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From Sexual Assault to Sexual Risk: A Relational Pathway?

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Abstract

Among women and gay and bisexual men, sexual assault is associated with increased rates of sexual risk behavior and negative sexual health outcomes. Although the mechanisms of these effects are potentially myriad, the current analyses examine the role of perceived partner pressure for condomless sex in mediating the association between adult sexual assault (ASA) and recent anal or vaginal sex without a condom. In a sample of 205 young adult women and gay and bisexual men, ASA was indirectly associated with condomless anal and/or vaginal sex via perceptions of partner pressure for condomless sex, $\chi^2(1) = 5.66, p = .02$, after controlling for race, age, gender and sexual identity, and relationship status. The elucidation of this relational mechanism points to several potential intervention and prevention strategies that may reduce actual and perceived pressure for sex without a condom, including strategies designed to facilitate the prioritization of health and safety over relational goals and the improvement of partner selection and perceptions of partner pressure.

Keywords

sexual assault; sexual risk behavior; relationships

Sexual assault, both in childhood and adulthood, is widespread, with estimates varying considerably depending on samples and definitions. In an online survey limited to adult female respondents, 47.8% reported forced or coerced sexual experiences in their lifetimes (Jozkowski & Sanders, 2012), while in a sample of college women, 72.8% reported sexual victimization since age 16 (Turchik & Hassija, 2014). According to the 2003 National Youth Risk Behavior Survey, a nationally representative survey of both male and female high school students, 8.9% of respondents had experienced forced sex in their lifetimes (Basile et al., 2006). Estimates of both childhood sexual abuse (CSA) and adult sexual assault (ASA) range considerably in samples of gay and bisexual men as well, with ASA prevalence ranging from 12% to 57% depending on definition and sample, rates that are typically higher than among heterosexually identified men (Peterson, Voller, Polusny, & Murdoch, 2011).

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Importantly, research consistently demonstrates an association between a history of sexual assault, including both CSA (that occurring before the age of 14) and adult experiences of sexual assault and victimization (since the age of 14), and risky sexual behavior, particularly among women and gay and bisexual men, groups that are also at highest risk for HIV infection (Blain, Muench, Morgenstern, & Parsons, 2012; Hequembourg, Bimbi, & Parsons, 2011; Johnson & Johnson, 2013; Lalor & McElvaney, 2010; Parsons, Bimbi, Koken, & Halkitis, 2005; Peterson et al., 2011).

CSA is associated with increased rates of sexually transmitted diseases among adolescents (Brown, Lourie, Zlotnick, & Cohn, 2000; Hillis, Anda, Felitti, Nordenberg, & Marchbanks, 2000; Upchurch, Mason, Kusunoki, & Kriechbaum, 2004) and adolescent pregnancy (Noll, Shenk, & Putnam, 2009). CSA in women has been linked to more sexual partners (Krahe, Scheinberger-Olwig, Waizenhofer, & Kolpin, 1999). In addition, research indicates that childhood and adolescent sexual abuse are associated with engaging in prostitution for both men and women (Parsons et al., 2005; Steel & Herlitz, 2005; Widom & Kuhns, 1996).

Research specifically focused on gay and bisexual men also demonstrates an association between sexual assault and subsequent sexual risk behavior, including sexual compulsivity. In a study of adult gay men, those who reported highly forceful penetrative CSA were more likely to engage in high risk sex, which included unprotected anal sex with a non-primary partner (Paul, Catania, Pollack, & Stall, 2001). In another study of adult gay and bisexual men, men with a history of childhood or adult sexual victimization were more likely than men with no assault history to report a history of sexually transmitted infections (STIs), symptoms of sexual compulsivity, and increased substance use (Hequembourg et al., 2011). Also, in a survey of more than 2,500 gay men by the National Institutes of Mental Health, men who reported unwanted sexual activity during childhood also reported significantly more unprotected sex acts than men who did not report unwanted sexual activity during childhood (DiIorio, Hartwell, & Hansen, 2002). Numerous other studies have demonstrated effects of CSA and intimate partner violence in gay and bisexual men on HIV risk behavior (Arreola, Neilands, & Díaz, 2009; Feldman, Díaz, Ream, & El-Bassel, 2007; Kalichman, Gore-Felton, Benotsch, Cage, & Rompa, 2004; Parsons et al., 2005).

Although fewer studies focus on victims of sexual assault that occur during adulthood (and some studies simply measure lifetime history of sexual assault), these studies indicate similar associations between ASA and sexual risk behavior in women (Brener, McMahon, Warren, & Douglas, 1999; Deliramich & Gray, 2008; George et al., 2014; A. J. Lang et al., 2003; D. L. Lang et al., 2011; Turchik & Hassija, 2014). Although much of the research examining ASA has focused on women, a meta-analysis investigating associations between ASA and subsequent sexual risk behavior among men finds similar associations among gay and bisexual men (Peterson et al., 2011). For example, gay and bisexual men who have experienced unwanted sexual contact as adults are more likely to report high risk sexual behavior when compared with men without unwanted sexual contact (Kalichman et al., 2001). In a sample of gay and bisexual men in New York City, men with a history of ASA reported a higher number of lifetime STIs, including HIV, compared with those with a history of CSA (Hequembourg et al., 2011). Other studies examine lifetime history of sexual assault and find similar associations between a lifetime history of sexual assault and sexual risk behavior (Herrick, Stall, Egan, Schrager, & Kipke, 2014).

Although the connection between history of sexual assault and risky sexual behavior is a consistent finding in the literature, the mechanisms through which this association operates are potentially myriad and in need of additional investigation. Research indicates that CSA leads to higher levels of post-traumatic stress disorder (PTSD), depression, and suicidal ideation, lower self-esteem, and a more external locus of control, which in turn lead to riskier sexual behavior (Senn, Carey, & Coury-Doniger, 2012). The association between ASA and sexual risk behavior may also be a function of alcohol or substance abuse (Johnson & Johnson, 2013; Schacht et al., 2010) for several reasons. One potential mechanism may be that victims of sexual abuse or assault may use alcohol and drugs as a way to cope with their negative feelings surrounding the original experience(s) or use substances to cope with anxiety during subsequent sexual encounters. Substance use, then, may be associated with contexts in which sex is more likely and/or may directly affect sexual risk-taking via impaired judgment and risk negotiation abilities.

Although individual factors are clearly important mechanisms of the relationship between sexual assault and sexual risk behavior, relational pathways from sexual assault to risky sexual behavior are also critical to investigate. For example, among adolescents, a history of sexual abuse was associated with recent dating violence, defined as being hit, slapped, or physically hurt by a boyfriend or girlfriend (Basile et al., 2006). Among Black adolescent women, those with a history of dating violence, when compared with those without a dating violence history, were more likely to fear having conversations about pregnancy prevention and were also more likely to fear the consequences of condom use negotiation (Wingood, DiClemente, McCree, Harrington, & Davies, 2001). Furthermore, women with a history of sexual victimization (including coercion or rape) give higher importance ratings to the goals of protecting their partner, protecting the relationship, and avoiding embarrassment than do women with no history of victimization (Farris & Fischhoff, 2012). These findings indicate that women may be prioritizing relationship goals over safety and health concerns (Raiford, Seth, & DiClemente, 2013) and also that a history of sexual violence may influence future partner choices, interactions with partners, and perceptions of partner preferences and relational power.

These relational factors may be related to traditional gender norms and power dynamics. For example, Jones (2006) defined sexual pressure as “sexual choices that are limited by adherence to gender stereotypical expectations for sex and fear of, or experience with, adverse consequences, such as losing the relationship, threats, or physical coercion, if these expectations are not met” (p. 282). Jones developed a measure to assess perceptions of sexual pressure for sex without a condom, which assessed their concerns that their partner would leave them, yell at them, threaten, or hurt them if they asked them to use a condom. In samples of urban women, adult sexual victimization has been positively associated with perceived sexual pressure. Although not conducted in a mediational model, perceived sexual pressure also significantly predicted sexual risk behavior, even after controlling for substance use and other demographic factors (Jones, 2006; Jones & Gulick, 2009). Qualitative research also supports the role of the gendered prioritization of partner satisfaction and stability in sexual risk behavior (Jones & Oliver, 2007). Unfortunately, research also indicates that perceived sexual pressure decreases condom use, even in the face of other protective behaviors and factors, such as self-efficacy and condom negotiation skills

(Gakumo, Moneyham, Enah, & Childs, 2012), indicating that the negotiation of perceived and actual sexual pressure should be a factor in any sexual risk reduction prevention strategy.

Although much of the research investigating the sexual health consequences of CSA and ASA focus on women, research also indicates that gay and bisexual men may also suffer many of the same negative outcomes as women, though research does not examine the mechanisms of these effects as extensively as research among women. Research also indicates elevated rates of CSA and ASA among gay and bisexual men compared with heterosexual men (Balsam, Rothblum, & Beauchaine, 2005; Peterson et al., 2011). Furthermore, both women and gay and bisexual men face elevated HIV and STI transmission risk compared with heterosexual men, thus warranting specific research addressing the predictors of sexual risk behavior. As such, the current analyses exclude heterosexual men and focus on women who have sex with men (regardless of sexual identity) and gay and bisexual men.

Present Study

Available evidence supports the assertion that relational factors are relevant to the association between history of sexual assault and sexual risk behavior. To our knowledge, though, previous research has not examined perceived partner pressure for unsafe sex as a mediator. As such, the purpose of the present study was to evaluate the role of perceived partner pressure as a mediator between ASA history (defined as completed forced, pressured, or incapacitated sexual intercourse since the age of 14) and sexual risk behavior (defined as anal or vaginal sex without a condom) among women and gay/bisexual men. Consistent with previous research, we hypothesized that there would be a significant association between ASA history and condomless sex acts. Furthermore, we hypothesized that when perceived partner pressure for condomless sex was introduced into a structural equation model:

Hypothesis 1: History of ASA would be positively associated with perceived partner pressure.

Hypothesis 2: Perceived partner pressure would be positively associated with condomless sex acts.

Hypothesis 3: The indirect path between ASA history and condomless sex acts through perceived partner pressure would be significant.

Method

These analyses utilize data collected in Project DASH (Drinking and Sexual Health), which enrolled three hundred one 18- to 29-year-olds who reported alcohol consumption and sexual activity (defined as vaginal or anal sex). Participants were enrolled between 2010 and 2013, and all resided in the New York City (NYC) metropolitan area. All study procedures were approved by the City University of New York's institutional review board.

Recruitment and Enrollment

We utilized two recruitment strategies to enroll a broad sample of young adults in NYC. In both strategies, eligibility criteria were as follows: (a) aged 18 to 29, (b) report at least 3 days of alcohol consumption in the last 90 days and at least 1 day of alcohol consumption in the last 30 days, and (c) report at least one act of vaginal or anal sex in the last 30 days. First, we utilized timespace sampling in a wide range of urban venues that house youth cultural scenes, both alcohol-serving and non-alcohol-serving venues. Time-space sampling was originally developed to capture hard-to-reach populations (MacKellar, Valleroy, Karon, Lemp, & Janssen, 1996; Muhib et al., 2001; Stueve, O'Donnell, Duran, San Doval, & Blome, 2001), but it is also constructive for generating estimates of venue-based populations (Parsons, Grov, & Kelly, 2008), such as socially active young adults. Trained recruiters approached potential participants and screened them for eligibility using anonymous surveys on an iPod Touch. Eligible individuals were given more information about the study and asked to provide contact information. In total, 168 participants (56% of the sample) were enrolled in the study via time-space sampling.

Second, we utilized incentivized snowball sampling, wherein each participant enrolled was given the opportunity to refer up to three other people into the study. Each participant was given three numbered recruitment cards that were linked to their study identification number and given a broad sense of the eligibility criteria (e.g., 18 to 29 years old, drinks alcohol, is sexually active). When a person called with one of those cards, research staff described the study, screened them for eligibility, and, if eligible, scheduled their first appointment. For each referral who was eligible and enrolled in the study, the referring participant received US\$20. In total, 133 participants (44% of the sample) were enrolled via incentivized snowball sampling.

In their initial appointment, participants provided informed consent (documented via signed consent forms), completed a Timeline Follow Back (TLFB) calendar (Sobell & Sobell, 1992) with information about their substance use and sexual behavior in the last 30 days, and completed a computerized survey delivered via Qualtrics®. All data were coded with identification numbers so as to maintain confidentiality of the data.

Measures

Demographic information—Participants self-reported demographic information via Qualtrics® including age, race/ethnicity (dichotomized into White and non-White in these analyses), gender, sexual identity, and relationship status.

Timeline Follow Back—The TLFB is a commonly used semi-structured interview designed to collect daily behavior over a specified period of time (Carey, Carey, Maisto, Gordon, & Weinhardt, 2001; Sobell & Sobell, 1992). The TLFB has demonstrated good test-retest reliability, convergent validity, and agreement with collateral reports for sexual behavior and substance use (Weinhardt et al., 1998). Interviewers for this project were research assistants and project coordinators who were well-trained in utilizing the TLFB, trained and skilled in developing rapport with participants to facilitate honest selfreport, and to respect the values and behaviors of all participants. Critical life events (i.e., vacations,

birthdays, paycheck days) were used to prompt recall of daily behaviors, which were recorded on a personalized calendar. Interviewers asked participants to describe each sexual encounter that they had over the course of the preceding 30-day period. Specifically, participants reported the type of sexual activity (vaginal, anal, or oral intercourse, condom use), partner type (main or casual), and whether they were sober or under the influence of drugs and/or alcohol. Participants also reported all alcohol and drug use over the course of the 30-day period. For the purposes of these analyses, the outcome utilized is the number of condomless vaginal or anal sex acts.

Sexual Experiences Survey—The Sexual Experiences Survey (SES) was used to assess experiences of ASA (Koss & Gidycz, 1985). The survey asks about the occurrence of a variety of sexual experiences since the age of 14 in a “yes or no” format. We utilized the three questions that ask about completed experiences of rape. Questions include, “Have you had sexual intercourse when you didn’t want to because a partner threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?” “Have you had sexual intercourse when you didn’t want to because a partner gave you alcohol or drugs?” and “Have you had sexual intercourse when you didn’t want to because a partner used their position of authority (boss, teacher, camp counselor, supervisor) to make you?” If participants said yes to any of these three questions, they were categorized as having a history of adult sexual assault.

Sexual Pressure Scale—The Sexual Pressure Scale (SPS) is used to assess perceptions of pressure for engaging in sexual activity and has been shown to have convergent and divergent validity (Jones, 2006). In the present study, a five-item modified version of the SPS was used to assess perceptions of pressure to not use a condom for reasons that include, “you feel your partner would leave you if you suggested using a condom” and “you worry your partner will think you do not trust him or her if you suggested using a condom.” Participants responded on a five-point Likert-type scale ranging from “never feel” to “always feel.” The scale demonstrated good internal reliability in this sample ($\alpha = .84$).

Data Analysis

The relationship between ASA and condomless sex acts was evaluated using a multiple regression analysis, which controlled for the influences of age, gender/sexual identity group (women vs. gay and bisexual men), relationship status, and race. Consistent with the count nature of the condomless sex acts variable, a negative binomial distribution was specified for the outcome.

A structural equation model was calculated in Mplus v7.1 to examine the role of perceived partner pressure as a mediator between sexual assault and condomless sex. In each model, condomless sex acts were predicted by perceived partner pressure and ASA history. Perceived partner pressure was, in turn, examined as an outcome predicted by history of ASA.

The significance of the indirect pathway from ASA to condomless sex acts through perceived partner pressure was evaluated using a model constraint. A model was specified in which the product of the two pathways of (a) ASA to perceived partner pressure and (b)

perceived partner pressure to condomless sex acts was constrained to be zero. This model was compared with a model in which the product was unconstrained using a chi-square goodness of fit test in which an associated p value of $< .05$ indicated that constraining the product of the two pathways significantly reduced the fit of the model, supporting the presence of mediation. A p value of $> .05$ indicated that constraining the product term did not significantly affect model fit, contraindicating the presence of mediation.

Results

Sample Characteristics

In total, 301 eligible participants completed a baseline assessment, though heterosexual men were excluded from the analyses as they are often in a different position of power and risk in sex and relationships and because their rate of ASA was low (13%). Including women (of any sexual identity) and gay and bisexual men, the final analytic sample consisted of 205 participants (see Table 1). Half of the sample was White, and most (89.8%) were currently enrolled in college, had completed an associates or some college education, or had at least a 4-year college degree. In total, 35% of the analytic sample reported experiencing sexual assault since the age of 14 (34% of gay/bisexual men and 36% of women, *n.s.*). Participants scored an average of 7.9 on the perceived partner pressure for sex without a condom scale ($SD = 4.1$; scale scores could range from 5 to 25), with a marginally significant difference in perceived partner pressure between gay/bi men and women (8.46 vs. 7.42, respectively), $t(203) = 1.85$, $p = .066$, and reported an average of 4.5 condomless sex acts in the past 30 days ($SD = 8.7$), with no significant difference between gay/bisexual men and women (4.37 and 4.62, respectively).

The Association Between Sexual Assault and Sexual Risk Behavior

Negative binomial regression results are presented in Table 2. Contrary to the hypothesis, the association between sexual assault and condomless sex acts was non-significant as were most covariate regression coefficients. The only significant covariate was relationship status. Being partnered predicted a greater number of condomless sex acts in the previous 30 days.

Perceived Partner Pressure as a Mediator Between Sexual Assault and Sexual Risk Behavior

Figure 1 displays the path model results for variables of primary theoretical interest. As hypothesized, ASA was significantly associated with perceived partner pressure, and perceived partner pressure was significantly positively associated with condomless sex acts. Contrary to our hypothesis, ASA history was not significantly associated with condomless sex acts in the full model. However, consistent with our hypothesis, the indirect pathway between sexual assault and condomless sex acts through perceived partner pressure was significant, $\chi^2(1) = 5.66$, $p = .02$. Table 3 contains the regression coefficients for model covariates as well as their 95% confidence intervals. It also contains exponentiated betas for all predictors of condomless sex acts as well as standardized β s for all predictors of perceived partner pressure.

A post hoc multi-group analysis was conducted to evaluate whether the specified model fit the data equally well for women and gay and bisexual men. Two multi-group models were calculated, one in which all regression parameters were estimated separately in each group and one in which the regression parameters were constrained to be equal. The fit of the unconstrained model (AIC = 2,393.23; adjusted BIC = 2,395.55) and the constrained model (AIC = 2,391.17; adjusted BIC 2,395.73) did not differ significantly from one another, $\chi^2(8) = 13.85$, $p = .09$. These findings suggest that variation in regression parameters between gender and sexual identity groups in the present sample were negligible.

Discussion

As hypothesized, results suggest that perceived partner pressure for sex without a condom may constitute a mechanism by which ASA history is associated with sexual risk behavior. The significant indirect pathway between ASA history and condomless sex acts, which operated similarly for women and gay and bisexual men, is consistent with existing literature and suggests that perceptions of intimate interactions with partners may partially explain how experiences of sexual violence contribute to future sexual risk. It is important to note that the significant indirect effect of ASA history on condomless sex via perceived partner pressure for sex without a condom occurs in the absence of the hypothesized significant direct effect. According to Hayes (2009), such a finding may result when two variables are linked by multiple factors. If intermediary variables have opposite effects, the total direct effect may be null in spite of the presence of significant specific indirect associations. In the current model, ASA may have multiple pathways to condomless sex: one pathway through perceived partner pressure and other pathways through variables not assessed in the present study. Although the pathway mediated by perceived partner pressure is associated with increased sexual risk-taking, pathways mediated by other variables may be associated with decreased sexual risk. For example, one such pathway may be via increased risk perception and awareness. The combination of these effects would result in a non-significant direct effect that actually masks pathways that are indicative of the mechanisms of the association between sexual assault history and sex without a condom.

Other studies have presented data consistent with the notion that perceptions of partner preferences influence sexual risk. These perceptions may function in two ways. First, perceptions of pressure may be distorted by learning experiences encountered during victimization, such that these perceptions are inaccurate. Second, perceptions of pressure may be accurate and high levels of pressure are experienced because of partner pressure owing to the nature of the partners with whom sexual assault survivors subsequently engage. Negative perceptions of a partner's response to condom use negotiation may also be associated with lower levels of sexual assertiveness and self-efficacy, both of which are associated with a history of sexual assault and identified as influential in the associations between sexual assault and sexual risk behavior (Stoner et al., 2008; VanZile-Tamsen, Testa, & Livingston, 2005). Sexual assault may also skew individual expectations for coercion (Lalor & McElvaney, 2010) or may negatively influence risk perception and responses to risk and potential coercion (George et al., 2014; Marx & Soler-Baillo, 2005).

Although experiences of sexual assault may skew cognitive processes in a manner that increases perceptions of partner pressure that are inaccurate, it is also possible that perceptions of partner pressure are accurate, and associations with sexual victimization and risk arise as a function of partner selection. In this case, negative perceptions of a partner's response to requests for condom use also may be associated with actual partner characteristics, particularly as research indicates an association between sexual assault history and current dating violence and interpersonal violence (Abramsky et al., 2011; Senn, Carey, Vanable, Coury-Doniger, & Urban, 2006), both of which are also associated with sexual risk behavior (Alleyne-Green, Coleman-Cowger, & Henry, 2012; Senn et al., 2012). It may be that those who have experienced sexual assault, particularly in the context of ongoing interpersonal violence, have a higher tolerance for abusive and coercive behavior and, in fact, come to expect some level of coercion (Lalor & McElvaney, 2010).

Furthermore, research indicates that adolescent girls who experience dating violence are also more likely than those without a history of dating violence to perpetrate dating violence (Alleyne-Green et al., 2012), suggesting that the contexts of some relationships may be more violent and coercive overall. As such, although research and intervention efforts often target female victims of sexual assault, these findings, paired with previous literature, indicate the need for dyadic-level interventions. Couple-level interventions should focus on sexual health negotiation skills and violence reduction in the context of the relationship.

Although the current findings cannot be construed to support one of these routes over the other, both may be valuable and provide guidance for the development of interventions. These findings highlight the potential difficulty in negotiating relational versus health and safety goals for those with a history of sexual assault. Effective intervention for these individuals might incorporate cognitive restructuring components applicable to cognitive distortions and also relationship skills and assertive communication skills building exercises relevant for individuals who may gravitate toward highly authoritarian partners.

Although these findings contribute to an understanding of the mechanisms of association between ASA and subsequent sexual risk behavior, all research must be considered in the context of the study's limitations. First, analyses included only the most severe form of sexual assault and did not collect more detailed information on their rape experience(s). Although the narrow examination of completed rape limits the generalizability of these findings to those with the most severe experiences of sexual assault, research indicates that the more severe one's experience of sexual assault, the more risky behavior they endorse (Johnson & Johnson, 2013). Similarly, we did not examine the characteristics of their sexual assault, particularly in terms of severity of the physical assault and the nature of the relationship with the perpetrator, both factors that influence psychological and behavioral responses to sexual assault (Turchik & Hassija, 2014; Wu, Berenson, & Wiemann, 2003). Second, as is much research into the consequences of sexual assault, the data presented are cross-sectional, thus precluding strong conclusions about the causal directions involved in the model. Longitudinal research indicates that experiences of sexual assault likely intensify or create psychosocial and contextual factors that increase the risk of subsequent sexual victimization (Lalor & McElvaney, 2010; Messman-Moore, Ward, & Zerubavel, 2013), thus likely making these associations reciprocal. Finally, because examinations of the complex effects of alcohol on sexual behavior are better suited to event-level analyses (Cooper, 2010),

we did not consider the role of alcohol consumption in the model. Alcohol consumption has a complex association with sexual risk behavior (Parks, Hsieh, Lorraine, & Levonyan-Radloff, 2011; Patrick, O'Malley, Johnston, Terry-McElrath, & Schulenberg, 2012) and is a common response to sexual assault (Alleyne-Green et al., 2012) as well as a factor in subsequent sexual risk behavior (Schacht et al., 2010). As such, we believe that alcohol use (in general and in sexual situations) likely represents its own complex pathway of effect, though future analyses could examine alcohol use, sexual assault, and partner pressure in a multilevel model. We also did not take into account the nature of the participant's current relationship, though we did control for relationship status in the model. In terms of sexual risk behavior, it is likely that many couples were tested for HIV and other STIs and have remained behaviorally monogamous. However, because research indicates high rates of main partner transmission among gay and bisexual men (Sullivan, Salazar, Buchbinder, & Sanchez, 2009), we included all vaginal or anal sex without a condom as a sexual risk behavior. The interactions between perceived partner pressure for sex without a condom, alcohol consumption, and relationship characteristics are likely influential in the associations between ASA history and sexual risk behavior and warrant future investigation. Finally, the majority of the sample reported at least some college education, thus somewhat limiting the generalizability of findings.

Despite these limitations, these findings are consistent with other research indicating an association between sexual assault and sexual risk behavior and also provide additional evidence for a relational pathway from sexual assault to sexual risk. Research and intervention strategies should focus on partner choice and relationship skills training, dyadic sexual health training for couples, and empowerment training to facilitate the negotiation of potentially conflicting health and relational goals.

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Figure 1.
Mediational model of adult sexual assault history, perceived partner pressure, and condomless sex acts.

Table 1

Sample Characteristics.

Characteristic	<i>M</i>	<i>SD</i>
Age	23.57	2.95
	<i>N</i>	%
Gender/sexual identity		
Straight women	78	38
Lesbian/bisexual women	28	13.7
Gay/bisexual men	99	48.3
Race/ethnicity		
White	103	50.2
Black	29	14.1
Latino/a	33	16.1
Asian or Pacific Islander	8	3.9
Mixed or other	32	15.6
Education		
HS diploma or less	21	10.2
Currently in college	48	23.4
Completed some college or associates degree	48	23.4
BA/BS or above	97	47.3
Relationship status		
Single	97	47.3
Partnered	108	52.7
Experienced sexual assault since age 14?	72	35.1
	<i>M</i>	<i>SD</i>
Perceived partner pressure for condomless sex	7.92	4.08
Condomless anal and/or vaginal sex acts (past 30 days)	4.5	8.66

Table 2

Negative Binomial Regression of Condomless Sex Acts on Adult Sexual Assault.

	<i>B</i>	95% CI	β
Age	0.03	[-0.05, 0.11]	1.03
Race (ref = non-White)	0.12	[-0.41, 0.65]	1.13
Gender/sexual identity (ref = women)	0.36	[-0.14, 0.86]	1.43
Relationship status (ref = single)	1.54**	[1.01, 2.07]	4.66
Sexual assault	0.24	[-0.25, 0.73]	1.27

Note. CI = confidence interval.*
p .05.**
p .01.

Table 3

SEM Model Predicting Condomless Sex Acts and Perceived Partner Pressure.

Outcome: Condomless Sex Acts	<i>B</i>	95% CI	exp <i>B</i>
Age	0.04	[−0.03, 0.12]	1.04
Race (ref = non-White)	0.16	[−0.36, 0.68]	1.17
Gender/sexual identity (ref = women)	0.31	[−0.19, 0.80]	1.36
Relationship status (ref = single)	1.36 ^{**}	[0.85, 0.12]	3.90
Perceived partner pressure	0.08 ^{**}	[0.03, 0.12]	1.08
Sexual assault	0.24	[−0.23, 0.71]	1.27
Outcome: Perceived Partner Pressure	<i>B</i>	95% CI	β
Age	−0.04	[−0.23, 0.16]	−.03
Race (ref = non-White)	0.38	[−0.78, 1.54]	.05
Gender/sexual identity (ref = women)	1.55 ^{**}	[0.26, 2.85]	.19
Relationship status (ref = single)	1.32 ^{**}	[0.22, 2.43]	.16
Sexual assault	1.45 ^{**}	[0.36, 2.55]	.18

Note. CI = confidence interval.*
p .05.**
p .01.