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# Reactions of Heterosexual African-American Men to Women's Condom Negotiation Strategies

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## Abstract

This study describes responses of 172 single heterosexual African American men, ages 18–35, to condom negotiation attempts. Strategies used included reward, coercive, legitimate, expert, referent, and informational strategies, based on Raven's (1992) influence model. The purpose was: 1) to identify strategies influencing participant acquiescence to request, and 2) to identify predictors of participant compliance/refusal to comply with negotiation attempts. Participants viewed six videotape segments showing an actress, portrayed in silhouette, speaking to the viewer as a 'steady partner'. After each segment, participants completed measures of: request compliance, positive and negative affect, and attributions concerning the model and themselves. No significant differences were found in men's ratings across all vignettes. However, differences in response existed across subgroups of individuals, suggesting that while the strategy used had little impact on participant response, the act of suggesting condom use produced responses that differed across participant subgroups. Subgroups differed on levels of AIDS risk knowledge, STD history, and experience with sexual coercion. Also, the "least-willing-to-use" subgroup was highest in anger/rejection and least likely to make attributions of caring for partner. Effective negotiation of condom use with a male sexual partner may not be determined as much by specific strategy used as by partner characteristics.

Interventions to assist persons in reducing risk for HIV infection have drawn upon a number of behavioral science theories, such as the Theory of Planned Behavior (Ajzen, 1991); social cognitive and self-efficacy theory (Bandura, 1988); the Information-Motivation-Behavior model (Fisher & Fisher, 1992); and the AIDS Risk Reduction Model (Catania, Kegeles, & Coates, 1990). Although these theories approach the issue of HIV risk behavior changes from different perspectives, they all posit that behavioral skills–including the ability to communicate condom use requests with sexual partners--are important determinants of success in risk reduction behavior change.

State-of-the-art skills building interventions aimed at promoting HIV risk reduction behavior change have often emphasized the acquisition of sexual assertiveness, communication, and negotiation skills to be used with sexual partners. Methods often used to teach these skills

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include the modeling, role-playing, and practice of negotiation tactics, and emphasis of communication with sexual partners as an important precursor of condom use. Negotiation skills training has been incorporated into HIV risk reduction intervention programs for many at-risk populations including adolescents (DiNoia & Schinke, 2007; Fisher, Fisher, Bryan & Misovich, 2002; Hovell et al., 2001), inner-city men (Calsyn et al., 2009; Kalichman, Cherry, & Browne-Sperling, 1999) and women (Carey et al., 2000; DiClemente & Wingood, 1995), gay men (Bowen et al., 2008; Kelly et al., 1997), and adults with serious mental illness (Otto-Salaj, Kelly, Hoffmann, Stevenson, & Kalichman, 2001; Sikkema, Meade, Doughty-Berry, Zimmerman, Kloos, & Snow, 2007; Susser et al., 1998). In several meta-analyses of HIV risk reduction interventions, negotiation skills training has been cited as a common component of many HIV interventions that have been deemed efficacious in changing HIV risk behaviors (e.g, meta-analyses by Albarracin, Gillette, Earl, Glasman, Durantini & Ho, 2005; Crepaz et al., 2006; Darbes, Crepaz, Lyles, Kennedy & Rutherford, 2008; Herbst, Kay, Passin, Lyles, Crepaz, & Marin, 2007). Further, a synthesis of the results of HIV intervention meta-analyses suggests that increased condom use in particular may account for the greatest effect sizes in HIV prevention intervention results (Noar, 2008). In support of this finding, results of a meta-analysis examining the impact of sexual communication on condom use (Noar, Carlyle & Cole, 2006) showed that communications about condom use had the largest effect size of all the variables they examined, indicating that discussion of condom use in some fashion may play a key role in facilitating use.

There is still much to be learned about how different approaches to negotiating safer sex are perceived and responded to by sexual partners, and what factors influence reaction to negotiation attempts. Traditional models of persuasion suggest that success or failure to achieve compliance may indeed vary with type of message used, characteristics of the negotiator or their relationship, or characteristics of the sexual partner for whom the message is targeted (Hovland, Janis, & Kelley, 1953).

There are several reasons why we need to further investigate reactions to condom negotiation strategies. First, women in power-imbalanced relationships may perceive that they have a lot to lose from unsuccessful negotiation efforts (e.g., Beadnell, Baker, Morrison, & Knox, 2000; Wingood, Hunter-Gamble, & DiClemente, 1993; Wingood & DiClemente, 1997). This makes sense: If a negotiation attempt is effective, it could prevent risk, and much could be gained. If it is ineffective, however, it could produce negative partner outcomes: a partner may refuse to comply with the request, may become angry or defensive, and the individual attempting the negotiation may abandon further efforts. This issue is especially pertinent to heterosexual women's negotiation skill attempts. Whether or not condoms are used is strongly influenced by the male partner in a male/female relationship; safer sex efforts may require negotiation skills if a male partner is initially reluctant to use a condom during sexual activity. In addition, gender role stereotypes and gender scripts have traditionally discouraged women's initiation of sexual discussion, so initiating sexual negotiation may be difficult for many women.

Many studies have investigated gender differences in strategy use (Aida & Falbo, 1991;Bird, Harvey, Beckman, & Johnson, 2001; Bui, Raven, & Schwarzwald, 1994; Noar, Morokoff, & Harlow, 2004); however, findings have been inconsistent. Several studies have found differences in the comfort level felt by men and women when using different forms of sexual negotiation. For example, Carter and colleagues(1999) found in their examination of roles in negotiation of condom use that women play a more active role and men a more reactive role in negotiation; similar results were found by Noar, Morokoff, and Harlow (2002). Further, Carter, McNair, Corbin, and Williams (1999) found that when men's partners were more active in the process of deciding whether or not to use condoms, the relationship between intentions to use condoms and past condom use increased: it seemed as if men's intentions to use condoms

were based on the assumption that a female partner would initiate the decision to use a condom. Some studies examining gender (e.g., Allen, Emmers-Sommer & Crowell, 2002; Noar, Morokoff & Harlow, 2002) suggest that women may be generally more communicative about safer sex than men. Other studies(Aida & Falbo, 1991; Bird, Harvey, Beckman, & Johnson, 2001; Buss, Gomes, Higgins, & Lauterbach, 1987; Noar, Morokoff, & Harlow, 2004) have not found gender differences in strategy use in intimate relationships. For example, in a study of 90 heterosexual couples, Bird and colleagues (2001) found that study participants reported that the strategy used most often was to engage in a conversation about disease prevention, pregnancy prevention, or condom use; they next reported using assertion of needs or wants directly, followed by threatening to withhold sex. However, fewer studies have been performed examining a partner's perceptions of specific condom use negotiation strategies. Johnson, Gant, Hinkle, Gilbert, Willis, and Hoopwood (1992) found that in their sample of young African-American men and women, men were much more likely to react with anger when asked how they would react if a sexual partner proposed using a condom. Our research team (Otto-Salaj, Reed, Brondino, Gore-Felton, Kelly, & Stevenson, 2008) found similar results in our qualitative study of sexual negotiation in African-American adults.

There are little data showing use of specific strategies as predictors of successful negotiation. Margillo and Imahori (1998) examined use of negotiation strategies using semi-structured interviews with 21 African-American women between the ages of 15 and 30 who were economically impoverished and who used condoms inconsistently. Successful use of six types of "compliance-gaining" strategies was assessed, based on a typology developed by Howard, Blumstein, and Schwartz (1986). The typology includes autocracy, bargaining, bullying, disengagement, manipulation, and supplication. Autocracy includes asserting authority, claiming greater knowledge, making self-centered statements, or flatly insisting; bargaining involves use of reasoning or compromise; bullying uses threats, insults, ultimatums, or violence; disengagement relies on indirect methods such as sulking, making the partner feel guilty, or removing oneself from the situation; manipulation utilizes flattery, seduction, hints, or any practice which is secretive; and supplication includes pleading or acting ill or helpless. Results showed women reported successfully using bargaining/reasoning most often with male sexual partners, followed by bullying and autocracy. However, the study did not assess perceptions of the strategies by male partners, or unsuccessful use of strategy types by women participants.

Noar, Morokoff, and Harlow have conducted several studies (2002 (2004) examining use of condom influence strategies. Their 2002 study focused on college students, and identified six particular influence strategies (withholding sex, direct request, nonverbal seduction, relationship compartmentalizing, provision of risk information, and deception) used by the students in their sample; further, they found that use of these strategies were related to intentions for condom use, and that women endorsed use of different strategies emphasizing verbal approaches (withholding sex, direct request, risk information, and relationship conceptualizing) compared to men. In their 2004 study, they explored use of these strategies in a diverse community sample of 113 heterosexually-active men and women, and found that participants endorsed the aforementioned six strategies, plus a strategy based on pregnancy prevention. However, they did not find gender differences in strategy use. They also found that willingness to use condoms, sexual assertiveness, and being sexually communicative was linked to greater endorsement of strategy use. Their results suggest that becoming more ready to use condoms on a regular basis is related to greater likelihood of using strategies to influence a partner to use condoms.

Other studies (e.g., Dunn & Cowan, 1993; Lam & Barnhart, 2006; Lam, Mak, Lindsay, & Russell, 2004) have indicated there may be potential influence of ethnicity or culture on negotiation attempts. This may be important, as HIV risk reduction messages are increasingly

targeted to populations identified as being at greater risk for infection. In the epidemiological literature on HIV seroprevalence, the rate of AIDS diagnoses for black adults and adolescents in 2005 was 10 times the rate for whites and nearly 3 times the rate for Hispanics. Further, the rate of AIDS diagnoses for black women was nearly 23 times the rate for white women (CDC, 2007a; 2007b). Although African-American women comprised an estimated 13% of the U.S. population in 2005, they also comprised a disproportionate 66% of HIV/AIDS cases(CDC, 2007b). For these reasons, African-American men and women are often targeted for inclusion in HIV risk reduction interventions, including those focusing on negotiation skills training (e.g., Carey et al., 2000; DiClemente & Wingood, 1995; DiClemente et al., 2004; Jemmott, Jemmott & Fong, 1992; Kalichman, Cherry & Browne-Sperling, 1999; Sikkema et al., 2005). In particular, many interventions appear to target African-American women (DiClemente & Wingood, 1995; DiClemente et al., 2004; Sikkema et al., 2000; Wechsberg, Lam, Zule, & Bobashev, 2004).

Cultural differences in sexual and safer sex behavior have been reported in some studies(e.g. Catania, Coates & Golden, 1994), but not others(e.g. Seal & Palmer-Seal, 1996). Numerous studies have examined the influence of cultural norms and values on sexual decision-making; of these, several(Belk, Snell, Garcia-Falconi, Hernandez-Sanchez, Hargrove, & Holtzman 1988; Dunn & Cowan, 1993; Lam & Barnhart, 2006; Lam, Mak, Lindsay, & Russell, 2004; Steil & Hillman, 1993) have examined cultural context as a possible determining factor in the use of influence strategies. Lam and colleagues (Lam, Mak, Lindsay, & Russell, 2004) found that Asian American students used verbal indirect strategies (e.g., deception, flattery, dropping hints) significantly more than White American students. A study of African-American, Latina, and Caucasian-American women (Steil & Hillman, 1993) found that ethnicity was associated with decision-making, in that African American women were the least willing or able to communicate with partners about contraceptive decision-making. Wingood and DiClemente (1998) suggested that a reason for this may be the strong association among African American women of condom negotiation attempts with the belief that asking a partner to use a condom implies infidelity.

Wingood, Hunter-Gamble, & DiClemente(1993) conducted a series of focus groups with 18 unmarried African-American women between 18 and 25, in order to gain a greater understanding of the process by which women initiate communication about safer sex and negotiate condom use with regular and casual partners. Wingood and her colleagues found that while many women reported the ability to initiate discussions concerning safer sex with male sexual partners, few reported that they were able to negotiate condom use. Factors such as trust, conflict avoidance, attitudes toward using condoms, and sexual self-efficacy were identified as barriers to condom negotiation. In particular, most of the women in this study did not perceive themselves as having the power to make their partner wear a condom. Further, women who did feel comfortable exercising their power possessed either well-developed sexual negotiation skills or greater sexual self-efficacy. Finally, several women expressed fear of violence or described personal experience with violent reactions upon attempting to negotiate condom use with their partner. The researchers concluded that future research be targeted to determine the nature of sexual negotiations among African-American men and women and predictors of successful sexual negotiation among these populations, and to understand the role of power dynamics between African-American men and women in negotiating condom use.

In keeping with the need to investigate power dynamics in the context of negotiation, our investigational team (Otto-Salaj, Reed, Brondino, Gore-Felton, Kelly & Stevenson, 2008) completed a qualitative study of perceptions and responses of 51 African-American men and women to six different types of negotiation strategies. These strategies included reward, coercive, legitimate, expert, referent, and informational strategies, and were based on Raven's (1992) Power/Interaction Model of Interpersonal Influence. The following statements were

used to represent each of the six types of negotiation strategy, to be used with a hypothetical 'steady' sexual partner:

- **Coercion**: If a steady sexual partner said to you that if a condom wasn't used, s/he wasn't sure that s/he wanted to have sex with you or continue the relationship:
- **Reward**: If a steady sexual partner said to you that s/he thought condoms made it easier to "let go", that s/he thought you both could have sex for a longer time when using one, and that s/he knew some things that would make you feel really good while a condom was being used:
- **Legitimate**: If a steady sexual partner brought up condom use as the "responsible thing to do":
- **Referent**: If a steady sexual partner brought up condom use by saying that s/he respects you a lot, that condom use would be the best thing for you both, and how great you would be if you went along with it:
- **Expert**: If a steady sexual partner said that s/he's learned a lot about using condoms, and that the more s/he learns about them, the more s/he wants to use them, so it's a good idea that you use one:
- **Informational**: If a steady sexual partner brought up using condoms by saying that s/he saw a TV show that talked about HIV, and how effective condoms are in keeping people safe from HIV, and so what do you think about using a condom:

Results demonstrated gender differences in response to different strategy types: female participants responded best to referent, legitimate and reward strategies, and worst to the use of informational tactics. On the other hand, male participants responded best to reward strategies, and worst to coercion to use condoms. Further, responses given by a subset of both women and men indicated that use of negotiation tactics involving coercion to use condoms may result in negative and angry or violent reactions by those sexual partners. This was interesting, given that when female participants were asked to generate strategies they would use to negotiate with a sexual partner, most participants replied that they would use strategies that would be classified as coercive, and could not generate strategies based on other types of power bases.

Thus, we set out to examine the types of negotiation styles women might use to maximize the likelihood of safer outcomes while minimizing the likelihood of negative social outcomes, as well as the characteristics of those partners who may respond well to different types of condom use negotiation attempts. This study describes the reactions of a sample of heterosexual African-American men to several condom use negotiation attempts by a hypothetical female partner, involving six different types of approaches purportedly used by a steady sexual partner. Our purpose was: 1) to assess the differences in reactions to each type of negotiation strategy and attempt to identify strategies more likely or less likely to result in participant acquiescence to the request, and 2) to identify predictors of participant compliance or refusal to comply with condom use negotiation attempts. More information may help us inform more specifically communication components of HIV risk reduction interventions.

## Method

### Setting and Participants

A sample of 172 men was included in the present set of analyses. Participants met the following inclusion criteria: 1) they were male; 2) of African-American ethnicity; 3) were heterosexually-active in the three months prior to interview, 4) were between the ages of 18 and 35, 5) were unmarried, and 6) agreed to give written informed consent for project participation. All

participants were recruited from an inner-city community-based service center providing outreach, social service, and recreational programs for African-American men and women.

**Procedures and Measures—**In the community center, recruitment for the study was performed by project staff using face-to-face meetings, brochures, and posters. Interested persons were briefly screened to determine whether or not they met criteria for study entry. Informed consent was obtained from men who met screening criteria, and participants were then interviewed in a private room at the center. Assessments were conducted by an ethnically-matched research team experienced in the administration of assessment measures. Assessors also had previous experience in sexuality education and HIV prevention. Moreover, all assessors received extensive training in the study protocol and assessment measures before conducting the fieldwork.

In individual sessions, participants completed measures assessing:

**Demographic data and health characteristics:** Data were obtained on participant age, education level, relationship status, employment status, and income. In addition, participants were asked how often they had had an STD, and whether or not they ever had an HIV antibody test (and, if so, its result).

**AIDS risk behavior knowledge:** In previous research, we developed, pilot tested, and normed objective tests of knowledge concerning risk practices and risk reduction steps (Kelly et al., 1990; Kelly, St. Lawrence & Brasfield, 1991). Recently, we have modified the measure's vernacular and phrasing and have added items that better assess HIV risk knowledge in low-literacy populations. This 17-item version has sound psychometric properties (Otto-Salaj, Heckman, Stevenson, & Kelly, 1998), and is scored by summing the number of items correct.

**Risk History Survey (RHS):** The RHS assesses respondent sexual practices and substance use over the preceding 3 months. The RHS has proven to correlate with other measures pertinent to HIV risk-taking such as risk knowledge (Kelly et al., 1990), and to exhibit acceptable reliability characteristics (Kauth, St. Lawrence, & Kelly, 1991). The RHS elicits information on sexual activities and substance use occurring over the past three months including number of male and female sexual partners, frequency of unprotected vaginal and anal intercourse, and frequency of condom use. The format and language used in this instrument was found to be reliable and valid when used in a previous study (Otto-Salaj, Heckman, Stevenson, & Kelly, 1998).

**Condom attitudes:** The Condom Attitude Scale is a ten-item scale assessing participant's attitudes towards condom use. Each item consists of a statement (sample items: "Condoms ruin the mood," "Condoms interrupt foreplay") and a 6-point Likert scale to indicate level of agreement (1="Strongly Disagree" to 6="Strongly Agree"). This scale produces scores ranging from 10 to 60, with higher scores indicative of more positive attitudes toward condom use. The scale has demonstrated adequate internal consistency and reliability in a previous study (alpha=.70; Otto-Salaj, Heckman, Stevenson, & Kelly, 1998).

**Videotape segments:** In order to examine the relative effectiveness and social consequences of different theory-based strategies that might be employed by women to negotiate condom use with male partners, videotape segments representing each of six types of negotiation strategies— coercion, reward, referent power, legitimate power, expert power, and informational power—were shown to participants.

Each videotape segment showed a female actor speaking directly into the camera as if speaking directly to the viewer of the tape; participants were instructed to view the tapes as if the woman

was a 'steady' sexual partner. The actor was represented in silhouette, to obscure personal features or characteristics which might confound participants' assessments of negotiation attempts. Edgar, Noar and Murphy (2007) suggest that although many HIV risk reduction interventions may employ negotiation strategy use, these strategies are often not sufficiently linked to theory or empirical evidence of strategy use. Thus, each segment showed the model using a different negotiation strategy; strategies portrayed were based on Raven's (1992) social influence tactic conceptualizations, but informed and tailored for content, vernacular, and expressive style. Raven proposes six bases of power from which people derive strategies attempting to influence the behavior of others. These bases of power include: (a) reward; (b) coercion; (c) legitimate; (d) expert; (e) referent; and (f) information. According to Raven, **reward** and **coercive power** can refer to tangible rewards and real physical threats, but can also include personal approval or rejection. **Legitimate power** is derived from the structural relationship between the influencing agent and the target; the agent may implicitly or explicitly communicate that s/he has a "right" to ask the target to engage in some behavior, and that the target has an obligation to comply. Raven explicates several dimensions of legitimate power, including reciprocity ("I did that for you, so you should feel obliged to do this for me"), equity ("I have worked hard and suffered, so I have a right to ask you to do something to make up for it") and responsibility or dependence ("the obligation to help others who cannot help themselves or others who are dependent on us"). We chose to focus on the dimension of responsibility/dependence for the purpose of this study. **Expert power** is acting on the assumption that the powerholder is "correct", while **referent power** refers to engaging in a behavior because of a sense of connection with the influencing agent. Raven suggests that these forms of power may also have a "boomerang" effect in which the target does the opposite of whatever the influencing agent wishes, perhaps because s/he perceives the agent as acting in his or her best interest, or because people often dislike an influencing agent. Finally, **informational power** is based on logical argument that the influencing agent can present, either directly or indirectly, to the target in order to implement change.

In constructing the text of the video portrayals, a focus group was held with 6 African-American men and women, during which videotape text was edited and rewritten to reflect cultural tailoring of language, accurate portrayal of each power base, and social validity of presentation. In addition, we attempted to control for length of negotiation message/attempt, to make them similar across attempts. Video segments were presented in counterbalanced order across participants, as a control for possible influences of order and primacy or recency effects on participant ratings of the segments. Table 1 illustrates how the influence tactics were reflected in the text used in the videotape segments.

After viewing each video segment, each participant completed measures describing his reaction to the video segment he just observed, using six-point Likert scales to indicate level of agreement (where 1 = Strongly Disagree, and 6 = Strongly Agree) with statements reflecting the following domains:

**Compliance with the condom use request:** Six items were used to measure the participant's likelihood to use condoms as influenced by the condom use request (e.g., "If she said this to me, I would use a condom if we had sex, even if I didn't really want to"; "I would refuse to use a condom if she said this to me");

**Positive and negative affect:** Six items measured the participant's emotional reaction and liking for the model as influenced by her request (e.g., "If she said this to me I would be happy"; "If she said this to me, I would like her less");

**Attributions concerning the woman model:** The five items on this dimension measured the participant's perceptions of the model's motivation for engaging in the request (e.g., "If she said this to me, I would think she only cares about herself"); and

**Attributions concerning himself:** Five items measured the motivations of the participant regarding his reaction to the request (e.g., "If she said this to me I would think I need to find another partner").

Thus, we were able to assess each participant's reported likelihood of condom use request adherence, positive and negative affect, and attributions concerning himself and the hypothetical woman partner in response to each of the six portrayals. These items are shown in Table 2.

***Data Analysis:*** Ratings on each item across vignettes were compared using a repeated measures general linear model to determine whether participant's ratings of each item varied by vignette. Cluster analysis was applied to the ratings from each vignette. Specifically, SPSS version 16 was used to run average linkage hierarchical agglomerative cluster analyses using the squared Euclidean distance method of measuring similarity. The 22 items following a vignette were entered into the cluster analysis and dendograms were examined to determine which items grouped together to form clusters. This was done for each of the 6 vignettes. Cluster analysis results from each vignette were compared to determine whether items clustered similarly for each vignette. The items and clusters which were consistent across vignettes were selected and average composite scores were created for each item cluster within each vignette. These cluster analysis derived composite scores were aggregated by averaging them across vignettes. This produced four composite scores representing the following constructs: Anger/rejection of the partner; Condom use refusal; Attributions of the partner as selfish, cheating, and/or uncaring of the respondent; and Attributions of the partner as caring and agreement to use condoms. Since interest in the current study is on condom use, the sample was sorted in terms of their responses to the new index representing the degree of condom refusal averaged across the vignettes. Subgroups were identified who would definitely use condoms, were less likely to do so, and who were least likely to do so. Exploratory analyses were conducted to determine how these groups differed from one another in their responses to the vignettes on the remaining composite scores and other variables in the data set.

## Results

Mean age of participants was 31.5 years (SD=3.3). Most participants (74%) were unemployed. The mean education level of the sample was 12.1 years (SD=1.89). Thirty-five percent of the participants were not currently in a relationship, 24% were in a relationship that was not long-term, 21% were in a long-term relationship but not living with their partner, and 18% were living with their partner.

### Aggregated Men's Ratings

No significant differences were found in men's ratings across the six vignettes. Specifically, a repeated measures general linear model was conducted for each item. None of the results reached significance, which indicates that there were no significant differences in men's ratings across the six vignettes on any of the 22 items. Greenhouse-Geisser F-ratios ranged from 0.170 to 2.204, with p-values ranging from 0.057 to 0.971.

### Cluster Analysis

The 22 items from each vignette were then placed into a cluster analysis to determine whether the items clustered in any way. This was done for each of the 6 vignettes. The dendogram from

each cluster analysis was examined to look for items which clustered together and provided an interpretable solution (Norusis, 2009). Results were then compared across vignettes to look for similarity. It was found that each of the 6 cluster analyses revealed 4 clusters, which supported the clusters that were chosen by showing that the clusters were stable across vignettes (Clatworthy, Buick, Hankins, Weinman, & Horne, 2005). One cluster, termed anger/rejection of the partner included items 8, 11, 18, and 22. The condom use refusal cluster included items 2, 3, and 5. The cluster indicating attributions of the partner as selfish, cheating, and untrusting of the respondent included items 14, 15, and 16. Finally, the cluster which indicated agreement on condom use and attributions of the partner as caring included items 7, 10, 13, 17, and 19. Items on each cluster were averaged for each vignette to create 4 composite scores for each vignette. As it was already determined that there were no differences across vignettes, these scores were then averaged across vignettes to create 4 composite scores for each participant, representing their scores on each of the constructs listed above.

Since our interest is in condom use, the sample was then sorted in terms of their responses to the condom use refusal construct. Subgroups were identified who would either definitely use condoms, were less likely to do so, and who were least likely to do so. The individuals who were thought to *definitely use condoms* (n=41; 23.7%) responded to each item on this subscale with a 1, which indicated that they strongly disagreed that they would refuse to use condoms, giving an average on this construct of 1. Individuals who were thought to be *less likely to use condoms* (n=111; 64.2%) had an average on this construct between 1 and 3, which indicated that, on average, they disagreed that they would refuse to use condoms. Finally, individuals who were thought to be *least likely to use condoms* (n=20; 11.6%) had an average on this construct which was greater than 3. This indicated that they, on average, agreed that they would refuse to use condoms. Exploratory analyses were then conducted to determine how these groups differed from one another in their responses to the vignettes on the remaining composite scores and other variables in the data set.

## Chi-square Analyses

Subgroups varied on whether or not they were forced into having sex when they didn't want to in the past 3 months [$\chi^2(2)=6.763$, $p<.04$]. Specifically, participants who stated that they had been forced into having sex when they didn't want to were more likely to be in the "less likely" and "least likely to use a condom" subgroups. On the other hand, participants who stated that they had not been forced into having sex when they didn't want to were more likely to be in the "definitely would use a condom" subgroup than in the other two subgroups.

Subgroups also varied on whether or not they ever had a STD [$\chi^2(2)=7.313$, $p<.03$]. In this case, participants who stated that they had ever had a STD were more likely to be in the definitely would use a condom or in the less likely to use a condom subgroups than in the least likely to use a condom subgroup. On the other hand, participants who stated that they had never had a STD were more likely to be in the least likely to use a condom subgroup than in the other two subgroups.

## ANOVAs

The subgroups were found to differ significantly from one another on measures of AIDS knowledge [$F(2,169)=3.283$, $p<.05$]. Specifically, the subgroup that would definitely use condoms had the highest AIDS knowledge mean (M=12.585), while the subgroup that was less likely to use condoms had a lower mean (M=11.333), and the subgroup that was least likely to use condoms had the lowest AIDS knowledge mean (M=11.100). Post hoc pairwise Bonferroni comparisons revealed that the only significant difference was between the group that would definitely use condoms and the group that was less likely to use condoms.

The subgroups were also found to be significantly different from one another on the anger/rejection of the partner construct which was created from the cluster analysis [$F(2,167)=27.171$, $p<.001$]. Specifically, the subgroup that would definitely use condoms had the lowest anger/rejection of the partner mean ($M=1.556$), while the subgroup that was less likely to use a condom had a higher anger/rejection of the partner mean ($M=2.288$), and the subgroup that was least likely to use a condom had the highest anger/rejection of the partner mean ($M=3.042$). All post hoc Bonferonni comparisons were significant, which indicated that each of the 3 groups were significantly different from one another. This indicated that likelihood of condom use was related to anger/rejection of the partner such that being more likely to use condoms was related to lower levels of anger/rejection of the partner.

In addition, the subgroups were found to be significantly different from one another on the agreement to use condoms and attributions of the partner as caring construct [$F(2,167)=14.465$, $p<.001$]. Specifically, the subgroup that would definitely use condoms had the highest mean ($M=5.072$), while the subgroup that was less likely to use condoms had a lower mean ($M=4.375$), and the subgroup that was least likely to use condoms had the lowest mean ($M=4.040$). Post hoc pairwise Bonferroni comparisons revealed a significant difference between the group that would definitely use condoms and the group that was less likely to use condoms as well as between the group that would definitely use condoms and the group that was least likely to use condoms. This indicated that the likelihood of condom use was related to agreement to use condoms and attributions of the partner as caring. That is, participants who were most likely to use condoms were also most likely to agree to use condoms and to view their partner as caring.

Putting this all together, a 3×3 mixed model ANOVA (condom use subgroup by composite score) was performed, which demonstrated consistencies across subgroups in responses on the outcome measures. The subgroup that was most willing to use condoms was lowest in anger/rejection of the partner and in attributions of the partner as selfish, and highest on agreement to use condoms and attributions of the partner as caring. The subgroup that was least willing to use condoms was highest in anger/rejection of the partner and in attributions of the partner as selfish, and lowest on agreement to use condoms and attributions of the partner as caring. The subgroup that was less likely to use condoms scored in between the other two subgroups on all three constructs. That is, there was a significant interaction between subgroup and composite score [$F(2,162)=27.697$, $p<.001$].

## Discussion

Our results suggest that first, in comparing the reactions of heterosexually-active African American men to a number of condom use negotiation strategies used by a hypothetical female partner, there was no one strategy that was responded to significantly more positively or negatively. In other words, there was no “magic bullet’ – no strategy worked to facilitate positive responses and acquiescence to use condoms by project participants. However, we also found that none of the strategies elicited universally negative responses –in the form of negative affect or attributions regarding the hypothetical female partner. This differs somewhat from the findings of our previous qualitative study of perceptions of condom use negotiation strategies (Otto-Salaj, Reed, Brondino, Gore-Felton, Kelly, & Stevenson, 2008). In that study, we found that men generally responded best to reward strategies, and worst to coercion strategies.

Participants were divided into three subgroups based on the results of one of the cluster analysis clusters (condom use refusal). These subgroups appear to be related to responsiveness to negotiation attempts as a whole and willingness to use condoms. Further, our results indicate that these three subgroups significantly differed from one another on constructs that one would

think would predict differences in willingness to use condoms, such as anger/rejection of the negotiator and attributions of the negotiator as caring. The group that indicated greatest willingness to use condoms also indicated positive attributions and least anger/rejection toward the negotiator, and were more likely to have been diagnosed with an STD in the past; further, this group significantly differed from the group indicating they were least likely to use condoms on these measures. Also, participants who indicated they were unwilling to use condoms were also more likely to have been forced into sex in the past. These results support the findings in our earlier study, and suggest that responses to negotiation strategies are rather complex. In our qualitative study, we also found that responses differed across subsets of women and men. Responses given by a subset of women and-- to a greater extent, men-- indicated that use of negotiation tactics involving coercion to use condoms may result in negative and even angry or violent reactions. Especially among some men, the potential for violent response to a "no condom, no sex" strategy was clear. Further, negative affect did not always correspond with refusal to use condoms, but may have other consequences such as increasing the likelihood of intrapersonal violence between sexual partners. Thus, in order to avoid potentially angry or violent reactions in response to negotiation attempts, we recommend that this particular strategy type be used with caution, and with attention paid to the characteristics of the partner.

Our current findings suggest that while the manner in which the female approached her request to use condoms had little impact on the participant's response, the very act of suggesting condom use produced a response that differed across participants. Further, this act produced an extremely negative response among some men, no matter what strategy was used. As women are often targeted for training in condom use negotiation as a part of HIV risk reduction strategies, it is important for trainers to be aware that successful negotiation may be influenced as much by partner characteristics as by the method of training and strategies emphasized. In certain relationships, the use of negotiation may encourage negative relationship outcomes, with a potential for anger and violence from a subset of male partners in response to negotiation attempts. Little exploration of personality predictors of condom use has been conducted (Hoyle, Fejfar & Miller, 2000; Zimmerman et al., 2007). Hoyle, Fejfar and Miller (2000) performed a meta-analysis of the literature on personality traits and sexual risk taking, and identified sensation-seeking and impulsivity to be most indicative of sexual risk taking. This may help to explain our finding that men who were least likely to use condoms were also most likely to have had a previous history of an STD; however, as there is little integration of personality characteristics and condom use, we know of no studies examining personality predictors of response to negotiation attempts. Most studies examining partner characteristics and condom negotiation have focused on variables such as perception of partner's willingness to use condoms. For example, a study of factors thought to promote safer sex communication in a sample of college students (DiIorio, Dudley, Lehr & Soet, 2000) found that perception of partner attitudes toward a safer sex discussion was related both to communication self-efficacy, communication outcome expectancies and safer sex communication; however, the relationship between partner attitudes and communication was weak, suggesting a complex relationship and potential mediation by other factors. Thus, research specifically exploring partner characteristics that influence perception of strategies and willingness to use condoms would be a welcome addition to the literature, and would facilitate the tailoring of HIV interventions to individuals having characteristics that predict unwillingness to use condoms.

As effective negotiation of condom use with a male sexual partner may be determined more by characteristics of that partner than by specific strategy used, teaching an array of negotiation strategies in HIV intervention skills training may allow intervention participants to be able to more accurately target use of a specific strategy for a particular partner. Also, increasing the repertoire of strategies among HIV intervention participants may increase the likelihood that 1) they actually engage in condom negotiation attempts; and 2) they are able to choose and apply a strategy that is more effective in persuading a partner to use a condom. The results also

imply a need to more adequately explore gender differences not by negotiation strategy use or perception of strategies, but in the efficacy of HIV intervention components other than negotiation skills training. In a meta-analysis of HIV prevention interventions and components found to be efficacious with different subgroups, Albarracin, Gillette, Earl, Glasman, Durantini, and Ho (2005) found that men and not women were the ones who benefitted most from behavioral skills training, including training in condom use and communication skills; this suggests that efficacy of HIV intervention components may differ by gender of the target of the intervention. Further analysis of the efficacy of specific components of interventions – and how efficacy may differ by gender, age, ethnicity, and personality characteristics of those to whom the interventions are targeted – is suggested. Finally, it may also be equally effective for HIV risk interventions to attend to issues in both men and women regarding the empowerment of women, and creation of norms for: respect, empathy and caring for partners; rejection of anger, hostility, aggressiveness, and physical and emotional violence; and condom use and sexual safety.

## Study Limitations

There are several limitations to our findings. First, we attempted to simulate a negotiation attempt as might occur in a relationship with a steady (that is, ongoing and relatively stable) sexual partner. There are numerous challenges in this context: it is difficult to simulate the dynamics in an existing relationship. We chose to characterize the relationship as ‘steady’ for several reasons. First, those are relationships in which it is often difficult to increase condom use. Studies suggest that condom use in most relationships is less consistent or diminishes over time (e.g. Manlove, Ikramullah, & Terry-Humen, 2008). Previous HIV intervention trials have shown outcomes reflective of HIV risk behavior change with new sexual partners, but no change with existing or long-term partners (e.g. Otto-Salaj et al., 2000). Also, being in a ‘steady’ relationship may also result in dynamics creating greater sexual risk for partners, because of the balance--or imbalance-- of power, and commitment to relationship resulting in potentially greater losses for a female negotiator if partners are non-monogamous and negotiation attempts go awry. Similarly, many public health campaigns endorsing condom negotiation do not propose using specific strategies with specific partner types (i.e. steady or casual) – they simply suggest using a strategy, without taking into account the length of relationship (e.g., “No condom, no way; “Just say no”); our recent study shows use of some strategies may potentially produce issues for established relationships (Otto-Salaj, Reed, Brondino, Gore-Felton, Kelly, & Stevenson, 2008). Thus, we wished to continue our work examining the context of negotiating condom use in a steady relationship.

However, several studies have found that context of relationship may be an important factor influencing use of negotiation strategies. In a study examining assertive communication with a sexual partner, Quina and colleagues (Quina, Harlow, Morokoff, Burkholder, & Deiter, 2000) found that women having a current sexual partner generally responded more negatively on most study measures, suggesting that just having a real-life partner may influence responses on measures assessing communication strategies. In a similar vein, DeVisser and Smith (2001) conducted a study of 103 heterosexual men and women who completed a condom use diary over a period of six months. They found that for relationships with both regular and casual partners, the dynamic of condom use was influenced not as much by the attitudes or beliefs of the partner, but more by the “characteristics of the interaction between the partners (e.g., prior agreements, use of other contraception). (p. 423).” DeVisser and Smith go on to suggest that condom use among steady partners may be heavily influenced by established patterns of behavior, whereas condom use among casual partners may be more influenced by the context of that specific encounter. Considering these studies, we need to interpret our results with caution; future research examining and comparing multiple contexts of relationship in the assessment of strategy perception and use is recommended.

In addition, in order to allow us to characterize the relationship with the hypothetical female partner as 'steady', we felt we needed to obscure most of the model's physical characteristics so that perceptions of the physical attractiveness of the hypothetical partner would not influence our results. This controlled for some factors, although study participants were exposed to the model's voice when listening to the vignettes, and we relied on the ability of the participants to transcend the context of laboratory research in the conduct of the study. Thus, the extent to which we were successful in facilitating our participants to realistically consider the hypothetical partner as 'real' is unclear. Also, it is likely that dynamics in condom negotiation with newer partners may vastly differ from the situations we were trying to assess.

Finally, the study was also designed with the intent of examining use of negotiation strategies based on Raven's power bases, while at the same time making them 'user-friendly,' implementing language that people might use in negotiating use of condoms. To address this, we conducted the focus group and worked with African American men and women to construct and revise the wording for each strategy, based on the idea that these strategies would be used with a steady partner. Although the members of the group worked together to develop wording, and agreed at the end on the wording for each strategy, it is admittedly arguable how believable each strategy would be in a real life negotiation attempt. In particular, some strategies are more believable than others, because we had some sources of comparison in the form of messages similar to those advocated in public health campaigns. Also, we attempted to control for length of negotiation messages and make them similar across attempts. The example negotiation strategies used in our attempts may not accurately reflect the length of time spent in negotiation in real-life situations; our examples may be longer or 'more wordy,' or may be shorter than the phrasing people really might use.

Thus, when including condom use negotiation components in HIV risk reduction programs, using a "one size fits all" approach in advocating use of negotiation strategies – no matter what the strategy – may not be as efficacious in promoting behavior change as using a repertoire of several different negotiation tactics, and taking into account partner characteristics and relationship context in choice of strategies to use. Providing a "menu of options" – may be key in facilitating successful adoption and use of strategies appropriate for specific relationships. Further, additional research is recommended on the specific characteristics of partners that predict strategy efficacy, and the effects of relationship context of strategy use and efficacy of specific strategies.

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## References

Aida Y, Falbo R. Relationships between marital satisfaction, resources and power strategies. Sex Roles 1991;24:43–56.

Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes 1991;50:179–211.

Albarracin D, Gillette JC, Earl AN, Glasman L, Durantini MR, Ho MH. A test of major assumptions about behavior change: A comprehensive look at the effects of passive and active HIV-prevention interventions since the beginning of the epidemic. Psychological Bulletin 2005;131:856–897. [PubMed: 16351327]

Bandura, A. Perceived self-efficacy in the exercise of control over AIDS infection. In: Mays, VM.; Albee, GW.; Schneider, SF., editors. Primary prevention of AIDS: Psychological approaches. Newbury Park, CA: Sage; 1988. p. 128-141.

Beadnell B, Baker SA, Morrison DM, Knox K. HIV/STD risk factors for women with violent male partners. Sex Roles 2000;42:661–689.

Belk SS, Snell WE, Garcia-Falconi R, Hernandez-Sanchez JE, Hargrove L, Holtzman WH. Power strategy use in the intimate relationships of women and men from Mexico and the United States. Personality and Social Psychology Bulletin 1988;14:439–447.

Bird ST, Harvey SM, Beckman LJ, Johnson CH. The PARTNERS Project. Getting your partner to use condoms: Interviews with men and women at risk of HIV/STDs. The Journal of Sex Research 2001;38:233–240.

Bowen AM, Williams ML, Daniel CM, Clayton S. Internet based HIV prevention research targeting rural MSM: Feasibility, acceptability, and preliminary efficacy. Journal of Behavioral Medicine 2008;31:463–477. [PubMed: 18770021]

Bui KT, Raven BH, Schwarzwald J. Influence strategies in dating relationships; The effects of relationships satisfaction, gender, and perspective. Journal of Social Behavior and Personality 1994;9:429–442.

Buss DM, Gomes M, Higgins DS, Lauterbach K. Tactics of manipulation. Journal of Personality and Social Psychology 1987;52:1219–1229. [PubMed: 3598864]

Calsyn, DA.; Hatch-Maillette, M.; Tross, S.; Doyle, SR.; Crits-Christoph, P.; Song, YS.; Harrer, JM.; Lalos, G.; Berns, SB. Motivational and skills training HIV/sexually transmitted infection sexual risk reduction groups for men. Journal of Substance Abuse Treatment. 2009. epub, http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6T90-4VCNDYV-6&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=0ca99066eb9b26efa66df0b83c2c4954, retrieved 5-11-09

Carey MP, Braaten LS, Maisto SA, Gleason JR, Forsyth AD, Durant LE, Jaworski BC. Using information, motivational enhancement, and skills training to reduce the risk of HIV infection for low-income urban women: A second randomized trial. Health Psychology 2000;19:3–11. [PubMed: 10711582]

Carter JA, McNair LD, Corbin WR, Williams M. Gender differences related to heterosexual condom use: The influence of negotiation styles. Journal of Sex & Marital Therapy 1999;25:217–225. [PubMed: 10407794]

Catania JA, Kegeles S, Coates TJ. Towards an understanding of risk behavior: An AIDS risk reduction model (ARRM). Health Education Quarterly 1990;17:53–72. [PubMed: 2318652]

Catania JA, Coates TJ, Golden E. Correlates of condom use among Black, Hispanic, and White heterosexuals in San Francisco: The AMEN study. AIDS Education and Prevention 1994;6:12–26. [PubMed: 8024940]

Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report. Vol. 17. Atlanta: US Department of Health and Human Services; 2007a. p. 1-46.Rev ed

Centers for Disease Control and Prevention. HIV/AIDS Prevention Home, HIV Surveillance in Women (June 17, 2007). 2007b. Retrieved January 2, 2008 from http://www.cdc.gov/hiv/topics/surveillance/resources/slides/women/slides/Women11.pdf

Clatworthy J, Buick D, Hankins M, Weinman J, Horne R. The use and reporting of cluster analysis in health psychology: A review. British Journal of Health Psychology 2005;10:329–358. [PubMed: 16238852]

Cowan G, Bommersbach M, Curtis SR. Codependency, loss of self, and power. Psychology of Women Quarterly 1995;19:221–236.

Crepaz N, Lyles CM, Wolitski RJ, Passin WF, Rama SM, Herbst JH, Purcell DW, Malow RM, Stall R. Do prevention interventions reduce HIV risk behaviors among people living with HIV? A meta-analytic review of controlled trials. AIDS 2006;20:143–157. [PubMed: 16511407]

Darbes L, Crepaz N, Lyles C, Kennedy G, Rutherford G. The efficacy of behavioral interventions in reducing HIV risk behaviors and incident sexually transmitted diseases in heterosexual African Americans. AIDS 2008;22:1177–1194. [PubMed: 18525264]

deVisser R, Smith A. Relationship between sexual partners influences rates and correlates of condom use. AIDS Education and Prevention 2001;13:413–427. [PubMed: 11718441]

DiClemente RJ, Wingood GM. Randomized controlled trial of an HIV sexual risk-reduction intervention for young African-American women. Journal of the American Medical Association 1995;274:1271–1276. [PubMed: 7563531]

DiClemente RJ, Wingood GM, Harrington KF, Lang DL, Davies SL, Hook EW, Oh K, Crosby RA, Hertzberg VS, Gordon AB, Hardin JW, Parker S, Robillard A. Efficacy of an HIV prevention intervention for African American adolescent girls: A randomized controlled trial. Journal of the American Medical Association 2004;292:171–179. [PubMed: 15249566]

DiIorio C, Dudley WN, Lehr S, Soet JE. Correlates of safer sex communication among college students. Journal of Advanced Nursing 2000;32:658–665. [PubMed: 11012809]

DiNoia J, Schinke SP. Gender-specific HIV prevention with urban early-adolescent girls: outcomes of the Keepin' It Safe program. AIDS Education and Prevention 2007;19:479–488. [PubMed: 18190273]

Dunn KF, Cowan G. Social influence strategies among Japanese and American college women. Psychology of Women Quarterly 1993;17:39–52.

Edgar, T.; Noar, SM.; Murphy, B. Communication skills training in HIV prevention interventions. In: Edgar; Noar; Freimuth, editors. Communication perspectives on HIV/AIDS for the 21st century. New York: Lawrence Erlbaum; 2007.

Fisher JD, Fisher WA. Changing AIDS risk behavior. Psychological Bulletin 1992;111:455–474. [PubMed: 1594721]

Fisher JD, Fisher WA, Bryan AD, Misovich SJ. Information-motivation-behavioral skills model-based HIV risk behavior change intervention for inner-city high school youth. Health Psychology 2002;21:177–186. [PubMed: 11950108]

Goldberg LR. The structure of phenotypic personality traits. American Psychologist 1993;48:26–34. [PubMed: 8427480]

Grauerholz E, Serpe RT. Initiation and response: The dynamics of sexual interaction. Sex Roles 1985;12:1041–1059.

Herbst JH, Kay LS, Passin WF, Lyles CM, Crepaz N, Marin BV. A systematic review and meta-analysis of behavioral interventions to reduce HIV risk behaviors of Hispanics in the United States and Puerto Rico. AIDS and Behavior 2007;11:25–47. [PubMed: 16917668]

Hovell MF, Blumberg EJ, Liles S, Powell L, Morrison TC, Duran G, Sipan CL, Burkham S, Kelley N. Training AIDS and anger prevention social skills in at-risk adolescents. Journal of Counseling and Development 2001;79:347–355.

Hovland, CI.; Janis, IL.; Kelley, HH. Communication and persuasion: Psychological studies of opinion changes. New Haven, CT: Yale University Press; 1953.

Howard H, Blumstein P, Schwartz P. Sex, power, and influence tactics in intimate relationships. Journal of Personality and Social Psychology 1986;51:102–109.

Hoyle RH, Fejfar MC, Miller JD. Personality and sexual risk taking: A quantitative review. Journal of Personality 2000;68:1203–1231. [PubMed: 11130738]

Johnson EH, Gant L, Hinkle YA, Gilbert D, Willis C, Hoopwood T. Do African American men and women differ in their knowledge about AIDS, attitudes about condoms, and sexual behaviors? Journal of the National Medical Association 1992;84:49–64. [PubMed: 1602502]

Kalichman SC, Cherry C, Browne-Sperling F. Effectiveness of a video-based motivational skills-building HIV risk reduction intervention for inner-city African American men. Journal of Consulting and Clinical Psychology 1999;67:956–966.

Kauth MR, St Lawrence JS, Kelly JA. Reliability of retrospective assessments of sexual HIV risk behavior: A comparison of biweekly, three-month, and 12-month self-reports. AIDS Prevention and Education 1991;3:207–214.

Kelly JA, Murphy DA, Sikkema KJ, McAuliffe TL, Roffman RA, Solomon LJ, Winett RA, Kalichman SC. Randomised, controlled, community-level HIV-prevention intervention for sexual-risk behaviour among homosexual men in US cities. The Lancet 1997;350:1500–1505.

Kelly JA, St Lawrence JS, Brasfield TL, Lemke A, Amidei T, Roffman RE, Hood HV, Smith JE, Kilgore H, McNeill C. Psychological factors which predict AIDS high-risk versus AIDS precautionary behavior. Journal of Consulting and Clinical Psychology 1990;58:117–120. [PubMed: 2319044]

Kelly JA, St Lawrence JS, Brasfield TL. Predictors of vulnerability to AIDS risk behavior relapse. Journal of Consulting and Clinical Psychology 1991;59:163–166. [PubMed: 2002133]

Kelly JA, St Lawrence JS, Hood HV, Brasfield TL. Behavioral intervention to reduce AIDS risk activities. Journal of Consulting and Clinical Psychology 1989;57:60–67. [PubMed: 2925974]

Lam AG, Barnhart JE. It takes two: the role of partner ethnicity and age characteristics on condom negotiations of heterosexual Chinese and Filipina American college women. AIDS Education and Prevention 2006;18:68–80. [PubMed: 16539577]

Lam AG, Mak A, Lindsay PD, Russell ST. What really works? An exploratory study of condom negotiation strategies. AIDS Education and Prevention 2004;16:160–171. [PubMed: 15134124]

Manlove J, Ikramullah E, Terry-Humen E. Condom use and consistency among male adolescents in the United States. Journal of Adolescent Health 2008;43:325–333. [PubMed: 18809129]

Margillo, GA.; Imahori, TT. Women and AIDS: Negotiating Safer Practices, Care, and Representation. New York: The Haworth Press, Inc; 1998. Understanding safer sex negotiation in a group of low-income African-American women; p. 43-69.

Noar SM. Behavioral interventions to reduce HIV-related sexual risk behavior: Review and synthesis of meta-analytic evidence. AIDS and Behavior 2008;12:335–353. [PubMed: 17896176]

Noar SM, Carlyle K, Cole C. Why communication is crucial: Meta-analysis of the relationship between safer sexual communication and condom use. Journal of Health Communication 2006;11:365–390. [PubMed: 16720536]

Noar SM, Morokoff PJ, Harlow LL. Condom negotiation in heterosexually active men and women: Development and validation of a condom influence strategy questionnaire. Psychology and Health 2002;17:711–735.

Noar SM, Morokoff PJ, Harlow LL. Condom influence strategies in a community sample of ethnically diverse men and women. Journal of Applied Social Psychology 2004;34:1730–1751.

Norusis, MJ. SPSS 17.0 Statistical Procedures Companion. Upper Saddle River, NJ: Prentice Hall; 2009.

Otto-Salaj LL, Heckman T, Stevenson LY, Kelly JA. Patterns, predictors, and gender differences in HIV/AIDS risk among severely mentally ill men and women. Community Mental Health Journal 1998;34:175–190. [PubMed: 9620162]

Otto-Salaj LL, Reed B, Brondino MJ, Gore-Felton C, Kelly JA, Stevenson LY. Condom use negotiation in heterosexual African-American adults: Responses to types of social power-based strategies. Journal of Sex Research 2008;45:150–163. [PubMed: 18569536]

Otto-Salaj LL, Kelly JA, Stevenson LY, Hoffmann R, Kalichman SC. Outcomes of a randomized small-group HIV prevention intervention trial for people with serious mental illness. Community Mental Health Journal 2001;37:123–144. [PubMed: 11318241]

Quina K, Harlow LL, Morokoff PJ, Burkholder G, Deiter PJ. Sexual communication in relationships: when words speak louder than actions. Sex Roles 2000;42:523–549.

Raven BH. A power/interaction model of interpersonal influence: French and Raven thirty years later. Journal of Social Behavior and Personality 1992;7:217–244.

Seal DW, Palmer-Seal DA. Barriers to condom use and safer sex talk among college dating couples. Journal of Community & Applied Social Psychology 1996;6:15–33.

Sikkema KJ, Anderson ES, Kelly JA, Winett RA, Gore-Felton C, Roffman RA, Heckman TG, Graves K, Hoffmann RG, Brondino MJ. Outcomes of a randomized, controlled community-level HIV prevention intervention for adolescents in low-income housing developments. AIDS 2005;19:1509–1516. [PubMed: 16135905]

Sikkema KJ, Kelly JA, Winett RA, Solomon LJ, Cargill VA, Roffman RA, McAuliffe TL, Heckman TG, Anderson EA, Wagstaff DA, Norman AD, Perry MJ, Crumble DA, Mercer MB. Outcomes of a randomized community-level HIV prevention intervention for women living in 18 low-income housing developments. American Journal of Public Health 2000;90:57–63. [PubMed: 10630138]

Sikkema KJ, Meade CS, Doughty-Berry JD, Zimmerman SO, Kloos B, Snow DL. Community-level HIV prevention for persons with severe mental illness living in supportive housing programs: A pilot

intervention study. Journal of Prevention and Intervention in the Community 2007;33:121–135. [PubMed: 17298935]

Steil JM, Hillman JL. The perceived value of direct and indirect influence strategies: A cross-cultural comparison. Psychology of Women Quarterly 1993;17:457–462.

Susser E, Valencia E, Berkman A, Sohler N, Conover S, Torres J, Betne P, Felix A, Miller S. Human immunodeficiency virus sexual risk reduction in homeless men with mental illness. Archives of General Psychiatry 1998;55:266–272. [PubMed: 9510221]

Wechsberg WM, Lam WKK, Zule WA, Bobashev G. Efficacy of a woman-focused intervention to reduce HIV risk and increase self-sufficiency among African American crack abusers. American Journal of Public Health 2004;94:1165–1173. [PubMed: 15226138]

Wingood GM, DiClemente RJ. The effects of an abusive primary partner on the condom use and sexual negotiation practices of African-American women. American Journal of Public Health 1997;87:1016–1018. [PubMed: 9224187]

Wingood GM, DiClemente RJ. Partner influences and gender-related factors associated with noncondom use among young adult African American women. American Journal of Community Psychology 1998;26:29–51. [PubMed: 9574497]

Wingood GM, Hunter-Gamble D, DiClemente RJ. A pilot study of sexual communication and negotiation among young African-American women: Implications for HIV prevention. Journal of Black Psychology 1993;19:193–203.

Zimmerman RS, Noar SM, Feist-Price S, Dekthar O, Cupp PK, Anderman E, Lock S. Longitudinal test of a multiple domain model of adolescent condom use. Journal of Sex Research 2007;44:380–394. [PubMed: 18321017]

## Table 1

Videotape Strategy Types, Premises, and Associated Text

| Social Power Base | Influence Tactic Utilizing Base | Condom Negotiation Script Reflecting This Tactic |
|---|---|---|
| Coercion | Threatening punishment (disapproval, relationship change) for not adhering to the request | "You know, I really want to have sex with you, and I know you want to have sex with me. But I've got to tell you, I've made a rule for myself, and that is to use condoms when having sex. I can't respect someone who doesn't use them, so we're going to use them or we're not having sex. Period." |
| Reward | Promising or insinuating reward (personal approval, sexual satisfaction) for adhering to the request | "I know you want to have sex, and I want to do it with you, too. We can really get each other off using condoms – just the thought of getting together with you and using them really turns me on. I can make this very hot, and we can try some things that make us feel really good." |
| Legitimate | Invoking principles of reciprocity, responsibility, or dependence | "I care about you. You really seem to care about me, and I think you want to have sex with me. I know you want to use a condom, because you're the kind of guy that looks out for a woman. And that's what people who care about one another do, it's the responsible thing to do." |
| Referent | Stressing target of influence as a "role model," someone the powerholder admires | "We seem to have a lot in common, and I respect and admire you. We both want the same thing--I want to sleep with you, and you want to sleep with me. Talking with you about condoms is no problem, because a man like you is always prepared —that's one of the great things about you. I know you want to do it safely." |
| Expert | Invoking powerholder as the "expert," the one who knows best what to do, without associated knowledge (informational power, see below) | "I want to have sex with you, and think you want to have sex with me. I really like learning new things, and think I'm pretty good at a lot of things. I know all about using condoms and how great they are for staying healthy. The more I learn about using them, the more I know it's a good idea to use one." |
| Information | Emphasizing specific factual information supporting adherence to the request | "I think you want to sleep with me, and I really want to sleep with you, but I'm concerned about HIV. I saw a TV show the other day on HIV, you know--the virus that causes AIDS? More of us are being infected with it every day, and although there's drugs to treat it, there's no cure. Condoms are a good way to keep us safe, and we won't have to worry about pregnancy or HIV." |

## Table 2

Videotape Rating Items

| Content | Items |
|---|---|
| **Condom Use Compliance:** | (1) If she said this to me, I'd use a condom if we had sex even if I really didn't want to. |
| | (2) There would be nothing a woman could say to get me to use a condom. |
| | (3) I would refuse to use a condom if she said this to me. |
| | (4) Sex with a condom would be okay if she suggested it like this. |
| | (5) There is nothing *this woman* could say to get me to use a condom. |
| | (6) If my real-life sexual partner said this to me, I'd use a condom. |
| **Positive and Negative Affect** | (7) If she said this to me, I would be happy. |
| | (8) If she said this to me, I would feel angry. |
| | (9) If she said this to me, I would feel anxious. |
| **Liking for the Model:** | (10) If she said this to me, I would like her more. |
| | (11) If she said this to me, I would like her less. |
| | (12) If she said this to me, I might not be able to have sex at all. |
| **Attributions for the Model:** | (13) If she said this to me, I would think that she cares about me. |
| | (14) If she said this to me, I would think she only cares about herself. |
| | (15) If she said this to me, it's because she doesn't trust me. |
| | (16) If she said this to me, she must have been having sex with someone else, and that's why she brought it up. |
| | (17) If she said this to me, it would show that she is thinking of both of us. |
| **Attributions about Himself (the participant):** | (18) If she said this to me, I would think I need to find another partner. |
| | (19) If she said this to me, I would go along with it because I care about her. |
| | (20) I make the decisions about how we have sex, so I wouldn't really care how she feels about condoms - I'll decide. |
| | (21) Having sex is more important than whether or not we use condoms. |
| | (22) If she said this to me, I wouldn't trust her anymore. |