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An Event-Level Examination of Successful Condom Negotiation Strategies among Young Women

C Peasant^{1,2}, EM Montanaro^{1,3}, TS Kershaw¹, GR Parra⁴, NH Weiss⁵, JP Meyer⁶, JG Murphy⁷, TD Ritchwood⁸, and TP Sullivan⁵

¹Center for Interdisciplinary Research on AIDS, Yale School of Medicine

²Substance Use, Gender, and Applied Research Program, RTI International

³Department of Psychological Science, University of North Carolina Charlotte

⁴Department of Child and Family Studies, University of Nebraska Lincoln

⁵Department of Psychiatry, Yale School of Medicine

⁶Yale AIDS Program, Yale School of Medicine

⁷Department of Psychology, University of Memphis

⁸Department of Public Health Sciences, Medical University of South Carolina

Abstract

This study examines the effect of condom negotiation strategies on condom use and partner type and substance use before sex as moderators of strategy effectiveness. Women reported their daily sexual behavior during the last month. Withholding sex was more strongly associated with condom use when utilized with a non-casual sex partner. Directly requesting condom use was more strongly and using deceptive reasons to influence condom use was less strongly related to condom use during substance use. Results underscore the importance of understanding the contexts in which condom negotiation strategies are successful in order to improve HIV/STI prevention efforts among women.

Keywords

Condom negotiation; Event-level; HIV; STI; Condom use; Sexual Risk

Young women between the ages of 15–24 have the highest incidence of chlamydia and gonorrhea compared to women and men in other age groups and account for approximately 32% of new HIV infections among women in the U.S. (Centers for Disease Control and Prevention [CDC], 2013). Furthermore, the HIV epidemic is predominate in the southeastern U.S. and is present on many college campuses in the South (CDC, 2016; Hightow et al., 2005). Although heterosexual sex is the main mode of infection among women and condom use is the most accessible form protection from HIV and other sexually transmitted infections (STIs), research suggests that 63% of young college women engage in condomless sex (American College Health Association [ACHA], 2014). Young heterosexual women's low utilization of condoms may be partially attributable to their difficulty negotiating condom use with their male partners. While men can unilaterally decide whether

or not to use condoms during sex, women must often negotiate condom use, or advocate for condom use with a partner, in order to protect themselves from HIV and STIs. Therefore, condom negotiation is a key factor related to condom use among women, but can also be a barrier (Bowleg et al., 2004; Noar et al., 2006).

Condom negotiation, or the behaviors or strategies that individuals use to advocate for condom use with their partners (Peasant, Parra, Okwumabua et al., 2014), is one of the strongest predictors of condom use (Noar et al., 2006; Sheeran and Orbell, 1998). Previous research has delineated some common condom negotiation strategies, such as withholding sex (e.g., making it clear that one will not have sex if condoms are not used), directly requesting condom use (e.g., making a direct request to use condoms), using seduction (e.g., getting one's partner sexually aroused and then taking out a condom), conveying risk information (e.g., telling one's partner that using a condom will protect them from STIs), relationship conceptualizing (e.g., telling one's partner that it would really mean a lot to the relationship if he would use a condom), and using deception (e.g., making up a reason why one wants her partner to use a condom; see Table 1; Noar et al., 2002). Many HIV/STI prevention programs recognize the importance of condom negotiation strategies through the inclusion of condom negotiation skills training in their curricula (Harshbarger et al., 2006; Latham et al., 2010). While these interventions have been shown to be efficacious in increasing condom use among young women (Sales et al., 2012), little is known about the effectiveness of specific condom negotiation strategies, both in general and as a function of the context of the sexual encounter (i.e., partner type, substance use before/during sex). As such, interventions may unintentionally waste resources by promoting condom negotiation strategies that may not be the most effective given a woman's sexual context. It is thus vital that research identifies condom negotiation strategies that are effective at promoting condom use under different sexual circumstances in order to improve the efficacy of these interventions among young women.

Some condom negotiation strategies may be more effective at promoting condom use when used with a non-casual sexual partner (i.e., someone with whom the participant was previously or currently involved in a committed or steady dating relationship) as compared to a casual sexual partner (i.e., someone with whom the participant did not intend to start a committed relationship or steady dating relationship). Research has demonstrated that women are less likely to use direct or assertive strategies (e.g., withholding sex) to negotiate condom use with their non-casual sexual partners than with their casual partners (De Bro et al., 1994; Holland and French, 2011). However, whereas research has examined differences in the types of condom negotiation strategies women use with casual vs. non-casual partners, no research has explored whether the effectiveness of specific condom negotiation strategies varies as a function of partner type.

Substance use before sex may also affect the efficacy of specific condom negotiation strategies. For instance, research has demonstrated that substance use impairs women's ability to engage in verbal condom negotiation (Maisto et al., 2002; Maisto et al., 2004). However, little research has examined how substance use before sex influences the effectiveness of different types of condom negotiation strategies, including those that may be non-verbal. There is an established inverse relation between alcohol consumption and

executive functioning among young adults (Parada et al., 2012). Therefore, it is plausible that substance use may be more likely to impair condom negotiation strategies that require higher level cognitive processing, such as verbally advocating for condom use (e.g., directly requesting condom use), compared to those that do not require expressive language (e.g., seduction). Given the high frequency of concurrent substance use and sexual intercourse among young college women (ACHA, 2014), and the increased attention that has been given to the role of substance use in young college women's sexual experiences (Bennett, 2016), it is important to understand how substance use impacts the effectiveness of specific condom negotiation strategies. By understanding how substance use impacts the success of a variety of condom negotiation strategies, interventions will be better equipped to promote the most effective strategies for women, even when they choose to engage in substance use before sex.

Global association studies have demonstrated the aggregated associations between partner type, substance use, condom negotiation, and condom use (for review see Peasant, et al., 2015). However, the conclusions that can be drawn from these studies are limited because they cannot provide inferences about the process of condom negotiation and condom use during specific episodes of sexual intercourse or within different sexual contexts. Therefore, event-level methodology should be used to gain an in-depth examination of the real-world relations among specific condom negotiation strategies and subsequent condom use (Weinhardt and Carey, 2000). Event-level methods can elucidate the temporality of the variables of interest, examine differences within the same person over time by using the event as the unit of analysis, and delineate the role of contextual factors that may impact the relations of interest. Notably, although event-level methods provide several advantages over global association designs, no studies, to our knowledge, have used event-level methods to assess the effectiveness of specific condom negotiation strategies or to examine moderators of their effectiveness.

The current study

Given the rising rates of HIV/STIs and high prevalence of substance use before sex on college campuses and the low rate of condom use among college women, they are extremely vulnerable to HIV and STIs (ACHA, 2014; Hightow et al., 2005). Therefore, the current study seeks to address a critical methodological gap in the literature by using event-level data to assess the effect of six condom negotiation strategies (i.e., withholding sex, directly requesting condoms, using seduction, conveying risk information, relationship conceptualizing, and using deception) on condom use among an ethnically diverse sample of at-risk young college women. This study also extends existing research by investigating how partner type and substance use before sex may impact the effectiveness of condom negotiation strategies. We define effective condom negotiation strategies as those that result in condom use. Of note, withholding sex may result in women not engaging in sexual intercourse, which also decreases HIV/STI risk. However, our definition emphasizes the outcome of condom use during sex.

Based on previous research (Broaddus et al., 2010; Schmid, 2012; Tschann et al., 2010), we hypothesized that direct and verbal strategies (i.e., withholding sex, directly requesting

condoms) would be more effective than indirect (i.e., conveying risk information, relationship conceptualizing, deception) and non-verbal (i.e., seduction) strategies. We also expected that the effectiveness of the condom negotiation strategies would differ as a function of partner type (i.e., casual vs. non-casual) and substance use before sex (i.e., yes vs. no), such that strategies would be more effective when used with a casual partner (Misovich et al., 1997) and less effective when used with substances (Maisto et al., 2002).

Method

Participants

This study was a part of a larger study examining sexual risk behaviors among college students. Participants were 738 male and female undergraduate students at an urban university in the southeastern United States. Of these students, 162 and 4 were excluded because they identified as male or transgender, respectively. Of the women in this study, we selected a subsample of young women (18–25 years of age) who were most-at-risk for STI/HIV infection and had negotiated condom use in the past month. Therefore, women who were over the age of 24 ($n = 42$), married ($n = 28$), self-identified as lesbian or bi-sexual ($n = 29$), reported that they had not had sex in the last 30 days ($n = 188$), and reported that they did not negotiate condom use in the last 30 days ($n = 219$) were excluded from the analyses. Therefore, 101 participants were included in the current study.

The average age of participants was 19.33 ($SD = 1.35$; Range = 18–24). Approximately 46.53% ($n = 47$) of participants were African American, 39.60% ($n = 40$) were White, 5.94% ($n = 6$) were Hispanic/Latina, 0.99% ($n = 1$) were Asian, 0.99% ($n = 1$) were American Indian/Alaskan Native, and 11.88% ($n = 12$) were multiracial or another race. Approximately 3.96% ($n = 4$) of women were engaged, 1.98% ($n = 2$) were divorced or separated, 40.59% ($n = 41$) were in a long-term relationship (≥ 6 months), 9.90% ($n = 10$) were in a short-term relationship (< 6 months), 18.82% ($n = 19$) were dating multiple people, and 24.75% ($n = 25$) were not dating. A detailed description of the sample is presented in Table 2.

Procedures

Participants were recruited from undergraduate psychology courses. To be eligible for participation, women had to be fluent in English and 18 years or older. After providing informed consent, participants completed an initial assessment online. Participants completed a follow-up assessment online four weeks later. Only data from the baseline assessment were used in the current study. Participants received information about sexual health resources and course credit for their participation.

Measures

An online Timeline Followback Interview (TLFB; Sobell et al., 1996; Weinhardt et al., 1998) was used to assess participants' condom negotiation, condom use, partner type, and substance use before sex for each day that they engaged in sexual intercourse during the last 30 days. The online TLFB was used to collect sexual behavior information due to its demonstrated reliability and validity (Pedersen, Grow, Duncan, Neighbors, & Larimer, 2012;

Sobell et al., 1996; Weinhardt et al., 1998). The online TLFB uses recall aids (i.e., calendars and landmark events), to facilitate recall, enables the collection contextual information about each event, and provides information about behavioral patterns over time (Carey et al., 2001).

Participants were presented with an online calendar that included the beginning and end dates of the reporting period and instructed to think about landmark events such as spring break to help facilitate recall. Participants indicated all the days on which they had sexual intercourse. For every day that participants reported sexual intercourse, they indicated which of the six condom negotiation strategies they used (1 = used this strategy or 0 = did not use this strategy) based on items from the Condom Influence Strategy Questionnaire (Noar et al., 2002); whether or not they used a condom (1 = used a condom or 0 = did not use a condom); whether their sexual partner was a casual (i.e., someone with whom the participant did not intend to start a committed relationship or steady dating relationship) or a non-casual partner (i.e., someone with whom the participant was previously or currently involved in a committed relationship or steady dating relationship; 1 = casual or 0 = non-casual partner); and whether they used substances before sex (1 = used substances before sex or 0 = did not use substances before sex).

Covariates

Intentions to Use Condoms—Intentions to use condoms was included as a covariate in the analyses because of its demonstrated association with condom negotiation and condom use (Noar et al., 2006; Sheeran and Orbell, 1998). The TLFB was used to measure women's intentions to use condoms during each day that they engaged in sexual intercourse. Responses were coded as 1 = intended to use a condom or 0 = did not intend to use a condom.

Use of Contraceptives—Contraceptive use was examined as a covariate due to its association with condom use and condom negotiation (Gurman and Borzekowski, 2004; Seal and Palmer-Seal, 1996). Use of contraception was assessed using questions that were adapted from CDC Sexual Behavior Questions (CDC, 2001) which assessed participants' use of 13 contraception methods. Participants who endorsed using hormonal contraception or female-controlled contraception (e.g., spermicide) were coded as 1 = using contraception. Those who reported that they either did not use contraception, relied on the withdrawal method, or did not know if they used contraception were coded as 0 = not using contraception. Male condom use was not included as a form of contraception due to its dual purposes of disease and pregnancy prevention and the fact that it was the main variable of interest (Turchik and Gidycz, 2012).

Analytic approach

Preliminary analyses were conducted to ensure that there were no violations of assumptions, including examining collinearity between condom negotiation strategies. We used generalized estimating equations (GEE) with binomial logistic regression modeling to examine the event-level association between specific condom negotiation strategies and condom use over the 30-day reporting period. All six of the condom negotiation strategies

were entered into the GEE model in order to assess the effectiveness of each strategy to promote condom use while accounting for the variance of the other strategies. Use of additional forms of contraception, condom use intentions, relationship status, and race were entered as covariates.

GEE analyses allow for the description of the marginal expectation of the outcome variable (i.e., condom use) while accounting for the correlation among repeated observations for a given participant and the inclusion of participants with missing data. We also examined possible moderators of the associations between specific condom negotiation strategies and condom use. Partner type (casual vs. non-casual) and substance use before sex (yes vs. no) were examined as possible moderators by adding interaction effects one-by-one to the model.

Results

Descriptive data

There was a total of 446 sexual episodes reported by participants. Participants reported an average of 4.96 (SD = 3.79 Range = 1–15) sexual episodes over the 30-day period. Participants reported using condoms during 70.18% ($n = 313$) of their sexual episodes. Across the sexual episodes, participants reported using the strategies of withholding sex 29.82% ($n = 133$) of the time, direct request 32.96% ($n = 147$) of the time, seduction 8.97% ($n = 40$) of the time, relationship conceptualizing 8.07% ($n = 36$) of the time, risk information 5.61% ($n = 25$) of the time, and deception 2.69% ($n = 12$) of the time. Participants reported using substances during 18.82% ($n = 80$) of their sexual episodes and having sex with a non-casual partner during 78.35% ($n = 333$) of their sexual episodes. Participants reported that they intended to use condoms during approximately 76.91% ($n = 343$) of their sexual episodes. Most participants reported using an alternative form of contraception (84.52%).

Primary analyses

GEE analyses were conducted to examine the event-level association between specific condom negotiation strategies and condom use controlling for contraception use, condom use intentions, relationship status, and race. Results revealed a significant association between withholding sex and condom use ($OR = 5.71$ CI = [1.45, 22.46], $p < 0.05$). When withholding sex was used condom use was more likely to occur. There were no significant associations among any of the other condom negotiation strategies and condom use ($ps > .05$, see Table 3).

Partner type (casual vs. non-casual partner) was investigated as a possible moderator of the associations among specific condom negotiation strategies and condom use. Results indicated a significant interaction effect of partner type in the associations between both withholding sex ($p = 0.02$) and deception ($p = 0.04$) and condom use. Simple effects revealed that condoms were used more often when withholding sex and deception were used with a non-casual (versus casual) sex partner. Partner type did not moderate the associations among the other condom negotiation strategies and condom use ($ps > 0.06$).

Substance use before sex also was investigated as a possible moderator of the associations among specific condom negotiation strategies and condom use. Results indicated a significant interaction effect of substance use before sex and both direct request ($p = 0.01$) and deception ($p = 0.01$) strategies on condom use. Simple effects revealed that condom use was more likely to occur when direct request was used during sexual episodes that involved (versus did not) involve substance use before sex. Condom use was less likely to occur when deception was used during sexual episodes that involved (versus did not involve) substance use before sex. Substance use before sex did not moderate the associations among the other condom negotiation strategies and condom use ($ps > 0.10$).

Discussion

This study used event-level methods to examine the effectiveness of six condom negotiation strategies in promoting condom use among young college women. Our findings support and extend the literature by identifying effective condom negotiation strategies for promoting condom use among young women and demonstrating that the effectiveness of these strategies differs as a function of partner type and substance use before sex.

Previous research provides strong support for an association between condom negotiation and condom use (Noar et al., 2004). Our findings extend this literature by using an event-level approach to highlight effective condom negotiation strategies for promoting condom use among young women. Consistent with our hypothesis, the direct condom negotiation strategy of withholding sex was the only strategy that predicted condom use when accounting for the effects of the other strategies and the use of alternative forms of contraception, condom use intentions, relationship status, and race. These findings indicate that when women withhold sex they are more likely to use condoms compared to when they do not. Traditionally, the strategy of withholding sex has been conceptualized as a tactic that leads to the refusal of sex and no sexual intercourse. However, our findings focused on negotiation strategies that resulted in sex with a condom. Therefore, it seems that withholding sex to promote condom use may also result in protected sexual intercourse. Our results also revealed that other condom negotiation strategies such as conveying risk information and relationship conceptualization were not significantly associated with condom use. Existing interventions for reducing HIV and other STIs often encourage young women to use a wide array of condom negotiation strategies (Harshbarger et al., 2006; Latham et al., 2010), including conveying risk information and relationship conceptualization. Interventions that aim to promote the development of condom negotiation skills among young women may consider increasing the resources spent on fostering skills to help women safely refuse sex without a condom in order to negotiate condom use.

Our findings underscore contextual factors that may impact the effectiveness of specific condom negotiation strategies in promoting condom use. One contextual factor found to influence the condom negotiation-condom use relation was partner type. Inconsistent with our hypothesis, withholding sex was more effective when used with non-casual (versus casual) partners. Similarly, our findings indicated that using deception as a condom negotiation strategy was more effective when used with non-casual sex partners as compared to casual sex partners. These findings highlight the nuance of young women's condom

negotiation process. Specifically, it may be that withholding sex with non-casual partners was effective for some women because of the level of relationship certainty that they had with their partner, while for others deception was more effective because this indirect strategy helped to circumvent the anticipated negative response of their partners. This explanation is congruent with the theory of relationship uncertainty that states the people act more assertively in situations when the future of the relationship is more certain (Knobloch and Carpenter-Theune, 2004; Schmid, 2012). Given our definition of non-casual partner (someone with whom the participant was previously or currently involved in a committed or steady dating relationship), assertive negotiation strategies such as withholding sex may be effective when used by women who feel secure in their sexual partnerships and deception may be effective when women are in a steady relationship, but are uncertain about the future of that relationship. Based on our finding that partner type may influence the effectiveness of certain condom negotiation strategies, HIV/STI interventions for young women should take partner type into consideration when teaching condom negotiation strategies. Some strategies may be more effective when used with a non-casual (vs. a casual) partner. Alternatively, there may be other strategies that are more effective with casual partners, however, more research is needed to explore this question.

Our findings also demonstrated how substance use before sex can influence the effectiveness of condom negotiation strategies in promoting condom use. When women used substances before sex and used direct request to negotiate condom use they were more likely to use condoms compared to when they did not use substances before sex. Conversely, our findings indicate that when women used substances before sex and used deception to negotiate condom use they were less likely to use condoms compared to when they did not use substances before sex. Our finding related to the condom negotiation strategy of direct request suggests that strategies that require women to request condom use may be less difficult to implement when under the influence of substances. While this finding was contradictory to our hypothesis, previous research indicates that substance use can decrease anxiety and facilitate social interactions (e.g., communication skills; Labouvie and Bates, 2002; Thomas et al., 2003). As such, it is possible that substance use before sex may increase women's self-efficacy to engage in condom negotiation by reducing anxiety related to the sexual encounter (Labouvie and Bates, 2002; Thomas et al., 2003). Previous research also suggests that the expectations of substance use are more influential in women's ability to request condom use than actual intoxication (Maisto et al., 2004). Therefore, substance use may act as "liquid courage" for women who expect substances to reduce their anxiety related to condom negotiation.

Our finding related to deception as a condom negotiation strategy indicates that substance use before sex may decrease the effectiveness of deception as a condom negotiation strategy. This finding aligns with our hypothesis and suggests that deceptive strategies that require women to "make up" a reason to use a condom are more difficult to implement when under the influence of substances. Given the frequency of substance use before sex among young women and their partners (ACHA, 2014), interventions should help women to identify condom negotiation strategies that may be successful (i.e., direct request) and strategies that may be impaired (i.e., deception) when they engage in substance use before sex.

Although this study fills important gaps in the literature, there are noteworthy limitations that should be addressed in future research. First, each condom negotiation strategy was assessed using a single item based on the Condom Influence Strategy Questionnaire (Noar et al., 2002). Future research should use more comprehensive measures of condom negotiation to assess the effectiveness of specific strategies. Second, data used in this study were based on participants' recollection of their sexual activity over the last 30 days and were not collected prospectively and in near real-time. Future research should use ecological momentary assessment (assessment of behavior in near real-time) to address the limitations of recall bias (Shiffman et al., 2008). Third, this study did not assess the quantity or type of substance that participants used before sex. Therefore, it is not clear how different substances (e.g., alcohol vs. marijuana) may differentially impact condom negotiation effectiveness. Future research should explore how the type of substance and quantity of use impact condom negotiation among women. Fourth, this study did not address condom use without the need for negotiation. While beyond the scope of this current paper, it seems that this may have been the case for several participants who were omitted because they reported using condoms, but did not report negotiating condom use. These women may not have needed to negotiate condom use because of a unilateral decision made by their partners or may have negotiated condom use before the start of the study. Future dyadic research may shed some light on the different negotiation processes that may take place between partners, including the lack of negotiation and/or how some negotiation strategies may maintain effectiveness over time without the need for repeated negotiation. Our findings also should be interpreted in light of the fact that there were some condom negotiation strategies that were rarely used. Future research should attempt to replicate these findings using a longer recall or follow-up period and/or a larger sample size. Finally, this study involved a relatively homogeneous sample of participants (college women recruited from an urban university), limiting the generalizability of our findings. The context of the college sexual experience may not represent the sexual experiences of heterosexual women across age groups. However, it should be noted that our sample of at-risk ethnically diverse college-age women represent a group that is particularly vulnerable to HIV/STI infection and, therefore, these findings have implications for reducing infections among this high-risk population. Nevertheless, replication of these findings in larger, more diverse samples is needed.

Despite these limitations, this study has key implications for HIV and STI prevention programs for young women. Considering the importance of condom negotiation in promoting condom use, interventions should help women develop skills to implement the most effective condom negotiation strategies, such as withholding sex. Furthermore, interventions should equip women with the skills to adapt their condom negotiation strategy based on the context of their sexual encounters. By identifying the most effective strategies, understanding the context in which strategies are effective, and implementing this knowledge into new and existing interventions, prevention efforts will be more successful in curtailing the HIV and STI burden among young women.

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Table 1

Description of Condom Negotiation Strategies

Negotiation Strategies	Description
Withholding Sex	Making it clear that one will not have sex if condoms are not used
Direct Request	Making a direct request to use condoms
Seduction	Getting ones' partner sexually aroused and then taking out a condom
Relationship Conceptualizing	Telling one's partner that it would really mean a lot to the relationship if he would use a condom
Risk Information	Telling one's partner that using a condom will protect them from STIs
Deception	Presenting a fictitious reason (e.g., to prevent pregnancy, when the young women is taking oral contraception and is truly worried about disease prevention) why one wants her partner to use a condom

Table 2

Demographic Characteristics of Sample (N =101)

<i>Characteristic</i>	<i>Mean/N (SD/%)</i>
Age	19.33 (1.35)
Race	
African American	47 (46.53%)
White	40 (39.60%)
Asian	1 (1.00%)
American Indian/Alaskan Native	1 (1.00%)
Multiracial/Other	12 (11.88%)
Ethnicity	
Hispanic	6 (5.94%)
Non-Hispanic	95 (94.06%)
Relationship Status	
Engaged	4 (4.00%)
Divorced/Separated	2 (2.00%)
Long-term relationship (≥ 6 months)	41 (40.60%)
Short-term relationship (< 6 months)	10 (9.90%)
Dating multiple people	19 (18.81%)
Not dating anyone	25 (24.75%)
Contraception (Yes)	66 (76.74%)
Age of Vaginal Sexual Debut	16.51 (1.54)
Number of Lifetime Sex Partners	5.21 (4.98)
History of STI Diagnosis (Yes)	16 (18.60%)
* Number of Sexual Episodes where Condom *Use was Intended	3.89 (3.57)
* Used Withholding Sex (Yes)	60 (59.41%)
* Used Direct Request (Yes)	65 (64.36%)
* Used Seduction (Yes)	23 (22.77%)
* Used Relationship Conceptualizing (Yes)	12 (11.88%)
* Used Risk Information (Yes)	13 (12.87%)
* Used Deception (Yes)	12 (11.88%)

* These descriptive statistics are based on the overall frequency of each variable and not the event-level data.

Table 3

Frequency of Condom Negotiation Strategies and their Association with Condom Use

Negotiation Strategies	Frequency of Strategy Use (N/%)	OR (95% CI)	AOR (95% CI)
Withholding Sex	133 (29.82%)	3.19 (1.88, 4.50) ***	5.71 (1.45, 22.46)*
Direct Request	147 (32.96%)	1.40 (.67, 2.13) ***	.61 (.22, 1.67)
Seduction	40 (8.97%)	1.14 (–.43, 2.72)	.83 (.17, 4.16)
Relationship Conceptualizing	36 (8.07%)	.42 (–1.12, 1.97)	.51 (.09, 2.80)
Risk Information	25 (5.61%)	1.70 (–.12, 3.51) +	4.85 (.54, 43.80)
Deception	12 (2.69%)	.60 (.186, 1.96)	.24 (.06, 1.05)+
Contraception		.645 (.215, 1.93)	3.56 (.67, 18.93)
Relationship Status		.78 (.59, 1.03)	.73 (.50, 1.07)
Race		1.17 (.82, 1.68)	1.59 (.93, 2.72)
Condom Use Intentions		4.59 (3.61, 5.55) ***	.01 (.002, .03) ***

Note:

 $p < .001$;+ $p < .1$; OR = odds ratios; AOR = adjusted odds ratio; Odds ratios are adjusted for all other strategies, race, relationship status, and contraception use, and condom use intentions.