Men, Multiple Sexual Partners, and Young Adults' Sexual Relationships: Understanding the Role of Gender in the Study of Risk

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ABSTRACT *Heterosexual transmission of HIV and other sexually transmitted infections has become a primary health concern worldwide. Gender roles for heterosexual interactions appear to sanction men's sexual risk-taking, especially the pursuit of multiple sexual partners. Using measures developed in this study, the current study assessed the associations between men's and women's relationship attitudes and experiences and their sexual risk encounters. Participants were 104 men and 103 women (18–24 years) from a large, urban college located in a high HIV risk neighborhood of New York City. All completed a survey assessing HIV risk and the battery of relationship measures assessing traditional sexual roles, sexual conflicts, significance of sex, relationship investment, need for relationship, and unwanted sex. For men, greater sexual conflict in their primary relationships was associated with more sexual partners and fewer unprotected vaginal intercourse encounters with a primary partner and across sex partners overall. In addition, men's endorsement of more traditional sexual roles and lower relationship investment were associated with higher numbers of sexual partners. Among women, compliance with men to engage in unwanted sex was associated with higher levels of participation in unprotected sex. For both men and women, greater significance given to sex in a relationship was associated with fewer extradyadic partners. This study demonstrates the utility of measures of relationship attitudes and experiences to characterize sexual risk, especially among men. Findings are discussed in terms of implications for prevention program targeting young urban adults.*

KEYWORDS *Gender, HIV, Measures, Men, Sexual risk, Women.*

INTRODUCTION

Heterosexual transmission of HIV and other sexually transmitted infections (STIs) has become a primary health concern worldwide.^{1,2} Individuals in established heterosexual relationships are less likely to use condoms consistently, if at all, than those in casual relationships.^{3,4} Women's inability to negotiate condom use with

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their partners has been viewed as a major obstacle to the enactment of safer sexual practices and a primary target of a wide range of interventions.⁵⁻⁸ Yet men, for the most part, have been overlooked in these efforts even though they play a major role in HIV transmission.⁹

Scripts Guiding Men's and Women's Sexual Behavior

Script theory^{10,11} provides a useful framework for analyzing the interface of gender roles and heterosexual interactions. Gender roles are culturally defined sets of behavior that differentiate maleness and femaleness¹² and are incorporated into 'scripts,' which are mutually shared conventions that identify the content, sequence or boundaries of appropriate behavior.¹³ Scripts are negotiated at three interrelated levels: the cultural, interpersonal, and individual levels.

Sexual scripts capture the interface of gender, sexuality, and relationships and are theorized to play a key role in how we develop norms for sexual behavior.^{10,11} The script literature has focused on a normative or "traditional" sexual script for heterosexual interactions that positions men as initiators of sexual activity and women as the reactors or "gatekeepers" responsible for controlling the activities in which the couple engage.^{10,11,14} Men are expected to pursue ever-higher levels of sexual intimacy with partners,^{15,16} even straying outside of committed relationships to pursue sexual opportunities that arise.^{15,17} The polarization of gender roles is considered most evident in intimate relationships and may be a critical factor influencing transmission risk.

Although these scripts reflect aspects of one's culture and the sociohistorical context, they may be enacted individually or within a relationship to a greater or lesser extent,^{10,11} making them amenable to scientific investigation. Some aspects of the traditional sexual script have received empirical support. In a meta-analysis of gender differences in sexual attitudes and experiences, men reported more sexual outlets compared to women and had considerably more permissive attitudes around sexual behavior ($d = 0.81$). Men report being encouraged by their peers to seek multiple sexual partners,¹⁸ and both women and men often view forced sex as justified in occasions where a woman "led a partner on" or made him "so sexually aroused" that he lost control.¹⁹ Men report expecting higher levels of intimacy earlier in relationships than do women and are more likely to report pressuring, threatening or using violence to gain sex from a partner.^{20,21} We argue here that the endorsement of such scripts sanctions men's risk-taking in the sexual arena.

Scripts for Heterosexual Relationships

In Western countries, a norm of concurrent dating relationships prior to establishing a committed relationship and sex only with a promise of marriage was replaced in recent decades by a norm of serial relationships often characterized by early commitment and early sexual activity, with presumed exclusivity.^{22,23} This accelerated committed and presumed monogamous status is often cited as a primary reason why couples quickly forego condom use after the onset of a relationship.²³⁻²⁵ Qualitative research indicates that men seek emotional closeness with women but experience tension about expressing need for emotional intimacy.^{26,27} Whereas having extradyadic sex is viewed as a violation of the norm of exclusivity, it is relatively common, especially among men,²⁸ and has been identified as a behavior that is particularly risky, rapidly accelerating the spread of sexually transmitted infections.^{29,30} Little is known, however, about predicting who is most likely to report extradyadic relationships or about the attitudes associated with this

risk behavior in the context of intimate relationships.³¹ The current study aims to increase understanding of the gender-related attitudes and behaviors associated with participation in extra-dyadic partnerships.

Assessing Gender and HIV Risk

There is a growing call for closer scrutiny of the measures we employ in our research.¹² Most notably, research addressing gender-related constructs typically incorporates measures that were developed decades earlier, were not developed or tested on the samples under study (usually they are standardized on White, middle-class samples), or else are adapted in ways that obscure the psychometric properties of the resulting measures and validity of the findings. Over-reliance on a few dated options has led to a dearth of measures in general.^{32,33} An underlying goal of the study was to develop practical measures characterizing key dimensions of the relationships of young, ethnically diverse urban men and women. Using these measures, the current study assesses the extent to which young adults in relationships endorse attitudes and behaviors in line with the traditional sexual script supporting risky behaviors on the part of men.

METHODS

Participants

Participants were 104 men and 103 women from a large, urban college located in a high HIV risk neighborhood of New York City. All students resided locally; no on-campus housing was provided. All men and women between the ages of 18–24 who were in a heterosexually active relationship of at least three months' duration were eligible for the study. Male and female participants were not in relationships with each other.

Research Setting and Procedures

According to the 2000 U.S. Census data, the per capita income for the area in which the college is located was \$17,258. Overall, the number of individuals in the neighborhood 18 years or older who lived below the poverty level in the preceding 12 months was 63.3%. This neighborhood was chosen specifically because of its high HIV case rate of 62.2 (per 100,000 people) in 2003, and three of its four neighboring zip codes have some of the highest rates in the United States,³⁴ indicating substantial risk of contact for residents. The proportion of HIV cases attributed to heterosexual intercourse increases each year for this area,³⁴ particularly among young adults. Formative research with this population of students revealed high rates of sexual risk behavior and low HIV knowledge.³⁵

The participants were enrolled during the Fall semester of 2003 and Spring semester of 2004. Recruitment methods included flier distribution and announcements in classrooms (i.e., psychology, anthropology, computer science, health and physical education). The study was described as addressing "sex, romance, and relationships." Three hundred and forty fliers were distributed. The study was announced in eight classrooms with sizes ranging from approximately 20–65. Interested students were encouraged to approach study personnel at the study offices for more information. Of those who inquired about the study, all but three agreed to be screened for eligibility. Eligible individuals who provided consent completed a survey in private that assessed background characteristics, HIV risk

behaviors, and relationship attitudes and experiences using the measures designed specifically for this study population. All participants received \$25 for completing the survey.

Measure Development

To ensure the use of measures in the survey tapping key dimensions of heterosexual relationships among urban, young men and women, formative research using diaries, individual interviews, and surveys of the target populations was undertaken. These data were used to generate an item pool and test and refine preliminary versions of practical and gender- and culturally- sensitive measures that are appropriate for this population and that help to redress the dearth of measures in the field.

Diary Study To collect data regarding actual interactions young women and men had with their partners rather than generalizations or presumptions about their typical or recent interactions, we collected prospective data using diary methods. Thirty-two women and 31 men (18–24 years) from this population of students monitored their daily sexual interactions over a three-week period using a structured daily diary. There is growing evidence to suggest that prospective diary methods may capture socially sensitive information, such as occasions of unprotected sexual activity, more effectively than traditional interview modes requiring long-term recall.^{36–38} Moreover, with repeated neutral exposure to the questions, use of diary methods may desensitize participants, particularly to some of the sexual items, thereby possibly improving the validity of their reports.³⁸ Participants were recruited using fliers and announcements in classes. Those interested in participating contacted study personnel and were screened for eligibility (i.e., 18–24 years, in heterosexual relationship, sexually active in past two weeks). After providing consent, participants completed a brief demographic questionnaire and a sexual history measure and were then trained to complete a structured one-page daily diary form. Participants were instructed to return the forms on a daily basis for three weeks using pre-stamped, addressed envelopes. All were reimbursed for taking part in the training and at the end of the three-week period.

Individual Interviews Following completion of the diary portion of the study, participants were interviewed in depth regarding their sexual experiences over the period of diary data collection. Individual interviews followed diary collection to elicit an item pool adequate for measuring key dimensions of young adults' sexual interactions that might emerge. All interviews were conducted by trained interviewers with experience with sex-related content. Interviews were conducted in English, audiotaped, transcribed, and proofed using two independent readers. The data analytic approach involved initially examining study transcripts to identify primary coding categories as well as a range of themes present within each category. A structured coding scheme was developed within each of the major domains of inquiry that emerged.³⁹ Coding categories and themes were organized into a formal codebook, and excerpts from interviews relevant to these themes were extracted from the transcripts. Next, transcripts were formally content coded. When suggested by associations, overlap, or diversions in the data, thematic categories were refined, merged, or subdivided by the coding team. All decision trails were noted and documented to assure that interpretations were supported by

the data.^{40,41} The results were organized so that they summarized four primary dimensions of sexual interactions. These dimensions were (1) significance of sex to the relationship and efforts to build intimacy, (2) relationship investment, (3) components of traditional sexual scripts (including initiating, refusing, using pressure or influence, and complying with unwanted sex) and (4) sequence of sexual events (i.e., timing of events and decisions about sexual event trajectory).

Final Refinement of Relationship Measures A pool of items representing these dimensions was administered in a survey of 349 young adults (117 men and 232 women). We established construct validity using factor analyses and internal consistency via Cronbach's alpha. Six scales emerged from the data. In addition, 35 participants completed the measures on two occasions, three weeks apart, to assess test-retest reliability. The validity of the new measures was further established by testing their associations with other related constructs. The product of this formative work was a battery of six psychometrically sound measures relevant to the study population (see [Appendix](#)).

Measures

Background Characteristics Participants reported their age, ethnicity, race, family income, and neighborhood residence. They also provided information regarding their relationship status and children (if applicable).

HIV Risk Behaviors Participants reported the number of occasions with which they had engaged in the following behaviors with their primary partner over the preceding two months: vaginal intercourse, unprotected vaginal intercourse, anal intercourse, and unprotected anal intercourse. They provided the number of occasions that they had engaged in each of these sexual behaviors with any other opposite-sex partner over the preceding two months, the number of partners that they considered to be "one night stands" (i.e., someone the participant had sex with once and never again whether anticipated or not), and total number of partners in this time period.

Relationship Attitudes and Experiences Respondents reported the extent of their agreement on a six-point scale ranging from (1) *strongly disagree* to (6) *strongly agree*. All items are found in the [Appendix](#).

- (1) *Traditional Sexual Roles*. This five-item measure assesses respondents' endorsement of traditional beliefs regarding men's and women's roles in heterosexual encounters. Alpha coefficients were strong ($\alpha = 0.70$ for men and $\alpha = 0.71$ for women); however, the measure's test-retest correlation was 0.20 over a three-week period ($p = 0.25$), possibly as a result of the relatively small number of items.
- (2) *Significance of Sex*. This scale comprised 12 items measuring beliefs that shared sexual experiences serve to bond partners intimately in relationships. Both the alpha and test-retest coefficients were strong: $\alpha = 0.84$ for men, $\alpha = 0.89$ for women, test-retest $r = 0.86$ ($p < 0.001$).
- (3) *Unwanted Sex*. This seven-item instrument assessed respondents' participation in unwanted, but consensual, sexual interactions. Higher scores

indicate more experience complying with unwanted sex in their primary sexual relationships. Alpha coefficients were $\alpha = 0.81$ for men and $\alpha = 0.78$ for women. The test-retest coefficient was $r = 0.86$ ($p < 0.001$) over a three-week period.

- (4) *Relationship Investment*. This 12-item measure assesses commitment to the long-term future of one's primary sexual relationship with higher scores indicating greater investment. The alpha coefficients were $\alpha = 0.90$ for men and $\alpha = 0.90$ for women, and the test-retest coefficient over a three-week period was $r = 0.92$, $p < 0.001$.
- (5) *Need for Relationship*. This three-item measure captures respondents' perceived emotional need for an intimate relationship. Higher scores reflect greater perceived need. The alpha coefficients were $\alpha = 0.79$ for men and $\alpha = 0.89$ for women, and the test-retest coefficient was $r = 0.80$, $p < 0.001$.
- (6) *Sexual Conflicts*. This nine-item scale assesses agreement with statements regarding disagreements and tension between relationship partners about sex. Higher scores indicate greater discord in the relationship. The alpha coefficients were $\alpha = 0.90$ for men and $\alpha = 0.89$ for women, and the test-retest coefficient was $r = 0.47$, $p < 0.01$.

Data Analyses

All data analyses were performed using SPSS Version 13.0. Means and proportions were used to describe and compare women's and men's reports of sexual behavior. Fewer than 10% reported unprotected anal sex; therefore, this variable was not included in the predictive analyses. Correlations were used to examine associations between participants' relationship scores and three sexual risk variables: number of unprotected vaginal intercourse with primary partner, number of unprotected vaginal intercourse with any partner (both of which were log-transformed to account for their non-normal distributions), and total number of partners. In addition, we defined two dichotomous variables: reports of more than one partner (yes/no) in prior two months and participation in unprotected sex (none/some) in prior two months. Logistic regressions were used to examine how relationship scores predicted reports of any participation in unprotected sex and having more than one sexual partner. Relationship scores were trichotomized based on the distribution among all participants stratified by gender, using low scores as the reference group in each case.

RESULTS

Participants were between 18 and 24 years of age (Mean = 20.4, SD = 1.97) and in a sexually active heterosexual relationship at the time of the study, in line with study requirements. Participants were Black (41%), White (33%), Asian (4%) or Other (23%; predominantly indicating "Hispanic"). In terms of ethnicity, 19% indicated that they were Hispanic/Latino in origin. Sixty-nine percent were born in the U.S.: The remainder was born in the Caribbean (12%), Europe (7%), or elsewhere (11%). Most (80%) were full-time students. They reported a range of family household incomes, with the majority indicating low or extremely low family incomes for New York City: 20% reported family incomes between \$0 and \$20,000, another 24% between \$20,000–\$40,000, and 22% between \$40,000–\$60,000. Most had never married and were not living with a partner (74%). The

others were cohabiting (23.4%), married (2%) or separated (0.5%), and 7% (*n* = 5 men and 8 women) reported having at least one child.

Current Sexual Risk

In terms of sexual behavior in the preceding two months, men reported fewer occasions of unprotected vaginal encounters in their primary relationships compared to women (Table 1). Almost half of the men (45%), compared to 12% of the women, reported having at least one other sexual partner during the prior two months, $\chi^2(1) = 24.63, p < 0.001$. Men reported higher numbers of sexual partners outside of their primary relationships compared to women, and more men reported “one night stands” (25% versus 4%), $\chi^2(1) = 15.45, p < 0.001$. However, across both primary and secondary relationships, men and women reported similar numbers of unprotected vaginal intercourse encounters.

Relationship Attitudes, Experiences and HIV Risk Behaviors

Significant gender differences were found for five of the six new measures assessing relationship attitudes and experiences (Table 2). Men reported stronger endorsement of traditional sexual roles, more experience agreeing to unwanted sex with their partners, and more sexual conflicts in their relationships compared to women. However, they also attributed less significance to sex for bonding in a relationship and reported less investment in their primary relationship. No difference was found between men and women in perceived need for a relationship.

We examined associations between participants’ relationship scores and risk variables in two ways. First, correlations were calculated between scores and two log-transformed count variables (i.e., total number of unprotected vaginal intercourse with primary partner, with any partner) and total number of partners during the two prior months (see Table 3). For men, greater sexual conflict in their primary relationship was associated with fewer unprotected vaginal intercourse encounters with a primary partner and across partners and with more sex partners overall. In addition, men’s endorsement of more traditional sexual roles and lower relationship investment were associated with higher numbers of sexual partners in the two months preceding the study. Only one association was noted among

TABLE 1. Reports of sexual risk of among men and women in preceding two month period

	Men		Women	
	No. (%)	Mean (SD)	No. (%)	Mean (SD)
Unprotected intercourse encounters with primary partner*		6.7 (20.3)		6.9 (9.7)
Report of two or more partners***	46 (45%)		12 (12%)	
Report of “one night stands”***	25 (24%)		4 (4%)	
Unprotected intercourse encounters across partners		6.9 (20.1)		7.2 (10.8)
Total number of partners***		2.2 (2.2)		1.2 (0.6)

N = 103 men and 102 women: One man and one woman reported no sex data and were excluded from these analyses.

p* value (*t*-test or Chi-square test) < 0.05. **p* value (*t*-test or Chi-square test) < 0.001.

TABLE 2. Gender differences in relationships attitudes

Scales	Men		Women		<i>p</i> value
	M	SD	M	SD	
Traditional sexual roles	2.76	0.98	2.40	1.04	0.011
Significance of sex	3.64	0.82	4.56	1.03	0.000
Unwanted sex	3.56	0.95	3.14	1.09	0.004
Relationship investment	3.62	1.02	4.49	1.04	0.000
Need for relationship	3.06	1.40	3.11	1.64	0.807
Sexual conflicts	2.54	1.08	2.17	1.07	0.014

N = 104 men and 103 women. All measures scored on 1–6 scale.

women: Compliance with men to engage in unwanted sex was associated with higher levels of participation in unprotected sex with primary partners.

Second, we conducted univariate logistic regression analyses using relationship scores in trichotomized form as predictors for the risk variables—any unprotected sex with a primary partner, any unprotected sex across partners, and more than one sexual partner. In each case, participants with low scores comprised the reference group. Men who reported moderate or high sexual conflict had one-fifth to one-sixth the odds of reporting unprotected sex with both their primary partners (OR = 0.24, 95% CI = 0.07–0.74 and OR = 0.17, 95% CI = 0.05–0.51) and across all partners (OR = 0.20, 95% CI = 0.06–0.66 and OR = 0.05, 95% CI = 0.05–0.48) compared to those with low sexual conflict. Women with moderate (but not high) significance of sex scores had seven to eight times greater odds of unprotected sex within their primary relationship or across relationships compared to those with low scores (OR = 7.04, 95% CI = 1.55–31.99 and OR = 8.44, 95% CI = 1.48–48.14).

Relationship scores did not predict having multiple partners for the women. However, among men, two scale scores were significantly associated with having had sex outside their primary relationship in the two months prior to the study. Specifically, men who had high significance of sex scores had less than one-tenth the odds (OR = 0.07, 95% CI = 0.01–0.58) of having a secondary partnership compared to those who had low significance of sex scores. Similarly, men with moderate

TABLE 3. Pearson correlations between scale scores and sexual risk variables for men and women

Scales	Number of UVI encounters with primary partner		Number of UVI encounters with all partners		Number of partners	
	Men	Women	Men	Women	Men	Women
Traditional sexual roles	−0.17	−0.03	−0.14	−0.01	0.28**	0.06
Significance of sex	−0.06	−0.02	−0.05	0.03	−0.18	−0.08
Unwanted sex	0.03	0.22*	−0.06	0.19	0.14	0.05
Relationship investment	0.10	0.07	0.06	0.08	−0.32***	−0.13
Need for relationship	0.03	−0.04	0.04	−0.05	−0.04	−0.13
Sexual conflicts	−0.36***	−0.04	−0.31**	−0.05	0.25*	0.07

UVI Unprotected Vaginal Intercourse (log transformed prior to analyses).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

(OR = 0.17, 95% CI = 0.07–0.45) or high (OR = 0.12, 95% CI = 0.03–0.46) relationship investment had approximately one-tenth the odds of a secondary partnership of those with low relationship investment. Thus, relationship scores are clearly associated with risk both in terms of unprotected sex and sexual relationships with multiple partners.

DISCUSSION

In this study, we investigated associations between gender, HIV risk, and relationship attitudes and experiences among an ethnically diverse sample of young urban adults. The study presented six brief measures that tap key dimensions of young urban adults' heterosexual relationships. These measures were proven gender-specific, and their validity was reinforced by our findings of associations with different aspects of HIV risk.

The young men were nearly four times more likely than were the women to report multiple sexual partners in the two months preceding the study, in accordance with findings from other studies.^{28,42} In addition, men reported twice as many secondary partners and were six times more likely to report having had a recent "one-night stand." Women reported higher rates of unprotected intercourse within their primary relationships, although their rates of unprotected sex were as high as men's across partners. This finding is of particular interest because young men typically have greater decision-making power about condom use than do women,^{43,44} perhaps leading them to enforce safer sex practices in some relationships but not others. It also emphasizes the importance of context and indicates that gender roles, and indeed the norms and scripts guiding interactions, vary for relationship types.

Our study was guided by script theory—a conceptual model that emphasizes social or normative endorsement of men's risk behavior, especially in terms of the participation in sexual contact outside one's primary relationship. Although scripts are negotiated at the cultural, interpersonal, and individual (intrapsychic) levels, we may have best captured the influence of scripts at the interpersonal and intrapsychic levels. The traditional sexual script designates men as initiators and aggressors in heterosexual relations with women, pressing for sexual access both within and beyond the relationship boundaries even to the point of coercion.¹⁵ In line with this model and our behavioral findings, men were less likely than were women to view sex as significant to establishing intimacy with a partner and were less invested romantically in their primary relationships. Further, men endorsed stronger traditional beliefs about the gender roles in sexual relationships. Men also reported engaging more often in sex that they did not want than did women. Men may view refusing sexual opportunities with women as antithetical to scripts dictating appropriate "masculine" forms of sexual behavior. Others studies have found that men are reluctant to admit to engaging in unwanted sex with a woman for fear of appearing unmasculine,⁴⁵ a situation that may lead them to pursue sexual opportunities they might otherwise judge unsafe.

For men only, more sexual conflict was associated with less unprotected sex, both with primary and secondary partners, and more sexual partners overall. This finding is supported by research demonstrating that feelings of closeness and intimacy to one's partner are associated with less condom use.^{25,26} Moreover, men who endorsed more traditional sexual roles and had less investment in their primary relationship reported more sexual partners. Those who viewed sex as sig-

nificant for forming intimacy and those who were moderately or highly invested in their relationships with women were about one-tenth as likely to report extra-dyadic sexual partners.

Significance of sex worked differently for women: Those with moderate levels had 7–8 times the odds of reporting unprotected sex compared to those with low levels. There appears to be a curvilinear relationship here: Women with high significance of sex scores did not differ from those with low scores in terms of unprotected sex. Low scores may be protective in this sense in that these women may not view sex as a means of ensuring relationship maintenance, whereas high scores may be protective to the extent that the individual works to protect the “sanctity” of the sexual experience by ensuring that it is not compromised by disease. Further study is required to elucidate the nature of this relationship. Interestingly, for women, but not men, engaging in unwanted sex was associated with higher rates of unprotected sex. Women who comply with requests for sex when it is unwanted are likely less able to insist on condom use.

A key conclusion from this study must be that, although intimacy and closeness may reduce rates of unprotected sex within a couple, greater investment in and significance given to a primary sexual relationship reduces the chances that a man will seek additional sexual partners—a behavior identified as especially risky and accelerating the spread of sexually transmitted infections.^{29,30} Research should incorporate measures of relationship and sexual satisfaction and investigate the contribution of length of relationship, as these may also be important factors in determining risk.

Limitations of the current study include those associated with the reliance on self-reports, although the measures employed here were derived from extensive formative work using both a range of qualitative and quantitative methods to ensure appropriate “fit” with the sample and validation through established constructs. Self-report biases may still have influenced recall and reporting of sexual risk activities, however. Another potential limitation relates to the use of a college sample, which is likely quite different from other samples in terms of risk activity. These students were residents of an impoverished urban area, with high HIV and STI rates, and were enrolled in a college that draws most of its students from local neighborhoods, yet may have important differences from the general population that constitute protective factors. Our sample was relatively diverse in terms of race/ethnicity and socioeconomic status, but all lived in an urban context, which likely modified the enactment of sexual scripts. For instance, young urban adults often cannot afford to live away from home and thus face restrictions in privacy. College students in urban institutions socialize with large groups of other largely unmarried individuals, affording many opportunities for sexual mixing, often with little social monitoring by one’s peers. Another limitation of the study is that the men and women were not in relationships with each other to our knowledge. Future research should examine relationship dynamics around sex and HIV risk with samples of intact couples and investigate the impact of pregnancy intentions, STI histories, and perceptions and expectations regarding partner fidelity on these dynamics.

In summary, the current study presents a battery of new measures that help elucidate how HIV risk activity unfolds in the context of established heterosexual relationships of young urban adults. In light of the high rates of unprotected sex among both women and men, our findings indicate that understanding the multidimensionality of relationship attitudes and experiences may be key to understand-

ing heightened risk for HIV/STIs among young adults. HIV prevention efforts must consider the influence of relationships—the context of most sexual risk. Prevention counselors and media campaigns targeting young people need to stress that it is the size of extradyadic partnership networks, not consistency of condom use, that best accounts for escalating rates of infection.^{29,30} Reducing partner numbers may be a far more realistic goal than promoting 100% condom use. Furthermore, expanding prevention options in terms of technologies, such as female-controlled methods, and behavioral strategies to ensure safer practices is a critical step in improving protection from HIV.

ACKNOWLEDGEMENTS

We gratefully acknowledge research support from NICHD Grant R01-HD41721 to Lucia F. O'Sullivan, Ph.D. as well as support from NIH Training Grant 5T32DA13911 for Abigail Harrison. The authors thank the students for their participation in the project, Dr. Anke Ehrhardt for advice and support, Giovanna Rodriguez for coordinating data collection and entry, and Dr. Patricia Antoniello who helped implement the project.

APPENDIX

Traditional sexual roles

1. Women are supposed to wait until the man initiates sex then decide whether they want it or not
2. Men ultimately decide whether condoms or birth control are used
3. In new relationships, women should wait for men to initiate sex
4. Women who have more sex than most are dirty
5. Women would be satisfied to just engage in foreplay

Significance of sex

1. Sex is part of a commitment; it's not just an experience
2. A person should get to know and care for a partner before having sex
3. Sex is for special relationships
4. Sex is about showing your emotions
5. Sex with your partner has to be something special
6. It is important to be close friends before you have sex
7. Giving one's virginity to a partner is special
8. Sex is just fun; it shouldn't have to mean anything (Reverse scored)
9. I wouldn't have sex unless I really loved the person
10. I have only had sex with people that I had a strong relationship with
11. To me sex means something—it's more than just doing it
12. I think sex is all about respect and trust

Unwanted sex

1. We sometimes use sex for validation that our relationship is okay
2. I've had sex with my partner when I wasn't in the mood because my partner really wanted it
3. I would go along with sex to make my partner happy
4. My partners knows how to persuade me when I don't want to have sex
5. I've had sex with my partner when I wasn't really in the mood
6. If I said no to sex, my partner would beg me to change my mind
7. Sometimes I make my partner convince me to have sex

Relationship investment

1. We look forward to seeing or talking to each other every single day
2. We share every secret
3. We think of each other as best friends
4. Being in a relationship should become a central part of your life
5. We know everything about each other
6. I want to spend the rest of my life with my partner
7. I would like our relationship to get somewhere
8. I can see myself with my partner when I'm old
9. I want to spend all our time together
10. If we broke up, it would be a devastating blow to me
11. Everybody knows that we are serious about each other
12. We love talking about our passions and our goals in life

Need for relationship

1. Without a relationship I'd feel lonely and empty
2. I'd be crazy right now if I had no partner at all
3. I would feel lonely without a partner

Sexual conflicts

1. My partner wants sex a lot more than I want it
2. Sometimes I wish my partner would just leave me alone sexually
3. I don't initiate because my partner doesn't give me a chance to
4. I'm not interested in sex so much as my partner is
5. It has to be my partner's way or no way when it comes to sex
6. It's really hard for me to say what I want sexually
7. When I initiate sex, it hurts my partner's feelings
8. I won't initiate sex in case I get rejected
9. I often say 'no' when my partner wants to try new things

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