

Georgia State University

ScholarWorks @ Georgia State University

Psychology Theses

Department of Psychology

8-8-2023

The Roles of Sexual Relationship Power and Sexual Assertiveness for Condom Use in the Association Between Sexual Victimization History and Condom Use Frequency

Anna Peddle

Follow this and additional works at: https://scholarworks.gsu.edu/psych_theses

Recommended Citation

Peddle, Anna, "The Roles of Sexual Relationship Power and Sexual Assertiveness for Condom Use in the Association Between Sexual Victimization History and Condom Use Frequency." Thesis, Georgia State University, 2023.

doi: <https://doi.org/10.57709/35868290>

This Thesis is brought to you for free and open access by the Department of Psychology at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Psychology Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

The Roles of Sexual Relationship Power and Sexual Assertiveness for Condom Use in the
Association Between Sexual Victimization History and Condom Use Frequency

by

Anna K. Peddle

Under the Direction of: Cynthia A. Stappenbeck, Ph.D.

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

in the College of Arts and Sciences

Georgia State University

2023

ABSTRACT

The present research evaluated whether sexual victimization (SV) severity is related to less frequent condom use through experiences of lower power in sexual relationships and lower sexual assertiveness for condom use. This secondary data analysis study utilized existing data from 770 women recruited from an urban community who reported STI risk factors and moderate social drinking. Participants presented to the laboratory and completed a questionnaire battery on the computer as part of the larger study that included an alcohol administration protocol. Path analyses revealed that childhood sexual abuse (CSA) and adolescent/adult SV were indirectly associated with frequency of condom use through lower sexual relationship power and lower sexual assertiveness for condom use. Findings suggest that the association between SV and less frequent condom use may be reduced by interventions that prioritize decreasing power imbalances in sexual relationships and enhancing women's access to sexual health protection strategies.

INDEX WORDS: Sexual victimization, Gender power, Sexual assertiveness, Condom use

Copyright by
Anna Katherine Peddle
2023

The Roles of Sexual Relationship Power and Sexual Assertiveness for Condom Use in the
Association Between Sexual Victimization History and Condom Use Frequency

by

Anna K. Peddle

Committee Chair: Cynthia Stappenbeck

Committee: Isha Metzger

Amanda Gilmore

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

August 2023

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to those who have contributed to the development of this thesis document. First and foremost, my heartfelt appreciation goes to Dr. Cynthia Stappenbeck, my mentor and committee chair, for her indispensable guidance, expertise, and support throughout this process. I also sincerely appreciate the members of my thesis committee for their time and valuable feedback. I would also like to thank the research team of Project FRESH, from which this secondary data analysis was conducted. The Project FRESH team, Dr. William George, Dr. Cynthia Stappenbeck, Dr. Jeanette Norris, Dr. Kelly Davis, Dr. Julia Heiman, and Kelly Kajumulo, MPH, managed the data from this research project very well, which helped me immensely when analyzing the data. This work was supported by a grant funded by the National Institute of Alcohol Abuse and Alcoholism (R01AA016281) awarded to William George, Ph.D. Finally, I am grateful for the research participants who took part in this study, as this work would not be possible without them.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	IV
LIST OF TABLES	VII
LIST OF FIGURES	VIII
1 INTRODUCTION	1
1.1 STIs and HIV in the U.S	1
1.2 The Sexual Victimization History and Condomless Sex Frequency Link	1
1.3 Overview of the Proposed Study	6
1.4 Hypotheses	6
2 METHOD	7
2.1 Participants	7
2.2 Procedures	9
2.3 Measures	9
2.3.1 Adolescent/Adult SV Severity	9
2.3.2 Childhood Sexual Abuse	10
2.3.3 Sexual Relationship Power	10
2.3.4 Sexual Assertiveness for Condom Use	11
2.3.5 Condom Use Frequency	12
3 DATA ANALYTIC APPROACH	12
3.1 Preliminary Analyses	12

3.2	Path Analyses.....	13
3.3	Power Analyses.....	14
4	RESULTS	15
4.1	Descriptive Statistics	15
4.2	Model Testing and Comparison.....	16
4.3	Direct and Indirect Effects	18
5	DISCUSSION	19
5.1	Strengths and Limitations	21
5.2	Future Directions	23
5.3	Clinical Implications	24
5.4	Conclusions	25
	REFERENCES.....	27

LIST OF TABLES

Table 1. Correlations and Descriptive Statistics 16

Table 2. Final Model Testing Significance of Indirect Effects on Condom Use..... 19

LIST OF FIGURES

Figure 1. Hypothesized Model..... 7

Figure 2. Alternative Model..... 13

Figure 3. Hypothesized Model Path Coefficients 17

Figure 4. Modified Hypothesized Model Path Coefficients (Final Analytic Model)..... 17

Figure 5. Alternative Model Path Coefficients 18

1 INTRODUCTION

1.1 STIs and HIV in the U.S

Rates of sexually transmitted infections (STIs) have been steadily increasing in the U.S. since 2014 (Centers for Disease Control and Prevention, 2021b). 80% of new STIs (including HIV infections) in women in the year 2019 were acquired through heterosexual contact, with heterosexual women accounting for 16% of new HIV diagnoses that year alone (Centers for Disease Control and Prevention, 2021c). This translated into an estimated 7,000 U.S. women who received HIV diagnoses in 2019 (Centers for Disease Control and Prevention, 2021a, 2022). Chlamydia and Gonorrhea rates are also high in women, with 1.8 million cases of Chlamydia and 253,359 cases of Gonorrhea found in women in 2019 (Centers for Disease Control and Prevention, n.d.). Women also saw 6,493 cases of Syphilis in 2019, which was a 30% increase from the year prior (Centers for Disease Control and Prevention, n.d.). From these and other STIs, women are placed at an increased risk for severe health consequences, such as cervical cancer (*HPV Transmission- Who Gets It?*, 2009). Correct and consistent condom use can decrease risk for HIV and other STIs, but only 27-39% of young heterosexual women's recent vaginal intercourse events involved the use of condoms (Reece et al., 2010).

1.2 The Sexual Victimization History and Condomless Sex Frequency Link

Women with histories of childhood sexual abuse (CSA) and/or adolescent/adult sexual victimization (SV) are less likely to use condoms and more likely to contract STIs than women without these histories (Arriola et al., 2005; Campbell et al., 2004; Greenberg et al., 1999; Koenig & Clark, 2005; Parillo et al., 2001; Senn & Carey, 2010; Shrier et al., 1998). CSA is defined as non-contact or contact sexual acts involving an individual younger than age 14 by a person either three or more years older, or by a person of the same age/ 1-2 years older if the

victim reports either: a) experiencing coercion, threats, or force, b) being upset at the time, c) having been molested or sexually abused as a child, or d) vaginal or anal penetration at an age prior to that identified by the participant as her age of first consensual sexual intercourse (Hulme, 2007). Adolescent/adult SV is commonly defined as sexual acts (including sexual contact, attempted penetration, or completed penetration) occurring age 14 or older that were unwanted, nonconsensual, or happened when a person was unable to consent (Koss et al., 2007). Although CSA has been directly associated with less frequent condom use (Stappenbeck et. al., 2016), recent work suggests that CSA may also exert its influence on condom use frequency at least in part through adolescent/adult SV. Indeed, two recent experiments with heavy drinking women with HIV/STI risk factors found that the association between CSA and intentions to engage in unprotected sex was partially mediated by the severity of sexual revictimization in adolescence or adulthood (Masters et al., 2014; Stappenbeck et al., 2016a).

Research investigating explanatory factors in the connection between SV and condomless sex frequency points to intervening mental health symptoms (i.e., trauma symptomology, depression, self-esteem, self-efficacy), consuming alcohol to cope with sex, and more negative perceptual and emotional experiences in sexual scenarios, particularly those involving alcohol and partner pressure (Bird et al., 2022; George et al., 2016a; Miller, 1999; Noll et al., 2003; Parkhill et al., 2014; Rellini, 2008). As an example, women with SV histories have been found to have increased susceptibility to partner pressure against condom use and greater anticipation of negative reactions from partners to requests to use condoms— factors which may place women with greater SV histories at increased risk for unprotected sex because they defer to sexual partners to make these decisions (George et al., 2016; Masters et al., 2014; Wells et al., 2015; Whitmire, et. al.,1999). Increased sensitivity to partner pressure and greater likelihood of

anticipating negative partner reactions could be a conditioned response from prior SV experience(s) and/or from previous experiences with male sexual partners. If previous experiences with male sexual partners also play a role in increased sensitivity to factors such as partner pressure for women with SV histories, then one question that arises is whether women with SV histories might experience less power in their sexual relationships and, if so, how this lack of power might relate to women's ability to advocate for condom use. Sexual relationship power and sexual assertiveness for condom use are two factors that have received less attention in the literature thus far and may help explain the SV- condomless sex link.

Sexual relationship power in women's heterosexual relationships refers to the ability to act according to one's will within the relationship, have equal say when it comes to relationship decisions, and be able to assert one's will even when this does not align with a sexual partner's wishes (Campbell et al., 2009; Pulerwitz et al., 2000). It is possible that women with more severe adolescent/adult SV histories have been in sexual relationships in which they held less power, and that their experience(s) of lower power could help explain why they do not consistently advocate for the use of condoms. This potential connection between SV and condom use through lower power may be particularly true to the extent to which experiencing lower power in sexual relationships leads to difficulty insisting that condoms be used in sexual scenarios. Although no prior research has investigated an association between SV severity and sexual relationship power, it is reasonable to expect that increased adolescent/adult SV severity could impact women's later likelihood of holding lower power than a sexual partner. For instance, consistent with the traumagenics dynamics model (Finkelhor & Browne, 1985) and the theory of learned helplessness (Seligman, 1975), the traumatic experience of having no power and control during SV experience(s) may lead some individuals to learn that they lack power and control over

sexual situations, thus contributing to their likelihood of entering into or maintaining sexual relationships in which they lack power. The traumagenic dynamics model also posits that the experience of having one's trust betrayed by SV, particularly in childhood or adolescence, can lead to difficulty identifying who is trustworthy later on. Indeed, prior studies have found that women who have experienced sexual abuse show lower levels of secure attachment compared to women who have not been abused (Aspelmeier et al., 2007; Roche et al., 2016; Watts et al., 2020). Finally, it is also plausible that reduced self-esteem, self-worth, or other mental health difficulties shown to be associated with SV may also lead women to have less power in sexual relationships as well (Botsford et al., 2019; Dodd & Littleton, 2017; Krahe & Berger, 2017; Senn et al., 2012). If it is true that women with more severe SV histories typically experience lower power in their sexual relationships compared to women without SV histories, this could impact condom use. Decreased condom use may occur through women's inability to assert that condoms must be used.

Assertion of one's needs and goals in sexual contexts is broadly termed "sexual assertiveness" and is comprised of the ability to refuse sex if it isn't wanted, the ability to initiate sex if it is wanted, and the ability to safeguard one's sexual health through insisting that condoms be used (Morokoff et al., 1997). Sexual assertiveness for condom use is of particular relevance to this study because it pertains specifically to the use of condoms and the protection of one's sexual health. Since men are the ultimate gatekeepers of male condom use, sexual assertiveness for condom use (i.e., insisting on condom use) is particularly important for women to engage in to protect themselves against HIV/STIs. No prior research has demonstrated an association between sexual relationship power and sexual assertiveness for condom use, yet both constructs have been independently associated with condomless sex frequency (Morokoff et al., 1997;

Whitmire, et. al., 1999). Related research from two experimental studies by Woolf and Maisto (Woolf-King & Maisto, 2015; Woolf & Maisto, 2008) demonstrated that women report significantly more perceived difficulty in their ability to initiate, negotiate, and engage in condom use after reading sexual vignettes in which they are depicted as having lower relationship power than the male partner. Although initiation and negotiation for condom use are related, they are not equivalent to sexual assertiveness for condom use, which reflects an insistence on the use of a condom when a partner might not want to one. Thus, sexual assertiveness for condom use may be particularly impacted by power differentials within a sexual relationship because this imbalance may result in a fear or concern about asserting one's condom use desire in circumstances when a disagreement with a sexual partner may be likely.

A small number of studies have suggested that women who have experienced CSA or SV are less likely to insist that condoms be used in their sexual encounters, which could in turn lead to decreased condom use (Morokoff et al., 2009; Stoner et al., 2008; Zerubavel & Messman-Moore, 2013). Morokoff and colleagues (2009) found evidence that sexual assertiveness for condom use could serve as a mediator between lifetime SV and recent unprotected sex. In a study that asked women to project themselves into a sexual scenario, Stoner and colleagues (2008) found that adolescent/adult SV was associated with a reduced sexual assertiveness, reduced sexual assertiveness was associated with use of fewer strategies to insist on condoms and, in turn, the use of fewer strategies to insist on condoms was associated with a higher likelihood of unprotected sex intentions. These prior studies provide preliminary support for sexual assertiveness for condom use as an additional explanatory factor in the link between SV and unprotected sex.

1.3 Overview of the Proposed Study

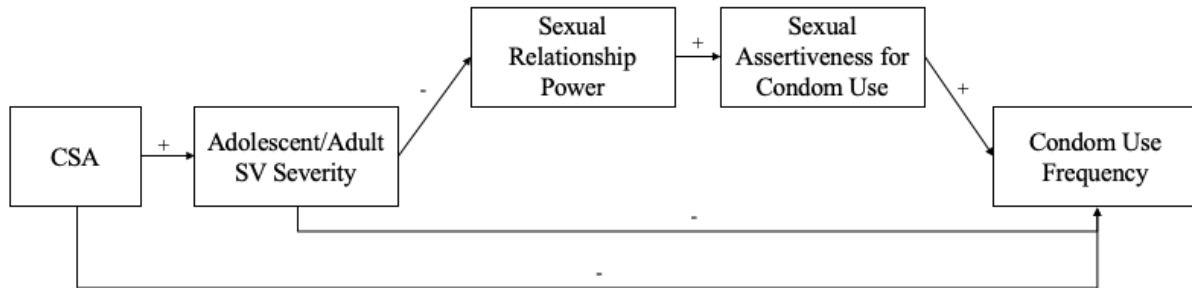
The purpose of the present study is to evaluate whether CSA and adolescent/adult SV severity are related to less frequent condom use through experiences of low power in sexual relationships and low sexual assertiveness for condom use. To my knowledge, no studies have established whether associations exist between SV severity and sexual relationship power or between sexual relationship power and sexual assertiveness for condom use. As such, this study is the first to determine these fundamental relationships. In addition, this study offers the first opportunity to explore whether SV severity influences women's likelihood of being in inequitable sexual relationships in adulthood, and their subsequent ability to insist on and maintain consistent condom use in daily life. Gaining this knowledge could allow for an increased emphasis on sexual relationship power as a factor to reduce HIV/STI risk among women with SV histories. This study may further inform our understanding of sexual relationship power as a factor impacting sexual assertiveness for condom use—an insight which has the potential to inform behavioral interventions offering condom use assertiveness skills to women.

1.4 Hypotheses

The above research and theory suggest a model that may help explain how women's experiences of SV are related to less frequent condom use (see Figure 1). First, I hypothesize negative direct relations between both CSA and condom use frequency, and adolescent/adult SV severity and condom use frequency (H1). Next, I expect that CSA will be positively associated with adolescent/adult SV severity (H2). I also predict that more severe adolescent/adult SV will be associated with lower sexual relationship power (H3), and that lower sexual relationship power will be associated with lower sexual assertiveness for condom use (H4). I then predict that

sexual assertiveness for condom use will be positively associated with recent condom use frequency (H5). Finally, I will examine a path model in which I hypothesize that CSA will be indirectly associated with less frequent condom use through adolescent/adult SV experiences, sexual relationship power, and sexual assertiveness for condom use (H6).

Figure 1. Hypothesized Model



2 METHOD

This investigation utilized data collected as part of a larger study that examined women's alcohol use and sexual decision-making. Data for this research was drawn from a background survey administered to participants during a laboratory session that occurred prior to alcohol administration and experimental paradigm (not included in the present study).

2.1 Participants

Eight hundred and seventy-six women were recruited for the research study. We reduced this sample to include only women who had sex in the past 3 months, leaving 787 total participants. Women (n=787) between the ages of 21-30 who reported being either single or in nonexclusive sexual/romantic partnerships were recruited from an urban community. Women were eligible for the study if they were sexually active in the past 3 months and had at least one occasion of unprotected sex in the past year with at least *one* additional HIV/STI risk factor. Additional HIV/STI risk factors included: a) at least one new sex partner in the past year, b) two or more sex partners in the past year, c) having ever had an STI, d) knowing or suspecting that a

recent (past year) sex partner, e) had a coinciding sexual relationship, f) had an STI and/or HIV, g) had a same-sex sexual encounter, h) ever used IV drugs, or i) had been incarcerated in the last 12 months. Due to the alcohol administration procedures used in the larger study, eligible women were required to be moderate social drinkers and report at least one episode of heavy episodic drinking (defined as four or more drinks within two hours) at least one time in the past year (National Institute on Alcohol Abuse and Alcoholism, 2004). Women were excluded if they had medical conditions or prescription medications that were contraindicated with alcohol use or a history of problem drinking or negative reactions to alcohol in accordance with NIAAA guidelines and assessed by the Brief Michigan Alcohol Screening Test (Pokorny et al., 1972). Women not interested in sex with men (criteria determined by interest rather than sexual orientation) were also excluded due to the experimental portion of the study in which women read and projected themselves onto a sexual scenario involving a male partner. The sample for this study had the same racial/ethnic breakdown as the larger metropolitan area from which women were recruited. The sample comprised of 68.5% White, 7.2% African American/Black, 5.8% Asian, 1% American Indian/Native Alaskan, 13.7% Multiracial, and 7.5% Hispanic. On average, participants were approximately 24.8 years of age and earned an income between \$21,000 and \$30,999 per year. Thirty five percent ($n=282$) of the sample were students, of those 65% ($n= 185$) were full time students. The majority (82%) of the sample reported being college educated, with at least some college at minimum. Just over half (57%) of the participants reported being employed. Eighty nine percent of participants reported being single, 0.5% were married, 6% reported living with a partner, 1.4% reported that they were separated, 2.3% reported being divorced, and 3% reported being widowed.

2.2 Procedures

All procedures and measures were approved by the university's Human Subject's Division Institutional Review Board prior to data collection. Online and print advertisements invited social drinking women to participate in a research study on social interactions between men and women. Interested participants contacted the number provided in the advertisement and trained research assistants described the study and screened the callers for eligibility and informed them of pre-study guidelines (no driving to the lab session, no eating or drinking caloric beverages for three hours before the session, and no alcohol or drug use for 24-hours prior to appointment). When participants arrived at the laboratory for their appointment, their blood alcohol concentration (BAC) was verified to be 0.00 by a trained research assistant using a handheld breathalyzer (Alco-Sensor IV; Intoximeters, Inc.). Participants were provided with an informed consent document which alerted them to potentially distressing questions assessing previous sexual victimization history. Participants were then weighed to calculate alcohol dosage and given a urine pregnancy test which were required to be negative in order to continue participation. Following these procedures, participants were taken to a private room where they completed a battery of questionnaires on a computer for approximately 1 hour before participating in the experimental portion of the study. At the end of all study procedures, participants were debriefed and paid \$15 per hour for their participation.

2.3 Measures

2.3.1 *Adolescent/Adult SV Severity*

The revised Sexual Experiences Survey (SES) measures nonconsensual sexual experiences since age 14 (Koss et al., 2007). For each nonconsensual sexual outcome (i.e., unwanted sexual contact, attempted or completed oral, vaginal, or anal penetration), participants

are asked to indicate the number of times they experienced each outcome by potential tactics utilized by perpetrators, including verbal coercion (e.g., lies, verbal threats or pressure), intoxication, and force, on 4-point response scales (0 = *never*; 3 = *3 or more times*). SV severity is calculated by multiplying a severity rank for each tactic/outcome combination (i.e., 0 = no ASA, 1 = sexual contact by verbal coercion, 2 = sexual contact by intoxication, 3 = sexual contact by force, 4 = attempted or completed rape by verbal coercion, 5 = attempted or completed rape by intoxication, 6 = attempted or completed rape by physical force) by the frequency with which each tactic/outcome combination has occurred. The severity score has a possible range of 0–63 (Davis et al., 2014). The SES has demonstrated consistent evidence of good reliability and validity and has been validated in samples of adult women (Koss et al., 2007; Koss & Gidycz, 1985).

2.3.2 *Childhood Sexual Abuse*

Hulme’s Childhood Sexual Abuse questionnaire asks participants to report whether they had experienced any of 13 possible sexual acts at or before age 13, with yes/no response options (Hulme, 2007). Example items include [did someone] “touch or fondle your body, including your breasts or private parts,” “show their private parts to you for sex reasons,” or “put a finger in your vagina.” If any of the 13 sexual acts were endorsed, participants were coded as having experienced CSA.

2.3.3 *Sexual Relationship Power*

Experiences with power differentials in sexual relationships was measured using the Sexual Relationship Power Scale (Pulerwitz et al., 2000). Questions were asked in reference to women’s last relationship with a man. The measure assesses relationship control (e.g., “When my partner and I disagree, he gets his way most of the time.”) using 4-point response scales (1 =

strongly agree; 4 = *strongly disagree*) and decision-making dominance (e.g., “who usually had more say about what you did together?”) on 3-point response scales (1 = *your partner*; 2 = *both of you equally*; 3 *you*). Four condom-use related questions will be removed from the analysis due to Pulerwitz and colleagues’ (2000) suggestion to remove these items when investigating the relation between relationship power and condom use behavior. Removing these items does not appear to negatively affect internal consistency (Pulerwitz et al., 2002; Pulerwitz et al., 2000). For scoring, the means of items assessing relationship control (12 items) are taken and this procedure is repeated for items assessing decision making dominance (7 items). The questions assessing decision-making dominance which were asked on a 3-point scale are rescaled to range from 1-4. This is done with the following formula: $(\text{average score of all 3-point items} - 1) / (3 - 1) * 3 + 1$. These rescaled average scores are then added to the mean scores of items that assessed relationship control and divided by two to produce an overall sexual relationship power score with equal weighting ranging between 1 and 4, with higher scores reflecting greater sexual relationship power.

2.3.4 Sexual Assertiveness for Condom Use

Sexual assertiveness for condom use was measured using the Sexual Assertiveness Survey (SAS). This questionnaire measures an individual’s tendency to engage in assertive sexual behaviors and includes three subscales: initiation, refusal, and STI prevention assertiveness (Morokoff et al., 1997). Only the STI Prevention Assertiveness subscale will be used in this study (e.g., “I insist on using a condom or latex barrier if I want to, even if my partner doesn’t like them”). Participants are asked to rate their level of agreement with each item on 5-point scales from 1 = *disagree strongly* to 5 = *agree strongly*. After reverse scoring three of

the items, the six Items are summed into a total score for this subscale, with higher values reflective of greater STI prevention assertiveness.

2.3.5 Condom Use Frequency

Participants were asked to report the number of times over the past 3 months that they a) had consensual vaginal intercourse and b) used condoms out of all the times they had consensual vaginal intercourse. The total percentage of the time that women reported using a condom when having vaginal intercourse over the past three months was then calculated (0=0%, 10=100%). These questions were taken from the Sexual History and Experiences Questionnaire that has been adapted from interview and questionnaire assessments to assess sexual experiences (Capaldi et al., 2002; Leigh et al., 2008). This measure has been used in several previous samples of adult women (Masters et al., 2014; Stappenbeck et al., 2016b).

3 DATA ANALYTIC APPROACH

3.1 Preliminary Analyses

Prior to testing the model, data was examined in SPSS for non-normality (i.e., skewness and kurtosis), nonlinearity, outliers, missingness, and multicollinearity. Due to the nature of the outcome variable measuring condom use in the past 3 months, we reduced this sample to include only women who had sex in the past 3 months, leaving 787 participants. Of these, seventeen participants were excluded from analyses due to missing data on key study variables, resulting in an analytic sample of 770. T-tests compared participants who were excluded ($n=106$) to those included ($n=770$) and found no significant differences between the two groups on any key study or demographic variables, except for on the adolescent/adult SV variable. The included participants reported slightly higher levels of adolescent/adult SV severity ($M=18.58$, $SD=17.25$) compared to excluded participants ($M=14.73$, $SD=16.61$), $t(868)=-2.14$, $p<.05$. Frequencies and

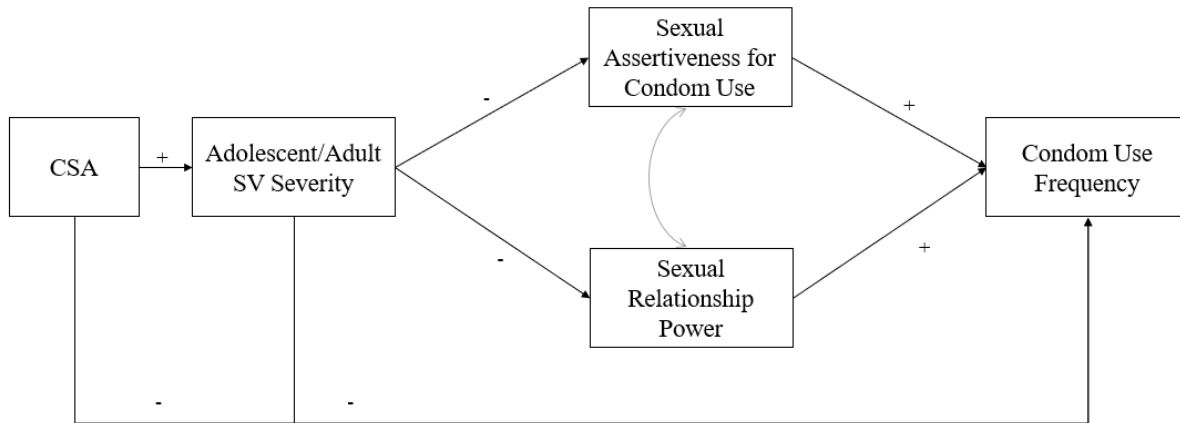
means were also evaluated for sample demographics and bivariate correlations were conducted among all variables in the model.

3.2 Path Analyses

Path analyses were conducted with Mplus statistical modeling software (Muthen & Muthen, 1998) using maximum likelihood estimation with bias-corrected confidence intervals. Statistical significance was determined by 95% bias-corrected bootstrapped confidence intervals that did not contain zero (Mallinckrodt et al., 2006). All paths between variables were allowed to freely vary. Good model fit was evaluated by examining the model chi-square. Although a non-significant model chi-square indicates good fit, chi square is particularly sensitive to large sample sizes (Bentler & Bonett, 1980). Thus, the chi-square was interpreted alongside other fit indices using the following criteria: Root Mean Square Error of Approximation (RMSEA) value $< .06$ and a RMSEA confidence interval in which the lower bound value includes or is very near zero and an upper bound value that does not exceed $.10$; Comparative Fit Index (CFI) value $> .95$; and Standardized Root Mean Square Residual (SRMR) value $< .08$ (Hu & Bentler, 1999).

First, we examined the path analysis for the hypothesized model (Figure 1). Given the cross-sectional limitation of this dataset, we also ran an alternative model in which temporal precedence was not assumed between sexual relationship power and sexual assertiveness for condom use (Figure 2). This alternative model placed both mediators at the same analytic level and thus allowed us to evaluate whether sexual relationship power and sexual assertiveness for condom use were uniquely associated with condom use frequency.

Figure 2. Alternative Model



For both the hypothesized and alternative model, modification indices were examined to determine whether the model could be further strengthened by adding or removing a path. If modification indices suggested the addition or removal of a path, this was only done if the resulting change made conceptual and theoretical sense. Once final models were established for both the hypothesized and alternative model configurations, the two models were compared using fit indices and investigating the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC), which provide a comparative measure of fit with lower values indicating superior fit (Akaike, 1974; Burnham & Anderson, 2004).

Direct and indirect effects of the final analytic model were examined using the “Model indirect” command in Mplus. This command provides a total indirect effect from CSA through all mediating variables to condom use frequency as well as indirect effects from adolescent/adult SV through each mediated pathway to condom use.

3.3 Power Analyses

Monte Carlo simulation was conducted in Mplus to determine the sample size needed for adequate power to detect effects in the hypothesized path model (Figure 1). Results of the

simulation indicated that a sample size of 770 participants would yield power of .94 to .95 to detect small-to-medium effects of .2.

4 RESULTS

4.1 Descriptive Statistics

CSA was endorsed by 29.9% of the sample and 77.3% of the sample reported one or more experiences of adolescent or adult sexual assault. One quarter (25%) of the sample experienced both CSA and adolescent/adult SV. Of the total sample, the average number of vaginal intercourse events reported in the past 3 months was 20.9 ($SD = 18.7$). Means, standard deviations, and correlations of the model variables are presented in Table 1. Bivariate correlations revealed that CSA was significantly positively associated with more severe adolescent/adult SV and negatively associated with sexual relationship power and sexual assertiveness for condom use. Adolescent/adult SV severity was also negatively associated with sexual relationship power and sexual assertiveness for condom use. Finally, significant positive associations were also found between sexual relationship power and both sexual assertiveness for condom use and condom use frequency, as well as between sexual assertiveness for condom use and condom use frequency.

Table 1. Correlations and Descriptive Statistics

Measure	1	2	3	4	5
1. Childhood Sexual Abuse	1.0				
2. Adolescent/Adult SV Severity	.20**	1.0			
3. Sexual Relationship Power	-.09*	-.25**	1.0		
4. Sexual Assertiveness for Condom Use	-.09*	-.18**	.23**	1.0	
5. Condom Use Frequency	.02	-.06	.10**	.53**	1.0
Mean	.31	18.61	3.00	20.04	4.21
SD	.46	17.32	.41	6.06	3.92
Min	.00	.00	1.33	1.00	.00
Max	1.00	63.00	4.00	30.00	10.00

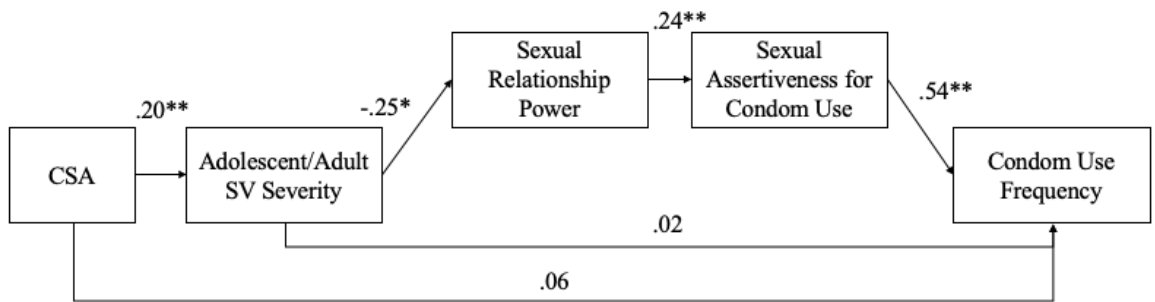
Note.* $p < .05$, ** $p < .01$

4.2 Model Testing and Comparison

The hypothesized model (Figure 3) fit the data well, $\chi^2(4) = 15.00$, $p < .01$, RMSEA = .06 (95% confidence intervals [CI] = .03 - .09), CFI = .97, SRMR = .03. Modification indices revealed that the model would be strengthened by adding a path from adolescent/adult SV to sexual assertiveness for condom use. The modified hypothesized model depicted in (Figure 4) was then run with this path included. This modified hypothesized model (Figure 4) had excellent fit to the data $\chi^2(3) = 2.33$, $p = 0.51$, RMSEA = 0.00 (95% CI = .00 - .06), CFI = 1.00, SRMR = .02. The alternative model (Figure 5) had very good fit, $\chi^2(2) = 2.32$, $p = 0.31$, RMSEA = .01 (95% CI = .00 - .08), CFI = .99, SRMR = .01. No modifications were suggested that would have improved fit for the alternative model. All models accounted for 29% of the variance associated with condom use frequency.

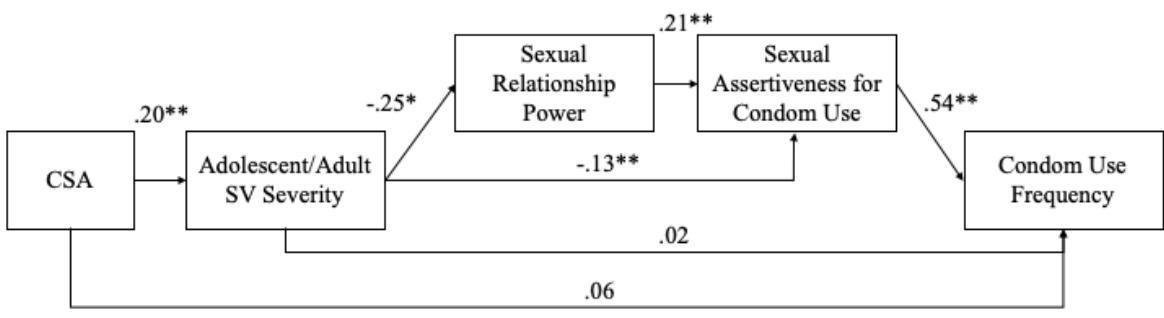
Examination of AIC and BIC indicated relative differences between the alternative model (AIC=16143; BIC= 16217) and the modified hypothesized model (AIC= 16141; BIC= 16211). Generally, a difference between 2-10 points suggests that the model with the smaller value is superior (Burnham & Anderson, 2004). Therefore, the modified hypothesized model was selected as the final model due to its statistical superiority as well as strong theoretical rationale. Figure 4 displays the final model with standardized coefficients.

Figure 3. Hypothesized Model Path Coefficients



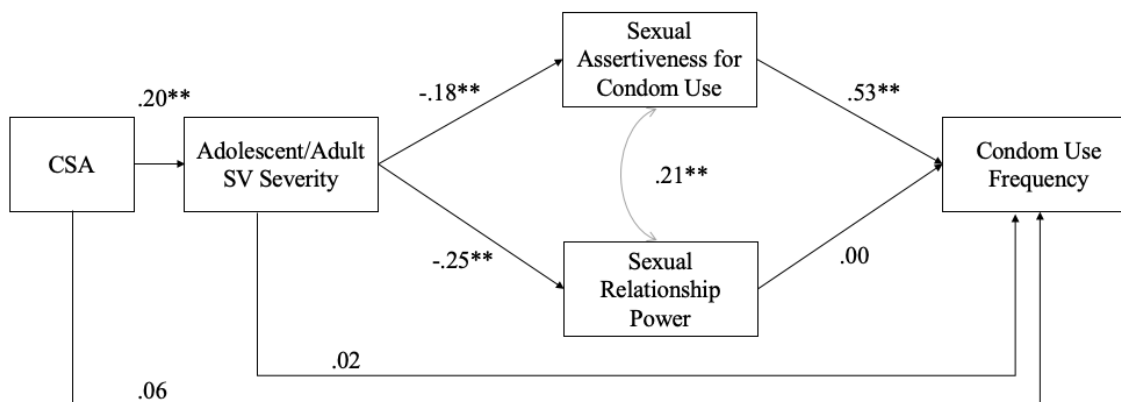
Note:** $p < .01$

Figure 4. Modified Hypothesized Model Path Coefficients (Final Analytic Model)



Note: ** $p < .01$

Figure 55. Alternative Model Path Coefficients



Note:** $p < .01$

4.3 Direct and Indirect Effects

Table 2 provides the standardized coefficients and standard errors for the indirect effects for the final model. As shown in Figure 4, direct effects were present for all specified paths in the final model, except for between both CSA and adolescent/adult SV and condom use frequency. As hypothesized, having a history of CSA was positively associated with adolescent/adult SV severity. More severe adolescent/adult SV severity was associated with lower sexual relationship power, which, in turn, was associated with lower sexual assertiveness for condom use. More severe adolescent/adult SV severity was also directly associated with lower sexual assertiveness for condom use. As expected, lower sexual assertiveness for condom use was associated with lower rates of condom use. With respect to the indirect effect of CSA on condom use frequency, the combined effect of adolescent/adult SV, sexual relationship power, and sexual assertiveness for condom use was significant, suggesting that the associations between SV and condom use frequency were primarily explained through women's relationship power and sexual assertiveness for condom use.

Table 22. Final Model Testing Significance of Indirect Effects on Condom Use

Indirect Paths	Standardized Estimate	SE
Effect of CSA (total indirect)	-.02	.01
Via adolescent/adult SV	.00	.01
Via adolescent/adult SV and sexual assertiveness for condom use	-.01**	.01
Via adolescent/adult SV, sexual relationship power, and sexual assertiveness for condom use	-.01**	.01

Note. ** $p < .01$

5 DISCUSSION

The goal of this study was to investigate the link between CSA and adolescent/adult SV and condom use frequency in women. This appears to be the first study to explore associations among SV, sexual relationship power, and sexual assertiveness for condom use on condom use behavior. Results revealed that women who reported CSA experienced greater severity of adolescent/adult SV (H2). More severe adolescent/adult SV was associated with lower sexual relationship power (H3), and lower sexual relationship power was associated with lower sexual assertiveness for condom use (H4). Although not originally hypothesized, adolescent/adult SV severity was also directly associated with lower sexual assertiveness for condom use. As expected, lower sexual assertiveness for condom use was associated with less frequent condom use (H5). Path analyses indicated that CSA and adolescent/adult SV severity were associated with condom use frequency through sexual relationship power and sexual assertiveness for condom use (H6). Contrary to hypotheses, there were no significant direct effects between either

CSA or adolescent/adult SV severity and condomless sex, suggesting that in our model the associations between SV and condomless sex were primarily explained through women's relationship power and sexual assertiveness for condom use (H1).

Although unexpected, the finding that there were no direct effects of CSA or adolescent/adult SV on condom use frequency highlights the importance of women's sexual relationship power and sexual assertiveness for condom use in rates of condom use frequency for women with SV histories. Although some studies have found support for a direct link between SV and condomless sex (e.g., Stappenbeck et. al., 2016; Stoner et. al., 2008), other studies have found CSA and/or adolescent/adult SV to be associated with condomless sex only through mediating factors (Morokoff et. al., 2009, Wells et. al., 2016). Our finding that other factors may help account for the SV-condomless sex link is consistent with theoretical perspectives that it is the consequences or "wounds" (Greek translation of the word *trauma*) of sexual assault or other traumatic events, rather than the events themselves, which are responsible for negative health outcomes (Maté & Maté, 2022). This finding also provides public health efforts aimed at reducing HIV and STI prevalence with additional targets (e.g., sexual assertiveness for condom use) that can be added to efforts targeting the prevalence of sexual assault.

In their seminal work, Whitmire and colleagues (1999) stated "Interpersonal power and powerlessness in sexual relationships are the unifying themes" (p. 6) within theoretical discussions of heterosexual women's HIV risk. Similarly, powerlessness, lack of control, and helplessness have been discussed as occurring both during and as a result of traumatic events (Finkelhor & Browne, 1985). Both lines of inquiry held the theme of powerlessness as central to considering the consequences of SV or predictors of HIV risk. This study was the first to empirically test these perspectives together by revealing that women with more severe SV

histories may be more likely to experience lower power in their sexual relationships than women with less severe SV histories. These experiences of lower power in sexual relationships are associated with difficulty advocating for condom use, which is associated with lower rates of condom use. Adding additional nuance to this perspective, our finding that adolescent and adult SV was directly associated with lower levels of sexual assertiveness for condom use supports our conceptualization that the pathway through sexual relationship power is *one* pathway to sexual assertiveness for condom use and that other pathways may exist. For instance, SV may lead some individuals to be fearful or dissociative in sexual situations which inhibits their ability to advocate for condom use, regardless of them having ever had experiences with low sexual relationship power. Additionally, given that lower sexual relationship power was not directly associated with condom use in the alternative model and there was also no suggested modification index to add a path from sexual relationship power to condom use for the hypothesized model, it seems that sexual relationship power is not directly associated with condom use frequency and instead other factors, such as sexual assertiveness for condom use, provide a link between lower relationship power and condom nonuse. Indeed, sexual assertiveness for condom use appears to play an important role in the association between SV and condom use.

5.1 Strengths and Limitations

The current study had strengths and limitations that must be considered when interpreting results. Strengths of this study include the large sample of women drawn from an urban community and the assessment of actual condom use behavior, rather than indicators of condom use (e.g., condom use intentions). Limitations of this study include sample characteristics that limit generalizability to young women ages 21-30 who are heavy episodic drinkers, reported

some index of sexual risk in the previous 12 months, and who were recently sexually active and not currently in a committed relationship. Thus, not included in this sample are men, nonbinary individuals, individuals who abstain from alcohol or those who are light drinkers, individuals who report a history of problem drinking, or individuals who are outside the ages of 21 and 30. Additionally, the findings may not generalize beyond the primarily White, mostly college-educated sample of women who were interested in sexual experiences with men.

Beyond the sample limitations, the study had design limitations. First, this study utilized a cross-sectional design and from this arises the issue of temporal precedence. We attempted to address this concern by evaluating an alternative model that placed relationship power and sexual assertiveness for condom use at the same level of the model thereby reducing questions about temporal precedence and found that this alternative model was not a better fit to the data than the modified hypothesized model. Second, the ordering of variables in the final model assumes that experiencing adolescent/adult SV is a factor that could predict lower sexual relationship power which would then predict lower sexual assertiveness for condom use. It is possible, however, that some women's "most recent" sexual relationship (as queried by the Sexual Relationship Power Scale) occurred prior to their experience of SV. For instance, a participant could have entered a sexual relationship where their partner had greater power, and then have been sexually assaulted by that partner. In this case, both the current relationship context and SV would likely impact their ability to advocate for current condom use, but this experience would not be captured by the temporal ordering of the hypothesized model or the alternative model in this study. Future studies should attempt to address these limitations by evaluating these factors using a longitudinal design.

5.2 Future Directions

Given the sample limitations in the present research, future research is needed to examine the applicability of the present model in other groups of individuals. Future research should investigate associations between SV, sexual relationship power, sexual assertiveness for condom use, and condomless sex in samples with predominantly Latina and Black women, given that these groups report more condomless sex and are affected disproportionately by HIV/STIs (Gleton et al., 2019). Furthermore, power imbalances and difficulty with sexual assertiveness for HIV/STIs protection are also not exclusive to heterosexual relationships. Future research might investigate similar risk pathways for individuals in same-sex relationships, especially given the elevated rates of SV and HIV/STIs in these groups (Balsam et al., 2005; Centers for Disease Control and Prevention, 2021d).

Ideally, future research should address the temporal precedence limitations in the present study by replicating the present model using a longitudinal study design. Although the present study offers support for the idea that prior experiences of SV are associated with ones' later likelihood of experiencing lower sexual relationship power, future longitudinal research should confirm this. Secondly, future research should investigate whether experiencing lower sexual relationship power after SV leads to decreased ability to advocate for condom use in both the sexual relationship in which one reports the power imbalance and in future sexual relationships after an experience of low-sexual relationship power. Future studies might begin by comparing sexual assertiveness and condom use in a group of women who are currently experiencing low sexual relationship power to a group of women who experienced low power in a prior relationship, but who are currently in equitable sexual relationships.

Several other new opportunities for research arise from the current findings beyond those that address study limitations. Although the current model supports the hypothesis that SV is associated with experiences of lower sexual relationship power, the present study did not examine possible explanations for this link. Future research might investigate psychological factors such as psychological distress, self-perceptions of worth, perceptions of sexual and gender roles in relationships, or perceptions of normative sexual behavior as potential reasons why SV might be associated with lower sexual relationship power. Lastly, given the substantial body of work on the link between alcohol use and both SV and condomless sex, future research might also investigate how alcohol use would influence the pathways examined in the present study.

5.3 Clinical Implications

This study provides evidence that SV experiences are associated with women's likelihood of experiencing lower power in sexual relationships in adulthood, which in turn, is associated with decreased ability to insist on and maintain consistent condom use. These findings provide support for addressing lower sexual relationship power and sexual assertiveness for condom use in clinical interventions aimed at reducing HIV/STI risk in women who have experienced SV. Firstly, interventions could address the link between SV experiences and sexual relationship power as a potential means of reducing downstream factors (i.e., sexual assertiveness for condom use), directly associated with condomless sex. Although more research is needed, it is likely that SV was associated with lower sexual relationship power due to self-perceptions of worth, self-perceptions of sexual roles, and/or ideas of what is normative behavior within a sexual relationship. Therefore, clinical interventions might benefit from targeting these areas for women with SV histories who are having condomless sex. Secondly, these findings

appear to suggest that interventions target the influence of past or current experiences of lower sexual relationship power on women's ability to insist on condom use. At a basic level, it seems important for clinicians to understand the sexual dynamics experienced in past or current relationships and understand that women that have had relationships with significant sexual power imbalances may be more likely to have lower condom use assertiveness. Methods of intervening to decrease experiences of low sexual relationship power would depend on individual context, but could include providing education around what equitable sexual relationships can look or feel like, intervening with male sexual partners so that the burden to insist on condoms does not fall on female partners, or increasing interpersonal assertiveness skills. Finally, this data underscores the importance of delivering condom use assertiveness skills to women who have experienced SV and women at risk for HIV/STIs. Though more research is needed on the most effective techniques to increase assertiveness for condom use, clinicians may find success in adapting methods from interpersonal assertiveness and/or sexual assertiveness trainings to help clients increase condom use assertiveness, specifically (DiClemente, 1995; Speed et al., 2018).

5.4 Conclusions

In conclusion, the present study demonstrates that SV severity is associated with women's likelihood of being in inequitable sexual relationships in adulthood and ability to insist on and maintain consistent condom use. Specifically, we found support for a model indicating that CSA and adolescent/adult SV severity were associated with low condom use frequency through lower sexual relationship power and lower sexual assertiveness for condom use. Sexual assertiveness for condom use arose as a particularly important factor in the link between SV and condom use frequency. We conclude that working to decrease power differentials within sexual relationships

and increasing women's access to strategies to protect their sexual health are important targets for future exploration and intervention with potential to decrease the link between SV histories and condomless sex.

REFERENCES

- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, 19, 716–723.
- Arriola, K. R. J., Loudon, T., Doldren, M. A., & Fortenberry, R. M. (2005). A meta-analysis of the relationship of child sexual abuse to HIV risk behavior among women. *Child Abuse & Neglect*, 29(6), 725–746. <https://doi.org/10.1016/J.CHIABU.2004.10.014>
- Aspelmeier, J. E., Elliott, A. N., & Smith, C. H. (2007). Childhood sexual abuse, attachment, and trauma symptoms in college females: The moderating role of attachment. *Child Abuse & Neglect*, 31(5), 549–566. <https://doi.org/10.1016/J.CHIABU.2006.12.002>
- Balsam, K. F., Rothblum, E. D., & Beauchaine, T. P. (2005). Victimization over the life span: A comparison of lesbian, gay, bisexual, and heterosexual siblings. *Journal of Consulting and Clinical Psychology*, 73(3), 477–487. <https://doi.org/10.1037/0022-006X.73.3.477>
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3). <https://doi.org/10.1037/0033-2909.88.3.588>
- Bird, E. R., Stappenbeck, C. A., Blayney, J., Kaysen, D., & George, W. H. (2022). Examination of Sex-Related Distress and Self-Medication Drinking Model in U.S. College Women. <https://doi.org/10.1080/00224499.2022.2044444>, 1–9.
- <https://doi.org/10.1080/00224499.2022.2044444>
- Botsford, J., Steinbrink, M., Rimane, E., Rosner, R., Steil, R., & Renneberg, B. (2019). Maladaptive Post-traumatic Cognitions in Interpersonally Traumatized Adolescents with Post-traumatic Stress Disorder: An Analysis of “Stuck-Points.” *Cognitive Therapy and Research*, 43(1), 284–294. <https://doi.org/10.1007/S10608-018-9928-3>

- Burnham, K., & Anderson, D. (2004). Multimodel inference: understanding AIC and BIC in model selection. *Journals.Sagepub.Com*, 33(2), 261–304.
<https://doi.org/10.1177/0049124104268644>
- Campbell, A. N. C., Tross, S., Dworkin, S. L., Hu, M. C., Manuel, J., Pavlicova, M., & Nunes, E. V. (2009). Relationship power and sexual risk among women in community-based substance abuse treatment. *Journal of Urban Health*, 86(6), 951–964.
<https://doi.org/10.1007/s11524-009-9405-0>
- Campbell, R., Sefl, T., & Ahrens, C. E. (2004). The Impact of Rape on Women’s Sexual Health Risk Behaviors. *Health Psychology*, 23(1), 67–74. <https://doi.org/10.1037/0278-6133.23.1.67>
- Capaldi, D., Stoolmiller, M., ... S. C.-D., & 2002, undefined. (2002). Heterosexual risk behaviors in at-risk young men from early adolescence to young adulthood: prevalence, prediction, and association with STD contraction. *Psycnet.Apa.Org*, 38(3), 394–406.
<https://doi.org/10.1037/0012-1649.38.3.394>
- Centers for Disease Control and Prevention. (n.d.). *Reported STDs in the United States, 2019*. [Fact Sheet]. <https://www.cdc.gov/media/releases/2021/p0413-stds.html>
- Centers for Disease Control and Prevention. (2021a). *Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data United States and 6 Dependent Areas, 2019: Special Focus Profiles*.
<https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-26-no-2/content/special-focus-profiles.html#4>

Centers for Disease Control and Prevention. (2021b). *Reported STDs Reach All-time High for 6th Consecutive Year | CDC Online Newsroom | CDC.*

<https://www.cdc.gov/media/releases/2021/p0413-stds.html>

Centers for Disease Control and Prevention. (2021c). *HIV in the United States and Dependent Areas.* <https://www.cdc.gov/hiv/statistics/overview/ataglance.html>.

Centers for Disease Control and Prevention. (2021d, October 15). *HIV and Gay and Bisexual Men.* <https://www.cdc.gov/hiv/group/gay-bisexual-men/index.html>

Centers for Disease Control and Prevention. (2022). *HIV and Women.*

<https://www.cdc.gov/hiv/group/gender/women/index.html>

Davis, K. C., Gilmore, A. K., Stappenbeck, C. A., Balsan, M. J., George, W. H., & Norris, J.

(2014). How to score the sexual experiences survey? a comparison of nine methods.

Psychology of Violence, 4(4), 445–461. <https://doi.org/10.1037/a0037494>

DiClemente, R. J. (1995). A randomized controlled trial of an HIV sexual risk-reduction intervention for young African-American women. *JAMA: The Journal of the American Medical Association*, 274(16). <https://doi.org/10.1001/jama.274.16.1271>

Dodd, J., & Littleton, H. (2017). Sexual Assault and Sexual Risk Behaviors Among Lower-Income Rural Women: The Mediating Role of Self-Worth. *Violence and Victims*, 32(1), 110–125. <https://doi.org/10.1891/0886-6708.VV-D-15-00119>

George, W. H., Davis, K. C., Masters, N. T., Kajumulo, K. F., Stappenbeck, C. A., Norris, J., Heiman, J. R., & Staples, J. M. (2016a). Partner Pressure, Victimization History, and Alcohol: Women’s Condom-Decision Abdication Mediated by Mood and Anticipated Negative Partner Reaction. *AIDS and Behavior*, 20(1), 134–146.

<https://doi.org/10.1007/s10461-015-1154-3>

- George, W. H., Davis, K. C., Masters, N. T., Kajumulo, K. F., Stappenbeck, C. A., Norris, J., Heiman, J. R., & Staples, J. M. (2016b). Partner Pressure, Victimization History, and Alcohol: Women's Condom-Decision Abdication Mediated by Mood and Anticipated Negative Partner Reaction. *AIDS and Behavior*, *20*(1), 134–146.
<https://doi.org/10.1007/s10461-015-1154-3>
- Gleton, B., Jahanfar, S., Inungu, J., & Latty, C. (2019). Factors Associated with Condom Use among African American and Hispanic/ Latino Youth. *European Journal of Environment and Public Health*, *4*(1). <https://doi.org/10.29333/ejeph/5954>
- Greenberg, J., Hennessy, M., Lifshay, J., Kahn-Krieger, S., Bartelli, D., Downer, A., & Bliss, M. (1999). Childhood sexual abuse and its relationship to high-risk behavior in women volunteering for an HIV and STD prevention intervention. *AIDS and Behavior*, *3*(2).
<https://doi.org/10.1023/A:1025440124211>
- HPV Transmission- Who gets it?* (2009). Gardasil. <http://www.gardasil.com/hpv/hpv-types/hpv-transmission>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1).
<https://doi.org/10.1080/10705519909540118>
- Hulme, P. A. (2007). Psychometric evaluation and comparison of three retrospective, multi-item measures of childhood sexual abuse. *Child Abuse and Neglect*, *31*(8), 853–869.
<https://doi.org/10.1016/J.CHIABU.2007.03.016>
- Koenig, L. J., & Clark, H. (2005). Sexual abuse of girls and HIV infection among women: Are they related? *From Child Sexual Abuse to Adult Sexual Risk: Trauma, Revictimization, and Intervention.*, 69–92. <https://doi.org/10.1037/10785-004>

- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). Revising the SES: A Collaborative Process to Improve Assessment of Sexual Aggression and Victimization. In *Psychology of Women Quarterly* (Vol. 31). Blackwell Publishing, Inc.
- Koss, M. P., & Gidycz, C. A. (1985). Sexual experiences survey: reliability and validity. *Journal of Consulting and Clinical Psychology*, 53, 442–423. <https://psycnet.apa.org/record/1985-24253-001>
- Krahé, B., & Berger, A. (2017). Longitudinal pathways of sexual victimization, sexual self-esteem, and depression in women and men. *Psychological Trauma : Theory, Research, Practice and Policy*, 9(2), 147–155. <https://doi.org/10.1037/TRA0000198>
- Leigh, B. C., Vanslyke, J. G., Hoppe, M. J., Rainey, D. T., Morrison, D. M., & Gillmore, M. R. (2008). Drinking and condom use: Results from an event-based daily diary. *AIDS and Behavior*, 12(1), 104–112. <https://doi.org/10.1007/S10461-007-9216-9>
- Mallinckrodt, B., Abraham, W. T., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology*, 53(3), 372–378. <https://doi.org/10.1037/0022-0167.53.3.372>
- Masters, N. T., George, W. H., Davis, K. C., Norris, J., Heiman, J. R., Jacques-Tiura, A. J., Gilmore, A. K., Nguyen, H. V., Kajumulo, K. F., Otto, J. M., & Stappenbeck, C. A. (2014). Women’s Unprotected Sex Intentions: Roles of Sexual Victimization, Intoxication, and Partner Perception. <https://doi.org/10.1080/00224499.2012.763086>, 51(5), 586–598. <https://doi.org/10.1080/00224499.2012.763086>
- Maté Gabor, & Maté Daniel. (2022). *The myth of normal: trauma, illness, & healing in a toxic culture*. Avery.

- Miller, M. (1999). A model to explain the relationship between sexual abuse and HIV risk among women. *AIDS Care - Psychological and Socio-Medical Aspects of AIDS/HIV*, *11*(1), 3–20. <https://doi.org/10.1080/09540129948162>
- Morokoff, P. J., Quina, K., Harlow, L. L., Whitmire, L., Grimley, D. M., Gibson, P. R., & Burkholder, G. J. (1997). Sexual Assertiveness Scale (SAS) for women: development and validation. *Journal of Personality and Social Psychology*, *73*(4), 790–804. <https://doi.org/10.1037//0022-3514.73.4.790>
- Morokoff, P. J., Redding, C. A., Harlow, L. L., Cho, S., Rossi, J. S., Meier, K. S., Mayer, K. H., Koblin, B., & Brown-Peterside, P. (2009). Associations of Sexual Victimization, Depression, and Sexual Assertiveness with Unprotected Sex: A Test of the Multifaceted Model of HIV Risk Across Gender. *Journal of Applied Biobehavioral Research*, *14*(1), 30–54. <https://doi.org/10.1111/J.1751-9861.2009.00039.X>
- Muthen, L. K., & Muthen, B. O. (1998). *Mplus Users Guide* (8th ed.).
- National Institute on Alcohol Abuse and Alcoholism. (2004). *NIAAA council approves definition of binge drinking*.
- Noll, J. G., Horowitz, L. A., Bonanno, G. A., Trickett, P. K., & Putnam, F. W. (2003). Revictimization and Self-Harm in Females Who Experienced Childhood Sexual Abuse: Results from a Prospective Study. *Journal of Interpersonal Violence*, *18*(12), 1452–1471. <https://doi.org/10.1177/0886260503258035>
- Parillo, K. M., Freeman, R. C., Collier, K., & Young, P. (2001). Association between early sexual abuse and adult HIV-risky sexual behaviors among community-recruited women. *Child Abuse and Neglect*, *25*(3), 335–346. [https://doi.org/10.1016/S0145-2134\(00\)00253-2](https://doi.org/10.1016/S0145-2134(00)00253-2)

- Parkhill, M. R., Norris, J., & Davis, K. C. (2014). The Role of Alcohol Use During Sexual Situations in the Relationship Between Sexual Revictimization and Women's Intentions to Engage in Unprotected Sex. *Violence and Victims, 29*(3), 492–505.
<https://doi.org/10.1891/0886-6708.VV-09-183>
- Pokorny, A. D., Miller, B. A., & Kaplan, H. B. (1972). The brief MAST: a shortened version of the Michigan Alcoholism Screening Test. *The American Journal of Psychiatry, 129*(3), 342–345. <https://doi.org/10.1176/AJP.129.3.342>
- Pulerwitz, J., Amaro, H., Jong, W. De, Gortmaker, S. L., & Rudd, R. (2002). Relationship power, condom use and HIV risk among women in the USA.
Https://Doi.Org/10.1080/0954012021000031868, 14(6), 789–800.
<https://doi.org/10.1080/0954012021000031868>
- Pulerwitz, J., Gortmaker, S. L., & DeJong, W. (2000). Measuring sexual relationship power in HIV/STD research. *Sex Roles, 42*(7–8), 637–660. <https://doi.org/10.1023/a:1007051506972>
- Reece, M., Herbenick, D., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Condom Use Rates in a National Probability Sample of Males and Females Ages 14 to 94 in the United States. *The Journal of Sexual Medicine, 7*(SUPPL. 5), 266–276.
<https://doi.org/10.1111/J.1743-6109.2010.02017.X>
- Rellini, A. (2008). Review of the empirical evidence for a theoretical model to understand the sexual problems of women with a history of CSA. *The Journal of Sexual Medicine, 5*(1), 31–46. <https://doi.org/10.1111/J.1743-6109.2007.00652.X>
- Roche, D. N., Runtz, M. G., & Hunter, M. A. (2016). Adult Attachment: A Mediator Between Child Sexual Abuse and Later Psychological Adjustment.

[Http://Dx.Doi.Org/10.1177/088626099014002006](http://dx.doi.org/10.1177/088626099014002006), 14(2), 184–207.

<https://doi.org/10.1177/088626099014002006>

Seligman, M. E. P. (1975). *Helplessness : on depression, development, and death*. 250.

Senn, T. E., & Carey, M. P. (2010). Child Maltreatment and Women's Adult Sexual Risk

Behavior: Childhood Sexual Abuse as a Unique Risk Factor:

[Http://Dx.Doi.Org/10.1177/1077559510381112](http://dx.doi.org/10.1177/1077559510381112), 15(4), 324–335.

<https://doi.org/10.1177/1077559510381112>

Senn, T. E., Carey, M. P., & Coury-Doniger, P. (2012). Mediators of the relation between

childhood sexual abuse and women's sexual risk behavior: A comparison of two theoretical frameworks. *Archives of Sexual Behavior*, 41(6), 1363–1377.

<https://doi.org/10.1007/s10508-011-9897-z>

Shrier, L. A., Pierce, J. D., Emans, S. J., & DuRant, R. H. (1998). Gender differences in risk

behaviors associated with forced or pressured sex. *Archives of Pediatrics and Adolescent Medicine*, 152(1), 57–63. <https://doi.org/10.1001/ARCHPEDI.152.1.57>

Speed, B. C., Goldstein, B. L., & Goldfried, M. R. (2018). Assertiveness Training: A Forgotten

Evidence-Based Treatment. In *Clinical Psychology: Science and Practice* (Vol. 25, Issue 1). <https://doi.org/10.1111/cpsp.12216>

Stappenbeck, C. A., George, W. H., Staples, J. M., Nguyen, H., Davis, K. C., Kaysen, D.,

Heiman, J. R., Masters, N. T., Norris, J., Danube, C. L., Gilmore, A. K., & Kajumulo, K. F.

(2016a). In-The-Moment Dissociation, Emotional Numbing, and Sexual Risk: The Influence of Sexual Trauma History, Trauma Symptoms, and Alcohol Intoxication.

Psychology of Violence, 6(4), 586–595. <https://doi.org/10.1037/A0039978>

- Stappenbeck, C. A., George, W. H., Staples, J. M., Nguyen, H., Davis, K. C., Kaysen, D., Heiman, J. R., Masters, N. T., Norris, J., Danube, C. L., Gilmore, A. K., & Kajumulo, K. F. (2016b). In-The-Moment Dissociation, Emotional Numbing, and Sexual Risk: The Influence of Sexual Trauma History, Trauma Symptoms, and Alcohol Intoxication. *Psychology of Violence, 6*(4), 586–595. <https://doi.org/10.1037/A0039978>
- Stoner, S. A., Norris, J., George, W. H., Morrison, D. M., Zawacki, T., Davis, K. C., & Hessler, D. M. (2008). Women's condom use assertiveness and sexual risk-taking: Effects of alcohol intoxication and adult victimization. *Addictive Behaviors, 33*(9), 1167–1176. <https://doi.org/10.1016/J.ADDBEH.2008.04.017>
- Watts, S., Evans, S. Z., Simons, L. G., & Simons, R. L. (2020). The effect of sexual victimization on attachment in emerging adulthood: An analysis of an African-American sample: <https://doi.org/10.1177/0269758020936073>, 27(1), 111–124. <https://doi.org/10.1177/0269758020936073>
- Wells, B. E., Starks, T. J., Robel, E., Kelly, B. C., Parsons, J. T., & Golub, S. A. (2015). From Sexual Assault to Sexual Risk: A Relational Pathway? <http://dx.doi.org/10.1177/0886260515584353>, 31(20), 3377–3395. <https://doi.org/10.1177/0886260515584353>
- Whitmire, L. E., Harlow, L. L., Quina, K., & Morokoff, P. J. (1999). *Childhood trauma and HIV: Women at risk*. Brunner/Mazel.
- Wolf, S. E., & Maisto, S. A. (2008). Gender differences in condom use behavior? The role of power and partner-type. *Sex Roles, 58*(9–10). <https://doi.org/10.1007/s11199-007-9381-3>
- Wolf-King, S. E., & Maisto, S. A. (2015). The Effects of Alcohol, Relationship Power, and Partner Type on Perceived Difficulty Implementing Condom Use Among African American

Adults: An Experimental Study. *Archives of Sexual Behavior*, 44(3), 571–581.

<https://doi.org/10.1007/S10508-014-0362-7/TABLES/3>

Zerubavel, N., & Messman-Moore, T. L. (2013). Sexual Victimization, Fear of Sexual Powerlessness, and Cognitive Emotion Dysregulation as Barriers to Sexual Assertiveness in College Women: *Http://Dx.Doi.Org/10.1177/1077801213517566*, 19(12), 1518–1537.

<https://doi.org/10.1177/1077801213517566>