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## Preliminary Findings of an Adapted Evidence-Based Woman-Focused HIV Intervention on Condom Use and Negotiation Among At-Risk Women in Pretoria, South Africa

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### Abstract

This article presents the results of a randomized trial in South Africa of an adapted evidence-based Woman-Focused intervention on condom use with primary sex partners. The preliminary findings show that regardless of HIV status, condom negotiation was significantly associated with condom use at the 3- and 6-month follow-ups. By intervention group, significant intervention effects were found at 6-month follow-up for HIV-positive and HIV-unknown status women in the Woman-Focused intervention who were more likely than women in the Standard intervention to report condom use with a primary male partner. Among HIV-positive women, those in the Woman-Focused group and those with greater sexual control were more likely to report condom use at the 6-month follow-up. The findings indicate that gender-based interventions for women may result in increased condom negotiation skills.

### Keywords

condom negotiation; condom use; HIV risk; sex workers; sexual control; South Africa; woman-focused intervention

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In 2006, data from extensive antenatal clinic surveillance systems, national surveys with HIV testing, and mortality records from civil registration systems indicated that

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approximately 5.5 million South Africans were living with HIV (UNAIDS, 2008). Overall, HIV prevalence among South Africans aged 15 to 49 is estimated at 18%, with women bearing the larger burden of the epidemic compared with men. This disparity is especially pronounced in younger age groups, with women aged 15 to 24 accounting for 90% of all new HIV infections among their age group (Rehle, 2007) and being four times as likely to be infected with HIV as their male counterparts (17% vs. 4%) (Pettifor et al., 2005; Shisana et al., 2005). Additionally, in 2005, HIV prevalence among women aged 20 to 29 was estimated to be six times higher than among men of the same age group (5.6% vs. 0.9%) (UNAIDS, 2008). Although data from antenatal clinics across South Africa show that HIV prevalence may be leveling off, the overall estimate remains exceptionally high at 29%, underscoring the serious public health concern for women of childbearing age and their children (Department of Health, 2007; UNAIDS, 2008).

In addition to the biological factors that place women at increased risk for HIV (Nicolosi et al., 1994), many South African women lack the sociocultural and economic power to control sexual relationships and practice safer sex with main male sex partners, such as husbands and boyfriends (Langen, 2005). In particular, poor women and those lacking adequate education and job skills often depend on main male sex partners for financial support to meet basic subsistence needs (Hunter, 2002). Further, South African sociocultural norms dictate that male partners determine the timing, nature, and frequency of sexual interactions; decisions about condom use; and the legitimacy of having multiple sex partners (Ackermann & de Klerk, 2002; Eaton, Flisher, & Aaro, 2003; Gilbert & Walker, 2002; Sawyer, Wechsberg, & Myers, 2006; Wechsberg, Luseno, & Lam, 2005). The highly unequal sociocultural and economic status faced by many South African women places them at a disadvantage in their ability to be sexually assertive with regard to practicing safer sex, discussing sexual risk, negotiating condom use with primary male partners, and avoiding sexually coercive situations (Wechsberg et al., 2008). For many of these women, the greatest risk for HIV infection is heterosexual contact (Shisana et al., 2005).

Previous studies in Sub-Saharan Africa have found that greater self-efficacy in negotiating condom use and communicating with sex partners about HIV risks are positively associated with condom use (Karim, Magnani, Morgan, & Bond 2003; Pettifor, Measham, Rees, & Padian, 2004; Taffa, Klepp, Sundby, & Bjune, 2002). Studies have also found that the lack of sexual power as well as experiences with sexual coercion can compromise a woman's ability to use condoms, which in turn increases risk for HIV infection (Pettifor et al., 2004). Other research has shown that the type of sexual relationship is associated with condom use (Department of Health, 2004; Maharaj & Cleland, 2004; Pettifor et al., 2004). For instance, women involved in trading sex for goods, food, or money are more likely to use condoms with their trading partners than with boyfriends or husbands (Varga, 1997; Wechsberg et al., 2005). In contrast, women who are married, in committed trusting relationships, or living with their partner report low condom use (Maharaj & Cleland, 2004; Pettifor et al., 2004) and difficulty introducing condoms into and/or negotiating condom use in sexual relationships (Parker, Nkosi, Birdsall, & Hajiyanis, 2004). Men and women who have been in relationships for 6 or more months are also significantly less likely to have used condoms at their most recent sexual intercourse than individuals who have been together for a lesser amount of time (Hendriksen, Pettifor, Lee, Coates, & Rees, 2007).

While knowledge of one's HIV status may also influence condom use (Shisana et al., 2005), study findings have been mixed. Among HIV-infected adults in Uganda, individuals who knew their HIV status or their partners HIV status were more likely to have used condoms at last sex act (Bunnell et al., 2008). In contrast, a study among young adults in South Africa found HIV status was not a significant predictor of condom use at most recent sexual intercourse (Hendriksen et al., 2007). Another study, in Botswana, found that HIV-infected

individuals with multiple recent sex partners were less likely to have used condoms or disclosed their HIV status to their sex partners than individuals with only one recent partner (Kalichman, Ntseane, Segwabe, Odireleng, & Simbayi, 2007). Particularly for HIV-infected women, who already face unequal gender relations and economic power, the fear of violence, rejection, and isolation may act as a barrier to disclosing HIV status and/or using condoms in sexual relationships.

These findings suggest that to be successful in increasing condom use, interventions need to focus on helping women to empower themselves—including women who are infected with HIV—and enhancing their sexual power, condom negotiation skills, and communication with main sex partners. A systematic review of the effect of interventions on condom use found that several studies in Sub-Saharan Africa have increased condom use among women and their main sex partners (Foss, Hossain, Vickerman, & Watts, 2007). However, only one of these studies used a randomized controlled trial design, stressing the need for more rigorous research.

The primary aim of the present study was to determine whether a Woman-Focused intervention based on gender and empowerment theories increased condom use with main male partners. A secondary aim was to examine whether women who reported greater condom negotiation, communication about sexual risk with main male partners, self-efficacy in sexual assertiveness, and sexual control were more likely to use condoms with main partners. A third aim was to determine whether outcomes differ based on a woman's HIV status.

## METHODS

The Women's Health CoOp (WHC)–Pretoria is a randomized community trial of a Woman-Focused HIV prevention intervention for high-risk women who use alcohol and other drugs. This intervention was adapted from the Women's CoOp (Wechsberg et al., 2003; Wechsberg, Lam, Zule, & Bobashev, 2004), which has been judged to be a “best-evidence” behavioral HIV intervention by the U.S. Centers for Disease Control and Prevention (Lyles et al., 2007). The findings from a small efficacy trial conducted in 2002 in Pretoria with a sample of 100 sex workers supported the South African adaptation and rationale for the current project (Wechsberg et al., 2005; Wechsberg, Luseno, Lam, Parry, & Morojele, 2006). The WHC–Pretoria received Institutional Review Board (IRB) approval at both RTI International in the United States and the University of Witwatersrand in South Africa.

The adaptation process, recruitment techniques, eligibility criteria, and study protocol have been described elsewhere (Luseno & Wechsberg, 2009; Wechsberg et al., 2008). Implementation of the WHC–Pretoria began in June 2004. The data presented here are based on a sample of 583 women for whom baseline, 3-month and 6-month follow-up assessments, and HIV test results were available.

### Interventions

After randomization, participants received two private one-on-one, hour-long sessions held within a 2-week period. Interventionists used cue cards to provide information and sessions were conducted in English, Zulu, or SeSotho depending on a participant's language preference. All participants received information on community resources and a risk-reduction and toiletry kit containing a variety of materials, including male and female condoms, water-based lubricants, and an oral dam.

The Woman-Focused intervention is an empowerment-based two-session HIV intervention designed to reduce sexual risk, substance use, and victimization among at-risk and

underserved women. It is intended to equip women with increased knowledge about alcohol and other drug use associated with sexual risk and victimization, increase personal power by reducing substance use and staying alert, increase communication skills with partners, increase condom use competency, and teach specific violence prevention strategies. Women also complete a personalized action plan to address their individual risk behaviors and develop concrete short- and long-term goals that each woman feels she can attain to reduce sexual risk, substance abuse, and victimization.

Session One includes information on substance abuse, HIV/sexually transmitted infections (STIs), ways of reducing HIV risk, and behavioral skills training with male and female condoms where the interventionist demonstrates and rehearses with the participant proper condom use. Session Two emphasizes violence prevention and negotiation with sex partners, and includes role-playing and rehearsal to improve participants' communication and negotiating skills. The second session ends with the personalized action plan. For Woman-Focused participants, a whistle was included in the risk-reduction kit to facilitate violence prevention strategies taught in the intervention. Woman-Focused participants also received active service referrals.

The Standard intervention is an adapted version of the revised National Institute on Drug Abuse (NIDA) Standard Intervention (Wechsberg et al., 1998). Minor modifications for South Africa were primarily language-based, such as substance use terminology obtained from the focus groups (e.g., marijuana is called "dagga" and cocaine or crack is called "rock"). The Standard intervention provides information on HIV; drug and sexual risks; risk-reduction methods, including demonstrations on proper use of male and female condoms; how to talk with a partner about safer sex practices; the HIV antibody test; and the steps that participants should take to prevent the spread of HIV.

### HIV Testing

HIV antibody testing as well as pretest and posttest counseling were offered to all participants at their first intervention session as part of the intervention protocol. Only participants who consented were tested for HIV. Testing was conducted with OraQuick Rapid HIV-1 Antibody Test and reactive samples were confirmed with Pareekshak HIV Triline (a rapid test to detect HIV-1 and HIV-2 antibodies). Participants with indeterminate OraQuick or Pareekshak test results were encouraged to seek testing services at a clinic or voluntary testing and counseling site. Participants who did not consent to HIV testing were encouraged at subsequent appointments to take the test, with additional pretest and posttest counseling.

### Measures

The outcome of interest was a dichotomous variable indicating whether at 3- and 6-month follow-ups a participant had used a male or female condom the last time she had sex with a main partner.

Four scales were created for this study to measure condom negotiation, communication with sex partners about risk, self-efficacy in sexual assertiveness, and sexually coercive experiences at baseline, 3-month, and 6-month assessments. Scale scores were computed by averaging individual item responses. Condom negotiation ( $\alpha_B = 0.88$ ,  $\alpha_3 = 0.87$ ,  $\alpha_6 = 0.87$ , where B = Baseline, 3 = 3-month follow-up, and 6 = 6-month follow-up) was measured with a 3-item Likert-type scale where participants were asked, "In the past 90 days, when you had sex, how often did you (a) ask your main sex partner to use a condom? (b) use a condom with your main sex partner even if you were high? or (c) refuse to have sex if your main sex

partner wouldn't wear a condom?" Response options ranged from "Not at all" to "All the time." Higher scores indicate more condom negotiation with the main partner.

Communication with sex partners about partner risk ( $\alpha_B = 0.87$ ,  $\alpha_3 = 0.89$ ,  $\alpha_6 = 0.90$ ) was measured using an 8-item dichotomous response scale with items asking whether in the past 90 days individuals asked their main sex partner about a variety of that partner's risk behavior, including how many sex partners he has had, whether he ever injected drugs, whether he ever shared injecting equipment, whether he ever had an STI, whether he has HIV, whether he had sex with someone else while dating/together with the current partner, and whether the participant asked their main partner to get tested for HIV or STIs. Higher scores indicate less communication with a main partner.

Self-efficacy in sexual assertiveness ( $\alpha_B = 0.92$ ,  $\alpha_3 = 0.91$ ,  $\alpha_6 = 0.92$ ) was measured using a 13-item Likert-type scale. Sample items include, "Do you feel you could ask your main sex partner to use a male condom?" and "Do you feel you could ask if he has HIV?" Response options ranged from "Not at all" to "All the time." Higher scores indicate greater self-efficacy in sexual assertiveness.

Sexual coercion ( $\alpha_B = 0.84$ ,  $\alpha_3 = 0.90$ ,  $\alpha_6 = 0.91$ ) was measured using a 6-item Likert-type scale asking individuals how much they agree or disagree with statements indicating sexually coercive experiences. Sample items include "Sometimes you have sex with your main sex partner even when you do not want to because it is expected of you." and "If you refuse to have sex with your main partner he will refuse to give you money or pay bills." Higher scores indicate greater sexual control and less sexually coercive experiences.

## Analysis

Mean difference tests (i.e., *t*-tests) were conducted on the scales to determine if there were differences by intervention group and sex worker status at baseline, 3-month, and 6-month assessments. Three separate analyses were conducted to examine intervention effects in the following study sample populations: women who were HIV positive from OraQuick or previously tested positive (hereafter referred to as HIV+); women who were HIV negative from OraQuick or previously tested negative (hereafter referred to as HIV-); and women who refused to take the HIV test offered by the study, had an indeterminate OraQuick, or did not know their status (hereafter referred to as HIV-unknown). Multiple postintervention logistic regression analyses were used to assess independent associations between intervention assignment and condom use at last sex act while adjusting for possible confounders. All analyses were conducted using procedures of the SAS statistical software (SAS 9.1.3 Service Pack 3, 2002–2003).

## RESULTS

### Study Sample

Descriptive characteristics of the sample are shown overall and by sex worker status in Table 1. The majority of the sample had a main partner who they were not living with, and also had one child. More women who were not sex workers reported having a main partner than sex workers, and women who were not sex workers were younger and had slightly higher educational levels. While most of the women were unemployed, sex workers reported significantly higher incomes than women who were not sex workers. Significant differences in HIV status can be noted, with 58% of sex workers being HIV+, compared with 26% of women who were not sex workers.

Findings from the mean difference tests for condom negotiation, self-efficacy for sexual discussion scale, sexual assertiveness scale, and sexual coercion index were found to be

mostly nonsignificant (data not shown). These tests were conducted between the Standard and Woman-Focused groups at baseline, 3-month, and 6-month assessments. At 3-month assessment, no between-group differences were observed in condom use at last sex act with 39% of women in the Standard group and 43% of women in the Woman-Focused group reporting using condoms. However, at 6-month assessment, condom use was significantly higher ( $p < .05$ ) in the Woman-Focused group, with 52% of women in this group using condoms at last sex act compared with 37% in the Standard group.

Overall, at baseline, women who reported engaging in sex work had significantly higher scores in condom negotiation with a partner and self-efficacy for sexual assertiveness than women who did not report engaging in sex work. Further, on average, sex workers had significantly lower scores on the sexual coercion index and higher scores on communication with a partner. The direction of these differences remained consistent at the 3- and 6-month assessments. However, no statistically significant differences were observed in condom use at last sex act at the 3- and 6-month assessments between sex workers and women who were not sex workers.

Table 2 presents the postintervention logistic regression analyses results of condom use at last sex act at 3- and 6-month follow-ups for the HIV+, HIV-, and HIV-unknown status study populations. HIV+ women with higher condom negotiation scores were more likely to report condom use at last sex act at the 3-month assessment (OR = 8.64; 95% CI = 3.70, 20.17;  $p < .05$ ) and 6-month assessment (OR = 19.78; 95% CI = 5.89, 66.39;  $p < .05$ ). HIV+ women in the Woman-Focused intervention were also more likely to report condom use at last sex act than women in the Standard intervention (OR = 7.27; 95% CI = 1.64, 32.23;  $p < .05$ ). At 6-month follow-up, HIV+ women with greater sexual coercion index scores also had greater odds of condom use at last sex act (OR = 3.02; 95% CI = 1.08, 8.45;  $p < .05$ ).

The odds of reporting condom use at last sex act were higher among HIV- women, with higher condom negotiation scores at 3- and 6-month follow-ups (OR = 11.51; 95% CI = 5.21, 25.46;  $p < .05$  and OR = 20.18; 95% CI = 7.71, 52.84;  $p < .05$ , respectively). Additionally, HIV- women who reported engaging in sex work were less likely to report condom use with a main partner at the 6-month assessment than women who did not engage in sex work (OR = 0.22; 95% CI = 0.06, 0.77;  $p < .05$ ). At 6-month assessment, HIV- women with higher self-efficacy for sexual discussion scores reported a greater likelihood of condom use at last sex act (OR = 6.49; 95% CI = 1.34, 31.44;  $p < .05$ ) than women with lower self-efficacy scores.

Similar to HIV+ and HIV- women at 3-month follow-up, participants with HIV-unknown status with higher condom negotiation scores had greater odds of using a condom (OR = 7.95; 95% CI = 3.38, 18.72;  $p < .05$ ). At 6-month assessment, the women with HIV-unknown status had similar results to the HIV+ women, with both treatment status (OR = 5.03; 95% CI = 1.26, 20.11;  $p < .05$ ) and condom negotiation (OR = 11.16; 95% CI = 3.90, 31.96;  $p < .05$ ) as significant predictors of condom use at last sex act, but without the significant sexual coercion findings.

## DISCUSSION

Currently, the greatest risk for HIV among South African women is heterosexual contact. This risk is especially heightened for poor women with low levels of education, limited job skills, and few employment options, often leaving sex work as the only option. The majority of these women have relationships with main partners, where monogamy is not the norm and neither is consistent condom use. Therefore, with South Africa's high rates of HIV,

increasing consistent condom use among these at-risk women remains a critical public health priority.

Although male and female condoms are now freely available from South African health departments, barriers to their use remain. One of the primary goals of the Woman-Focused intervention was to break new ground in the South African cultural environment and train women on proper condom use and negotiation skills for safer sex with a main partner. This study demonstrated significant intervention effects at 6-month follow-up for HIV+ and HIV-unknown women in the Woman-Focused intervention who were more likely than women in the Standard intervention to report condom use with a main sex partner, respectively. Significant intervention effects were not observed at 3-month follow-up, which may imply that it takes time to build confidence in the necessary skills before the impact is demonstrated.

This study also found that regardless of HIV status, condom use at 3- and 6-month follow-ups was significantly associated with greater condom negotiation with a main sex partner. Consistent with other studies, greater sexual control significantly increased the odds of condom use with a main sex partner, in particular among HIV+ women. The combination of negotiation, sexual control, and actual condom use is essential. The motivation among women who are HIV+ is unclear and merits further study.

Many of the women in this study engaged in sex work to support themselves and their families (Wechsberg et al., 2005). The means difference tests found that women who engaged in sex work were more likely than those who did not engage in sex work to negotiate condom use with main sex partners at follow-up. These women were also more likely to indicate greater self-efficacy in sexual assertiveness; however, they reported more sexually coercive experiences. In the logistic regression analyses, these differences did not translate to significantly greater condom use with primary male partners among sex workers. To the contrary, HIV- women who engaged in sex work had lower odds of condom use. This finding is supported by other studies that have shown that while engaging in sex work, many women will consistently use condoms with clients; however, they report low condom use with main sex partners (Hunter, 2002; Varga, 1997). These women may be more comfortable communicating about sexual matters, but this may not translate into risk-reduction behavior with main partners who could potentially have other outside partners. Therefore, for these women, there is the possibility that the greater risk for HIV infection is with main sex partners rather than clients.

Overall, the findings from this study suggest that efforts to increase condom use with main male sex partners among South African women at high risk for HIV infection would be more effective if implemented with efforts to enhance negotiation skills and sexual control. Interventions targeting sex workers also need to consider HIV risk posed in personal relationships with main sex partners who often report having multiple sex partners (Sawyer et al., 2006). Interventions will also need to provide more extended periods of support that include booster sessions to help continue to build confidence and skills to sustain behavior change.

## LIMITATIONS

As with most studies of sexual behavior and illicit drug use, the findings in this study are limited by the use of self-reported data. Reliability, validity, and data quality were enhanced by using experienced indigenous field staff, providing interviewers with extensive training on interviewing techniques, and regularly conducting quality assurance checks of the data and questionnaires. In addition, because the study population is a targeted sample of South African women who use substances and engage in high-risk sex behaviors, the findings may

not be representative of the general population and must be interpreted cautiously. The analyses presented here focus on predictors of condom use in committed relationships, where women may act differently relative to other types of relationships. This precludes generalizing the study findings to other partners. Finally, given that the analyses presented here are all within-time specific, it is not possible to confirm the direction of the relationships. While women who discuss condoms with their main sex partners or have greater sexual control may be more likely to use condoms, those who use condoms may also be more likely to discuss them and to have greater sexual control.

## CONCLUSION

A small number of randomized trials have shown that brief, gender-based and empowerment-theory-based individual interventions can be adapted to reduce HIV risk behaviors among South African women who face a high risk of HIV infection (Wechsberg et al., 2005; Wechsberg et al., 2006). The findings from this study further suggest that such interventions can address factors related to gender inequality that influence condom use, such as women's sexual control in relationships and communication about condom use with partners. More research is needed to define and apply measures of gender inequality as they relate to condom use and thereby HIV risk in the South African context. Further research is also needed to determine how interventions can be better targeted to increase condom use among women at increased risk for HIV infection.

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TABLE 1

## Frequencies of Demographic Characteristics

Characteristic, Table %	Overall <i>n</i> = 583 (%)	Not sex workers <i>n</i> = 199	Sex workers <i>n</i> = 384	Chi Sq <i>p</i> -value
Age				
18 to 24	<i>n</i> = 233 (40.0)	47.7	35.9	.02
25 to 34	<i>n</i> = 256 (43.9)	39.2	46.4	
35 and older	<i>n</i> = 94 (16.1)	13.1	17.7	
Education				
None to primary	<i>n</i> = 100 (17.2)	4.5	23.7	<.0001
Secondary	<i>n</i> = 440 (75.5)	80.9	72.7	
Tertiary	<i>n</i> = 43 (7.4)	14.6	3.7	
Employment				
Employed	<i>n</i> = 71 (12.2)	11.6	12.5	.009
Unemployed	<i>n</i> = 482 (82.7)	79.4	84.4	
Other	<i>n</i> = 30 (5.2)	9.1	3.1	
Number of children <sup>a</sup>				
1	<i>n</i> = 215 (50.7)	56.9	47.5	NS
2	<i>n</i> = 115 (27.1)	26.7	27.3	
3+	<i>n</i> = 94 (22.2)	16.4	25.2	
Marital status <sup>a</sup>				
Single, without main partner	<i>n</i> = 137 (23.6)	0.5	35.7	<.0001
Not living with main partner	<i>n</i> = 276 (47.6)	70.4	35.7	
Married or living with main partner	<i>n</i> = 161 (27.8)	28.1	27.6	
Separated, divorced, or widowed	<i>n</i> = 6 (1.0)	1.0	1.1	
HIV status <sup>b</sup>				
Negative	<i>n</i> = 236 (52.4)	74.2	41.9	<.0001
Positive	<i>n</i> = 214 (47.6)	25.9	58.1	
HIV unknown status	<i>n</i> = 133	<i>n</i> = 52	<i>n</i> = 81	
Characteristic, mean ( <i>SD</i> )	Overall <i>n</i> = 583	Not sex worker <i>n</i> = 199	Sex worker <i>n</i> = 384	<i>t</i> -test <i>p</i> -value
Monthly income				
in RAND	938 (1155)	567 (472)	1127 (1339)	<.0001
in USD	\$122 (\$150)	\$74 (\$61)	\$146 (\$174)	

Note.

<sup>a</sup>Contains some missing data.

<sup>b</sup>HIV tested (*n* = 354); Previous test by self-report (*n* = 96).

TABLE 2

Logistic Regression of Last Sex Condom Use at 3 Months and 6 Months

Correlates of condom use at last sex act	HIV positive			HIV negative			HIV unknown		
	OR (95% CI) condom use at 3 mos <sup>a</sup> (n = 111)	OR (95% CI) condom use at 6 mos (n = 120)	OR (95% CI) condom use at 3 mos (n = 165)	OR (95% CI) condom use at 6 mos (n = 163)	OR (95% CI) condom use at 3 mos (n = 97)	OR (95% CI) condom use at 6 mos (n = 88)			
Sex worker									
Yes	1.00 (0.32–3.14)	1.32 (0.29–5.93)	0.58 (0.22–1.51)	0.22 (0.06–0.77)*	1.06 (0.31–3.56)	1.34 (0.37–4.93)			
Treatment									
Women	0.94 (0.33–2.69)	7.27 (1.64–32.23)*	1.68 (0.67–4.18)	1.72 (0.61–4.84)	1.41 (0.41–4.80)	5.03 (1.26–20.11)*			
Condom negotiation—3 months	8.64 (3.70–20.17)*	...	11.51 (5.21–25.46)*	...	7.95 (3.38–18.72)*	...			
Communication with Partners about Sex Risk—3 months	0.41 (0.09–1.94)	...	2.56 (0.68–9.65)	...	0.38 (0.06–2.33)	...			
Self-efficacy in Sexual Assertiveness—3 months	0.45 (0.17–1.23)	...	0.89 (0.39–2.04)	...	0.57 (0.19–1.69)	...			
Sexual Coercion Index—3 months	1.61 (0.81–3.22)	...	0.90 (0.48–1.70)	...	1.25 (0.49–3.19)	...			
Condom negotiation—6 months	...	19.78 (5.89–66.39)*	...	20.18 (7.71–52.84)*	...	11.16 (3.90–31.96)*			
Communication with Partners about Sex Risk—6 months	...	1.19 (0.16–8.84)	...	6.49 (1.34–31.44)*	...	2.00 (0.23–17.82)			
Self-efficacy in Sexual Assertiveness—6 months	...	2.28 (0.57–9.18)	...	0.96 (0.41–2.21)	...	1.30 (0.40–4.21)			
Sexual Coercion Index—6 months	...	3.02 (1.08–8.45)*	...	0.72 (0.32–1.63)	...	1.38 (0.52–3.68)			

Note.

<sup>a</sup>Due to missing data on variables of interest, the analytic sample is greatly reduced.\*  $p < .05$ .