

Arousal loss associated with safer sex and risk of pregnancy: Implications for women's and men's sexual health

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ABSTRACT

Context: Few studies have examined arousal loss associated with either safer sex or the risk of unintended pregnancy, let alone their associations with sexual risk practices.

Methods: Internet survey data (2,399 men; 3,210 women) captured arousal profiles related to safer sex and unintended pregnancy. Chi square tests and regression analyses gauged associations between arousal profiles, unprotected sex in the last year, and lifetime experience of unintended pregnancy.

Results: Many respondents reported arousal loss related to both safer sex products (35%) and risk of unintended pregnancy (45%). As expected, women and men who strongly agreed that safe sex products can lessen their arousal were significantly more likely to have unprotected sex in the last year than those who strongly disagreed (OR=1.8 for men, 3.7 for women); those who strongly agreed that pregnancy risk can lessen their arousal were significantly less likely to have had an unintended pregnancy than those who strongly disagreed (OR=2.0 for men, 1.4 for women). Surprisingly, safer sex arousal loss was more strongly associated with unprotected sex among women than among men, whereas pregnancy arousal loss was more strongly associated with unintended pregnancy among men than among women.

Conclusions: Many men and women are turned off by safer sex practices, while others are turned off by pregnancy risk. Given arousal profiles' potential contributions to unintended pregnancies and STD transmission, they should be integrated into sexual health behavioral models, research, and programming.

INTRODUCTION

Although men and women's reasons for participating in sexual activities are complex, sexual enjoyment is a primary motive.¹⁻³ Research with men has illustrated that sexual pleasure influences sexual behaviors, including risk and risk reduction practices.⁴⁻⁷ Investigations of women's sexual behaviors have given less attention to the influence of sexual pleasure and arousal, instead focusing on the premise that within a relational context, women's motivations may be more related to economic need, the wish for intimacy, expressions of love, relationship maintenance, and a desire to please their male partners.⁸⁻¹⁰ However, more recent scholarship proposes that women are active seekers of sex that is pleasurable, enjoyable, and comfortable, leading them to prefer methods that allow for maximum sexual enjoyment and minimum sexual discomfort and interruption.^{11,12}

Similar to pleasure, sexual arousal has been shown to shape sexual behaviors.^{13,14} Findings demonstrate that a negative mood state decreases sexual desire and arousal for some individuals, but for others a negative mood may have a positive effect on sexual arousal and increase the likelihood of engaging in higher risk sexual behaviors.¹⁵ Concerns about pregnancy and STDs can also undermine sexual arousal; so too can contraception and safer sex practices.¹³ The most effective method of STD/HIV and unintended pregnancy prevention is the condom (both male and female). However, some men and women may choose not to use condoms because they reduce their sexual pleasure and/or arousal.^{16,17}

With discouraging rates of unintended pregnancy¹⁸ as well as STDs such as HIV and syphilis in the United States,^{19,20} it is essential to understand the range of factors contributing to sexual risk and protective behaviors. Sexual pleasure and arousal may critically influence both men's and women's willingness to use contraceptive and disease prevention methods. Although we may assume that risk of unintended pregnancy can undermine arousal and bolster protective practices, few studies have

collected data on this issue. Data on pregnancy risk, arousal, and sexual behavior are especially lacking for men, who are presumed to be comparatively unaffected by pregnancy associated arousal issues given that the social and financial burden of unintended childbearing often falls to women. Further, even as condom promotion and other safer sex programs continue to be an integral component of the sexual health field, these programs have given little attention to the potential of sexual pleasure and arousal in shaping both risk and preventive behaviors, especially for women.^{2,21} An approach sensitive to both pleasure and arousal profiles may facilitate a better understanding of the ways in which people make decisions that affect their sexual health.

In the spirit of such an approach, this study explored arousal loss associated with safer sex products and risk of unintended pregnancy for both women and men, and the associations between these arousal profiles and sexual behaviors. Using a large, Internet-based survey of women's and men's sexual behaviors, we posed three research questions: How is sexual arousal affected by both use of safer sex products such as condoms and perceived risk of pregnancy? To what extent are these arousal variables associated with sexual risk behaviors and history, namely unprotected sex and unintended pregnancy? And finally, do gender differences exist in arousal patterns and/or their associations with risk behaviors?

METHODS

Procedures and Participants

To explore these research questions, we used data from a larger research project, conducted at The Kinsey Institute at Indiana University, on the role of mood and sexual arousal in sexual decision making and risk taking. This project builds upon prior research on the role of personality traits in sex, including the propensity for sexual inhibition and excitation, as well as the association between negative

mood states (e.g., anxiety, depression) and increased sexual interest and risk taking.^{22,23} Study protocols were approved by the Indiana University Institutional Review Board, and data were collected between January 2004 and April 2006.

The larger sample included the following three groups: 1) Indiana University psychology students, 2) men and women from the local community of Bloomington, Indiana, and 3) men and women from outside of Bloomington who took the survey electronically by means of the Kinsey Institute website. The analysis we describe in this paper focuses on the latter, as these online respondents represent a far more diverse sample, both geographically and demographically; they also more closely resemble national patterns of sexual behaviors and outcomes, such as sexual activity in the past year, number of partners, and experience of unintended pregnancy.²⁴ Some online respondents were self-referred when they visited The Kinsey Institute's website, but most were recruited through research announcements in Kinsey Institute newsletters, media releases, and by word-of-mouth, reflecting the diffusion of information via the Internet. Online recruitment methods have been commonplace in fields such as psychology and sexuality studies, in which internal validity can be of greater value than generalizability.²⁵ Studies of sexual behavior in particular have benefitted from Internet-based methods, given that respondents may be more willing to answer sensitive questions online than they would be in face-to-face interview settings.²⁶⁻²⁸

The anonymity of the online study meant that the data were free of all identifying information—a fact made explicit to respondents on introductory web pages as a way of improving data validity. Participants filled out the questionnaires online and were presented with an informed consent statement; they needed to click to indicate their agreement to participate and to proceed to the survey. Interested participants were also asked to confirm that they were 18 years old or older before proceeding. Completion of the entire survey took approximately 45-50 minutes. Sections included a demographic and sexual history questionnaire, Mood and Sexuality Questionnaire,²⁹ Sexual

Inhibition/Sexual Excitation Scale,²³ as well as questions about sexual activity, condom use and inventories related to depression, anxiety, and subjective mood. No financial remuneration was offered, which strongly discouraged duplicate entries. Of the thousands of respondents who began the survey by consenting to participate, 78% of people completed all parts of the survey to which they were directed.

Several efforts were made to ensure the validity of the data throughout the data collection and cleaning process. For example, investigators looked for zero variability in responses, repetitive response patterns, and inconsistencies in answers to questions about age, gender, relationship status, and sexual orientation. In addition, data were reviewed to ensure no multiple entries. Cases of duplicate ID numbers were deleted (i.e., identical IDs due to submitting the first page and then returning to the first page of the survey at a later time).

Sample Selection and Exclusion/Inclusion Criteria

We first limited our sample to only those subjects who had taken the survey on the Kinsey Institute website (N=20,759). We further limited the present analysis to those respondents who were currently living in the United States or in Canada (N=14,284). It was important to confine our exploration to those with access to similar cultural norms around sexuality, safer sex, and pregnancy.

Cases with no information on age (N=1,236, or 9% of the larger sample), gender (N=929, or 7%), or sexual orientation (N=1330, or 9%) were dropped from the sample. There was overlap between some of these cases—for example, some respondents failed to indicate both their gender and age. Cases in which ages were under 18 (N=62, or 0.5%) or over 80 (N=11, or 0.1%, mostly extreme numbers such as 300) were deleted as well.

The sixth and final part of the survey was only administered to heterosexual and bisexual respondents who indicated that had been heterosexually active in the past year (N=9,381). Given our interest in unintended pregnancy, we limited analyses to those participants who had been

heterosexually active and who completed this part and all other five parts of the questionnaire (N=6,285).

We excluded those respondents who indicated that they had tried to conceive a child in the past year (N=589) as well as those who said they were unsure whether or not they had been trying to conceive (N=33) and those who had missing responses for this question (N=54). Our final sample of 5,610 women and men included only those respondents who clearly stated that they had not tried to conceive in the last 12 months.

Measures

Arousal variables

We included two arousal items from the Sexual Inhibition/Sexual Excitation Scale, each of which contained four possible responses: *strongly agree*, *agree*, *disagree*, and *strongly disagree*.

Condom-and safer-sex-associated arousal loss: Men were asked to respond to the following statement: *Putting on a condom can cause me to lose my erection*. Women were prompted with *Using condoms or other safe sex products can cause me to lose my arousal*.

Unintended pregnancy associated arousal loss: Both women and men were prompted with *If there is a risk of unwanted pregnancy, I am unlikely to get sexually aroused*.

Dichotomous sexual behavior variables

Unprotected sex in the last 12 months: Respondents were classified as having unprotected sex in the last 12 months if they answered yes to the following question: "In the past 12 months, have you ever had unprotected vaginal intercourse (e.g., penis in the vagina *without* a condom or any other type of contraception or barrier)?"

Unintended pregnancy: Women respondents were asked: "During your lifetime, have you become unintentionally pregnant?" Men were asked: "During your lifetime, have you gotten someone

unintentionally pregnant?” Participants were classified as having at least one unintended pregnancy if they answered “yes, once” or “yes, two times or more”.

STD history: Respondents were classified as having a history of STD if they indicated they had tested positive for at least one of the following in their lifetime: genital herpes, HPV/genital warts, Hepatitis B, gonorrhea, syphilis, Chlamydia, non-specific urethritis, or HIV.

Covariates

The survey collected demographic information that allowed us to control for certain variables known to be associated with sexual behaviors. These included age, relationship type (self reported “exclusive monogamous”, “non-exclusive, non-monogamous”, or “not in a relationship”), relationship length in number of months and years, and employment status (full time, part time, unemployed, or temporary/seasonal worker). We also included self-reported level of income (poverty level, lower income, lower middle, middle, upper middle, upper), although we collapsed several of the categories. Our final income question contains the following groupings: poverty level, lower to lower middle income, middle, and upper middle to upper.

Statistical Analyses

To explore gender differences in the sexuality variables, we compared men and women with respect to arousal and sexual behaviors using Chi-square and T-tests.

We then used multiple logistic regression to explore whether safer sex associated arousal loss was associated with unprotected sex in the last twelve months, and whether pregnancy associated arousal loss was associated with experience of unintended pregnancy. In both models, we controlled for all of the covariates. In the first model, we also controlled for STD history, which tends to be associated with condom use and other safer sex practices. We treated the arousal variables as categorical rather than continuous in our regression analyses, since the relationships between the arousal variables and the sexual outcome variables were not sufficiently linear to justify treating them as

continuous. However, when we re-ran the models with the arousal variables as continuous, the results were nearly identical. In this paper, however, we only report results from the categorical analyses.

RESULTS

Demographic Characteristics (Table 1)

Sample demographics are summarized in Table 1. Participants (N=5,609) were largely young (mean age=30) and white (90%). Men, on average, were slightly older than women (35 versus 28 years; $p=.000$). The majority were employed either full time (52%) or part time (24%), although proportionately more men than women were employed full time (65% versus 43%) ($p=.000$). A significant proportion of the total respondents (43%) were current students and said they were attending college, technical school, or university (not shown). The majority reported a level of income that was either “lower to lower middle” or “middle” (72%), whereas 5% identified as “poverty level” and a 22% as “upper middle to upper income”. However, proportionally more women than men fell into lowest income categories and more men than women reported “upper income” status (28% versus 18%) ($p=.000$).

About two-thirds of respondents (68%) reported being in monogamous relationships, 17% were in non-monogamous relationships, and 16% were not in a relationship at the time of the study (but had been sexually active in the last 12 months). These figures were nearly identical for men and women. Relationship length varied considerably, with a range of 0 to 54 years (mean length=6 years). Approximately one in ten respondents (11%) had been in a relationship for less than 6 months, and 8% had been in a relationship from 6 months to a year. Proportionally more women than men were in relationships younger than six months (13% versus 8%), and proportionally fewer women had been in relationships for three years or longer (38% versus 56%) ($p=.000$).

Sexual History and Arousal Variables (Table 1)*Sexual history variables*

Just over one in five respondents (22%) experienced at least one STD in their lifetime. Women were significantly more likely to report an STD than men (25% versus 18%, $p=.000$). About a third of respondents (31%) had experienced at least one unintended pregnancy in their lifetime, and despite a significant gender difference ($p=.001$), this figure was strikingly similar for women (33%) and men (29%).

Just over a third of respondents (39%) were currently using (or their partners were currently using) hormonal contraception. Not surprisingly, women were slightly and significantly more likely than men to report use (42% versus 34%, $p=.000$), since women are the ones who self-administer these methods.

A large proportion of respondents (69%) reported engaging in unprotected sex during the last twelve months, with men significantly more likely than women to do so (73% versus 64%, $p=.000$).

Arousal variables

As expected, significant gender differences marked the arousal variables. Men were more likely than women to report arousal loss associated with safer sex products such as condoms ($p=.000$). Forty percent of men “agreed” or “strongly agreed” that condoms can cause them to lose their arousal. Twenty nine percent of women “agreed” or “strongly agreed” that condoms or other safe sex products can cause them to lose their arousal.

Women were significantly more likely than men to report that pregnancy risk lessened their arousal ($p=.000$). Despite these differences, a significant proportion of men indicated that their sexual arousal was negatively impacted by pregnancy risk; 37% of men versus 53% of women said they “agreed” or “strongly agreed” that the risk of unwanted pregnancy undermined their arousal.

Relationships between Safer Sex Associated Arousal Loss and Unprotected Sex in the Last Year (Table 2)

Men

Univariate analyses

Overall, almost three in four men (73%) said they had had unprotected sex in the last 12 months; however, this percentage differed by condom-associated arousal status (not shown). Among those men who strongly disagreed that condoms can diminish their arousal, 71% had had unprotected sex in the last 12 months; the same was true for 82% of those who strongly *agreed* ($p=.007$).

Multivariate analyses. When controlling for covariates, men who strongly agreed that condoms diminish their arousal were slightly but significantly more likely to have had unsafe sex in the last 12 months than men who strongly disagreed (OR=1.8). Comparisons between the other arousal groups were not significant. (The R squared for this model=.07.)

Women

Univariate analyses. Compared to men, women's safer sex associated arousal was more strongly related to whether they had engaged in unprotected sex. Among those women who strongly disagreed that condoms and other safe sex products can diminish their arousal, approximately one in two (53%) women had had unprotected sex in the last 12 months. Among those who strongly *agreed* that condoms can diminish arousal, more than three in four women had had unprotected sex (78%; $p=.000$)—a difference of 25%, versus the 9% difference between these two categories among men.

Multivariate analyses. Safer-sex-associated arousal loss remained strongly and significantly associated with unprotected sex for women even when controlling for covariates. Compared to women who strongly disagreed that condoms and other safe sex products undermine their arousal, women who strongly agreed were 3.7 times as likely to have had unprotected sex in the last 12 months, and women who agreed were 2.6 times as likely. (The R squared for this model=.122)

Relationship between Pregnancy-Associated Arousal Loss and Unintended Pregnancy (Table 3)*Men*

Univariate analyses. Overall, 29% of men reported that they had been involved in at least one unintended pregnancy; however, this percentage differed by pregnancy associated arousal loss (not shown). Among those men who strongly agreed that risk of unwanted pregnancy can diminish their arousal, approximately one in five (21%) had experienced an unintended pregnancy. Among those who strongly *disagreed*, the same was true for one in three men (33%).

Multivariate analyses. When controlling for covariates, pregnancy-associated arousal remained significantly associated with unintended pregnancy. Compared to men who said they “strongly agree” that pregnancy risk diminishes arousal, men who “strongly disagreed” were 2.0 times as likely to have reported an unintended pregnancy. Men who “disagreed” were 1.8 times as likely to report an unintended pregnancy. (The R squared for this model=.14.)

Women

Univariate analyses. As with men, women’s likelihood of having an unintended pregnancy varied by pregnancy associated arousal status. Among those women who strongly agreed that risk of unwanted pregnancy can diminish arousal, approximately one in four (27%) had experienced an unintended pregnancy; the same was true for 40% of women who strongly *disagreed* ($p=.000$).

Multivariate analyses. Notably, in multivariate analyses, pregnancy associated arousal reduction was not as strongly related to unintended pregnancy as it was for men. Arousal remained a significantly associated, but covariates diluted its magnitude. Compared to women who strongly agreed that pregnancy risk diminishes arousal, women who strongly disagreed were only 1.4 times as likely to have experienced an unintended pregnancy. (The R squared for this model=.221)

DISCUSSION

Although pleasure reduction has been identified as an important reason for not using condoms,^{17,30} sexual health research has largely ignored the impact of pleasure and arousal on sexual risk and risk reduction practices, particularly for women (for exceptions, see Higgins et al. 2008³¹, Philpott et al. 2006², and Sanders et al. 2001³²). This exploratory study suggests that safer sex practices such as condom use and the perceived risk of unintended pregnancy can undermine sexual arousal and enjoyment for a significant proportion of men and women. What's more, both safer sex associated arousal loss and pregnancy associated arousal loss appear strongly related to sexual health outcomes, even when age, relationship type, and other covariates are taken into account. These findings contradict some relatively common gendered assumptions in the field of sexual and reproductive health. They also carry implications for sexual risk reduction efforts.

Safer sex associated arousal loss. A significant proportion of women in this study (just under one in three) reported decreased arousal due to safer sex practices such as condoms. Although proportionally fewer women than men stated that safer sex products reduce their arousal, safer sex associated arousal loss was much more strongly associated with unprotected sex in the last 12 months for women than for men. Researchers have associated men's lack of condom use with reductions in sexual pleasure and arousal, but they have been slower to recognize that safer sex products also affect on sexual sensation or arousal among women, potentially decreasing the likelihood of condom use. For example, in one recent and elegant analysis of condom use, men's reports of reduction in pleasure were emphasized while women's were not, even though a substantial proportion of women reported reduced pleasure.¹⁷ In our study, not only did many women experience arousal loss associated with condoms and other safe sex products, but this arousal loss seemed to be more related to unprotected sex than when men experienced such arousal loss.

As such, our results augment a burgeoning body of research suggesting that uptake and continuation of pregnancy and STD-prevention methods, including condoms and microbicides, are influenced by how they affect sexual sensation, arousal, and enjoyment. It may also be that women report that safer sex products such as condoms undermine their arousal because they undermine their *male partners'* arousal. Women in one recent study reported that their concern for their partner's pleasure was a primary determinant of whether condoms were used.³¹ Sex was most fulfilling when their partners felt good, so women were sometimes disinclined to press for condoms so as to facilitate men's--and thus their own--enjoyment of sex. Women are sexual agents who want to enjoy sex, but due to gendered relationship dynamics, sometimes their own erotic fulfillment depends upon pleasing their partners—in some cases, by encouraging unprotected sex.³³

Our findings also contribute to the critique of standard condom promotion programs among heterosexual women and men. Unlike health campaigns geared to the gay community which emphasize a range of possible (and lower risk) sex acts, campaigns aimed at people engaging in heterosex have not challenged the dominant script in which "sex" equates to vaginal intercourse.³⁴ Nor have they promoted pleasure as a means to increase protective behaviors.^{2,30} Our findings suggest that condom promotion programs need to better address the needs of both women and men who experience condom associated arousal loss, helping them devise better strategies to avoid STDs and unintended pregnancy. We need to learn how to identify and understand those individuals who find their arousal increased or decreased by different kinds of risk, and to devise alternate risk-reduction strategies for those strongly averse to condoms.

Pregnancy associated arousal loss. The findings presented here also challenge some of the commonly held notions regarding men and unintended pregnancy. As expected, in univariate analyses, women's arousal was more likely than men's to be compromised by the perceived risk of unintended pregnancy. However, not only did a similar proportion of men and women in the study report

involvement in an unintended pregnancy, over one in three men in our sample also reported that their arousal was undermined by the perceived risk of unintended pregnancy. More importantly, pregnancy associated arousal loss seemed more strongly associated with unintended pregnancy for men than for women. Men are infrequently surveyed about unintended pregnancy, in part because researchers assume that men do not know about, or will underestimate, unintended pregnancies.^{35,36} Even fewer studies attempt to measure how men might experience decreased or increased arousal by the idea of pregnancy and how this may influence contraception and STD prophylaxis.^{37,38} Our results suggest that pregnancy prevention is a salient goal for many men, and pregnancy risk influences how fully some men are able to become aroused and enjoy sex. Among those men whose arousal is diminished by perceived pregnancy risk, unintended pregnancies were much less common than among other men. This former group may hold the key to our efforts to prevent unintended pregnancies and promote effective contraceptive use.

Our study has a number of limitations, most central of which is the measurement of our “safer sex” variable. Men were asked specifically about erection loss related to condoms, but women were asked about arousal loss related to condoms *and other safe sex products*. Due to this latter phrasing, we cannot be certain about the precise product or practice indicated by the women who answered this prompt. For example, a woman who felt that condoms decrease her arousal—but spermicide does not—could have been at a loss on whether to agree or disagree with the statement. It is also conceivable that some women could have thought of oral contraceptives or other contraceptive methods when responding to the “safer sex products” prompt. However, evidence suggests that both in academic and common parlance, “safer sex” increasingly means HIV and STD prevention versus pregnancy prevention—and thus condoms versus other kinds of contraceptives.³⁹ Furthermore, given that the word “condoms” appears first in the prompt, we can be reasonably sure that most women were providing their attitudes primarily towards condoms when completing this survey item.

Nonetheless, the imprecisely worded prompt detracts from the precision of our analysis and precludes any definitive conclusions about women and condom related arousal loss—hence our use of the more ambiguous term, “safer sex associated arousal loss”. Given the apparently strong association between safer sex arousal and unprotected sex among women, we hope this analysis will inspire future research in which condom related arousal is measured more precisely.

We should also note that, despite the association between arousal and sexual risk behaviors, this analysis has not accounted for many other factors that more strongly influence risk practices. The majority of both men and women disagreed or strongly disagreed that engaging in safer sex causes them to lose their arousal, yet the majority also engaged in unprotected sex in the past 12 months. Thus, there are many other factors related to unprotected sex not assessed in this study—a factor that affects the magnitude of our findings. Since men were more likely overall to engage in unprotected sex, regardless of how condoms shaped their arousal, the relationship between condom-associated arousal loss and unprotected sex was bound to be lower in magnitude for them.

Our study is also limited by our use of an Internet-based convenience sample. Despite increasing evidence that online questionnaires can produce higher quality and less biased data than once believed,^{40,41} our sample certainly captures a select group individuals, perhaps unusual in their willingness to spend 45-50 minutes answering questions about sexuality for no monetary compensation. (The sample is also 91% white, which further limits our generalizability.) Yet using an online format to collect data on sexuality can also enhance data validity, since respondents feel assured of their privacy and anonymity.^{26,27} Online samples have been found extremely useful for generating hypotheses about understudied sexual topics.^{26,27} Nonetheless, future studies of this topic should involve more diverse and representative sample, including both older and younger individuals from broader racial and ethnic backgrounds.

We also wish to note that our sample was more sexually active than the population at large, and thus perhaps more likely to be affected by arousal issues than other groups of people. For example, a greater proportion of both men and women reported greater STD rates and more partners in the past 12 months than respondents in the 2002 NSFG.²⁴ (Notably, the unintended pregnancy rate was lower than national averages.) In addition, the older men and women in the study had higher rates of unintended pregnancy and unprotected intercourse in the last year, suggesting that the intersection of age and sexual history (e.g., longer exposure times, decreased concern related to pregnancy with menopause) may have affected our outcomes. Even though this sample captures a group of people particularly willing to engage in (potentially) riskier sexual behaviors, and thus is of particular interest to researchers and practitioners, it will be very important to explore arousal profiles and their relationships with sexual risk using more nationally representative data.

The main goal of the reported study was not to make definitive claims about the prevalence of arousal loss or about the relationship between arousal and sexual risk. Rather, we wanted to generate and explore hypotheses about some of these relationships, and the role of gender therein, a heretofore understudied topic. We also hoped to add to the sparse literature on both women's sexual experience with safer sex practices and men's sexual experience with pregnancy risk. For these purposes, the sample and survey served us well despite their limitations.

The findings of this study demonstrate that arousal profiles may be a small but important part of the framework explaining sexual behaviors and risk taking. Some people are clearly turned off by risk, while others are turned off by safer sex practices. As such, sexuality and arousal profiles should be taken seriously in our behavioral models of riskier sex. These profiles could contribute an essential element to effective collaboration with clients on improving sexual health outcomes. In closing, we also want to highlight the continued importance of recognizing women's sexual arousal and pleasure and their effects on effective prophylaxis. Finally, we argue that we need to keep men involved in sexual

health promotion—for themselves, for their partners, and for reduction of both unintended pregnancy and STDs/HIV.

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Table 1
Percent Distribution of Sample Variables by Gender (N=5609)

	Overall (combined) (N=5609)	Men (N=2399)	Women (N=3210)
<i>DEMOGRAPHIC VARIABLES</i>			
Age (mean, SD)**	30.1 (11.4)	34.7 (12.6)	28.2 (9.4)
Range	18-79	18-79	18-75
Race			
white	90.6	92.8	88.5
non-white	9.6	7.2	11.5
Employment status**			
employed full time	52.4	65.3	42.8
employed part time	23.7	15.7	29.7
unemployed	19.6	15.1	22.9
temporary/seasonal worker	4.3	3.9	4.6
Level of income***			
poverty level	5.3	4.1	6.2
lower to lower middle income	39.1	32.0	44.5
middle income	33.2	35.7	31.3
upper middle to upper income	22.4	28.1	18.1
Relationship status*			
exclusive monogamous	67.5	69.4	66.1
non-exclusive, non-monogamous	16.7	16.3	17.0
not in a relationship	15.8	14.3	17.0
Relationship length***			
not in a relationship	16.5	15.3	17.3
<6 months	10.9	7.8	13.1
6-12 months	8.4	6.7	9.6
1-3 years	18.6	14.4	21.7
3 or more years	45.7	55.8	38.3
<i>SEXUAL HISTORY VARIABLES</i>			
STD history***			
no reported STD	78.2	82.3	75.1
at least one lifetime STD (including HIV)	21.8	17.7	24.9
Unintended pregnancy history**			
none or unsure	68.9	71.1	67.2
at least one lifetime unintended preg	31.1	28.8	32.8
Using hormonal contraception***			
yes, using or partner using	38.6	34.1	41.7
no or unsure	61.4	65.9	58.3
Unprotected sex in the last 12 months***			
yes	68.9	73.9	65.2
no or unsure	31.1	26.1	34.8
<i>AROUSAL VARIABLES</i>			
If there is a risk of unwanted pregnancy, I am unlikely to get aroused***			
strongly agree	15.3	9.3	19.8
agree	30.9	28.0	33.1
disagree	41.6	48.5	36.4
strongly disagree	12.2	14.2	10.7
Using condoms [women only; or other safe sex products] can cause me to lose my arousal			
strongly agree	7.5	9.8	5.8
agree	26.3	29.8	23.6
disagree	45.5	43.6	46.9
strongly disagree	20.8	16.8	23.7
Total	100.0	100.0	100.0

*p<.05, **p<.01, ***p<.001

Table 2

Logistic Regression: Associations between Safer Sex Associated Arousal Loss and Unprotected Sex in Last 12 Months

Predictor	MEN (N=2399) <i>Using condoms can cause me to lose my arousal</i>	WOMEN (N=3210) <i>Using condoms or other safe sex products can cause me to lose my arousal</i>
	Adjusted Estimates: Exp(β) Odds Ratio (95% CI)	Adjusted Estimates: Exp(β) Odds Ratio (95% CI)
Using condoms [or other safe sex products] can cause me to lose my arousal		
strongly agree	1.79 (1.18, 2.73)**	3.66 (2.43, 5.50)***
agree	1.08 (.815, 1.44)	2.58 (2.05, 3.24)***
disagree	.970 (.744, 1.26)	1.42 (1.18, 1.71)***
strongly disagree	REF	REF
Relationship type		
not in a relationship	REF	REF
exclusive monogamous	1.30 (.54, 3.12)	1.39 (.529, 4.20)
non-exclusive, non-monogamous	2.32 (.977, 5.52)	2.29 (.816, 6.40)**
STD history		
no reported STD	REF	REF
at least one lifetime STD	1.36 (1.02, 1.80)*	1.64 (1.34, 2.00)***
Age (mean, SE)	1.02 (1.01, 1.03)***	1.04 (1.03, 1.05)***
Relationship length		
not in a relationship	REF	REF
<6 months	.879 (.359, 2.15)	.951 (.337, 2.68)
6-12 months	1.08 (.435, 2.70)	1.18 (.409, 3.38)
1-3 years	1.03 (.429, 2.45)	.876 (.311, 2.47)
More than 3 years	1.33 (.565, 3.12)	.878 (.312, 2.47)
Current level of income		
poverty level	1.11 (.682, 1.81)	1.39 (.966, 1.99)
lower to lower middle income	1.25 (.961, 1.62)	1.46 (1.18, 1.81)*
middle income	1.06 (.829, 1.35)	1.24 (1.07, 1.69)*
upper middle to upper income	REF	REF
Employment status		
employed full time	1.50 (.944, 2.34)	1.54 (1.06, 2.25)
employed part time	1.40 (.861, 2.28)	1.46 (1.01, 2.12)
unemployed	1.24 (.755, 2.03)	1.92 (1.31, 2.82)
temporary/seasonal worker	REF	REF
Nagelkerke R2	0.073***	0.122***

*p<.05; **p<.01, p<.001***

Table 3

Logistic Regression: Associations between Pregnancy Associated Arousal and Unintended Pregnancy

	MEN (N=2399)	WOMEN (N=3210)
Predictor	Adjusted Estimates: Exp(β) Odds Ratio (95% CI)	Adjusted Estimates: Exp(β) Odds Ratio (95% CI)
If there is a risk of unwanted pregnancy, I am unlikely to get sexually aroused		
strongly agree	REF	REF
agree	.997 (.674, 1.47)	1.04 (.818, 1.32)
disagree	1.75 (1.12, 2.52)**	1.33 (1.05, 1.68)*
strongly disagree	2.00 (1.28, 2.97)**	1.42 (1.05, 1.93)*
Relationship type		
not in a relationship	REF	REF
exclusive monogamous	1.04 (.409, 2.66)	3.69 (1.23, 11.03)*
non-exclusive, non-monogamous	1.64 (.648, 4.14)	4.64 (1.57, 13.7)**
Age (mean, SE)	1.04 (1.03, 1.05)***	1.08 (1.07, 1.09)***
Relationship length		
not in a relationship	REF	REF
<6 months	1.21 (.468, 3.15)	.406 (.136, 1.23)
6-12 months	1.27 (.479, 3.39)	.429 (.142, 1.29)
1-3 years	1.23 (.485, 3.10)	.417 (.141, 1.23)
More than 3 years	2.09 (.853, 5.12)	.623 (.212, 1.83)
Current level of income		
poverty level	1.36 (.765, 2.14)	2.22 (1.50, 3.27)***
lower to lower middle income	1.27 (.978, 1.65)	1.63 (1.28, 2.09)***
middle income	1.05 (.827, 1.32)	1.33, 1.03, 1.70)*
upper middle to upper income	REF	REF
Employment status		
employed full time	1.12 (.629, 2.01)	1.74 (1.04, 2.90)
employed part time	.735 (.394, 1.37)	1.30 (.774, 2.18)
unemployed	.939 (.505, 1.74)	1.63 (.967, 2.76)
temporary/seasonal worker	REF	REF
Nagelkerke R2	0.139***	0.221***

*p<.05; **p<.01, p<.001***