Effects of a Brief, Theory-Based STD-Prevention Program for Female College Students

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Abstract

Purpose—To evaluate a brief, theoretically guided sexually transmitted disease (STD) risk-reduction intervention tailored to young college women.

Methods—The participants were 78 undergraduate females ($\underline{M}$ = 20 years; 76% European-American) who reported inconsistent condom use or multiple sexual partners. Participants were randomly assigned to one of three groups: (a) a one-session intervention based on the information-motivation-behavioral skills (IMB) model, (b) a one-session information only intervention (INFO), or (c) a wait-list control group (WLC). Consistent with Fisher and Fisher's (1992) IMB model, we predicted that risk reduction would be greater when information about HIV was supplemented with motivational enhancement strategies and skills training. To evaluate this hypothesis, groups were compared at the post-intervention and at a two-month follow-up using analyses of covariance and log odds ratios.

Results—At post-intervention, the IMB and INFO groups demonstrated increased STD-related knowledge. At 2-month follow-up, the IMB and INFO groups showed sustained STD-related knowledge and the IMB group showed reductions in number of sexual partners compared to the WLC group.

Conclusion—These results provide partial support for the hypothesis that an IMB model-based intervention leads to reductions in sexual risk behavior, and suggest directions for future research.

Keywords

sexually transmitted diseases; motivation; sex behavior; college students; women

Introduction

The emergence of human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) during the 1980s has increased young people's awareness of sexually transmitted diseases (STDs). Although HIV continues to be acknowledged as a public health threat, other STDs actually occur more frequently. For example, 15 million new cases of STDs are diagnosed annually [1], and two-thirds of those infected are under the age of 25 years [2]. College women appear particularly vulnerable to STDs, with a prevalence that ranges from 7% to 13% [3-9]. Young women may experience a range of long-term health outcomes from infection with STDs, including pelvic inflammatory disease, sterility, cervical cancer, and birth defects. Women with a current STD are also at greater risk for HIV [10,11].

Despite the threat of STDs, there have been few theory-based intervention studies conducted with college students. Bryan et al. [7] reported that college women who took part in a one-

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session condom promotion intervention were more likely to report using a condom during their most recent intercourse compared to women in a control group. Sikkema et al. [12] found that a skills-based intervention led to less unprotected oral-genital sex but it did not reduce unprotected vaginal intercourse. Fisher et al. [13] evaluated an intervention based on their Information-Motivation-Behavioral Skills (IMB) model [14,15], and found increased condom use at the follow-up assessments. These three studies provide encouraging evidence that college students can respond to theory-based risk-reduction programs.

The present study extends previous research on risk-reduction interventions with college women in six ways:

1. We focused on STDs in general rather than on HIV alone. Our rationale was that, among college students, perceived vulnerability to HIV is low [16], owing to the low prevalence of HIV among college women and non-drug using heterosexuals [17]. Thus, lower prevalence and perceived risk for HIV can undermine risk-reduction efforts. In contrast, given that the prevalence of chlamydial infections [18] and gonorrhea [19] is higher in women, and that perceived susceptibility to STDs correlates with condom use [7], we thought that targeting STDs as more proximal health threats might increase college women's risk-reduction motivation.

2. We sought to strengthen the motivational component of Fisher and Fisher's IMB model with the motivational enhancement approach [20,21]. The IMB model delineates the constructs that lead to sexual risk-reduction whereas motivational enhancement strategies specify a therapeutic style and personalized approach. Thus, we included motivational enhancement strategies that may personalize the threat of STDs and promote behavior change.

3. We sought to develop and evaluate a brief one-session intervention that would be practical to implement and attractive to potential participants.

4. We included only sexually active women, and employed an intent-to-treat analytic strategy.

5. We employed a time-matched and content-equivalent comparison conditions. That is, we compared the effectiveness of an information-only intervention (INFO) with a more comprehensive "informational, motivational, and skills-based" (IMB) intervention guided by the Fisher and Fisher's [9] model. Both groups were compared to a wait-list control (WLC) group.

6. We used a theory-derived and identical measurement method. Participants were assessed on STD-related knowledge, motivation, behavioral skills, and sexual behavior at pre- and post-intervention, and at a 2-month follow-up. We predicted that participants in the IMB group would show improved knowledge, motivation, behavioral skills, and reduced unprotected vaginal and oral sex compared to the INFO and WLC groups.

Methods

Participants

The participants were 78 undergraduate women with a mean age of 20 years; all were single and most (76%) were European-American. Forty-eight percent reported 3 or more lifetime sexual partners; sixty-five reported unprotected vaginal sex in the previous 2 months. They participated for either partial fulfillment of course requirements or for extra credit in undergraduate psychology courses. Power analyses using effect sizes from our earlier work [22] indicated that a sample size of 17 per treatment condition would provide "good" (i.e., β

> .80) power [23]. Inclusion criteria included: (a) heterosexual, (b) sexually active in the last 2 months, and (c) 18 years old or older. Exclusion criteria included: (a) being married; (b) using condoms every episode of vaginal, oral, and anal sex during the last 2 months; and (c) pregnant or trying to become pregnant.

Measures

Demographics—A brief questionnaire was used to collect descriptive information, including age, race, and class standing.

Information—The STD Knowledge Questionnaire (STD-K-Q) is a 37-item instrument that assessed information about STD transmission, prevention, and natural history. The STD-K-Q was modeled after the HIV Knowledge Questionnaire [24], and comprises questions about HIV, chlamydia, genital herpes, HPV, gonorrhea, and PID. Data from the entire sample indicate that the STD-K-Q is internally consistent (alpha = .86). Data from the WLC group indicate that it is stable over short periods (one week $\underline{r}$ = .92) to longer retest periods (two months $\underline{r}$ = .85).

Motivation—The motivation construct was assessed with three instruments. The <u>Attitudes Towards Condoms</u> scale, (ATC), a 32-item instrument adapted from the Condom Attitude Scale (CAS) [25] assessed attitudes about condom use as an indicator of motivation to perform STD-risk-reduction behaviors. Four subscales are most relevant in a college population: (a) Interpersonal Impact; (b) Effect on Sexual Experience; (c) Perceived Risk; and (d) Relationship Safety. These subscales have high internal consistency (alpha >= .76). An 8-item instrument assessed <u>behavioral intentions</u> to perform STD-risk-reduction behaviors. This measure was found reliable (alpha = .90) and responsive to a prior risk-reduction intervention [22]. A 10-item <u>Decisional Balance</u> scale [26] was used to assess the pros and cons of condom use for disease prevention. Both subscales are internally consistent (alpha = .93 and .83, respectively). The instrument assessed both individual reactions to safer sex and participants' sexual partners perceived reactions to safer sex.

Behavioral skills—Role-plays simulations were used to evaluate sexual assertiveness. Participants who do not perform assertively in a simulated sexual situation are unlikely to perform better in an actual sexual situation with a partner [27]. These role-plays [28] were modified to reflect common college student experiences. Participants wrote their responses to the prompts to allow for a time-efficient administration. Responses were rated using our previous scoring system [28]; thus, prior to rating the role-plays, raters were trained to criterion on the four role-play dimensions. Reliability of the ratings of the sexual assertiveness role-plays was examined. Three raters rated a subset of 10% of the role-play responses; inter-rater agreement was calculated based on 198 duplicate ratings by independent and blind raters on each of the 4 dimensions. Interrater reliability were: (a) refusal of unsafe behavior: kappa = .86; (b) reason for refusal: kappa = .83; (c) suggestion of a safer alternative behavior: kappa = .84; and (d) overall appropriateness of the response: kappa = .78.

Risk behavior—Five items assessed sexual behavior including vaginal and oral sex, with and without condoms, and number of sexual partners. Items assessed behavior over the last 2 months at both pre-intervention and follow-up. Open response formats was used to reduce error owing to self-presentation bias. To reduce recall error further, participants reported sexual behavior over two months. This measure has been used in several previous studies [22,28, 29].

Process measures—A 7-item <u>Group experience</u> measure assessed participants' perceptions of the facilitators' knowledge and enthusiasm, and participants' comfort and enjoyment of the

group. In addition to assessing participants' responses to the facilitator and the groups, this measure documented non-specific effects of the intervention groups. A 3-item <u>Background influences</u> measure assessed whether external events influenced participants, including whether participants had attended other STD programs or been affected by a celebrity's diagnosis of an STD, or had other personal experiences about STDs. This measure allowed us to identify potentially confounding events that may have occurred during the study.

Procedure

Recruitment and pre-intervention—The participants were recruited from undergraduate psychology courses and volunteered for a study of "College Women's Health." Volunteers attended an informational meeting, where they were introduced to the study and informed consent was obtained. No women left the study upon learning of the inclusion of sexual health issues; the introduction was designed to put women at ease and allay potential concerns. Next, participants generated code names to ensure confidentiality, completed the baseline survey that included all of the measures, and met individually with the first author. Assurances of confidentiality, small group survey administrations, and use of code names on the surveys were intended to increase privacy and reduce error owing to self-presentation bias. Eligible participants were invited to join the study and, if interested, were assigned randomly to one of three conditions.

Conditions—The participants assigned to the intervention groups were scheduled to attend either a 150-minute INFO intervention or a 150-minute IMB intervention one week after the pre-intervention survey. Each intervention group comprised approximately 8 participants and was led by two facilitators, advanced graduate students in clinical psychology with training in sexual health. To protect against facilitator drift and contamination of intervention components across conditions, facilitators followed detailed manuals.

At the <u>INFO</u> groups, the facilitators stated that the session was an opportunity for the participants to learn about STD transmission, consequences, prevention, and treatment. Facilitators used an interactive format to elicit names and manifestations of the STDs, to correct misconceptions, and to provide information. They avoided personalizing the threat of STDs.

For the <u>IMB groups</u>, the facilitators implemented the five therapeutic principles of the motivational-enhancement approach [20,21] in that they: (a) expressed empathy; (b) increased awareness of the discrepancy between stated safety goals and actual risk behavior; (c) avoided argumentation; (d) "rolled" with resistance; and (e) supported self-efficacy. The group format was used to create a social context in which risk-reduction was normative and supported.

The first segment of the session (10 minutes) served as an introduction to the rules and goals of the group. The second segment (30 minutes) incorporated informational and motivational components. The facilitators elicited self-motivational statements from participants and wrote these statements on a flipchart. Reflective listening was used to elicit more statements. The facilitators requested names and specific manifestations of STDs from the participants, corrected misconceptions of STDs from the participants, and provided accurate information. The facilitator also provided participants with statistics on STDs in college women and those in this study who reported having an STD, history of an STD, or acquaintance with someone with an STD. To personalize the threat of STDs the facilitators handed out a personalized feedback generated from the participant's pre-intervention survey form that included condom use, number of sexual partners, and STD history. Feedback detailed participants' risk behaviors and compared their risk to data obtained from a normative sample of college women at the same institution. The facilitators elicited participants' reactions to the feedback and used reflective listening to reiterate their concerns. Facilitators then summarized participants' concerns and self-motivational statements.

The third segment (20 minutes) continued to emphasize motivational components. The facilitators elicited risk-reduction strategies from participants. They encouraged participants to generate 3 risk-reduction strategies, and for each, to identify its pros and cons. The facilitators reinforced the positive consequences of the risk-reduction strategies; they also elicited barriers to safer sex, and helped participants to identify strategies to deal with barriers. The facilitators asked for participants' reactions to the strategies to identify concerns and fears as well as advantages of risk-reduction. The facilitators ended the segment by reinforcing the advantages.

During the fourth segment (45 minutes) participants engaged in exercises to improve sexual communication skills. The facilitators explained and modeled examples of angry and assertive approaches to making a request. Participants were encouraged to compare the effectiveness of each approach. The basic points of assertive communication were described, and participants generated their own examples. The facilitators enacted a scenario in which one of the facilitators refused unsafe sex and requested that safer sex be practiced while the other facilitator pressured her for unsafe sex. Following the role-play the facilitators reviewed the points that were employed during the role-play. Once the facilitators were comfortable that the participants understood the various points they split up into groups of 3 to 4 and gave each group 2 scenarios to role-play. The facilitators visited each group during the role-plays, answered questions, and provided assistance, after which volunteers demonstrated one of their role-plays. Participants were then asked to identify the various points of assertiveness the volunteers used and to give examples of other risk-reduction alternatives.

In the next phase (15 minutes), the facilitators invited participants to complete and share two action plans with the goal of eliciting self-motivational statements. The facilitators ended the sexual communication segment by highlighting the skills participants had learned and their action plans for enacting these behaviors. In ending the session (30 minutes) the facilitators highlighted the various components of the session, summarized participants' commitment to change, and reinforced their abilities to carry out the risk-reduction strategies.

The WLC group was similar to the INFO group, but this occurred after the WLC group's follow-up survey.

Post-intervention—Immediately following the interventions, participants completed a survey administered by a research assistant (RA) who was not present at the groups and masked to condition. The WLC group completed the survey during the same week as the intervention groups. The survey included all pre-intervention measures except for the inclusion and exclusion criteria and the sexual behavior questions.

Follow-up—Two months after the intervention, participants were telephoned to remind them of their follow-up appointment. At the session, the RAs administered a survey that included all measures, excluding the inclusion and exclusion criteria. All participants were thanked and debriefed.

Results

Attrition

Of the 82 participants who were invited to participate, 78 accepted. Of these, 70 participants attended the post-test and 67 completed the 2-month follow-up survey.

Preliminary Analyses

Preliminary analyses were performed to assess: (a) pre-intervention equivalency of the groups, (b) equivalency of the "completers" and the "dropouts," and (c) normality and skew of the measures.

Equivalency of the groups—Separate ANOVA and χ^2 were performed on all baseline measures. The only difference found was on Decisional Balance, where the WLC group scored higher ($\underline{M} = 13.58$) than the IMB ($\underline{M} = 12.91$) and INFO ($\underline{M} = 10.89$) groups, $\underline{F}$ (2, 75) = 2.95, $\underline{p} = .05$.

Completers versus dropouts—Participants who attended all assessments (completers; $\underline{n} = 67$) were compared to those who did not (dropouts; $\underline{n} = 11$). Results showed that the number of completers and dropouts did not differ as a function of group assignment, $\underline{z} = .77$, $\underline{p} = .44$. There were no differences found on the dependent measures between the completers and the dropouts.

Normality and skew—Each dependent measure was examined for skewness. Skewed variables were re-expressed, when possible. Behavioral intentions for performing STD-risk-reduction behaviors and the sexual behavior variables required transformation. The sexual behavior measures were positively skewed with many "0"s and "1"s. Thus, a log transformation + .5 was performed on: (a) vaginal sex without a condom; (b) vaginal sex with a condom; (c) oral sex without a condom; and (d) oral sex with a condom. (The addition of the constant ensured that 0 values would not be deleted). The number of sex partners variable could not be re-expressed owing to few counts; thus, a non-parametric test, Mann-Whitney U test, a non-parametric test, was used.

Background influences—A Wilcoxon rank-sum test was performed on exposure to other STD programs that may have influenced study findings. Thirty-one percent of participants reported exposure to other STD programs (e.g., television). There were no differences between the INFO and IMB groups, $\underline{z} = -1.25$, $\underline{p} = .21$ or between the IMB and WLC groups, $\underline{z} = .26$, $\underline{p} = .80$.

Group experience—Participants rated the group facilitators as "knowledgeable" to "very knowledgeable" ($\underline{M} = 2.8$, $\underline{SD} = .33$) and "enthusiastic" to "very enthusiastic" ($\underline{M} = 2.7$, $\underline{SD} = .44$). Participants rated their enjoyment of the group as "somewhat" to "very much" ($\underline{M} = 2.3$, $\underline{SD} = .69$) and their comfort in the group as "comfortable" to "very comfortable" ($\underline{M} = 2.2$, $\underline{SD} = .68$).

Primary Analyses

An intent-to-treat analysis, which takes into account participants who drop out early in studies, was used [30]. With this approach, participants' last outcome measures was "carried forward" and substituted for subsequent missing values. In this study, the approach provided a more conservative estimate of treatment effects. Summary statistics for the 78 participants are presented in Tables 1 and 2. To minimize Type I errors, we set the familywise error rate at $\alpha = .05$, and divided it among the contrasts performed on knowledge (.05/6), attitudes (.05/4), behavioral intentions (.05/4), decisional balance (.05/4), and role-plays (.05/4).

Information—Separate ANCOVAs, using the pre-intervention score as the covariate, revealed differences among groups at post-intervention, $\underline{F}(2, 76) = 74.11$, $\underline{p} < .0000$; and at follow-up, $\underline{F}$ (2, 76) = 25.11, $\underline{p} < .0000$. Relative to the WLC group, both the INFO and the IMB groups improved their STD knowledge over time (Table 1). The latter two groups did not differ from each other at either occasion $\underline{F}$s (1, 40) = .31 and .16, respectively; both $\underline{p}$s > .10.

Motivation—Separate ANCOVAs compared conditions on the three measures of motivation. The groups did not differ regarding attitudes toward condoms, behavioral intentions, and decisional balance (Table 1; all $\underline{p}$s > .10).

Behavioral Skills—Separate ANCOVAs compared conditions. The groups did not differ at either occasion (Table 1; all $\underline{p}$s > .10).

Sexual behavior—The log odds of condom use during vaginal and oral sex were compared across groups. No differences were found for condom usage during vaginal sex or oral sex (Table 2). The proportion of participants who became sexually abstinent from pre-intervention to follow-up was 16% in the INFO group, 22% in the IMB group, and 11% in the WLC group. However, these differences were not statistically significant ($\underline{p}$s > .10). The proportion of participants who reported a decrease in number of sexual partners from pre-intervention to follow-up was 21% in the INFO group, 35% in the IMB group, and 16% in the WLC group. Relative to the WLC group, participants in the IMB group significantly decreased their number of sexual partners, $\underline{z}$ = -2.02, $\underline{p}$ = .04. The INFO and IMB groups did not differ, $\underline{z}$ = .97, $\underline{p}$ = .33.

Discussion

Participants in an IMB-based, brief intervention demonstrated improvements in STD-related information and reduced number of sexual partners. The intervention did not, however, improve participants' condom attitudes, intentions, skills, or condom use.

Participants in both the IMB and INFO groups demonstrated sustained improvements in STD knowledge. This is important because, unlike HIV-related knowledge, which tends to be high among students [31], STD-related knowledge tends to be low [32,33]. This study extends previous research by assessing more than one or two STDs [32-35]. We assessed knowledge of transmission, prevention, treatment, and consequences of the major STDs that affect young women. Interestingly, the STD-related knowledge that participants received in the IMB group appeared sufficient.

Participants in the IMB group did not improve on the indices of motivation or behavioral skills. Perhaps these null findings reflect the fact that some STDs can be present on the skin in areas not protected by condom use. Participants may have inferred that condom use is less effective against STDs and, in turn, failed to improve their condom attitudes. Also, participants in committed relationships (47% in the INFO group, 48% in the IMB group) who were not currently using condoms appeared to have rejected the relevance of condom use. Improving motivation or skills may have been perceived as unnecessary if participants believed they were in monogamous relationships. The absence of a treatment effect on these measures may also reflect methodological limitations (e.g., a ceiling effect on behavioral intentions). Alternatively, the intervention methods used to sensitize participants to STDs may not have been sufficient. Finally, personal experience may have overridden the motivational strategies. All of the women in the study were engaging in sexual risk behavior, yet only a small percentage reported a recent STD.

Regarding the skills findings, the brief nature of the intervention may have been insufficient to increase sexual assertiveness and negotiation. In a previous multi-session skills-based interventions with in-depth modeling and practice, college students increased their sexual assertiveness and negotiation skills [12]. In the current study, which evaluated a one-session intervention, the focus was on skill acquisition, not on fluency building [36]. Because participants did not practice their skills intensively in session, use them outside of the session,

nor receive corrective feedback for practice attempts, they did not acquire the skill observed with more intensive interventions [22,29].

Participants in the IMB group did not report reductions in unprotected vaginal and oral sex compared to the INFO and WLC groups. In this study, 53% of participants were in committed relationships at pre-intervention and were not using condoms. Initiating condom use in a committed relationship can be interpreted as questioning commitment and interpersonal trust [37]. With half of the groups in committed relationships, it may have been difficult to effect change on these variables.

Participants in the IMB group did reduce the number of sexual partners compared to the WLC group. This, combined with unimproved condom attitudes, suggests that participants may have adopted reduction in partners rather than condom use as their risk-reduction strategy. This interpretation is consistent with motivational enhancement strategies that encourage participants to adopt strategies consistent with their own individual lives and choices. Previous HIV- and STD-risk-reduction interventions with college students have not reported the impact of their interventions on the number of partners [7,12,13], so this novel finding warrants further study.

This study was guided by the IMB model of HIV-risk-reduction [9,10] with a broadening of the focus to all STDs, and a strengthening of the motivational component. Thus, it is useful to interpret the findings within this model. An increase in STD-related information without a concomitant increase in motivation is possible with the IMB model, which proposes that the two constructs are independent. The IMB group did not improve their skills as measured by the assertiveness role-plays. Behavioral skills play an important part in the IMB model for complex (e.g., negotiating condom use) and less complicated behaviors (e.g., purchasing condoms) and directly affect risk-reduction behaviors. Therefore, the lack of increased condom use in the IMB group is not unexpected given that motivation and behavioral skills were not enhanced. Information alone was insufficient to change behavior, as predicted by the model. Interestingly, a greater proportion of participants in the IMB group reduced their number of sexual partners. Generally in the IMB model, risk-reduction is measured by condom use, not by number of sexual partners. It is not clear whether the focus on STDs in general contributed to these findings, or that previous tests of the IMB model with college students have not focused on reduction in partners.

Future STD-risk-reduction studies with college students should be randomized, controlled intervention trials. It remains to be tested whether HIV- or more general STD-focused programs will reduce risk among college students more effectively. Because STD knowledge among female college students is lower than HIV knowledge, STD-risk-reduction studies need to allocate more time for education. Therefore, more effort must be invested in teaching participants how to identity the symptoms, modes of transmission, and consequences of STD infection.

Practitioners must also consider the unique challenges of STD-risk-reduction with female college students. Many women practice serial monogamy and view it as a safeguard against STDs [38] instead of viewing it as a form of multiple partnering that confers increased risk. Practitioners need to communicate to college women in a non-judgmental way that engaging in unprotected sexual behavior with a monogamous partner encompasses risk from previous partners. In addition, college women need to be aware of the serious, long-term health consequences of some STDs that may affect their reproductive health, especially in view of the asymptomatic nature of many STDs. Practitioners need to work with college women to promote positive attitudes towards condoms, encourage them to take responsibility for their

own STD-risk-reduction whether it is through male or female condom use, and facilitate their learning and developing effective sexual negotiation and assertiveness skills.

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Table 1

STD-related Knowledge, Motivation, and Sexual Assertiveness by Condition over Time

Variable	Pre-intervention		Post-test		Follow-up	
	M	**SD**	**M**	**SD**	**M**	**SD**
Knowledge (% correct)						
INFO	58.16	15.4	85.19	17.57	75.68	14.6
IMB	57.57	11.1	87.05	8.64	76.73	10.3
WLC	57.10	13.8	56.76	14.86	59.38	15.7
Attitudes towards Condoms						
INFO	131.42	11.5	134.42	12.5	127.47	14.7
IMB	132.04	13.2	129.65	12.0	130.35	13.5
WLC	130.99	13.1	131.00	14.0	131.02	13.5
Behavioral Intentions						
INFO	38.10	6.6	39.00	4.6	38.43	5.7
IMB	40.65	6.6	41.60	5.0	39.72	6.5
WLC	41.12	4.7	41.86	4.3	41.59	4.8
Decisional Balance						
INFO	10.89	4.2	11.94	5.0	11.10	4.8
IMB	12.91	4.3	13.13	3.1	14.26	3.8
WLC	13.58	3.5	13.63	3.9	13.38	3.3
Sexual Assertiveness						
INFO	29.79	10.5	25.26	8.7	26.63	9.2
IMB	27.13	8.4	25.35	10.5	25.35	7.1
WLC	27.14	7.9	26.81	9.7	27.61	9.4

Note. STD = Sexually transmitted disease, $\underline{M}$ = mean, $\underline{SD}$ = standard deviation

Table 2

Sexual Behavior by Condition over Time

Variable	Pre-intervention		Follow-up	
	M	**SD**	**M**	**SD**
Vaginal sex without condom				
INFO	3.9	3.9	3.7	6.3
IMB	4.7	6.3	4.4	8.6
WLC	5.6	9.1	4.6	8.6
Vaginal sex with condom				
INFO	3.0	4.1	7.8	22.9
IMB	5.0	6.5	3.2	5.0
WLC	3.3	3.9	4.0	7.2
Oral sex without condom				
INFO	4.8	6.5	6.1	12.2
IMB	3.9	3.4	3.3	3.7
WLC	3.3	3.9	5.2	10.3
Oral sex with condom				
INFO	0	0	0	0
IMB	.2	1.0	.1	.2
WLC	0	0	.1	.5
Number of sex partners				
INFO	1.2	.37	.89	.46
IMB	1.3	.54	.83	.49
WLC	1.1	.40	1.1	.53

Note. M = mean, SD = standard deviation