Unwanted Sexual Experiences and Sexual Risks in Gay and Bisexual Men: Associations Among Revictimization, Substance Use, and Psychiatric Symptoms

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Unwanted sexual experiences are associated with high-risk sexual practices for HIV infection. The current study examined histories of unwanted sexual contact in childhood and adulthood in relation to HIV risk behavior in men who have sex with men. Men attending a large gay pride event in Atlanta, Georgia (N = 595) completed anonymous surveys measuring sexual history, substance use, sexual risk behavior, and symptoms of dissociation, trauma-related anxiety, and borderline personality. Results showed that men who had been sexually coerced into unwanted sexual activity as adults were more likely to report being treated for substance abuse as well as use of crack cocaine and nitrite inhalants in the past 6 months. Sexually coerced men were also more likely to report high-risk sexual behaviors and symptoms of dissociation, trauma-related anxiety, and borderline personality. History of sexual victimization in childhood and revictimization in adulthood was not, however, associated with increased risk behavior over and above that seen in relation to adult unwanted sexual experiences. We conclude that sexual coercion is a significant problem among men who have sex with men, including increasing risk for HIV infection.

Unwanted sexual experiences are common in both heterosexual and homosexual relationships. Studies show that as many as one in three college women are either pressured or forced to unwillingly engage in sexual relations, with lifelong adverse consequences (Koss, Gidycz, & Wisniewski, 1987; Muehlenhard, Goggins, Jones, & Satterfield, 1991; Muehlenhard & Linton, 1987). Men are also often pressured and coerced to have sex, including coercion from female and male partners. In a sample of mostly heterosexual men, Struckman-Johnson and Struckman-Johnson (1994) reported that 24% of men had been sexually coerced by women after age 16 and 4% had been coerced by men. Similar rates of unwanted sexual contact among men perpetrated by women were reported in earlier studies (Muehlenhard & Cook, 1988; Struckman-Johnson, 1988). Research with gay men and lesbians indicate similar rates of sexual coercion. For example, Waterman, Dawson, and Bologna (1989) reported that 12% of gay men and 31% of lesbians reported being forced to have sex in their current or most recent relationship. Hickson, Davies, Hunt, and Weatherburn (1994) also found that 28% of British gay men had been coerced by a man into unwanted sexual activity. Kalichman and Rompa (1995) reported similar results, with 29% of gay and bisexual men in a midwestern U.S. city reporting sexual coercion. Moreover, 92% of the sexually coercive events identified by Kalichman and Rompa involved unprotected anal intercourse and therefore conferred significant risks for HIV infection.

Research suggests that several factors are associated with sexual coercion in adulthood. First, studies show that drug use can play an important role in sexual coercion, with cocaine abuse most closely related to unwanted sexual experiences in women (Kalichman, Williams, Cherry, Belcher, & Nachimson, 1998). Men who are sexually coerced by male partners are also more likely than noncoerced men to report drug use in sexual contexts (Kalichman & Rompa, 1995). A second factor associated with sexual coercion in women is a history of childhood sexual abuse. Women who had been sexually abused as children are significantly more likely to experience unwanted sexual intercourse as adults (Messman & Long, 1996; Urquiza & Goodlin-Jones, 1996) and are at greater risk for HIV infection (Whitmire, Harlow, Quina, & Morokoff, 1999). In a study of U.S. naval recruits, Merrill, Newell, Gold, and Milner (1997) showed that the likelihood of being raped was nearly five times higher for women with a history of childhood sexual abuse. Mayall and Gold (1995) found that women who experienced sexual assault as adults were more likely to have been victimized as children, and that higher rates of sexual activity formed the link between childhood sexual abuse and unwanted sexual contacts in adulthood. Research suggests that gay and bisexual men who experienced sexual abuse as children are also at substantial risk for HIV infection (Bartholow et al., 1994; Carballo-Dieguez & Dolezal, 1995; Doll et al., 1992). However, childhood sexual abuse has not been investigated in relation to adult male sexual coercion, nor has the link between sexual

The authors thank the staff of AIDS Survival Project of Atlanta for their assistance with data collection and the gay community of Atlanta for their support of this research. National Institute of Mental Health (NIMH) Grant R01-MH57624 and Center Grant P30 MH52776 supported this research.

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revictimization and HIV risk behavior been reported in men who have sex with men.

Explanations for the association between child sexual abuse and unwanted sexual events in adulthood have emphasized the roles of psychiatric symptoms such as dissociation, trauma-related anxiety, and borderline personality characteristics. Arata (1999) and Sandberg, Matorin, and Lynn (1999) found that trauma symptoms were significantly more common among women who had been revictimized as adults compared to women who had only experienced childhood sexual abuse. Dissociation symptoms and maladaptive personality characteristics may help explain the relationship between childhood sexual abuse and unwanted sexual contact in adulthood (Rickel & Becker, 1997). Dissociation serves as a cognitive and emotional escape strategy that can be effective in coping with childhood trauma but becomes maladaptive in adulthood. Dissociation in response to fear producing events can translate to ignoring potential risks, including risks for HIV-AIDS (Resnick & Seals, 1995). In the extreme case of dissociation, the self can become disorganized and fragmented in response to childhood trauma, developing into Borderline Personality Disorder (van der Kolk, 1996). Trauma, dissociation, and borderline characteristics may be important risk factors for substance abuse, unwanted sexual experiences, and sexual revictimization in women (Becker, Rankin, & Rickel, 1998; Miller 1999). However, to our knowledge sexual revictimization, dissociation, trauma-related anxiety, and borderline characteristics have not been investigated in relation to unwanted sexual experiences among gay and bisexual men. The purpose of the current study was, therefore, to extend findings reported in studies of women to men who have sex with men, and to examine revictimization as a risk factor for HIV and other sexually transmitted diseases (STDs) in men who have sex with men.

Consistent with the literature on sexual revictimization, we hypothesized that behavioral risks identified among men who have been sexually coerced as adults would be accounted for by the effects of childhood sexual abuse history. Further, we hypothesized that men with histories of unwanted sexual coercion in both childhood and adulthood would evidence the greatest degree of behavioral risks, both in terms of substance use and sexual relationship risks. We also predicted that unwanted sexual contacts would be associated with symptoms of dissociation, trauma, and borderline personality. Finally, we predicted that childhood sexual abuse history, and its residual psychological symptoms of dissociation, trauma-related anxiety, and borderline personality, would predict high-risk sexual activity in adulthood.

METHODS

Participants, Setting, and Procedures

To investigate sexual coercion and sexual revictimization in relation to sexual risks, 595 men attending the June 1999 gay pride festival in Atlanta were recruited to complete self-administered surveys. This festival was chosen as the site for the survey because of the over 300,000 men who attend this annual event and because previous research has shown that men who attend gay pride festivals report significant rates of high-risk sexual behaviors (Hickson et al., 1996; Kalichman et al., 1998). Atlanta was selected as the site for the study because of its significant HIV infection rates. Georgia ranks eighth among U.S. states in cumulative number of AIDS cases, and over 70% of all AIDS cases in Georgia have been reported in metropolitan Atlanta. More than half of Atlanta's AIDS cases have occurred among men who have sex with men (Georgia Division of Public Health, 1998).

Participants were asked to complete an 11-page survey concerning HIV and AIDS as they walked through the area of the festival grounds where retail venders and community organizations occupied display booths, two of which were rented for the purposes of this study. Participants were told that the survey was about sexual relationships, contained personal questions about their sexual history including childhood sexual abuse, was anonymous, and required approximately 15 minutes to complete. Over 85% of men approached agreed to complete the survey. Participants' names were not collected with the survey at any time. Participants were offered $4 for completing the survey, of which half could be donated to a local AIDS service organization; 45% of the sample chose to donate their entire incentive payment.

Measures

Participants completed self-administered anonymous surveys that consisted of measures of demographic information, sexual history, substance use, sexual practices, and scales assessing dissociation, trauma-related anxiety, and borderline personality symptoms. The following sections describe these measures.

Demographics. Participants were asked their age; years of education; income; ethnicity; home zip code; whether they self-identified as gay, bisexual, or heterosexual; whether they had been tested for HIV antibodies; and, if so, the results of their most recent HIV test. Men were also asked if they were exclusively partnered, defined by being in a relationship with only one man for at least 6 months.

Sexual history. To assess sexual history, we asked participants to respond Yes or No to items asking whether they had been sexually abused as a child, treated for an STD, or exchanged sex for money or drugs. Participants also indicated whether a male relationship partner had ever hit them and whether they feared the consequences of asking male partners to use condoms. History of unwanted sexual contact in adulthood was assessed using an instrument adapted from a widely used measure of sexually coercive experiences in heterosexual relationships (Koss & Gidycz, 1985). We asked men three sexual coercion items: "Have you ever had sexual intercourse (anal intercourse) even though you didn't want to because a man threatened to leave you?"; "Have you ever had sexual intercourse even though you

didn't want to because a man threatened to use physical force to make you?"; and "Has a man ever forced or pressured you to have sexual intercourse when you did not want to?"—each responded to as either Yes or No. We used an affirmative response to any one or more of these items to define unwanted sexual intercourse. In order to differentiate adult sexual coercion from childhood sexual abuse, we also asked participants to report their age at which these events occurred. Sexual coercion occurring after age 16 was defined as an adult experience. Therefore, sexually coercive experiences in adulthood in this study included those that occurred during late adolescence.

Substance use. Participants were asked if they had used two legal substances (tobacco and alcohol) and 5 illegal substances (marijuana, nitrite inhalants or poppers, powder and crack cocaine, and methamphetamine) in the previous 6 months. Participants also indicated whether they had used drugs in a sexual context in the past 6 months and whether they had received substance abuse treatment in their lifetime. Responses to these items were coded as dichotomous variables, Yes/No.

Sexual practices. Sexual behavior was measured by asking participants to report the number of times they had engaged in anal intercourse, as the insertive partner and as the receptive partner (responded to separately), as well as the number of times they used or did not use condoms during anal intercourse in the past 6 months. We were particularly interested in anal intercourse because of the high risk that this behavior poses for HIV transmission. Participants also recorded the number of sexual partners with whom they had engaged in each behavior in the previous 6 months. Open response formats were used for the sexual behavior measures to reduce response bias and to minimize measurement error. Measures similar to these have been found reliable in self-reported sexual behavior assessments (Kauth, St. Lawrence, & Kelly, 1991).

Dissociation experiences. To assess symptoms of dissociation, we used six items adapted from the Detachment subscale of the Dissociative Processes Scale that reflected tendencies to feel separated from one's own thoughts and actions (Harrison & Watson, 1996). Example items include "I often lose track of time," "Things around me feel unreal," and "My mind and my body do not feel like they are connected to each other," responded to on 4-point scales (1 = *Very Much Like Me*, 4 = *Very Much Not Like Me*, scores range from 6 to 24). The six dissociation items used in the current study were internally consistent, *alpha* = .82.

Trauma-related anxiety symptoms. To assess trauma-related anxiety, we developed three items that reflect long-term anxiety symptoms that are commonly associated with traumatic events. Participants were asked how often they experienced three specific symptoms over the previous 3 months. Example items include, "Felt anxious or scared but did not understand why?" and "Had nightmares about something bad that had happened to you?", responded to on 5-point scales (0 = *Never*, 5 = *Very Often*, scores range from 3 to 15). This measure was internally consistent in the current sample, *alpha* = .74.

Borderline personality. We used six items from the Borderline Personality scale of the Schedule for Nonadaptive and Adaptive Personality (SNAP) to assess borderline personality characteristics that parallel the diagnostic criteria for Borderline Personality Disorder (Clark, 1993). Sample items include "Sometimes I get so upset I feel like hurting myself," "I'll do almost anything to keep someone from leaving me," and "My mood sometimes changes without good reason," responded to on a 4-point scale (1 = *Very Much Like Me*, 4 = *Very Much Not Like Me*, scores range from 6 to 24). The six borderline personality items were internally consistent, *alpha* = .83.

Data Quality Assurances and Statistical Analyses.

All surveys were examined for inconsistencies and invalid responses. Missing data were omitted from analyses, resulting in slightly different degrees of freedom for various statistical tests. To investigate factors associated with a history of adult sexual coercion, men were classified as either having or not having experienced unwanted sexual contact since age 16. This classification was based on responses to the items directly asking whether men had experienced sexual coercion resulting from threats of abandonment, threats of force, and use of pressure or force, and the age when these events occurred. The resulting groups, men who had been sexually coerced since age 16 and men who had not, were compared on demographic, substance use, and sexual relationship risks using multiple logistic regression analyses with a likelihood ratio procedure. We first examined the associations between unwanted sexual experiences in adulthood with substance use and risk behaviors. In these analyses, education, ethnicity, income, and HIV status were entered first as covariates, with predictor variables entered in the next step. To test the hypothesis that childhood sexual abuse accounts for associations between unwanted sexual contact and risk behaviors, the regression analyses were repeated to include history of childhood sexual abuse as a covariate. Adjusted odds ratios and their associated 95% confidence intervals are reported.

A second set of analyses was conducted to compare men with histories of adulthood and childhood unwanted sexual experiences. For these analyses, we constructed four groups: (a) men who had not experienced unwanted sexual contacts in either childhood or adulthood, (b) men who were sexually coerced as adults but did not experience childhood sexual abuse, (c) men who were sexually abused as children but were not sexually coerced as adults, and (d) men who were both sexually coerced as adults and sexually abused as children. Group comparisons were conducted on categorical variables using contingency table chi-square tests. For four group comparisons, we followed significant omnibus chi-square tests by partitioning the contingency table with single degrees of freedom multiple comparisons using procedures recommended by Kimball (1954). This method divides the larger table into a series of 2 X 2 contingency tables such that the sum of the parti-

tioned chi-square values equals that of the larger table. In addition, to correct for inflated error resulting from multiple group comparisons within sets of conceptually related variables, we used a modified Bonferroni correction provided by Keppel (1982). In this modification, the alpha level is adjusted for the number of within-set comparisons by multiplying the standard alpha value ($p < .05$) by the degrees of freedom for the comparison, and dividing that value by the number of within-set comparisons performed. We applied this correction for all comparisons that were not preceded or followed by a multivariate test.

We conducted a 2 (experienced unwanted sexual contact in adulthood) x 2 (experienced childhood sexual abuse) multivariate analysis of covariance (MANCOVA), controlling for education, ethnicity, income, and HIV status for comparisons on the three psychiatric symptom scales: dissociation, trauma, and borderline personality symptoms. This analysis provided independent tests for the effects of unwanted sexual experiences occurring in adulthood and childhood, as well as the interaction between the two groups.

Finally, we conducted a hierarchical multiple logistic regression analysis using two or more unprotected anal intercourse partners as a single index of high-risk sexual behavior. Four blocks of predictor variables were entered in the following sequence: demographic characteristics, substance use, psychiatric symptom scales, and history of childhood and adulthood sexual victimization. This analysis, therefore, tested the association between unwanted sexual experiences in adulthood and childhood and high-risk sexual behavior over and above other factors commonly associated with risk.

Results

Among the 595 participants, the median age was 33 (*range*, 17-72) and the median years of education completed was 15 (*range*, 7-17). The majority of the sample was White (71%), with the remaining participants being African-American (21%), Hispanic (3%), and other ethnic backgrounds (5%). Twenty-six percent ($n = 156$) of participants had annual incomes below $20,000, 27% ($n = 162$) had incomes between $21,000-$30,000, and 49% ($n = 274$) earned over $30,000 annually. Eighty-six percent of the sample self-identified as gay, 12% bisexual, and 2% heterosexual. Seventy-seven percent of participants were from Georgia, with the majority from the metropolitan Atlanta area. The majority of men (88%) had been tested for HIV antibodies; of those 76% tested HIV negative, 23% HIV positive, and 1% did not know their test results.

History of Unwanted Sexual Contact

One in three men ($n = 210$, 35%) reported a lifetime history of unwanted sexual intercourse resulting from threats or use of force. Distinguishing between unwanted sexual experiences in adulthood from those in childhood showed that 121 men experienced sexual coercion as adults and 129 had been sexually abused as a child. There was, however, substantial revictimization reported by men in this sample: 40 (3%) men who were sexually coerced as adults also reported childhood sexual abuse, a significantly greater rate of sexual abuse than the 18% of men who were not sexually coerced as adults, χ^2 (N 595, df 1) = 11.58, $p < .001$.

Among men who were sexually coerced as adults ($n = 121$), 44% ($n = 53$) had unwanted sexual intercourse because a man threatened abandonment, 50% ($n = 60$) indicated that unwanted intercourse occurred because a man threatened to use force, and 53% ($n = 64$) experienced unwanted intercourse as a result of force, with 37% ($n = 45$) of coerced men experiencing more than one type of adulthood sexual coercion. The average age of first unwanted sexual intercourse in adulthood was 21.8 years ($SD = 8.3$) and the average age of the man who was sexually coercive at that first occurrence was 29.4 ($SD = 13.7$). It was also common for participants to report multiple sexually coercive experiences as adults, with 48% (n = 58) of men reporting three or more sexually coercive adult experiences. Comparisons on demographic characteristics showed that men who had been sexually coerced as adults were significantly less educated, more likely to be ethnic minorities, of lower-income levels, and more likely to have tested positive for HIV antibodies (see Table 1).

Unwanted Sexual Contact and Behavioral Risks

Men who experienced pressured or forced (unwanted) sexual intercourse as adults were compared to those who had not been pressured or forced as adults. Multiple regression analyses, controlling for years of education, ethnicity, income level, and HIV status showed that men with a history of adult unwanted sexual contact were significantly more likely to report crack cocaine and nitrite inhalant use than men who had not been coerced as adults. In addition, coerced men were more likely to have received substance abuse treatment. With respect to sexual relationship risks, men who had been sexually coerced were more likely to report unprotected anal intercourse as the insertive partner, any unprotected anal intercourse, and were more likely to have had two or more unprotected anal intercourse partners in the preceding 6 months. Unwanted sexual intercourse was also associated with having exchanged sex for money or drugs. We also found that men with a history of unwanted sexual intercourse were more likely to have been physically assaulted by a male partner and were significantly more likely to report being afraid to request male partners to use condoms (see Table 2). In a test of the revictimization hypothesis, these results remained significant with only slight changes in the observed odds ratios after adjusting for history of child sexual abuse.

Sexual Revictimization and Behavioral Risks

To investigate the potential effects of child sexual abuse history and sexual revictimization in childhood and adulthood on behavioral risk factors, we compared four groups of men who were subdivided according to their history of unwanted sexual contacts in adulthood and childhood. As shown in Table 3, men with a history of unwanted sexual

Table 1. Demographic Characteristics Among Men Who Have Sex with Men Who Experienced Unwanted Sexual Contacts Since Age 16 and Men Who Have Not.

Characteristic	Have not experienced unwanted sexual contact		Experienced unwanted sexual contact			
	M	*SD*	*M*	*SD*	*t*	*p*
Age	34.6	9.3	33.9	8.9	.7	ns
Years of education	14.8	2.0	13.8	2.3	4.5	.001
	N	%	*N*	%	$\chi 2$	*p*
Race						
White	359	76	61	52		
African-American	77	16	47	40		
Hispanic	15	3	3	3		
Other ethnicities	23	5	7	6	33.4	.001
Income						
< $20,000	103	22	53	45		
$21-30,000	130	27	32	27		
> $31,000	141	51	33	28	31.3	.001
Not sexually active	81	17	20	17		
Not an exclusive partner	186	40	50	42		
Exclusive partner						
< 6 months	57	12	24	20		
> 6 months	146	31	26	22	7.3	ns
Sexual orientation						
Gay	417	88	95	81		
Bisexual	50	11	22	19		
Heterosexual	5	1	1	1	5.7	ns
Tested for HIV	408	80	102	88	4.6	ns
HIV Seropositive	78	19	37	37	29.2	.001

Note. Ns vary due to missing data.

contact as both adults and children were most likely to report tobacco use and powder cocaine, crack cocaine, and methamphetamine use in the previous 6 months. In addition, men who had been sexually abused and sexually coerced were more likely to have been treated for substance abuse. In each case, men who reported sexual victimization as either an adult or a child reported a greater likelihood to use substances than men who had not been sexually violated (see Table 3). Most of the risks identified among revictimized men parallel risks of men with only a history of unwanted sexual contact in adulthood.

Contrary to the revictimization hypotheses, we found that men with a history of sexual coercion as adults, regardless of their history of childhood sexual abuse, were most likely to report unprotected insertive anal intercourse, multiple unprotected anal intercourse partners, and relationship violence. However, men who had been sexually abused as children and revictimized as adults were most likely to have been treated for an STD and most likely to have exchanged sex for money or drugs. Also consistent with the revictimization hypothesis, we found that men who had been revictimized were the most likely to fear the consequences of requesting partners to use condoms.

Unwanted Sexual Experiences and Symptoms of Dissociation, Trauma, and Borderline Personality

Results of a MANCOVA testing differences between men who had a history of unwanted sexual contacts in adulthood and childhood, controlling for participant education, ethnicity, income, and HIV status, indicated a multivariate main effect for having experienced unwanted sex as an adult, *Wilks' Lambda* (3, 460) = .93, $p < .001$. Subsequent ANCOVAs (all *F*'s *df* = 1, 462) showed that sexually coerced men reported greater dissociation symptoms, $F = 4.27$, $p < .05$, trauma-related anxiety symptoms, $F = 14.64$, $p < .001$, and borderline personality characteristics, $F = 28.73$, $p < .001$. In addition, there was a significant main effect for history of childhood sexual abuse, *Wilks' Lambda* (3, 460) = .97, $p < .01$; men with a history of childhood sexual abuse reported greater symptoms of borderline personality, $F = 6.09$, $p < .01$, with nonsignificant differences between groups for dissociation and trauma-related anxiety symptoms. Finally, results indicated a significant interaction effect between the two types of sexual violation histories, *Wilks' Lambda* (3, 460) = .97, $p < .01$. Subsequent ANCOVAs indicated a significant interaction on borderline personality characteristics, $F = 4.49$, $p < .05$, with nonsignificant differences for the other two scales. Further analyses showed that only men who had experienced both adult and childhood sexual coercion scored above the mean on any of the symptom indexes, and that was for borderline symptoms.

Multivariate Prediction of High-Risk Sexual Behavior

A major purpose of the present study was to extend the research literature by investigating the independent effects of sexual coercion on sexual risk behavior in men who have sex with men. We therefore conducted a hierarchical

Table 2. Substance Use and Sexual Relationship Risks Men Who Have Sex with Men With and Without a History of Unwanted Sexual Contact

	Have not experienced unwanted sexual contact (N = 474)		Experienced unwanted sexual contact (N = 121)		Adjusted for demographics	Adjusted for CSA history
	N	%	N	%	OR 95% CI	OR 95% CI
Substance use						
Tobacco	166	35	58	48	1.4 .8-2.2	1.4 .9-2.3
Alcohol	404	87	96	81	1.0 .5-1.9	1.0 .5-1.9
Marijuana	126	27	43	39	1.2 .7-2.0	1.3 .8-2.1
Powder cocaine	41	9	22	20	1.9 .9-3.7	1.9 .9-3.7
Crack cocaine	15	3	21	19	3.7 1.6-8.6	3.5 1.5-8.2
Nitrites	98	21	32	30	1.8 1.1-3.1	1..8 1.1-3.1
Methamphetamine	28	6	16	15	1.8 .8-3.9	1.8 .8-3.9
Used drugs as part of sex	57	13	24	22	1.5 .8-2.8	1.6 .9-2.9
Treated for substance abuse	44	9	34	28	2.0 1.1-3.8	2.0 1.1-3.6
Sexual behaviors						
Unprotected insertive anal intercourse	182	40	56	51	1.6 1.0-2.4	1.7 1.2-3.3
Unprotected receptive anal intercourse	170	38	53	47	1.4 .9-2.2	1.4 .9-2.3
Any unprotected anal intercourse	224	50	69	63	1.6 1.0-2.6	1.7 1.0-2.7
Unprotected anal intercourse with 2+ partners	51	12	33	31	2.8 1.6-5.3	3.0 1.6-5.4
Treated for an STD	125	26	47	40	1.6 .9-2.6	1.6 .9-2.6
Traded sex for money or drugs	60	13	43	36	2.3 1.3-3.9	2.3 1.3-3.9
Physically assaulted by male partner	117	25	70	58	4.4 2.7-7.3	4.5 2.7-7.4
Fears requesting partner to use condoms	7	2	28	23	26.3 7.4-94.2	27.8 7.5-102.4

Note. CSA = childhood sexual abuse.

multiple logistic regression analysis, using multiple unprotected anal intercourse partners in the past 6 months as the criterion variable and four blocks of predictor variables: (a) participant education, ethnicity, income, and HIV status; (b) powder cocaine, crack cocaine, and nitrite inhalant use in the past 6 months; (c) scores on the dissociation, trauma-related anxiety, and borderline personality scales; and (d) childhood sexual abuse and adult unwanted sexual contact experiences. Adjusted Odds Ratios (*OR*) and their associated 95% Confidence Intervals (*CI*) are reported. Results showed that lower participant income, *OR* = 1.6, *CI* = 1.1 – 2.2, a positive HIV status, *OR* = 2.3, *CI* = 1.2 – 4.5, and greater powder cocaine use, *OR* = 4.2, *CI* = 1.9 – 9.3, significantly predicted multiple unprotected anal intercourse partners. In addition, having been sexually coerced in adulthood significantly predicted multiple unprotected partners, *OR* = 2.9, *CI* = 1.4 – 5.7, whereas childhood sexual abuse history did not, *OR* = 1.1, *CI* = .5 – 2.2, demonstrating the independent effects of unwanted sexual contact in adulthood on sexual risk behavior.

Discussion

Results of the current study replicated and extended previous research and confirmed a study hypothesis to show that men with unwanted sexual experiences are at increased risk for multiple behavioral risks including substance abuse, trading sex for drugs, and relationship violence (Leigh, 1990). Sexual coercion in men is also likely to involve unprotected anal intercourse, placing them at high risk for HIV and other sexually transmitted infections (Kalichman & Rompa, 1995). Similar to studies of women (Koss et al., 1987; Whitmire et al., 1999) and other studies of sexual coercion of men (Struckman-Johnson & Struckman-Johnson, 1994; Waterman et al., 1989), one in three men reported a lifetime history of unwanted sexual contact. In support of a study hypothesis, sexually coerced men reported significantly greater substance abuse, unprotected sexual behaviors, and psychological symptoms of dissociation, trauma-related anxiety, and borderline characteristics than men who had not been coerced. However, contrary to our hypothesis, these findings remained significant even after accounting for childhood sexual abuse history. Again contrary to what we expected, childhood sexual abuse history alone was not independently associated with substance abuse or sexual risk behaviors.

Revictimization was common in our sample, with one third of men who experienced sexual coercion as adults also reporting a history of childhood sexual abuse. Sexual revictimization in men who have sex with men was not associated with dissociation or trauma-related anxiety in the current sample. Men who were sexually victimized both as a child and as an adult scored above the mean on borderline personality symptoms. Consistent with the

Table 3. Substance Use and Sexual Relationship Risks Among Men with Adult Unwanted Sexual Contact and Childhood Sexual Abuse Histories

	Neither adult coercion nor child sexual abuse ($N = 385$)		Adult sexual coercion ($N = 81$)		Childhood sexual abuse ($N = 89$)		Both adult coercion and childhood sexual abuse ($N = 40$)				Significance after correction
	N	%	*N*	%	*N*	%	*N*	%	χ^2	*p*	
Legal Substances											
Tobacco	125	33[a]	33	41[b]	40	45[b]	25	63[b]	17.2	.001	*
Alcohol	333	88	66	84	70	81	29	76	6.5	ns	ns
Illegal Substances											
Marijuana	101	27	28	37	25	29	15	43	6.3	ns	ns
Powder cocaine	32	9[a]	15	20[b]	9	11	7	21[b]	11.1	.01	*
Crack cocaine	11	3[a]	12	16[b]	4	5[a]	8	24[b]	36.6	.001	*
Nitrites	81	22	24	32	17	20	8	24	4.2	ns	ns
Methamphetamine	22	6[a]	9	12	6	7[a]	7	20[b]	11.1	.01	*
Used drugs as part of sex	46	13	14	19	11	13[a]	10	29[b]	8.1	.05	ns
Treated for substance abuse	32	8[a]	15	19[b]	12	14[ab]	18	45[c]	4.1	.001	*
Sexual risk behaviors											
Unprotected insertive anal intercourse	157	43[a]	41	55[b]	25	29[c]	15	43	11.0	.01	*
Unprotected receptive anal intercourse	135	37	37	49	35	41	16	44	4.2	ns	ns
Any unprotected anal intercourse	186	52[a]	49	65[b]	38	45[a]	20	59	7.4	.06	ns
Unprotected anal intercourse with 2+ partners	37	11[a]	23	32[b]	13	16[a]	10	29[b]	24.7	.001	*
Sexual risk history											
Treated for an STD	100	26[a]	31	38[b]	25	28	21	57[b]	8.7	.03	*
Traded sex for money or drugs	43	11[a]	27	33[b]	17	19[c]	23	59[b]	40.1	.001	*
Fears requesting partner to use condoms	4	1[a]	12	15[b]	3	2[a]	23	59[c]	115.6	.001	*
Physically assaulted by partner	81	21[a]	44	54[c]	36	40[b]	26	68[c]	66.3	.001	*

Note. Percents with different superscripts are significantly different from each other, $p < .05$, * indicates difference is significant using *p* value adjusted for inflated error.

emotional and relationship dependence of borderline personality (Becker et al., 1998), men with a history of revictimization were by far the most likely to state that they feared the consequences of requesting partners to use condoms. Studies show that (a) women with repeated abuse experience long-term emotional consequences (Koopman, Gore-Felton, & Spiegel, 1997), (b) fear can be a significant barrier to requesting condom use, and (c) failure to request condom use places people at risk for HIV infection (Kalichman et al., 1998; van der Straten, King, Grinstead, Serufilira, & Allen, 1995; Wingood & DiClemente, 1997). Efforts to reduce HIV and STD transmission risks among sexually revictimized men will therefore require mental health as well as public health strategies.

This study was conducted using a convenience sample of gay and bisexual men attending a large gay pride event

Table 4. Symptoms of Dissociation, Trauma, and Borderline Personality Among Men with Adult Unwanted Sexual Contact and Childhood Sexual Abuse Histories

	Neither adult coercion nor child sexual abuse ($N = 385$)		Adult sexual coercion ($N = 81$)		Childhood sexual abuse ($N = 89$)		Both adult coercion and childhood sexual abuse ($N = 40$)				
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	ASC	CSA	NT
Dissociative experiences	10.5	3.8	12.3	4.1	11.2	3.9	12.7	5.4	*		
Trauma symptoms	3.9	2.6	5.3	2.6	3.9	2.5	5.5	2.6	*		
Borderline characteristics	10.2	3.8	12.5	4.1	10.5	3.8	15.2	4.6	*	*	*

Note. ASC = Main effect for adult sexual coercion; CSA = Main effect for childhood sexual abuse; INT = interaction effect for adult sexual coercion x childhood sexual abuse.
* $p < .05$.

in a city in the southeastern United States that has a substantial AIDS case rate. Similar to other community-based research with men who have sex with men, our sample was predominantly White, of upper-income levels, and highly educated. It is also likely that our sample underrepresents men who are not open about their sexual orientation. There is considerable literature documenting social and cultural aspects of homosexuality in the southern United States that should also be considered when interpreting our findings. Fundamental religious beliefs; a relative lack of cultural diversity; restrictive community boundaries around class, race, and gender; unbending views of child and adolescent behavior; and an emphasis on relationships to land, home, and family serve as strong forces in shaping sexual identities in the South (Sears, 1991). These powerful cultural influences may account for regional differences in substance use and psychological adjustment among members of southern gay communities (Sears, 1991; Skinner & Otis, 1996). Therefore, limitations of our sample caution against over-generalizing our findings to broader populations of men who have sex with men, and all of our study findings require replication with samples drawn from different geographical regions.

Our study also used a cross-sectional survey method, precluding any inferences of causation regarding sexually coercive experiences, psychological symptoms, and sexual risk behaviors. Participants were asked to self-identify situations of sexual pressure or force, and how individuals define such situations is open to subjective interpretation. Our definition of unwanted sexual experiences also combined sexual pressure and sexual force, situations that are likely to have distinct consequences. Therefore, research using more sensitive methods, such as in-depth interviewing techniques, is required to confirm our study findings. Our survey method also relied on self-report of sensitive and often stigmatized experiences and behaviors. The potential for social desirability influences were minimized by anonymous survey procedures, and high rates of sexual abuse, unwanted sexual contact, substance use, multiple sexual partners, and unprotected anal intercourse reported by this sample suggests that participants were primarily honest in their responses. Nevertheless, surveys such as the one reported here can yield biased information, and such biases must be considered when interpreting our study findings. Finally, our measures of sexual coercion may have resulted in inaccurate response patterns (Ross & Allgeier, 1996), and our scales assessing dissociation, trauma, and borderline symptoms resulted in skewed scores with responses for the entire sample below the scale midpoints. Thus, restricted ranges may have reduced the sensitivity of our measures and should be considered when interpreting our results (Allgeier & Lamping, 1998).

We conclude that unwanted sexual experiences represent a prevalent and pervasive problem for men who have sex with men. A complex matrix of substance abuse, dissociation, anxiety, and personality disturbances occur with high-risk sexual behavior in men who have been sexually coerced to a greater extent than men who have not been coerced. Although these characteristics were not associated with childhood sexual abuse, it appears that men who experience unwanted sexual contacts as adults and as children were more vulnerable to some of the behavioral risks we examined. The study results require replication and confirmation using more diverse samples from other geographical regions and the use of more sensitive methodologies. Nevertheless, our findings suggest that interventions are needed to address sexual coercion in the sexual relationships of men who have sex with men. Interventions may draw from the successes of programs developed for reducing sexual coercion in heterosexual relationships (Muehlenhard et al., 1991; Parott, 1998). Many of the strategies used for preventing sexual coercion have also been successful in HIV risk reduction interventions, including sexual assertiveness and communication skills training and interventions to address alcohol and substance use in sexual contexts (Kalichman et al., 1998). Therefore, the same skills-building techniques used to prevent HIV risk behavior and sexual coercion can be brought together to simultaneously address these two related problems. Prevention of both sexual coercion and HIV infection will likely be improved through such integrated approaches.

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Manuscript accepted September 5, 2000