

## Self-Esteem Enhancing Reasons for Having Sex and The Sexual Behaviors of African American Adolescents

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**Abstract** A sample of 146 African American adolescents living in impoverished neighborhoods with high HIV rates participated in the Chicago HIV Prevention and Adolescent Mental Health Project (CHAMP), a longitudinal study of adolescent HIV risk exposure. The current study examined self-reported reasons why African American adolescents may participate in risky sexual behavior. Adolescents completed a questionnaire regarding their sexual behaviors and reasons for having sex at Wave 3 of data collection. Findings from the study revealed that females used con-

doms less consistently while males had more sexual partners and sexually debuted earlier. Regression analyses also indicated that males were more likely to endorse self-esteem enhancing reasons for having sex and those who did also reported a higher number of sexual partners. Males were more likely to endorse power-related reasons for having sex and those who did tended to sexually debut earlier. Across both genders, results suggested that those adolescents who endorsed more self-esteem enhancing reasons for having sex were less likely to use condoms consistently. Implications for prevention programs and future research are discussed.

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African American adolescents continue to engage in risky sexual behaviors despite the growing rates of sexually transmitted infections (STI'S) and HIV/AIDS in their community. On average, black youth are having sex more frequently than youth of other races (CDC, 2003). In addition, African American adolescents, tend to have more partners and sexually debut earlier than that of White, Non-Hispanic youth (CDC, 2003). Consistent condom use has also been a problem in African American adolescent populations, although black youth tend to use condoms more consistently than their counterparts of other races (CDC, 2003). Previous research has identified gender differences in the extent of these problems in the black adolescent population with males being more likely to sexually debut earlier and have more partners whereas females are less likely to use condoms (CDC, 2003).

These unsafe sexual behaviors increase the risk of pregnancy, STI's and HIV/AIDS infection. According to the HIV/AIDS Surveillance Report produced by the Centers for

Disease Control (CDC) in 2003, the rate of HIV/AIDS continue to grow in the African American community while overall rates in the US start to decline. While African Americans make up roughly 12.1% (US Census Bureau, 2000) of the total U.S. population, they made up about 50% of the total reported incidences of AIDS in the US through 2003. This percentage rose from 46% between 1996 and 2003 as the overall number of reported incidences in the US decreased (CDC, 2003). In contrast, the percentage of total number of reported incidences for white, non-Hispanic people, who make up 69.1 % of the population, dropped from 35% in 1996 to 32% in 2003.

Furthermore, African American adolescent females are at the highest risk for infection (Paikoff *et al.*, 2000; Taylor-Seehafer and Rew, 2000). According to the Centers for Disease Control and Prevention (CDC, 2003), 3 million adolescents become infected with an STD each year. Adolescent females continue to have higher rates of STD infection when compared with males (CDC, 2003). Of those adolescents diagnosed with HIV through 2003, African American girls made up 72% of the people in the 13–19 year old age group. In order to decrease these high rates of infection, prevention must be targeted at changing the risky sexual behaviors of African American adolescents. Previous literature has rarely focused on adolescents' self-reported reasons for engaging in risky sexual behaviors. Therefore, the purpose of the current study was to expand the literature on the risky sexual behaviors of African American adolescents by examining factors that motivate their unsafe sexual practices.

### Risky sexual behaviors

Trends in African American adolescent sexual behavior including age of sexual debut, number of partners, and consistency of condom use, are related to the increase in STI's and HIV/AIDS rates amongst this population. While the average age of sexual debut among American adolescents is 16, the average age of sexual debut among inner city African American youth is 13 (CDC, 2003). Early sexual debut increases the likelihood of more lifetime partners and more inconsistent condom use (Coker *et al.*, 1994). Furthermore, many cognitive and social developments that are necessary for competent sexual decision-making develop throughout adolescence (Bachanas *et al.*, 2002; Smith, 1997). As children mature cognitively, they develop the ability to foresee possible consequences for their actions, but such changes may occur long after the beginning of pubertal development and sexual maturity (Haffner, 1995). Thus, young adolescents, on the verge of puberty, may not have developed essential tools to make responsible sexual decisions.

In addition to early sexual debut, an adolescent's number of sexual partners may also increase their risk of contracting

HIV/AIDS. As an adolescent's number of partners increase, their risk of contracting an STI or HIV also increases exponentially (Beadnell *et al.*, 2005). The Youth Risk Behavior Surveillance (YRBS), conducted by the Centers for Disease Control biennially, collected data from 9–12 graders in 2003. The survey assesses an array of behaviors including driving, weight management, and sexual activity. According to the YRBS, African American adolescents tend to have more partners than their counterparts of other races. Furthermore, black males are more likely to have a higher number of partners than black females.

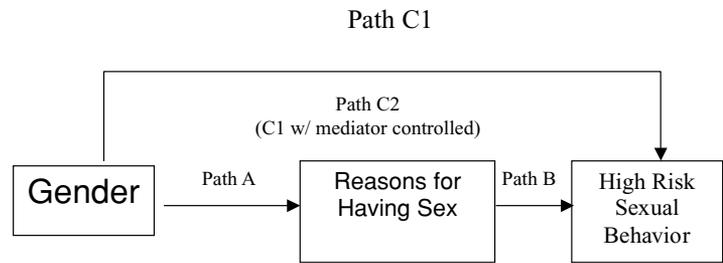
While early sexual debut and number of sexual partners increases risk of STI and HIV/AIDS infection, consistency of condom use is the most common and most accurate risk indicator used in research on risky sexual behaviors (Beadnell *et al.*, 2005). The decision to use condoms is impacted by a number of factors. Previous research indicates that both young men and women tend to view the use of condoms in a negative light. Teenagers often report that buying and/or using condoms is embarrassing. In addition, many adolescents feel that condoms diminish the physical pleasure of sexual intercourse (Beckman *et al.*, 1994; Norris and Ford, 1998). For females, consistent use of condoms may be even more challenging. Some women feel powerless to negotiate condom use with their partners, indicating that requesting condom use of their partner may either imply that they themselves are infected with sexually transmitted diseases or that their partner will leave as a result of the request (Heatherington *et al.*, 1996; Osmond *et al.*, 1993).

These aforementioned characteristics set the stage for inconsistent condom use among adolescents, thus increasing the rates of STI's and HIV/AIDS. According to the YRBS, 68.8% of sexually active adolescent males used condoms during last sexual intercourse versus 57.4% of adolescent females (CDC, 2003). Amongst black adolescents, 81.2 % of males vs. 63.6% of females reported using condoms at last sexual intercourse (CDC, 2003). Although girls are not more likely than boys to have sex, they are less likely to use condoms consistently. Considering that consistency of condom use is such an accurate indicator of risk, this may provide some insight as to why young women are at the highest risk for STD transmission (Murphy *et al.*, 1998). However, motivations to engage in these risky behaviors may be more revealing.

### Reasons for having sex

In the current study, numerous reasons for engaging in intercourse were examined including self-esteem enhancing reasons for having sex. Males and females experience various bodily changes and must cope with hormonal fluctuations, changes in appearance, and a developing sense of their physical self as they progress through adolescence.

**Fig. 1** Hypothesized mediation model with reasons for having sex as the mediators and risky sexual behavior as the outcome



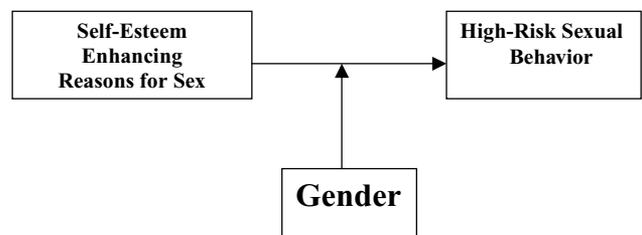
More generally, Rosenberg (1985) has suggested that a positive self-concept includes high self-esteem, perceived invulnerability, and a sense of personal control (Gullotta *et al.*, 2000). In so far as one’s self-concept can vacillate between positive and negative, it is natural for adolescents to search for methods that can improve these feelings. This desire to improve one’s sense of self and to be accepted by others in their social sphere can be expressed through eating issues, conforming to peer groups, or increased sexual activity (Gullotta *et al.*, 2000; Taylor-Seehafer and Rew, 2000). In addition, a sense of self, whether positive or negative, impacts on the development of an adolescent’s sexuality and competence in sexual decision-making (Taylor-Seehafer and Rew, 2000). A child who thinks positively about himself or herself will also be more comfortable with their role as a sexual person and this may in turn play a role in the types of decisions he or she makes in sexual practices.

Although developing a sense of self is equally important amongst male and female adolescents, Gulotta (2002) suggests that there are gender differences in the expression of self-concept. For example, young girls tend to report more dissatisfaction with their bodies than boys during adolescence (Attie *et al.*, 1990; Gullotta *et al.*, 2000). Furthermore, many girls feel the need to be desired and accepted not only by same-sex peers, but also by opposite sex peers. In contrast, boys strive to be more independent (Gullotta *et al.*, 2000; Orenstein, 1994). If an adolescent girl views sexual intercourse as a way to indulge the need to be wanted, she may be more vulnerable to outside peer pressure and sexual manipulation. According to Gillmore *et al.* (1992), young girls with higher self-esteem will most likely have the ability to resist outside pressures to engage in unsafe behaviors. They feel sexually competent and have the ability to make healthy choices about their sexual behaviors in addition to resisting external pressures. However, girls with lower self-esteem may lack this sense of control in sexual relationships. When girls feel like they lack control and choices, they are vulnerable to making unhealthy sexual decisions. In a study conducted by Soet *et al.* (1999) on the effects of perceived power on Caucasian and African American women’s sexual behaviors, they found that those women who felt they lacked power in their relationships were less likely to use condoms and were more likely to assume that they would re-

ceive a negative reaction from their partner if they suggested condom use.

Current study

The goal of the current study was to examine factors that motivate unsafe sexual practices in a sample of African American adolescents and explore some of the gender differences in their behavior. Based on previous studies, it was predicted that African American adolescent females would be less likely to use condoms than African American adolescent males. It was also proposed that black males would be more likely to sexually debut earlier and have more lifetime sexual partners than black females. A mediation model was used to test the possibility that certain reasons for having sex act as a mediator in the relationship between gender and risky sexual behavior. In Figure 1, gender acts as the predictor, reasons for having sex act as the proposed mediators, and risky sexual behaviors (including inconsistent condom use, number of sexual partners, and age of sexual debut) act as the outcomes. The pathways (A, B, C1, and C2) must all be significant in order for a mediational effect to be achieved. Since black females are less likely to use condoms and more likely to have difficulty with self-esteem during adolescence, it was hypothesized that females would be more likely to endorse self-esteem enhancing reasons for having sex, which would, in turn, be associated with less consistent condom use. Considering that black males are more likely to have more sexual partners and sexually debut earlier, the other reasons for having sex (e.g., power-related, love, pleasure, etc.) were also examined as mediators between gender and all the high-risk sexual behaviors.



**Fig. 2** Hypothesized moderation effect of gender on the relationship between self-esteem enhancing reasons for having sex and high-risk sexual behavior in general

Figure 2 displays the hypothesized moderation effect of gender (the proposed moderator) on the relationship between self-esteem enhancing reasons for having sex (the predictor) and high-risk sexual behaviors (the outcome). Previous literature indicates that females have more difficulty during adolescence with self-esteem, which may lead to more risky sexual behaviors in general, not necessarily just inconsistent condom use. Therefore, it was hypothesized that links between self-esteem enhancing reasons for having sex and risky sexual behaviors would be more robust for females.

## Methods

### Participants

Participants in the current study were from the Chicago HIV Prevention and Adolescent Mental Health Project (CHAMP). This longitudinal family study was designed to examine the role of family and mental health factors on HIV risk behaviors during the transition to adolescence. At Time 1, the participants included 315 African American preadolescents and their primary caregivers who were originally recruited when the child was in 4th or 5th grade at elementary schools in urban, low-income neighborhoods.

The children were selected from six Chicago public elementary schools near a major public housing project in primarily poor African American regions where the rate of HIV infection is higher than the citywide average. Participation was open to the families of all 4th and 5th graders at these schools. Flyers were sent home to parents requesting participation and the return of the flyer to confirm their desire to participate. Those families who returned the flyer were then contacted by phone or in person to set up interview appointments. The average age of the child at Time 1 was 11.0 years of age. All of the participants were African American and 60% lived in single parent households, typically with a female caregiver. Approximately two years later (Time 2), 93% (294) of the families returned to complete an early adolescent follow-up when the child was in 7th or 8th grade. The average age of the child at the second assessment point was 13.3 years of age.

At Time 3 participants were asked to return to complete a late adolescent follow-up, ideally when the child was between the ages of 16 and 19 ( $M = 17.98$ ,  $SD = 1.05$ ). All families who had participated in at least one prior data collection were asked to participate. At Time 3, 189 (60%) of Time 1 participants agreed to participate (73 males, 117 females). It should be noted that the current study is based solely on Time 3 data because sexual behaviors were examined more extensively at this data collection time point.

To ensure adequate power for this cross-sectional analysis, power was estimated using Cohen's  $D$  (1992). Previous liter-

ature revealed that there is about a 12% difference between black males and females in their consistency of condom usage (with females being lower). Considering that a small to medium effect size (ES) was expected (about  $d = .3$ ), with a power of .80, and a Type I error rate of .05, approximately 72 sexually active males and females were needed to detect a 12% difference. In the current study, there were 189 adolescents who returned and completed the measures chosen for this study in Time 3. There were no significant differences between those who returned to complete Time 3 and those who dropped out of the study on age, gender, primary caregiver, and educational level of the primary caregiver.

### Procedure

The adolescent and his or her family were interviewed extensively. All interviews were conducted in a university setting and the order of questionnaires and family interaction tasks were randomized. Interviewers, who completed over 25 h of training, conducted the interviews. This study focused specifically on information collected from the adolescent.

### Measures

#### *HIV risk behavior*

This construct was assessed with the Sex Survey completed by the adolescent. The scale is based on measures taken from the National Institute of Mental Health (NIMH) Multi-site HIV prevention trials (NIMH Multisite Prevention Trial, 1997). It is a comprehensive measure with scales adapted from those of Rotheram-Borus *et al.* (1996); Meyer-Bahlburg *et al.* (1990); and Rotheram-Borus *et al.* (1995). The survey assesses same and other-sex risky sexual behavior including number of partners, age of sexual debut, knowledge of partner's HIV/AIDS status, and sexually transmitted disease history. Both lifetime prevalence and the sexual history of respondents' past 5 partners were evaluated. In addition, history of drug and alcohol use was assessed alone and in the context of sexual activity.

In this study, risky sexual behavior was assessed using age of sexual debut, consistency of condom use, and number of partners. Participants were asked to report on their age of first intercourse. Participants were also asked to report on their number of lifetime partners based on a scale ranging from 1–4 with 1 = Only 1; 2 = 2–3; 3 = 4–10; and 4 = more than 10.

To assess condom use, participants were asked how many partners they had in the past 90 days. They were then asked to discuss up to 5 partners in more detail and more collectively about any partners beyond 5. Participants were asked "Did you have oral sex with this partner?," "How many times," and "How many times did you use condoms?" They were

asked “Did you have vaginal sex with this partner?,” “How many times?,” and “How many times did you use condoms?” Finally they were asked “Did you have anal sex with this partner?,” “How many times?” and “How many times did you use condoms?” While participants reported on oral, vaginal, and anal sex, only responses concerning vaginal and anal sex were utilized since these types of sex pose the most risk for HIV infection. To calculate consistency of condom use, the number of times condoms were used across partners in the last 90 days was divided by the number of times the target engaged in sexual intercourse across partners in the last 90 days.

*Reasons for having sex*

This is a 19-item measure taken from the Sex Survey completed by the adolescent. The instrument required participants to check off all reasons that have ever motivated their decision to participate in sexual intercourse during their lifetime. To develop the scoring procedure, seven item categories were proposed by the first author, based on rational criteria. They included self-esteem enhancing, ego boosting, revenge, control, partner pressure, love/intimacy, and simple self-gratification. The CHAMP research team was asked to put each of the 19 items on the Reasons For Having Sex inventory into one of the 7 categories. Twenty members of the team completed the exercise. For a reason for having sex to reliably load in a category, 14 of the 20 (70%) research team members had to put the item in that category. With this initial set of categories, only 5 of the 19 items loaded in one of the categories. Therefore, the rationally-derived categories were reconstructed and renamed and one category was added (i.e. for a total of 8 categories).

The 8 categories of the new system included self-esteem enhancing, to brag/prove something to others, revenge, love/intimacy, simple self-gratification/pleasure seeking, financial gain, power/control between partners, and fear of loss. The CHAMP research team was again asked to put each of the 19 items on the Reasons for Having Sex inventory into one of the 8 categories. Twenty-one members of the team completed the exercise. Again, 70% of members had to put the item in the category for it to load in that category. With this set of categories, 16 of the 19 items loaded in one of the categories. Those that did not load (“to get pregnant or get someone pregnant,” “just to please your partner,” and “because you felt lonely”) were not used in the final analysis with one exception (“because you felt lonely” was retained because it was believed to be integral in the assessment of self-esteem enhancing reasons for having sex. It should also be noted that this item loaded the most significantly on self-esteem enhancing.) Therefore, the final measure used for analysis included 17 different reasons for having sex in 8 categories. Alphas were also obtained for each category. These ranged from .82 to .94 (for scales with two or more

**Table 1** Reasons for having sex: Categorical classification and alphas

Category	Males <sup>a</sup> (n = 65)		Females (n = 81)	α
	Yes	Yes	Yes	
Self-esteem enhancing				.94
2. To make yourself feel better	23	12		
4. To feel proud of yourself	13	2		
5. Because you felt lonely	13	8		
17. To feel prettier or better looking	4	1		
To Brag/prove something to others				.94
7. To brag to others	10	3		
10. To prove something to yourself or others	6	6		
Revenge				
1. To get back at someone you were angry with	9	7		—
Love/Intimacy				.83
6. Because you wanted to make it clear you loved or cared for someone	28	20		
16. To express closeness or intimacy	36	31		
Simple self-gratification/ pleasure seeking				.92
8. For the sake of curiosity	17	31		
14. Because you were bored or needed a thrill	24	8		
15. Just to relieve nerves	22	11		
18. Just for your own pleasure	45	62		
Financial gain				
12. In exchange for money, drugs, or something else	3	1		—
Power/control between partners				.92
13. Out of a sense that you owed your partner or that you had to have sex	9	2		
19. To control partner	9	2		
Fear of loss				—
3. Because you were afraid of losing your partner	6	5		

*Note.* Item 9 “To get pregnant or get someone pregnant” and Item 11 “Just to please your partner” were not used in analysis because they did not load significantly in any of the categories.

<sup>a</sup>Number of participants (by gender) that reported they had engaged in intercourse for these reasons.

items). Table 1 lists the 17 items, the 8 categories in which they have been placed, and the corresponding alphas. It also lists the frequency of endorsements. There were 4 items on the self-esteem subscale, 2 items on the bragging subscale, 1 item on the revenge subscale, 2 items on the love/intimacy subscale, 4 items on the pleasure seeking subscale, 1 item on the financial gain sub scale, 2 items on the power/control subscale, and 1 item on the fear of loss subscale. Participants received a 1 for each item they endorsed.

**Table 2** Summary of high risk sexual behaviors at time 3

High risk behaviors	<i>M</i> ( <i>SD</i> ) or % ( <i>n</i> )	
	Females ( <i>n</i> = 116)	Males ( <i>n</i> = 73)
Target adolescent		
Percentage of sexually active adolescents <sup>a</sup>	69.8 ( <i>n</i> = 81)	89.0 ( <i>n</i> = 65)
Age of sexual debut	15.2 (1.39)	14.0 (1.94)
Number of sexual partners	1.8 (.65)	2.6 (.99)
Mean rate of condom use	.657 (.41)	.820 (.32)

<sup>a</sup>Numbers for percentage of sexually active adolescents refer to the percentage of each gender that participated in the study who reported that they had engaged in sexual intercourse at least once in their lifetime.

**Results**

Descriptives

Table 2 presents descriptive statistics on the sample separated by gender concerning their sexual behavior including age of 1st sexual intercourse, number of partners, and consistency of condom use. Of those adolescents who completed the measures, 77% of the sample (146 participants) reported that they had engaged in sexual intercourse at least once in their lifetime. Eighty-nine percent (*n* = 65) of the males who completed the measures had engaged in sexual intercourse and 70% (*n* = 81) of the females reported engaging in sexual intercourse at least once in their lifetime.

For the adolescents, females, on average, had fewer partners than males. In addition, females’ average age of sexual debut was later than that of males. However, females reported using condoms on average 65.7 % (*SD* = 40.8) of the time while males reported using condoms on average 82.0% (*SD* = 31.6) of the time.

Risky sexual behavior

It was hypothesized that males would have more lifetime partners and sexually debut earlier than females. An independent samples t-test was used to test these hypotheses. Results suggested that males had significantly more lifetime partners than females,  $t(144) = 6.32, p < .001$ . Findings also indicated that males were more likely to sexually debut earlier than females,  $t(135) = -3.94, p < .001$ . Finally, it was predicted that females would use condoms less consistently than males. An independent samples t-test was used to test this hypothesis. Results suggested that there was a significant difference between females and males in their consistency of condom use. Females used condoms less consistently than males in the past 90 days,  $t(104) = 2.24, p < .02$ , which was consistent with the proposed hypothesis.

**Table 3** Means and standard deviations for reasons for having sex

Reasons for having sex	<i>M</i> ( <i>SD</i> )	
	Females	Males
Target adolescent		
Self-esteem enhancing (0–4) <sup>a</sup>	.286 (.62)	.815 (1.03)*
Bragging (0–2)	.111 (.39)	.246 (.59)**
Revenge (0–1)	.086 (.28)	.139 (.74)
Love (0–2)	.630 (.72)	.985 (.74)*
Pleasure (0–4)	1.383 (1.01)	1.698 (1.21)
Financial (0–1)	.012 (.11)	.046 (.21)
Power (0–2)	.050 (.27)	.262 (.57)*
Fear of loss (0–1)	.061 (.24)	.092 (.29)

<sup>a</sup>Numbers in parentheses indicate possible range for subscale.

\*Significant gender differences for mediation analyses.

\*\*Significant gender difference only when age of 1st sexual intercourse was the outcome.

Reasons for having sex

It was proposed that females would be more likely than males to endorse self-esteem enhancing reasons for having sex. To test this hypothesis, an independent samples t-test was used to examine the differences in the means. Contrary to hypothesis, results indicated that males endorsed more self-esteem enhancing reasons for having sex than females,  $t(145) = 3.91, p < .01$ . See Table 3 for means and significant gender differences for reasons for having sex.

Mediation model

Inclusionary criteria for the age of sexual debut model was as follows: 1) Engaging in sexual intercourse within lifetime, 2) reporting on age of sexual debut 3) and completing the reasons for having sex inventory. The criteria for the number of partners model was similar to that of the age of sexual debut model except that participants were required to report on their number of lifetime partners as opposed to their age of sexual debut. Inclusionary criteria for the condom use model were as follows: 1) engaging in sexual intercourse, 2) having sex within 90 days of the point of data collection, 3) and completing the reasons for having sex inventory. Adolescents had to report that they had intercourse within 90 days of data collection because condom use consistency was calculated based on their activity within that time period.

Multiple regression analysis was used to test this model. Baron and Kenny (1986) suggest that in order for a variable to be considered a mediator, 4 different pathways must be established: Path A, the predictor (gender) must be significantly associated with the mediator (reasons for having sex); Path B, the predictor must be significantly associated with the criterion (high risk sexual behavior); Path C1, the mediator must be significantly associated with the criterion

after controlling for the predictor; and Path C2, the impact of the predictor on the criterion must be significantly less after controlling for the mediator. Once all 4 pathways were established, post-hoc tests were done to determine the strength and significance of the mediating effect (Holmbeck, 2002; Makinon and Dwyer, 1993). For each analysis, one-tailed tests were used.

#### Age of 1st sexual intercourse

Sample sizes varied between 135 and 137 based on the reason for having sex that was examined in the model. Filters were applied using the inclusionary criteria during analyses so that sample sizes did not vary when testing pathways within a specific mediation analyses. Table 4 contains a summary of the path coefficients for the various reasons for having sex with age of 1st sexual intercourse as the outcome. Previously reported results confirmed that Path A was significant for some “reasons.” Gender was a significant predictor of self-esteem, love, and power reasons for having sex. In addition, when age of sexual intercourse was the outcome, gender was also a significant predictor of bragging reasons for having sex,  $F(1,135) = 3.93, \beta = -.17, p = .05$ . Means suggested that males were more likely than females to endorse bragging reasons for having sex,  $M = .27$  ( $SD = .61$ ) for males and  $M = .10$  ( $SD = .38$ ) for females.

Regarding path C1, gender was a significant predictor of age of 1st sexual intercourse  $F(1,134) = 14.80, \beta = .32, p < .01$ . The path coefficients for C1 varied slightly because of differing  $n$ 's between the mediational analyses. The means for this variable across the four mediators indicated that males sexually debuted at an earlier age than females.

The last set of regressions tested Path B and Path C2. Results suggested that Path B in the model with power reasons for having sex was significant,  $F(2,13) = 10.297, \beta = -.18, p < .05$ . In addition, the coefficient of Path C2,  $\beta = .27$ , was less than that of Path C1. These findings indicated that power may have mediated the relationship between gender and age of 1st intercourse. Calculations with the Sobel (1988; see Holmbeck, 2002) equation suggested that power reasons for having sex significantly mediated the relationship between gender and age of 1st sexual intercourse,  $z = 3.2, p < .05$ . Specifically, Figure 3 suggests that males are more likely to report an element of power in their sexual relationships, and those males whose relationships have an element of power tend to sexually debut at an earlier age.

Results also indicated that Path B in the model with bragging reasons for having sex was significant,  $F(2,134) = 10.81, \beta = -.19, p < .05$ . Additionally, the Path C2 coefficient,  $\beta = .27, p < .01$ , was less than that of the Path C1 coefficient. Together, these results suggested that bragging may be mediating the relationship between gender and age of 1st intercourse. Examination with the Sobel

(1988; see Holmbeck, 2002) equation indicated that bragging did not significantly mediate the relationship between gender and age of 1st sexual intercourse,  $z = 1.52, p > .05$ .

In the analyses with self-esteem as the mediator, Path B was not significant,  $F(2,133) = 7.98, \beta = -.09, p > .05$ . Therefore, self-esteem did not mediate the relationship between gender and age of 1st intercourse. Lastly, Path B in the model with love reasons for having sex was not significant,  $F(2,134) = 7.74, \beta = .03, p > .05$ . Therefore, love did not mediate the relationship between gender and age of 1st intercourse.

#### Number of sexual partners

Based on exclusionary criteria for this model, sample sizes varied between 144 and 146 depending on the mediator being used in the analyses. Table 4 contains a summary of the path coefficients for the various reasons for having sex with number of sexual partners as the outcome. It has already been established that Path A was significant for three mediators. Specifically, gender was a significant predictor of self-esteem enhancing, love, and power reasons for having sex.

Regarding path C1, gender was a significant predictor of number of sexual partners  $F(1,143) = 39.61, \beta = -.47, p < .001$ . Beta coefficients for Path C1 varied slightly across analyses because of different sample sizes. Means for this variable across the mediators suggested that males tended to have more sexual partners over their lifetime than females.

The last set of regressions examined whether or not these reasons for having sex significantly mediated the relationship between gender and number of sexual partners. Path B and Path C2 were tested with these regressions. When self-esteem was the mediator, results suggested that Path B was significant,  $F(2,142) = 25.66, \beta = .23, p < .01$ . In addition, the Path C2 coefficient,  $\beta = -.40, p < .01$ , appeared to decrease in size from the Path C1 coefficient. These results suggested that self-esteem enhancing reasons for having sex may have partially mediated the relationship between gender and number of sexual partners. Calculations with the Sobel (1988; see Holmbeck, 2002) equation suggested that self-esteem enhancing reasons for having sex significantly mediated the relationship between gender and number of sexual partners,  $z = -2.39, p < .05$ . Specifically, Figure 4 indicates that males in this sample were more likely to endorse self-esteem enhancing reasons for having sex which, in turn was related to the report of more sexual partners.

With love as the mediator, Path B was not significant,  $F(2,143) = 19.81, \beta = -.005, p > .05$ . Therefore, love did not mediate the relationship between gender and number of sexual partners. In the analyses with power as the mediator, Path B was not significant,  $F(2,142) = 21.07, \beta = .09, p > .05$ . As a result, power did not mediate the relationship between gender and number of sexual partners.

**Table 4** Summary of standardized path coefficients for mediation analyses

Mediator (reasons for having sex)	Path A <sup>a</sup>	Path B <sup>a</sup>	Path C1 <sup>a</sup>	Path C2 <sup>a</sup>	Mediator?
<b>Age of 1st sexual intercourse</b>					
Self-esteem enhancing	-.34**	-.09	.32**	.99**	No
Bragging	-.17*	-.19*	.32**	.29**	No
Revenge	-.12	-	-	-	-
Love	-.27**	.03	.32**	.33**	No
Pleasure	-.14	-	-	-	-
Financial	-.11	-	-	-	-
Power	-.29**	-.18*	.32**	.27**	Yes
Fear of loss	-.10	-	-	-	-
<b>Number of sexual partners</b>					
Self-esteem enhancing	-.30**	.23**	-.47**	-.40**	Yes
Bragging	-.14	-	-	-	-
Revenge	-.08	-	-	-	-
Love	-.24**	-.01	-.47**	-.47**	No
Pleasure	-.14	-	-	-	-
Financial	-.10	-	-	-	-
Power	-.27**	.09	-.47**	-.44**	No
Fear of loss	-.06	-	-	-	-
<b>Condom use</b>					
Self-esteem enhancing	-.30**	-.21*	-.22*	-.28**	No
Bragging	-.17	-	-	-	-
Revenge	.02	-	-	-	-
Love	-.22*	-.14	-.21*	-.25*	No
Pleasure	-.15	-	-	-	-
Financial	-.13	-	-	-	-
Power	-.25**	-.06	-.21*	-.22*	No
Fear of loss	-.00	-	-	-	-

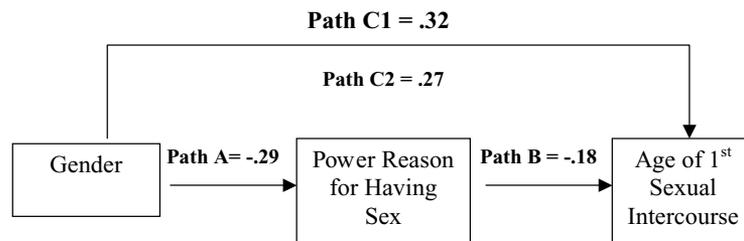
*Note.* Path A = gender ≥ mediator; Path B = mediator ≥ outcome w/gender controlled; Path C1 = gender ≥ outcome; Path C2 = gender ≥ outcome with mediator controlled.  
\**p* < .05.  
\*\**p* < .01.

**Condom use**

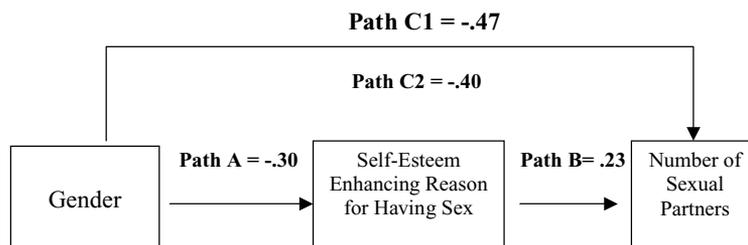
Based on the inclusionary criteria, sample sizes varied between 104 and 106 depending on the mediator being tested. Table 4 contains a summary of the path coefficients for the various reasons for having sex with condom use as the outcome. The first set of regressions examined Path A, the rela-

tionship between gender and the various reasons for having sex. As stated earlier, males were more likely than females to endorse self-esteem enhancing reasons for having sex. In addition, gender was also a significant predictor of love reasons for having sex,  $F(1,104) = 5.44, \beta = -.22, p < .05$ . Means suggested that males were more likely than females to endorse love reasons for having sex,  $M = 1.00$  ( $SD = .73$ ) for

**Fig. 3** Summary of path coefficients for Power Reasons for Having Sex as a mediator on the relationship between gender and age of 1st sexual intercourse



**Fig. 4** Summary of path coefficients for Self-Esteem Enhancing Reasons for Having Sex as a mediator on the relationship between gender and number of sexual partners



males and  $M = .67$  ( $SD = .32$ ) for females. Lastly, gender was also a significant predictor of power reasons for having sex,  $F(1,103) = 7.05$ ,  $\beta = -.25$ ,  $p < .01$ . Upon closer examination of the means for this variable, results suggested that in a male's sexual relationship, there is more likely to be an element of power than in a female's sexual relationship,  $M = .28$  ( $SD = .54$ ) for males, and  $M = .05$  ( $SD = .29$ ) for females. Gender did not significantly predict bragging, revenge, pleasure, financial, or fear of loss reasons for having sex when condom use was the outcome.

Path C1 was also significant such that gender was a significant predictor of consistency of condom use,  $F(1,103) = 5.33$ ,  $\beta = -.22$ ,  $p < .03$ . Coefficients for Path C1 varied slightly with each mediator because of different sample sizes. As confirmed earlier, females are less likely than males to use condoms consistently.

The final set of regressions tested Path B and Path C2. In the analyses with self-esteem as the mediator, a suppression effect was found. Path C1 was less than path C2,  $\beta_{\text{path C1}} = -.22 < \beta_{\text{path C2}} = -.28$ . Due to the suppression effect in this analysis, self-esteem did not mediate the relationship between gender and condom use. In analyses done with love as the mediator, Path B, the relationship between the mediator and the outcome, was not significant,  $F(2,103) = 3.55$ ,  $\beta = -.21$ ,  $p > .05$ . Therefore, love did not mediate the relationship between gender and condom use. Finally, Path B in the power-related reasons analysis was not significant,  $F(2,102) = 2.52$ ,  $\beta = -.06$ ,  $p > .05$ . Therefore, power did not mediate the relationship between gender and condom use.

#### Moderation model

In this study, it was proposed that gender would moderate the relationship between Self-Esteem Enhancing Reasons for Having Sex and risky sexual behavior. A moderation model can be tested with regression analyses in which the predictor and moderator are entered into the regression model followed by the interaction term created by the two. Gender and the centered self-esteem variable were entered into the regression equation in a "forward" fashion followed by the interaction between gender and the centered self-esteem variable. Self-esteem enhancing reasons for having sex was centered to avoid multicollinearity among the variables and to facilitate interpretation of any significant interaction effects (Holmbeck, 2002).

For analyses where number of partners, age of sexual debut, and consistency of condom use were employed as dependent variables, the interaction of gender and self-esteem enhancing reasons for having sex was never significant. Thus, gender did not moderate associations between self-esteem enhancing reasons for having sex and high-risk sexual outcomes.

#### Discussion

The purpose of this study was to examine whether various self-reported reasons for having sex motivate African American adolescents to engage in high-risk sexual behaviors. Findings from the study revealed that males were more likely to sexually debut earlier and have a higher number of lifetime partners while females were less likely to use condoms consistently, which supported the proposed hypotheses and previous research. Results partially supported predictions about the effects of self-esteem enhancing reasons for having sex on high-risk sexual behaviors (e.g., condom use and number of sexual partners). Contrary to prediction, males were more likely to endorse self-esteem enhancing reasons for having sex than females in this sample. Also, self-esteem significantly mediated the relationship between gender and number of sexual partners. Males were more likely to endorse self-esteem enhancing reasons for having sex and those who did had more sexual partners over their lifetime. Additionally, power-related reasons significantly mediated the relationship between gender and age of sexual debut. Specifically, males were more likely to endorse power-related reasons for having sex and those who did tended to sexually debut earlier.

Consistent with previous literature, African American females in this sample were less likely than males to use condoms consistently. Statistics on HIV/AIDS risk in African American communities suggest that black females are at the highest risk for infection (Llewellyn *et al.*, 2000; Taylor-Seehafer and Rew, 2000). One salient factor that may be contributing to this statistic may be consistency of condom use. The Youth Risk Behavior Surveillance (YRBS; 2001) found that 81.2 % of black males versus 63.6% of black females reported using condoms at last sexual intercourse (CDC, 2003). Although factors that underlie this finding were not examined in the study, it can be gathered from previous literature that an element of power may play an integral role in a female's decision to use a condom. If using male condoms, the female is often at a disadvantage because she must then convince her partner to use the condom. If the partner refuses, she may be placed in a compromising position where she is likely to engage in intercourse without the necessary protection. As a result, many females may be continually putting themselves at high risk for HIV and other STD's.

Contrary to prediction, findings from this study suggested that males were more likely to endorse self-esteem enhancing reasons for having sex. This finding is inconsistent with literature on the effects of self-esteem in adolescence. Past research has rarely examined reasons teenagers use to motivate their sexual decision-making. The literature suggests that young girls tend to report more dissatisfaction with their bodies than boys (Attie *et al.*, 1990). In addition, girls often

need to feel desired and accepted not only by same sex peers but also by opposite sex peers (Orenstein, 1994). As a result, it was anticipated that females may use sex as a way to boost their self-esteem. Yet, results of the current study suggest that it is males who use self-esteem to motivate their sexual decision-making and in turn engage in more risky sexual behaviors.

Males were more likely to endorse self-esteem enhancing reasons for having sex and those who did were more likely to have more sexual partners during their lifetime. Statistics from the YRBS (2003) suggest that black males are more likely than black females to have more sexual partners and sexually debut at earlier ages. Self-esteem enhancing reasons for having sex may be a mechanism that can serve to explain the high rate of sexual partners among black males. Some males may also be concerned with feeling desired sexually by others. Having numerous partners may be an indication that people view him in this manner. As a result, he may feel better about himself and thus boost his self-esteem through intercourse. Items on the self-esteem enhancing subscale such as “to make yourself feel better” and “to feel proud of yourself” may be more salient for males. On the survey, 23 males versus 12 females reported that they had engaged in intercourse to make him/herself feel better. In addition, 13 males versus 2 females reported that they had engaged in intercourse to feel proud of him/herself. These two statements are more general and they are not necessarily tied into feeling accepted or feeling better about your body, which, according to the literature, were important factors associated with self-esteem for females (Attie *et al.*, 1990; Orenstein, 1994; Pipher, 1994).

Results also suggested that males were more likely than females to endorse bragging, love, and power reasons for having sex. Bragging and love did not significantly mediate the relationship between gender and any of the high-risk sexual behaviors examined in this study. However, power did significantly mediate the relationship between gender and age of 1st sexual intercourse. Specifically, if males reported an element of power in their sexual relationships, then they were more likely to sexually debut at an earlier age. This particular subscale has two dimensions that reflect an element of power that could be used to motivate high-risk sexual behavior. One dimension contains the item, “to control partner” which implies that the male has the power in the relationship. The other dimension contains the item “out of a sense that you owed your partner or that you had to have sex” which indicates that the other party in the sexual relationship held the power. In examining these individual items, there were 4 out of 14 people who actually endorsed both items. The rest of the males only endorsed one of the items. In general, these results suggest that power, whether it was an active or passive facet, was a significant factor in the early sexual debut of these males. Early sexual debut puts individuals at

an increased risk for more sexual partners and inconsistent condom use (Coker *et al.*, 1994). The average age of sexual debut in this sample for males was 2 years below the national average among American adolescents, which was 16. Males in this sample are debuting extremely early and putting themselves at risk for future risky sexual behaviors.

#### Gender as a moderator

It was hypothesized that gender would moderate the relationship between self-esteem enhancing reasons for having sex and risky sexual behavior. Findings from the study did not support this hypothesis. However, the results suggested that in this sample, there was a significant main effect for self-esteem enhancing reasons for having sex. Adolescents in general who endorsed self-esteem enhancing reasons for having sex were more likely to have a higher number of sexual partners and less likely to use condoms consistently. These results indicate that when adolescents use self-esteem to motivate their sexual decision making, they may be choosing more risky sexual behaviors because boosting self-esteem may be more important than remaining safe or healthy. Because the finding was a main effect, this result also suggests that self-esteem is salient, not only for females, but also for males.

#### Limitations of the study

The current study had some limitations that may have impacted the results.

Although 146 adolescents indicated that they were sexually active, only 105 participants reported that they had engaged in sexual intercourse within 90 days of data collection. As a result, a number of adolescents who had a condom use history before this time period were left out of the final analysis. Another limitation of the study was that all of the information utilized in data analysis was obtained via self-report. This introduces a response bias that may have played a role in the results. Past research suggests that boys tend to overreport sexual activity whereas females tend to underreport or are more accurate (Alexander *et al.*, 1993; Hearn *et al.*, 2003). Alexander *et al.* (1993) found that black males had the highest rate of inconsistent reporting on lifetime sexual intercourse and age at 1st sexual intercourse in comparison to white males and black and white females. On the other hand, Hearn *et al.* (2003) examined the reliability of reports on sexual milestones and behavior with African American and Latina adolescents and found that their reports of sexual behavior were very accurate. With respect to reasons for having sex, Alexander *et al.* (1993) suggest that adolescents may not be completely truthful in reporting their behavior if they feel it is socially undesirable. Adolescents in this study may have underreported some of their “reasons”

behaviors because it may be difficult for a participant to admit that they are having sex to make his/herself feel better or to feel prettier and better looking. Adolescents might feel as though these are not acceptable reasons for engaging in sexual intercourse whereas having sex for pleasurable reasons such as “out of curiosity” or “to release sexual tension” may be reasons that are more acceptable amongst youth in this age group.

The time frame in which respondents were asked to report on their sexual activity within each measure may have also affected the results. This reference period was not consistent across measures. For example, adolescents were asked to report on any reason they had ever chosen to engage in sexual intercourse over their lifetime. However, condom use was only measured within 90 days of data collection. Therefore, the adolescent reports on their reasons for having sex may not have necessarily coincided with their condom usage over the past 90 days.

The age of participants at time 3 may not have been appropriate for an adequate test of the hypotheses proposed in this study. Most of the participants at the third wave of data were close to or over 18, which may be past the age when self-esteem plays a more integral role in sexual risk behaviors. It may have been helpful to assess all of the reasons that have motivated sexual decision making during the lifetime, specifically at younger ages, and also within 90 days of data collection. It is possible that self-esteem enhancing reasons for having sex may have been a motivator for sex earlier in adolescence but not now. Finally, there are issues of generalizability to other populations other than low-income urban African American adolescents. While this study adds to the literature on this specific population, replication of results in other populations is necessary before definitive conclusions can be drawn for the general population of adolescents.

#### Research and clinical implications

Even with some limitations, the results from this study have implications for future research as well as prevention and intervention programs. Based on the findings of this study, prevention and intervention programs that target high-risk sexual behavior should involve African American adolescents during their pre-teen years (e.g. 10–13) and focus on effective use of condoms, improved communication, boosting self-esteem, and discussions about power in sexual relationships. Females and males should be taught how to use both male and female condoms. It is especially important for females to become comfortable with their condom use efficacy so they can learn how to assert themselves when conflicting views about condom use may arise. This may help young girls feel as if they have a more powerful position

in deciding whether or not they will engage in intercourse without the use of a condom.

Findings in this study suggest that self-esteem is a factor in the decision to engage in risky sexual behaviors, not only for females, but for males as well. Both males and females could benefit from interventions aimed at boosting self-esteem in general (Dubois *et al.*, 2002; Gullotta *et al.*, 2000; Hirsch *et al.*, 2000). Even if sex is a means to improving self-esteem, it should not be at the cost of their health and thus consistent condom use should also be promoted.

Future research may also consider other methods for assessing reasons for having sex. The methodology used in this study looked at lifetime reasons for having sex. However, methods of assessment that examine recent reasons adolescents may have chosen to engage in intercourse may yield more accurate data. Daily journals, for example, may give a more accurate picture of reasons that teenagers engage in intercourse. The current study also did not examine other protective and risk factors (e.g., family variables) that may also affect sexual decision-making. Future studies could investigate reasons for having sex as well as other factors to see if they have an additive impact on risky sexual behavior. Lastly, it is important to look at all of these factors in a cultural context and to assure that constructs such as self-esteem or peer influence are operationally defined in such a way that is meaningful to the ethnic group under investigation.

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