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Assertive communication in condom negotiation: Insights from late adolescent couples' subjective ratings of self and partner

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Abstract

Purpose—Assertive communication has been associated with higher levels of condom use among youth using self-report survey methodology. The purpose of this study was to examine the subjective ratings of assertiveness among young, romantically-involved couples in the context of a condom negotiation task.

Methods—Using an innovative video-recall procedure, 32 couples (64 youth) engaged in a videotaped condom negotiation task and then rated self and partners' level of assertiveness. Both individual ratings of assertiveness and couple-level assertiveness were assessed using dyadic hierarchical linear modeling.

Results—Individuals' assertiveness was positively associated with condom use. Unexpectedly, the overall level of assertiveness in couples showed a curvilinear association with condom use. Very high and very low assertiveness was associated with lower condom use, while moderate levels of assertiveness were associated with higher condom use.

Conclusions—Moderate levels of assertiveness during condom negotiation may facilitate condom use in young couples. Increasing condom use among romantic partners may require developing interventions that strengthen youths' ability to engage in assertive communication strategies that balance emotional intimacy with self-advocacy.

Introduction

Close to half of US youth have engaged in opposite-sex sexual intercourse before graduating high school [1], and over 90% by age 24 [2]. For urban youth of color, particularly Black and Latino youth living in areas with high STI and HIV seroprevalence, this developmentally normative sexual behavior occurs amid increased risk for sexually transmitted diseases. For example, *Chlamydia trachomatis* among Black women ages 14 to

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19 is nearly seven times higher than among same age white females [3] and 57% of new HIV infections among youth are seen in Black and Latino individuals [4]. Consistent condom use decreases the risk of many STI's and over the past two decades, condom use has increased among youth of all racial and ethnic backgrounds [5]. However, some reports suggest that condom use has either leveled off or decreased, particularly among Black and Latino youth [6].

For many youth, sexual intercourse occurs within the context of romantic or serious relationships [7]. Youth are three to four times more likely to use condoms consistently with partners they consider casual than with serious partners with whom they consider to be in a romantic relationship [8]. While condoms are often used at the start of the relationship, use decreases precipitously, often over the course of a few weeks, once the relationship becomes steady [9]. The use of condoms in an established relationship is often seen as a barometer of the type and strength of the relationship [10]; youth who are uncertain of their partners' commitment level report infrequent condom use [11].

Youth who communicate or negotiate condom use with partners are more likely to use them consistently [12], yet less than half of youth report feeling comfortable discussing or advocating for condoms with their partner [13]. Few youth report discussing condom use prior to sexual intercourse [14], and close to half of youth report consenting to unprotected sex with a partner even when they wanted to use a condom [15,16].

Assertiveness is a key determinant of communicating the desire for condom use [17]. Typically, it includes behaviors such as actively disagreeing, expressing positive or negative personal rights and feelings, and standing up for one's self without attacking another [18]. Assertive behaviors measured in condom use studies have included the frequency of talking to a partner about AIDS or condoms [19], using direct verbal requests to use a condom [16], and high levels of comfort and self-efficacy during condom negotiations [12,20]. In general, youth who are less assertive with their sexual partners about condom use are less likely to use them or use them consistently [16,20]. Female youth tend to report lower rates of assertiveness than males [16], resulting in lower rates of condom use, particularly in relationships with older sexual partners [21,22].

For romantic partners, assertive communication regarding condom use is particularly challenging as it is often interpreted as questioning the trust and level of commitment of the partner [23]. Avoiding the topic of condoms may serve as a means of maintaining a highly-valued relationship [24]. Effective assertiveness may be more challenging for at-risk female youth, as mental health issues such as depression have been associated with low condom use and challenges in communicating about condom use with sexual partners [25]. However, the use of condoms among romantic couples is strongly warranted as youth typically engage in serial monogamy, concurrent sexual partnerships, [26] and do not test regularly for STIs or HIV [4]. Effective assertiveness within relationships requires a balance of self-advocacy and maintenance of emotional intimacy; youth must learn to advocate for their own needs while maintaining feelings of intimacy within the relationship [27].

Thus, although assertiveness has been associated with higher rates of condom use among youth, significant gaps remain. The vast majority of the literature on assertiveness as a correlate of condom use has focused mainly on self-advocacy in negotiating for condom use. Moreover, most reports rely exclusively on individual self-report with little consideration of relationship dynamics. Finally, studies examining assertiveness rarely distinguish between casual and romantic partners [28]. Research is needed that samples both members of a couple to gain a better understanding of these dynamics as they relate to condom negotiation and assertiveness. For the present study, we sought to recruit romantic partners who did not consistently use condoms, in order to capture the naturalistic conversations of these couples while discussing condom use.

Based on previous research, we hypothesized that individuals' self-reported assertiveness during a condom negotiation task with a romantic partner would be associated with condom use. We also hypothesized that the overall level of assertiveness in a couple would be positively correlated with the couples' reported condom use. We used a video-recall procedure [29], an innovative methodology for assessing youths' subjective understanding of their feelings and behaviors during a videotaped interaction with their romantic partner.

Methods

Participants

Youth were recruited at multi-service community based organization (CBO) in New York City that provides social, educational, physical (including reproductive) and mental health services, for youth ages 21 years old and younger who are at-risk for school drop-out, homelessness, substance abuse, and mental health problems. Youth were recruited with IRB approved flyers posted around the center in two steps. First, youth were initially eligible for participation if they (a) reported involvement in a heterosexual dating relationship for at least 3 weeks; (b) one member of the dating relationship was aged 16-21; (c) they reported engaging in penile-vaginal intercourse with the current partner without the use of a condom on at least one occasion during their relationship; and (d) were interested in participating in a research project with the current partner. Second, youth who met the initial eligibility criteria were asked to have their romantic partner contact the study team to be screened for eligibility and agree to participate. Out of 293 youth who were screened, 49 couples (98 youth, 33.4%) met eligibility criteria. The primary reasons for youth ineligibility (N=195) included not having a romantic partner (53.8%), both partners reported using condoms on every occasion (14.3%), had not engaged in penile/vaginal sex with this partner (13.3%), did not have an opposite sex partner (9.6%), and would not participate in research with their current partner (9.2%). Six of the 49 couples were no-shows, and between screening and assessment, 7 couples broke up. Thus 36 couples (73.4% of eligible couples) participated between August 2006 and May 2007. Two couples refused to participate in the videotaping, and technical problems were encountered with the videotapes of two other couples. Data is reported for 32 couples (64 participants).

Procedures and Measures

Couples came to the research facility together, and individually signed informed consent. All procedures were approved by the National Development and Research Institutes Institutional Review Board, which included approval to enroll youth under 18 without parental consent. Each participant received a stipend of \$50 for their participation in approximately two hours of data collection. Videotapes were checked for clear evidence that couples were not in a romantic relationship but no evidence was found.

The assessments were conducted in three phases: a survey, a videotaped interaction task, and a video recall task. In **Phase 1**, participants separately completed a survey using audio-assisted Questionnaire Development Software [30] on laptop computer.

Survey measures

Demographic variables—Participants reported their age (in years), relationship length (in months), years of schooling or GED status, drug/alcohol use, and race/ethnicity (Black, Latino, Caucasian, Other).

Sexual Behavior and Condom Use—The National Alcohol Survey [31] was used to assess number of lifetime sexual partners, number of times engaged in penile-vaginal intercourse in the previous month, and the number of times condoms were used in the previous month with their current (study) partner and any other partners. The proportion of protected sex acts was calculated by dividing the total number of sex acts with a condom in the previous month, by the number of total sex acts in the previous month. Scores ranged from 0 (no condom use) to 1 (consistent condom use) [32]. Consistent with other studies, this variable was distributed from 1 to 0 but tended to cluster at the upper and lower ends of the distribution [16]. Individuals' condom use, rather than the couples' mean level of condom use, was used as the outcome variable due to imperfect correlation across couple-members' reports.

Desire to use a condom at the most recent occasion of unprotected sexual intercourse with the current partner was assessed with one question (0 = no; 1 = yes).

Mental Health—Depression was assessed using the Center for Epidemiological Studies Depression Scale 8-item version [33]. Items are scored from “none of the time” to “all of the time” (0 – 3) with good reliability ($\alpha = .89$).

In **Phase 2**, participants joined their partner to participate in two videotaped discussion tasks. The first discussion task was a 5-minute warm-up task (planning a party). For the second task, couples were asked to discuss for 10 minutes why they or other couples they knew did not use condoms consistently. Allowing couples to discuss other youth was provided given the sensitive nature of the conversation. All the couples in the sample discussed their own relationship and approximately 35% of couples also made reference to other youth during their discussion. Couples were informed that if they ran out of things to talk about before 10 minutes, they could use a discussion guide, drawn from the literature, which listed general reasons couples do not use condoms consistently (e.g., don't like the

feel, only have sex with one person). Approximately 25% of couples referred to the guide at some point during the videotaping.

In **Phase 3**, participants returned to separate rooms to participate in a video-recall procedure [29]. Participants viewed the middle 5 minutes of the conversation on a laptop computer and at each 15-second interval, the video automatically paused to allow them to rate their own and their partners' behavior on several dimensions on a five-point Likert scale (0 = not at all to 4 = very much). There were a total of 14 time-points. The order of rating was counterbalanced; half of the participants rated themselves before their partners and half rated their partners before themselves.

Video-recall measures

Self-reported assertiveness (Self-A)—Self-reported assertiveness was measured using two items: “I was being conflictual,” and “I was trying to persuade my partner”. Correlation between these items was good ($r = .86, p < .01$). Each participant's self-ratings on these two variables were averaged at each time point. Then the mean level of assertiveness from all 14 time points were averaged together, with high scores representing high levels of assertiveness sustained over time.

Couple-level assertiveness (Couple-A)—The overall level of assertiveness in a couple's conversation was calculated by adding the Assertiveness self-ratings (Self-A) of both couple members (i.e., $\text{Self-A}_{\text{female}} + \text{Self-A}_{\text{male}}$). The overall level of assertiveness in each couple ranged from 0 to 8, with higher scores representing greater assertiveness in both partners. A rating of 8 indicates that both couple members reported maximum levels of assertiveness sustained across the entire conversation.

Data analysis plan

Gender differences across variables were assessed using independent samples *t*-tests. First, interclass correlation coefficients (ICCs) were computed to determine the similarity of each study variable between participants in couple dyads. Dyadic hierarchical linear modeling (HLM) [34] was then used to assess the impact of assertiveness on condom use, controlling for covariates and couple membership. Dyadic HLM assesses the impact of an individual's characteristics (level 1 predictors) on an outcome variable, while controlling that individual's similarity to his or her relationship partner (level 2 predictors). First, the impact of Self-A on condom use was assessed. Next, the impact of Couple-A on condom use was assessed. Couple membership was a level-2 predictor in both analyses. Unplanned post hoc analyses were run based on the findings from the planned analyses, as described below.

Sample Characteristics

The mean age of participants was 18.96 years ($SD = 2.70$). Self-reported racial/ethnic identity was 45.3% ($N = 29$) Black; 32.8% ($N = 21$) were Latino, and 12.5% ($N = 8$) were both Black and Latino. Close to half (45.5%) of the participants were currently enrolled in school, and an additional 21% were working on their GED. Females reported an average of 5 opposite sexual partners over their lifetime and males reported an average of 13.

Approximately 21% ($N = 14$) of participants reported having at least one additional sexual partner while involved with their current partner and this did not vary by gender. Approximately 17.2 % ($N = 11$) of the sample reported having an STI in the past 12 months. The vast majority (83.3%; $N = 53$) of the sample reported being tested for HIV in the previous year, reflecting their engagement in the CBO. The percentage of the sample reporting lifetime substance use included: cigarettes, 81.3%; alcohol, 98.4%; marijuana, 89%; hallucinogens, cocaine, and inhalants, 12.5%; club drugs (e.g., Methamphetamine), 15.6% (Table 1).

Gender differences across the main study variables and covariates were assessed using independent-samples t -tests. Similarities between couple members (ICCs) are presented in the final column of Table 2. Participants rated themselves as moderately assertive overall, with an average rating of 2.00 ($SD = 1.35$) on this 0-4 scale. Participant's self-rated assertiveness was not correlated with their partner's self-rated assertiveness ($r = .19, p > .05$). Depression was high among all participants; the overall sample mean of 6.64 was near the clinical cutoff of 7 or above. Females reported marginally greater depression than males ($t(61) = -1.89, p < .10$). Couple members' depression was positively correlated ($r = .36, p < .05$). Couple members' estimates of their relationship length were also highly correlated at .79 ($p < .01$).

Couples reported using condoms at an average of 33% of their sexual encounters in the previous month, similar to reports of other at-risk youth [16]. Couple members reported moderately similar rates of condom use ($r = .62, p < .01$), also consistent with previous research [35]. Thirty percent of participants reported never using a condom, and 11% reported always using a condom. The vast majority of youth (78%) reported wanting to use a condom at the most recent incident of unprotected sex and there were no gender differences. Couple members differed on their reported desire to use a condom ($r = .09$). Both members of only one couple reported no desire to use a condom at their most recent incident of unprotected sex.

Results

Self-reported assertiveness and condom use

The effect of Self-A on condom use was assessed using Dyadic HLM (Table 3). Age, relationship length, and desire to use a condom were removed due to non-significance. Results did not differ by gender. The final model revealed that Self-A was positively correlated with condom use ($B = .26, SE = .03, t = 2.28, p = .03$). Depression was retained in the model as a covariate owing to a marginally significant inverse association with condom use ($B = -.21, SE = .07, t = -1.90, p = .07$). Overall, this analysis supported that self-assertiveness is positively associated with condom use.

Couple-level assertiveness and condom use

Dyadic HLM was used to assess the effect of couple-level assertiveness (Couple-A) on condom use, over and above the contribution of Self-A. Similarity between couple-

members' condom use was controlled using HLM. All covariates were initially included the analysis but were removed due to nonsignificance. Outcomes did not differ by gender.

Initial analyses yielded unexpected results. While Self-A remained positively associated with condom use, Couple-A showed a marginal negative association with condom use ($B = -.06, p = .10$). Inspection of the scatterplots for this analysis (Figure 1) suggested that this unexpected finding occurred because the relationship between Couple-A and condom use was curvilinear rather than linear. A quadratic term (Couple-A*Couple-A) was entered to determine whether a curvilinear relationship was present (Table 4). Self-A continued to show a significant positive relationship with condom use ($B = .36; t = .04; t = 2.51; p = .02$). Entered as a linear term, Couple-A showed a significant inverse relationship with condom use ($B = -.37, SE = .03; t = -2.07, p = .04$). Entered as a quadratic term, Couple-A showed significant curvilinear relationship with condom use ($B = -.35, SE = .01, t = -2.62, p = .02$). This analysis was also run without Self-A to rule out statistical artifacts. Results (not shown) were very similar. As seen in Figure 1, couples with very high and very low assertiveness were the least likely to use condoms. Couples with moderate levels of assertiveness showed the greatest variation in condom use, suggesting that moderately assertive couples were most likely to use condoms consistently.

Discussion

The primary aim of this study was to determine whether self-reported assertiveness and couple-level assertiveness, as measured during a videotaped condom interaction paradigm, was associated with condom use among high-risk youth. As predicted, youths' self-reported assertiveness during the task was positively associated with self-reported condom use, building upon previous studies using individual self-report survey methodology [17]. Our findings are particularly ecologically valid because participants' reports of assertiveness reflected their subjective assessment of their own behavior with their sexual partner, rather than their self-report of assertiveness in the abstract. While the directionality of this finding is consistent with previous research, the correlation between self-reported assertiveness and condom use was slightly smaller than expected. Previous studies have used global self-ratings of assertiveness, which may pull for more extreme self-ratings and therefore provide greater predictive power. The present study, however, averaged together assertiveness across time, and high self-assertiveness ratings were reserved for the most extreme participants.

A second and novel result of this study is that couples' level self-reported assertiveness showed a curvilinear association with condom use. Couples with very high and very low assertiveness reported low levels of condom use, while couples with moderate levels of assertiveness were more likely to use condoms. Highly assertive couples were those who engaged in an unrelenting negotiation process across much of the discussion. Interpersonal interactions marked by sustained self-advocacy may become deadlocked rather than productive [36] and two highly assertive members may have experienced high conflict during the videotaped discussion. Sustained argumentativeness may be a threat to the relationship and unprotected sex serves as a strategy for reaffirming the relationship [24]. Condom use was also relatively low among couples where neither partner was assertive, affirming the importance of some assertive communication for safer sex behavior. In

couples with moderate levels of assertiveness, balancing negotiation and positive interaction may have led to a less threatening environment, where condom use could be discussed and implemented without threatening individual autonomy or relationship intimacy.

Compared to previous research demonstrating that condom use decreases as relationships grow longer and youth increase in age [37], we did not find that condom use decreased with relationship length or age. This lack of an association may be due to the non-normal distribution of condom use. However, the present study is not unique in finding that some couples maintain condom use over time as condom use and relationship length have been correlated at approximately $-.20$ [9,16], a small correlation that leaves much variability unexplained.

Limitations of this study include a small sample and cross-sectional data collection strategy. While the small sample size may have limited statistical power, the models were fully identified. As the sample was self-selected and recruited at a youth oriented CBO which provided a wide array of services, it might not accurately represent the high-risk population from which it was drawn, limiting its generalizability. Youth in abusive or highly conflictual relationships, or those involved in injection drug use, may have avoided participation. Additionally, our operationalization of assertiveness, actively disagreeing or trying to persuade, could be construed as argumentative rather than assertive. Future research should seek to capture a range of specific assertive behaviors among young couples.

The present study has important implications for HIV and STI prevention efforts. Training youth in assertive communication skills requires assisting them to balance emotional intimacy along with self-advocacy. Specific strategies may be required for different types of relationships. “Just-Say-No” techniques may not be effective for promoting condom use among couples who have challenges discussing this affectively-laden topic adaptively.

Implications and contributions

Assertive communication among young couples has been associated with increased condom use as measured by self-report. This study measured youths’ assessment of their own and their romantic partners’ assertive behavior during a condom negotiation task. Couples with very high or very low assertiveness were less likely to use condoms. Attention to relationship dynamics is important for assisting youth to negotiate condom use effectively.

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Figure 1. Scatterplot illustrating the curvilinear relationship between Couple-Level Assertiveness and actor's condom use.

Table 1

Demographic Characteristics of Sample

Characteristic	Total (N=64)	Males (N=32)	Females (N=32)
Age, mean (std deviation)	18.96 (2.70)	19.79 (2.97)	18.97 (2.11)
Racial/Ethnic Background, n (%)			
African-American (not Hispanic)	29 (45.3)	16 (50)	13 (40.1)
Hispanic	21 (32.8)	10 (31.3)	11 (34.4)
African-American and Hispanic	8 (12.5)	4 (12.5)	4 (12.5)
Other	6 (9.3)	2 (6.3)	4 (12.5)
Educational History, n (%)			
Currently enrolled in school	29 (45.3)	12 (33.3)	17 (53.1)
Working on GED	14 (21)	7 (19.4)	7 (19.4)
Sexual History			
Lifetime opposite-sex partners, mean (std deviation)	7.68 (13.55)	15.65 (20.74)	6.22 (9.14)
Concurrent partners during study relationship, n (%)	14 (21%)	6 (18.7%)	8 (25%)
Diagnosed with STI in past 12 months, n (%)	11 (17.2%)	4 (12.5%)	7 (21.9%)
Lifetime prevalence of drug and alcohol use, n (%)			
Cigarettes	52 (81.3)	26 (81.2)	26 (81.2)
Alcohol	63 (98.4)	32 (100)	31 (96.9)
Marijuana	51 (89)	26 (81.2)	25 (78.1)
Hallucinogens, cocaine, and inhalants	8 (12.5)	2 (6.3)	4 (12.5)
Pills, club drugs	10 (15.6)	3 (1.0)	7 (19.4)
Heroin, Crack	0	0	0

Table 2

Descriptive statistics of all study variables and Interclass Correlation Coefficients between couple members for each study variable

Variable mean(std deviation)	Total (N=64)	Males (N=32)	Females (N=32)	ICC
Self-Rated Assertiveness	2.00 (1.35)	1.86 (1.87)	2.15 (1.35)	.19
Depression	6.64 (5.91)	5.48 (5.28) ⁺	8.31 (6.53) ⁺	.36 [*]
Relationship Length (in months)	16.44 (15.53)	15.23 (15.87)	17.03 (16.36)	.79 ^{**}
Condom Use ^a	.33 (.37)	.36 (.37)	.30 (.36)	.62 ^{**}
Desire to use a condom ^b	.78 (.42)	.81 (.40)	.75 (.44)	.09
Sum of assertiveness in couple	4.01 (2.08)	--	--	--

^a Condom Use is a proportion ranging from 0 (not at all) to 1.00 (always).

^b Desire to use condom is coded 1 for yes, 0 for no.

⁺ Significant gender differences and ICC's are marked as follows: $p < .10$.

^{*} $p < .05$.

^{**} $p < .01$.

^{***} $p < .001$.

Table 3

Multilevel Model Predicting using Self-Reported Assertiveness (Self-A) and covariates to predict actor's Condom Use (Hypothesis 1)

Parameter	Standardized HL M Coefficient	<i>t</i>	Degrees of Freedom	Effect size
Intercept (β_{0d})	0	0.04	26.45	
Self-reported assertiveness (Self-A; β_1)	0.26	2.28*	41.55	.71
Depression (DEP; β_2)	-0.21	-1.90 ⁺	36.56	.02

All continuous predictors are grand-mean centered.

⁺ p .10.

* p .05.

Table 4

Multilevel Model Predicting using Self-Reported Assertiveness (Self-A), Couple-Level Assertiveness (Couple-A), and curvilinear interaction term to predict actor's Condom Use (Hypothesis 2)

Parameter	Standardized HLM Coefficient	<i>t</i>	Degrees of Freedom	Effect size
Intercept (β_{0d})	0.36	1.74 ⁺	26.11	
Self-reported assertiveness (Self-A; β_1)	0.36	2.51 [*]	27.92	0.63
Couple-level assertiveness (Couple-A; β_2)	-0.37	-2.07 [*]	47.10	.52
Couple-level assertiveness, Curvilinear Interaction term (Couple-A * Couple-A; β_3)	-0.35	-2.62 [*]	25.84	.65

All continuous predictors are grand-mean centered and standardized.

⁺ *p* .10.

^{*} *p* .05.