Masculine Gender Roles Associated with Increased Sexual Risk and Intimate Partner Violence Perpetration among Young Adult Men

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ABSTRACT *This study sought to assess the association between traditional masculine gender role ideologies and sexual risk and intimate partner violence (IPV) perpetration behaviors in young men's heterosexual relationships. Sexually active men age 18–35 years attending an urban community health center in Boston were invited to join a study on men's sexual risk; participants (N = 307) completed a brief self-administered survey on sexual risk (unprotected sex, forced unprotected sex, multiple sex partners) and IPV perpetration (physical, sexual and injury from/need for medical services due to IPV) behaviors, as well as demographics. Current analyses included men reporting sex with a main female partner in the past 3 months (n = 283). Logistic regression analyses adjusted for demographics were used to assess significant associations between male gender role ideologies and the sexual risk and IPV perpetration behaviors. Participants were predominantly Hispanic (74.9%) and Black (21.9%); 55.5% were not born in the continental U.S.; 65% had been in the relationship for more than 1 year. Men reporting more traditional ideologies were significantly more likely to report unprotected vaginal sex in the past 3 months ($OR_{adj} = 2.3$, 95% CI = 1.2–4.6) and IPV perpetration in the past year ($OR_{adj} = 2.1$, 95% CI = 1.2–3.6). Findings indicate that masculine gender role ideologies are linked with young men's unprotected vaginal sex and IPV perpetration in relationships, suggesting that such ideologies may be a useful point of sexual risk reduction and IPV prevention intervention with this population.*

KEYWORDS *Sexual risk behaviors, Partner violence, Masculine ideology.*

INTRODUCTION

HIV disease is a leading cause of death for young men in the United States¹ with young men residing in urban centers being at particular risk.² Although men predominantly become infected via unprotected sex with a male partner and/or injection drug use,² heterosexual risk for HIV/AIDS is a risk for men and is the primary means of HIV infection for women.² Epidemiologic study with women suggests that sexual risk for HIV is more likely in the context of an abusive relationship due to both diminished control of sexual protection among abused

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women and increased likelihood of HIV infection among abusive men.³ Studies with men also indicate that heterosexual males reporting IPV perpetration are significantly more likely to report higher risk sexual behavior, as compared with men not reporting recent IPV perpetration.^{4,5} Researchers have suggested that traditional masculine gender role ideologies may be linking IPV perpetration and sexual risk behaviors among young heterosexual men;⁵⁻⁷ however, no study to date has directly assessed this. The purpose of the current study is to assess associations between traditional masculine gender role ideologies and both sexual risk behaviors and recent IPV perpetration among young adult heterosexual men recruited from an urban community health center.

IPV Against Women and Sexual Risk for HIV/AIDS in Heterosexual Relationships

Extensive evidence from diverse populations of women demonstrates that IPV victimization, a health issue estimated to affect one in four U.S. women,⁸⁻¹⁴ is significantly associated with low contraceptive and condom use as well as adverse sexual and reproductive health outcomes (e.g., pelvic pain, menstrual abnormalities, STD/HIV, unwanted pregnancy and multiple abortions) among women (see¹⁵⁻¹⁷ for reviews). To date this research has primarily been limited to studies of female IPV victims, only very rarely including reports from male perpetrators. While research including women and girls' reports of male partner behavior points to a potential link between high rates of IPV perpetration and sexual risk among young adult men,^{3,18-26} there has been little direct study of whether abusive partners pose greater sexual risk to women due to their own risky sexual or controlling behaviors. Within qualitative studies, battered women have reported forced pregnancy and prevention of contraception from their abusive male partners.^{27,28} Less research has assessed this issue with men; however, research that has been conducted demonstrates significantly greater risk for sexual infidelity, multiple sex partners, unprotected sex, and forced unprotected sex among those reporting recent IPV perpetration.^{4,5}

Men's Traditional Gender Role Ideologies Linked to IPV Perpetration and Sexual Risk Behaviors

Traditional gender role ideologies are the perceptions of how men and women are supposed to think and behave in society and within the context of heterosexual relationships. Extensive research has documented that men with more traditional gender role ideologies are significantly more likely to report sexual coercion and relationship violence.²⁹⁻³⁷ Although much of this research has been conducted with middle-class White male samples (e.g., college students), these same identified ideologies (scripts, norms and attitudes) have also been reported in lower income and minority samples,^{31,34,37} suggesting that these ideologies are not necessarily unique to specific racial/ethnic or class subgroups. These findings are supported by research indicating similar gender role ideologies among U.S. White, Black and Hispanic young adult males.³⁸

Fewer studies have been conducted on associations between male gender roles and sexual risk behaviors. Those which have been conducted reveal similar findings to that seen in the gender-based violence literature; males with more traditional ideologies are significantly more likely to report sexual infidelity, more casual sex partners, unprotected sex, and negative attitudes toward condoms, with these

findings being demonstrated among White, Black and Hispanic young men and adolescent boys.^{31,34,39,40–48} Unfortunately comparability of observed gender role associations with IPV perpetration and sexual risk behaviors among men is limited by different measures being used in different fields. Only one male gender roles measure, the Male Role Attitudes Scale (MRAS),⁴² has been identified as useful in both the IPV and sexual risk literature.^{42,43,45} But there has been no research assessing its association with sexual risk behaviors and IPV perpetration within the same sample.

The current study is designed to assess the associations between male gender role ideologies and sexual risk behaviors as well as IPV perpetration among a young adult sample of men recruited from an urban community health center in Boston. Sexual risk behaviors included in our analyses are unprotected sex and other sex partners in the past 3 months and forced unprotected sex in the past year, based on previous study with this sample of men in heterosexual relationships demonstrating significant associations between past year IPV perpetration and these sexual risk variables.⁵

MATERIALS AND METHODS

English and/or Spanish-speaking men, age 18–35 years, reporting sex with a female partner in the past 3 months were recruited from a large urban community health center in Boston that primarily serves lower income Hispanic and African-American clients. Based on these inclusion criteria, men entering the health center were screened at registration by a trained research staff member bilingual in Spanish–English. Men agreeing to participate in a brief, anonymous men’s health survey were escorted by research staff to a private room, where individuals were screened for a second time to verify eligibility. Upon obtaining verbal consent, the self-report paper survey was administered in either English or Spanish, based on the participant’s choice. Following survey completion (approximately 20 min), participants were given a \$15 cash payment for their time and were informed of health center services related to HIV counseling and testing, STD testing, and social services including substance abuse and IPV. This study was approved by the Institutional Review Boards of Children’s Hospital and Boston University Medical Center.

Participation

Participants were recruited from April 2004 to February 2005. Of 432 men approached, 354 were eligible; 29 eligible individuals refused participation, resulting in a participation rate of 92%. Of our eligible and willing participants ($N=325$), 48% were at the health center for their own health care, 46% were accompanying a female partner or child to appointments for their health care, and 6% were attending a health fair.

Based on survey reports, 18 of the 325 eligible and willing participants were excluded for not meeting age criteria ($n=6$) or the criterion regarding sex with a female partner in the past 3 months ($n=12$); of the remaining 307 participants, 92% ($n=283$) reported involvement with a main female partner and penile-vaginal sex in the past 3 months with this partner; current analyses are limited to these individuals. Over one-third of these participants (36.7%) took the survey in

Spanish; the remaining 62.3% took the English survey. The Spanish version of the survey was back-translated from the English version by a professional translator unless scales and items were already available and had been tested in Spanish; the Spanish survey was then reviewed for language accuracy and approved by Spanish–English bilingual health center staff.

Survey Measures

Single items assessed demographics, including the participant's age, race/ethnicity, employment, and relationship status and length, as well as their English fluency and nativity to and length of residence in the continental U.S.

Our independent variable was Masculine Gender Role Ideologies as measured by the Male Role Attitudes Scale (MRAS).⁴² This eight-item measure uses a four-point response scale ranging from 1 = “agree a lot” to 4 = “disagree a lot” to assess how much participants agree with specified masculine ideologies related to male status in society, male toughness, anti-femininity, and male hypersexuality. This measure has been used with White, Black/African American and Hispanic young men, in Spanish and in English, and does not demonstrate strong differences across racial/ethnic groups.^{38,42} Cronbach alpha for our sample was 0.6; this alpha is consistent with previous studies with this measure with racially/ethnically diverse samples of young men.^{42,43} Scores on this measure ranged from 1–4 in our sample, with a median score of 3; mean and standard deviation in our sample were 3.0 and 0.5, respectively; these scores are consistent with previous studies with representative samples of adolescent and young adult men.^{42,49}

Our sexual risk behavior outcome variables were assessed by single items on unprotected vaginal sex and unprotected anal sex in the past 3 months with a main female partner, as well as an item on sex with other women within the past 3 months (in addition to sex with a main female partner in this timeframe). An item was also taken from the Conflict Tactics Scale-2⁵⁰ to assess forced unprotected sex in the past year; this is the only CTS-2 item related to HIV/STD and pregnancy risk.

Our IPV perpetration outcome variable was obtained from the CTS-2⁵⁰ as well. This 39-item measure assesses participant's perpetration of physical violence, sexual violence and violence resulting in victim's injury/need for medical services; it uses a seven-point response pattern to assess prevalence rates of violence against their partners ever and in the past year. (For details on items within each subscale, see Raj et al.⁵) For use in analyses, responses were summed and dichotomized as past year IPV perpetration or no past year IPV perpetration; Cronbach alpha for this scale was $\alpha = 0.93$. Note: As the forced unprotected sex item was taken from this scale, it was not included in the creation of the IPV perpetration variable.

Data Analyses

Frequencies were generated for demographics and sexual risk and IPV perpetration variables, as well as items from the MRAS. Chi-square analyses and *t*-tests were used to assess bivariate associations between the MRAS and both demographics (age, education, income, continental U.S. nativity and length of residence, Hispanic ethnicity, marital status, and relationship length) and our outcome variables (unprotected vaginal and anal sex with main female partner, other female sex partners, forced unprotected sex, and IPV perpetration ever). Adjusted logistic regression analyses were then conducted to assess associations between MRAS and each of our outcome variables. Regression analyses were adjusted to control for affects of potential confounders, including age, education (high school graduate),

income, continental U.S. nativity and length of residence, Hispanic ethnicity, marital status, and relationship length; these variables were chosen due to their associations with male sexual risk behaviors and IPV perpetration in this sample (see Raj et al.⁵ for details). In an effort to create more parsimonious models for our small sample, we employed methods outlined by Rothman and Greenland⁵¹ to determine which confounders required inclusion in final adjusted models for each outcome. Potential confounders were included based on their altering the point estimate by 10% or greater and being significant predictors of the outcome at $p < 0.20$. Adjusted odds ratios and 95% confidence intervals were used to assess significance in final models.

RESULTS

Sample Demographics

Participants were median age 24 years, 74.9% Hispanic and 21.9% Black. The majority of the sample was born in the continental U.S. (44.5%) or Latin America (53.4%). Almost one-third of participants (29.3%) was born in the Dominican Republic; 16.3% were born in Puerto Rico; 7.8% were born in Mexico, South or Central America, or Cuba. Of those not born in the continental U.S., 10.2% lived in the continental U.S. for 1 year or less, and 65.0% had lived in the U.S. for more than 5 years. More than one-third (37.5%) of participants were unemployed; 53.4% reported an income of \$800 or less per month; 28.0% did not hold a high school degree or GED. (Note: high rates of unemployment and low income and education may in part be attributable to the young sample, which likely included high school students.) Approximately one in six men (15.2%) reported being married; 35.7% were living with a partner, and an additional 41.7% were dating someone. Median relationship length for the sample was 2 years; 65.0% had been in their relationship for 1 year or more. Six percent of the sample was not currently involved in a relationship with a woman although they had sex with a main female partner in the past 3 months, suggesting that they had recently ended a relationship with a main female partner.

Sexual Risk Behaviors and IPV Perpetration

Unprotected sex in the past 3 months was reported by the majority of those reporting vaginal sex (80.2%) and anal sex (79.2%) with their main female partner; 16.3% reported having forced unprotected sex in the past year. Forty-three percent of men reported sex with a non-main female partner in the past 3 months; 49.2% reported no or inconsistent condom use with these partners.

Forty percent of the sample (41.3%) reported IPV perpetration (physical, sexual, and/or injury/need for medical services due to IPV) in the past year. Past year physical IPV perpetration was reported by 27.6% of the sample; past year sexual IPV perpetration was reported by 28.3% of the sample; past year perpetration of IPV-related injury or need for medical services was reported by 13.8% of the sample.

Masculine Gender Role Ideologies

In terms of male ideologies, men in this sample most ascribed to roles around men's need for respect; 76.0% of our sample reported that they agreed a lot with the statement "It is essential for a man to get respect from others," and 83.8% agreed a lot with the statement that "A man always deserves the respect of his wife and

TABLE 1. Responses to the male roles attitudes scale (MRAS), (*N* = 283)

	Disagree a lot 1 (%)	Disagree a little 2 (%)	Agree a little 3 (%)	Agree a lot 4 (%)	Avg. score (Std. dev.)
It is essential for a man to get respect from others	3.2	2.0	18.0	76.0	3.7 (.7)
A man always deserves the respect of his wife and children	1.1	4.6	10.2	83.8	3.8 (.6)
I admire a man who is totally sure of himself	3.8	3.6	19.9	72.5	3.6 (.7)
A man will lose respect if he talks about his problems	46.6	20.5	18.4	13.9	2.0 (1.1)
A young man should be physically tough, even if he is not big	17.7	15.9	29.4	36.4	2.8 (1.1)
It bothers me when a man acts like a woman	19.4	12.7	20.8	46.3	2.9 (1.2)
I do not think a husband should have to do housework	47.7	23.0	13.8	14.8	2.0 (1.1)
Men are always ready for sex	9.9	21.2	25.8	42.4	3.0 (1.0)

children.” Many men also expressed expectations that a man be physically tough (36.4%) and not act like a woman (46.3%). Views of men as hypersexual were also endorsed, with 42.4% indicating they strongly agree that men are always ready for sex and an additional 25.8% reporting some agreement with this statement (Table 1).

Bivariate analyses assessing associations between male gender role ideologies and key demographics demonstrated that men who had not graduated from high school or obtained a GED were significantly more likely to endorse more traditional masculine gender role ideologies than men with high school diplomas or GEDs ($p = 0.04$); no other demographics, including race/ethnicity and acculturation variables, were significantly associated with the MRAS. Bivariate analyses assessing associations between male gender role ideologies and sexual risk and IPV perpetration outcome variables demonstrated that the MRAS was significantly associated with past year IPV perpetration ($p = 0.05$), and a trend was seen in the association between the MRAS and unprotected vaginal sex with a main female partner ($p = 0.1$).

Associations between MRAS and Sexual Risk Behaviors and IPV perpetration

Consistent with bivariate associations between male gender role ideologies and sexual and IPV perpetration risk, adjusted regression analyses demonstrated that men reporting more traditional ideologies were significantly more likely to report unprotected vaginal sex with their main partner ($OR_{adj} = 2.3$, 95% CI = 1.2–4.6) and past year IPV perpetration ($OR_{adj} = 2.1$, 95% CI = 1.2–3.6). Such ideologies were not associated with unprotected anal sex, forced unprotected sex or multiple sex partners (see Table 2).

TABLE 2. Logistic regression analyses adjusted for demographics to assess associations between male gender role ideologies and sexual risk behaviors and partner violence perpetration, (N = 283)

Sexual risk behaviors or pregnancy involvement	OR _{adj} (95% CI)
Unprotected vaginal sex, past 3 months	2.3 (1.2–4.6) ²
Unprotected anal sex, past 3 months	1.1 (.4–3.4) ³
Forced sex without a condom, past year	1.4 (.7–2.8) ⁴
Other female sex partners, past 3 months	1.2 (.7–1.9) ¹
IPV perpetration, past year	1.8 (1.1–2.9) ⁵

¹Analysis adjusted for relationship length.
²Analysis adjusted for age, relationship length.
³Analysis adjusted for age, Hispanic ethnicity.
⁴Analysis adjusted for age, Hispanic ethnicity, non-English speaking.
⁵Analysis adjusted for age, relationship length, non-English speaking.

DISCUSSION

The current study indicates that young men with more traditional masculine gender role ideologies are more likely to report recent unprotected vaginal sex and IPV perpetration within the context of their heterosexual relationships; however, findings demonstrate no significant associations between these ideologies and having other female sex partners, forcing unprotected sex, or engaging in unprotected anal sex. Thus, while these findings lend some support to traditional masculine gender role ideologies being the linchpin explaining previous research findings linking non-condom use and IPV perpetration in men,^{4,5} lack of consistent findings in our sample suggest further research exploring this issue is needed.

Lack of consistent findings from our sample may be attributable, in part, to the diversity and simultaneously limited constructs of masculinity used in the MRAS measure. As described previously, the MRAS was designed to measure male status in society (i.e., men’s need for respect), male toughness (i.e., expectations men are physically tough and stoic), anti-femininity (i.e., intolerance for men exhibiting traditionally female attributes), and male hypersexuality (i.e., the view that men want sex all the time).⁴² The diversity of these attributes may be the cause of the measure’s low internal reliability, observed in our own study as well as others.^{42,43,45} However, additionally, a number of traditional masculine ideologies seen to be related to sexual assault, multiple partners, and partner violence are not included in the MRAS. Some of these specific ideologies include: 1. *traditional gendered sexual and relationship scripts*, including male control, sexual entitlement, coercive “seduction,” and sexual dominance in relationships; 2. *traditional male behavioral norms*, including male aggression, desire for risk/danger, and emotional detachment toward women; 3. *sexually conservative and negative attitudes toward women*, including views that women should be sexually passive and that a woman’s victimization from gender-based violence occurs as a consequence of her aggression, sexual teasing of men, or promiscuity; and 4) *adversarial heterosexual relationship norms* (e.g., women lie to get what they want from men).^{29–37,48,52–55} More in-depth qualitative and quantitative research is needed to better understand the diversity of masculine ideologies and how these relate to young men’s IPV

perpetration and sexual risk behaviors, as well as how these ideologies may link men's IPV perpetration and sexual risk.

While these findings offer important insight into male gender role ideologies and risk behaviors among young urban men, they must be considered in the context of certain study limitations. Generalizability of results are limited due to the use of a single community health center serving predominantly lower income Hispanic and Black men in the urban Northeast. Further, our findings may not even be generalizable to other community health centers in the Northeast. While our health center is typical of other community health centers in Boston in terms of its location within a lower income area and its predominantly racial/ethnic minority and lower income client population, it reaches a larger segment of immigrants and Hispanics than that seen at some of the other health centers in Boston. Our sample was largely Latino and, therefore, may reflect cultural expected sexual gender roles within the Latino community. Additionally, as our study included men seeking care at the health center as well as those accompanying others, findings cannot be generalized to those seeking care even within our collaborating health center. Unfortunately, as reasons for attending the health center were assessed at screening and not linked to survey data, we were unable to compare those attending the health center for their own care as opposed to the care of someone else, to determine whether these groups were comparable.

In addition to limitations related to generalizability, there are a number of other study limitations. This research was cross-sectional, so causality cannot be inferred from findings. Reliance on self-report makes these data subject to social desirability and recall biases; however, these biases would likely result in the under-reporting rather than over-reporting of sensitive issues such as perpetration of partner violence, unprotected sex and sexual infidelity. Due to the nature of the way questions were asked, we were unable to assess whether the reported sexual risk behavior occurred within the context of the abusive relationship. Longitudinal work, as well as studies with relationship-specific questions, will allow for greater elucidation of the nature of the relationships of male gender role ideology with sexual risk and IPV both independently and in conjunction and across greater time periods.

Conclusion and Implications

Young urban men endorsing more traditional masculine gender role ideologies appear to be more likely than those with more egalitarian gender role beliefs to engage in unprotected vaginal sex and IPV within heterosexual relationships. These findings may lend support to the theory that traditional male gender role ideologies constitute a shared risk source for IPV and sexual risk, but the lack of significant findings related to male gender role ideologies and multiple sex partners, as well as forced unprotected sex, highlight the need for further clarification on what different types of ideologies affect diverse sexual risk behaviors in this population. Further research is needed to better clarify the inconsistencies found in this exploratory work. Nonetheless, findings suggest that interventions to promote less traditional masculine gender role ideologies among young men may be helpful in addressing sexual risk and IPV perpetration for this population.

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REFERENCES

1. Center for Disease Prevention. Leading causes of death by age group, all races, males—U.S. 2002. *Office of the director. Men's health*. 2005. Available at: <http://www.cdc.gov/men/lcod/02all.pdf>.
2. Center for Disease Center. Cases of HIV infection and aids in the United States, 2003. *HIV/AIDS surveillance report*. 2005c;15.
3. Dunkle KL, Jewkes RK, Brown HC, et al. Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet*. 2004;363(9419):1415–1421.
4. El-Bassel N, Fontdevila J, Gilbert L, et al. HIV risks of men in methadone maintenance programs who abuse their intimate partners: a forgotten issue. *J Subst Abuse Treat*. 2001;12(1–2):29–43.
5. Raj A, Santana MC, La Marche AM, et al. Perpetration of partner violence associated with sexual risk behaviors among young adult men. In Press: *Am J Pub Health*.
6. Sabo D. Men's health studies: origins and trends. *J Am Coll Health Assoc*. 2000; 49(3):133–142.
7. Williams DR. The health of men: structured inequalities and opportunities. *Am J Public Health Nations Health*. 2003;93(5):724–731.
8. Centers for Disease Control and Prevention. Life-time and annual incidence of intimate partner violence and resulting injuries—Georgia, 1995. *MMWR CDC Surveill Summ*. 1998;47(40):849–853.
9. Centers for Disease Control and Prevention. Intimate partner violence among men and women—South Carolina, 1998. *MMWR CDC Surveill Summ*. 2000a;49(30): 691–694.
10. Centers for Disease Control and Prevention. Prevalence of intimate partner violence and injuries—Washington, 1998. *MMWR CDC Surveill Summ*. 2000b;49:849–853.
11. Plichta SB. Violence, health and use of health services. In: Falik MM, Collins KS, eds. *Women's Health and Care Seeking Behavior: The Commonwealth Fund Survey*. Baltimore, Maryland: Johns Hopkins University; 1996.
12. Schafer J, Caetano R, Cook CL. Rates of intimate partner violence in the United States. *Am J Public Health Nations Health*. 1998;88:1702–1704.
13. Straus MA, Gelles RJ. Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys. *J Marriage Fam*. 1986;48:465–479.
14. Tjaden P, Thoennes N. Full report of the prevalence, incidence, and consequences of violence against women: findings from the national violence against women survey. Washington: National Institute of Justice; 2000. Report NCJ 183781.
15. Amaro H, Raj A. Theoretical and measurement issues in the study of women's relational power in HIV risk reduction. *Sex Roles*. 2000;42(7/8):723–749.
16. Heise L, Ellsberg M. Ending violence against women. population reports. Volume Xxvii, Number 4. *Issues in World Health*. December, 1999. Available at: <http://www.infoforhealth.org/pr/l11edsum.shtml>.
17. Schmucl E, Schenker JG. Violence against women: the physician's role. *Eur J Obstet Gynecol Reprod Biol*. 1998;80(2):239–245.
18. Bauer HM, Gibson P, Hernandez M, et al. Intimate partner violence and high-risk sexual behaviors among female patients with sexually transmitted diseases. *Sex Transm Dis*. 2002;29(7):411–416.
19. Decker MK, Silverman JG, Raj A. Dating violence and STD/HIV testing and diagnosis among adolescent females. *Pediatrics*. 2005;116:e272–e276.
20. He H, McCoy HV, Stevens SJ, et al. Violence and HIV sexual risk behaviors among female sex partners of male drug users. *Women Health*. 1998;27(1–2):161–175.

21. Rickert VI, Wiemann CM, Harrykissoo SD, et al. The relationship among demographics, reproductive characteristics, and intimate partner violence. *Am J Obstet Gynecol*. 2002;187(4):1002–1007.
22. Roberts TA, Auinger P, Klein JD. Intimate partner abuse and the reproductive health of sexually active female adolescents. *J Adolesc Health*. 2005;36(5):380–385.
23. Silverman JG, Raj A, Mucci LA, et al. Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *J Am Med Assoc*. 2001;286(5):572–579.
24. Silverman JG, Raj A, Clements K. Dating violence and sexual risk in a representative sample of high school students. *Pediatrics*. 2004;114(2):e220–e225.
25. Wingood GM, DiClemente RJ. Consequences of having a physically abusive partner on the condom use and sexual negotiation practices of young adult African-American women. *Am J Public Health Nations Health*. 1997;87(6):1016–1018.
26. Wingood GM, DiClemente RJ. Partner influences and gender-related factors associated with noncondom use among young adult African-American women. *J Community Psychol*. 1998;26:29–53.
27. Hathaway JE, Willis G, Zimmer B, et al. Impact of partner abuse on women's reproductive lives. *J Am Med Womens Assoc*. 2005;60(1):42–45.
28. Raj A, Liu R, McCleary-Sills J, et al. South Asian victims of intimate partner violence more likely than non-victims to report sexual health concerns. *J Immigr Health*. 2005;7(2):85–91.
29. Andersen B, Cyranowski JM, Espindle, D. Men's sexual self-schema. *J Pers Soc Psychol*. 1999;76:645–661.
30. Anderson VN, Simpson-Taylor D, Hermann DJ. Gender, age and rape-supportive rules. *Sex Roles*. 2004;50(1–2):77–90.
31. Byers ES. How well does the traditional sexual script explain sexual coercion? Review of a program of research. *J Psychol Human Sex*. 1996;8(1):7.
32. Chiroro P, Bohner G, Viki GT, et al. Rape myth acceptance and rape proclivity: expected dominance versus expected arousal as mediators in acquaintance-rape situations. *J Interpers Violence*. 2004;19(4):427–441.
33. Greendlinger V, Byrne D. Coercive sexual fantasies of college men as predictors of self-reported likelihood to rape and overt sexual aggression. *J Sex Res*. 1987;23(1):1–11.
34. Krahe B. Sexual scripts and sexual aggression. In: Eckes T, Trautner HM, eds. *The Developmental Social Psychology of Gender*. Mahwah, New Jersey: Erlbaum; 2000.
35. Malamuth NM, Scokloski RJ, Koss MP, et al. Characteristics of aggressors against women: testing a model using a national sample of college students. *J Consult Clin Psychol*. 1991;59:670–681.
36. Murnen SK, Wright C, Kaluzny G. If “Boys Will Be Boys,” then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles*. 2002;17:359–375.
37. Ryan K. Further evidence for a cognitive component of rape. *Aggress Violent Behav*. 2004;9:579–604.
38. Doss BD, Hopkins JR. The multicultural masculinity ideology scale: validation from three cultural perspectives. *Sex Roles*. 1998;38(9–10):719–741.
39. Bowleg L, Lucas KJ, Tschann JM. “The Ball Was Always in His Court”: an exploratory analysis of relationship scripts, sexual scripts and condom use among African American women. *Psychol Women Q*. 2004;28(1):70–82.
40. DeLamater J. Females, males and sexuality. In: Kelley K, ed. *Gender Differences in Sexual Scenarios*. Albany, New York: State University of New York; 1987:127–139.
41. Noar SM, Morokoff PJ. The relationship between masculinity ideology, condom attitudes, and condom use stage of change: a structural equation modeling approach. *Int J Mens Health*. 2002;1(1):43–58.
42. Pleck JH, Sonenstein FL, Ku LC. Masculinity ideology: its impact on adolescent males' heterosexual relationships. *J Soc Issues*. 1993;49(3):11–29.

43. Pleck JH, O'Donnell LN. Gender attitudes and health risk behaviors in African-American and Latino early adolescents. *Matern Child Health J*. 2001;5:265–272.
44. Seal DW, Ehrhardt AA. HIV-prevention-related sexual health promotion for heterosexual men in the United States: pitfalls and recommendations. *Arch Sex Behav*. 2004;33(3):211–222.
45. Shearer CL, Hosterman SJ, Gillen MM, et al. Are traditional gender role attitudes associated with risky sexual behavior and condom-related beliefs. *Sex Roles*. 2005;52(5/6):311–324.
46. Schoeneberger M, Logan T, Leukefeld, C. Gender roles, HIV risk behaviors, and perceptions of using female condoms among college students. *Popul Res Policy Rev*. 1999;18(1–2):119–136.
47. Spencer M, Fegley S, Harpalani V, et al. Understanding hypermasculinity in context: a theory-driven analysis of urban adolescent males' coping responses. *Res Hum Dev*. 2004;1(4):229–257.
48. Sugarman DB, Frankel SL. Patriarchal ideology and wife assault: a meta-analytic review. *J Fam Violence*. 1996;11:13–40.
49. Forste R, Haas DW. The transition of adolescent males to first intercourse: anticipated or delayed. *Perspect Sex & Repro Health*. 2001;34(4), 2002 <http://www.guttmacher.org/pubs/journals/3418402.html>.
50. Straus MA, Hamby SL, Boney-McCoy S, et al. The revised conflict tactics scales (Cts2). *J Fam Issues*. 1996;17(3):283–316.
51. Rothman KJ, Greenland S. *Modern Epidemiology*. 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 1998.
52. Hill MS, Fischer AR. Does entitlement mediate the link between masculinity and rape-related variables? *J Consult Psychol*. 2001;48:39–50.
53. Malamuth NM, Brown LM. Sexually aggressive men's perceptions of women's communications: testing three explanations. *J Pers Soc Psychol*. 1994;67:699–712.
54. Mosher DL, Anderson RD. Macho personality, sexual aggression and reactions to guided imagery of realistic rape. *J Res Pers*. 1986;20:77–94.
55. Mosher DL, Sirkin M. Measuring a macho personality constellation. *J Res Pers*. 1984;18:153–163.