The Role of Young Adults' Pleasure Attitudes in Shaping Condom Use

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Condoms can help young adults protect themselves from sexually transmitted infections and unintended pregnancy. We examined young people's attitudes about whether condoms reduced pleasure and how these attitudes shape condom practices. We used a nationally representative sample of 2328 heterosexually active, unmarried 15- to 24-year-old young adults to document multivariate associations with condom nonuse at the last sexual episode. For both young men and women, pleasure-related attitudes were more strongly associated with lack of condom use than all sociodemographic or sexual history factors. Research and interventions should consistently assess and address young people's attitudes about how condoms affect pleasure. (Am J Public Health. Published online ahead of print May 14, 2015: e1-e4. doi:10.2105/AJPH. 2015.302567)

Because of their unique ability to prevent both pregnancy and sexually transmitted infections (STIs), male condoms are a vital public health tool. For decades, researchers have worked to understand and promote young adults' consistent condom use. Although 15- to 24-year-old young adults represent only 25% of the sexually experienced population in the United States, they account for 53% of all unintended pregnancies and nearly half of all new STI cases.²

Many studies document the sociodemographic and sexual history factors most associated with young adults' condom use,^{3–5} including age, education, and number of sexual partners.⁶ Research also explores psychosocial factors such as self-esteem^{7,8} and condom self-efficacy,⁹ as well as gender inequality that may

render condom use especially difficult for young women.¹⁰ Relatively little research explores young people's attitudes about condoms and sexual pleasure.

Burgeoning research among samples of "older" adults^{11,12} and college students^{13,14} has suggested that attitudes about how condoms affected sexual pleasure might influence condom use practices, although this work has primarily focused on men. 15,16 One exploratory mixed-gender study documented that both adult women and men who reported that condoms undermine arousal and enjoyment were least likely to use them. 17 However, fewer studies have explored such pleasure attitudes among adolescents and young adults, especially among young women,18 and no nationally representative studies of this topic exist for any age group. We addressed these limitations using a nationally representative sample of young adult women and men to assess how attitudes about condoms and sexual pleasure might be related to condom practices.

METHODS

We worked with data from the 2006 to 2010 National Survey of Family Growth (NSFG), which collects information on sexual behavior and contraception (among other things) in a national probability sample of 15-to 44-year-old respondents. We limited our sample to nonsterile, unmarried 15- to 24-year-old respondents who had heterosexual sexual intercourse in the past month and were not pregnant or trying to get pregnant (1183 women, 1145 men).

Our outcome variable was condom nonuse at last sexual episode served. Our pleasure variable was captured by the following question: "What is the chance that if you/your partner used a condom during sex, you would feel less physical pleasure?" Response categories were no chance, a little chance, a 50–50 chance, a pretty good chance, and an almost certain chance. Control variables included age, education, race/ethnicity, public assistance in the last year, number of opposite-gender partners in the last year, pregnancy ambivalence, condom-related embarrassment, and appreciation of condom use.

We performed all analyses in STATA/MP version 13 (StataCorp, College Station, TX) and

ran all analyses separately for women and men. All analyses used the svy command in STATA to adjust for the sampling and weighting scheme of the NSFG. For bivariate analyses, we used the χ^2 test to gauge the strength of associations between all controls and condom nonuse at last sexual episode. For multivariate analyses, we used logistic regression to examine the association between all control variables and condom nonuse.

RESULTS

Fewer than one half (44%) of respondents reported no condom use at last penile vaginal intercourse in the last month (53% of young women, 34% of young men). In terms of condoms and pleasure, 22% of respondents reported there was no chance that condoms would reduce their pleasure (31% women, 12% men), 27% reported a little chance (32% women, 22% men), 23% reported a 50–50 chance (20% women, 25% men), 18% reported a pretty good chance (11% women, 25% men), and 11% reported an almost certain chance (7% women, 14% men).

Table 1 presents the variables' associations with condom nonuse at the bivariate level. Sociodemographic and psychosocial associations followed expected directions: lack of condom use was more common among older respondents, those who had received public assistance in the last year, and those who would be pleased to learn their partner was pregnant. Among those who said there was a certain chance that condoms would reduce pleasure, 68% did not use condoms (80% women, 61% men), compared with 54% of those who said there was a pretty good chance (71% women, 46% men), 52% of those who said there was a 50-50 chance (63% women, 44% men), 36% of those who said there was a little chance (42% women, 28% men), and 29% of those who said there was no chance (34% women, 18% men).

Attitudes about condoms and pleasure remained significantly associated with condom practices in multivariate models (Table 2). Pleasure-related attitudes had stronger associations with lack of condom use than all other variables. Among young women, compared with those who said condoms were unlikely to reduce pleasure, those who said condoms were almost certain to reduce pleasure were

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TABLE 1—Sociodemographic Characteristics, Pleasure Attitudes, and Psychosocial Characteristics of 15- to 24-Year-Old Women (n = 1183) and Men (n = 1090): United States, 2006–2010 National Survey of Family Growth

Variable	No Use of Condom		
	Women, P or No. (%)	Men, P or No. (%)	Total, P or No. (9
Sociodemographic variables			
Age, y		.001	.001
15-19	622 (48.7)	619 (30.2)	1241 (39.9)
20-24	561 (50.3)	471 (49.8)	1032 (50.0)
Education	.01		.05
No high school diploma or GED	463 (50.5)	507 (39.3)	970 (44.4)
High school diploma or GED	340 (58.7)	294 (43.2)	634 (51.5)
Any college or more	380 (41.7)	289 (38.8)	669 (40.4)
Race/ethnicity	.05		
Non-Hispanic White	611 (48.1)	486 (40.9)	1097 (44.7)
Non-Hispanic Black	276 (43.1)	286 (34.4)	562 (38.5)
Non-Hispanic other	64 (66.4)	49 (27.5)	113 (49.7)
Hispanic	232 (55.3)	269 (46.9)	501 (50.8)
Received public assistance in last year	.01	.001	.001
No	669 (44.9)	716 (37)	1385 (40.8)
Yes	514 (57.7)	374 (47.2)	888 (53.0)
No. of opposite-sex partners in last year			
One	762 (50.7)	551 (42.5)	1313 (47.1)
Two or more	421 (47.3)	539 (37.6)	960 (41.9)
Pleasure attitudes			
What is the chance that if you/your partner used a condom during sex, you'd feel less physical pleasure?	.001	.001	.001
No chance	371 (33.5)	130 (17.5)	501 (29.1)
A little chance	353 (42.1)	275 (27.8)	628 (36.3)
50-50 chance	245 (63.0)	261 (43.8)	506 (52.4)
A pretty good chance	135 (71.3)	275 (46.3)	410 (53.8)
An almost certain chance	79 (80.1)	149 (61.2)	228 (67.8)
Psychosocial variables			
If you got pregnant/got your partner pregnant now, how would you feel?	.001	.01	.001
Upset	838 (43.7)	693 (35.2)	1531 (39.8)
Pleased	337 (65.8)	381 (49.5)	718 (56.7)
Wouldn't care	8 (46.0)	16 (37.6)	24 (39.2)
What is the chance that it would be embarrassing for you and a new partner to discuss using a condom?			.05
No chance	847 (48.4)	703 (37.9)	1550 (43.6)
A little chance	168 (47.7)	213 (36.9)	381 (41.6)
50-50 chance	72 (61.4)	80 (52.3)	152 (56.6)
A pretty good chance	60 (45.1)	56 (52.4)	116 (49.1)
An almost certain chance	36 (68.6)	38 (56.1)	74 (62.3)
What is the chance that if a new partner used a condom, you would appreciate it?	.001	.05	.001
An almost certain chance	864 (43.1)	488 (37.5)	1352 (41.1)
No chance	10 (76.3)	13 (59.5)	23 (66.2)
A little chance	18 (91.7)	35 (66.9)	53 (73.0)
50-50 chance	35 (87.4)	119 (51.2)	154 (60.0)
A pretty good chance	256 (62.6)	435 (37.1)	691 (46.1)

Note. GED = general equivalency diploma. Percentages are weighted to account for survey design effects.

TABLE 2-Multivariate Logistic Regression Models of Condom Nonuse by Gender: United States, 2006-2010 National Survey of Family Growth

Variable	Women (n = 1183) OR (95% CI) ^a	Men (n = 1090) OR (95% C
Sociodemographic variables		
Age 20-24 y (Ref = 15-19)	1.00 (0.70, 1.44)	2.70*** (1.71, 4.26)
Education (Ref = no high school diploma or GED)		
High school diploma or GED	1.59* (1.07, 2.36)	1.06 (0.67, 1.65)
Any college or more	0.94 (0.57, 1.56)	0.78 (0.43, 1.41)
Race/ethnicity (Ref = Non-Hispanic White)		
Non-Hispanic Black	0.57* (0.34, 0.95)	0.62 (0.35, 1.10)
Non-Hispanic other	1.70 (0.85, 3.39)	0.51 (0.24, 1.09)
Hispanic	0.98 (0.64, 1.51)	0.95 (0.61, 1.49)
Received public assistance in last year, yes (Ref = no)	1.66** (1.15, 2.41)	1.77* (1.07, 2.90)
≥ 2 opposite-sex partners in last year (Ref = 1)	0.93 (0.65, 1.34)	0.80 (0.55, 1.17)
Pleasure attitudes		
Chance that if you/your partner used a condom during sex, you'd feel less physical pleasure (Ref = No chance)		
A little chance	1.44 (0.94, 2.19)	1.97 (0.95, 4.09)
50-50 chance	3.28*** (1.87, 5.74)	3.97***(2.00, 7.88)
A pretty good chance	4.14*** (2.10, 8.17)	5.11*** (2.41, 10.82)
An almost certain chance	8.66*** (4.35, 17.27)	9.08*** (3.83, 21.53)
Psychosocial variables		
If you got pregnant/got your partner pregnant now, how would you feel? (Ref = upset)		
Pleased	2.13*** (1.43, 3.17)	1.85** (1.22, 2.80)
Wouldn't care	0.51 (0.12, 2.16)	0.87 (0.20, 3.85)
Chance that it would be embarrassing for you and a new partner to discuss using a condom (Ref = no chance)		
A little chance	0.81 (0.50, 1.30)	0.96 (0.59, 1.55)
50-50 chance	1.40 (0.70, 2.78)	1.53 (0.65, 3.61)
A pretty good chance	0.66 (0.28, 1.56)	1.57 (0.71, 3.47)
An almost certain chance	1.61 (0.45, 5.80)	2.76 (0.74, 10.23)
Chance that if a new partner used a condom, you would appreciate it (Ref = an almost certain chance)		
No chance	1.98 (0.25, 15.90)	3.10 (0.82, 11.67)
A little chance	9.78** (2.18, 43.83)	3.13* (1.27, 7.69)
50-50 chance	3.63* (1.34, 9.80)	1.74 (0.89, 3.38)
A pretty good chance	2.33*** (1.63, 3.33)	0.90 (0.56, 1.46)

Note. CI = confidence interval; GED = general equivalency diploma; OR = odds ratio.

8.7 times as likely to not use a condom (P<.001). Among young men only, the odds were 9.1 times as high (P<.001). Odds ratios for this association followed a positive, stepwise progression in that the greater the chance of pleasure reduction, the greater the odds of condom nonuse.

DISCUSSION

In this nationally representative study of 15to 24-year-old young adults, we found striking relationships between condom-related pleasure attitudes and lack of condom use at last sex in the last month. Perceptions about how condoms reduce sexual pleasure were more strongly associated with condom nonuse than all other sociodemographic, sexual history, or psychosocial factors. Although proportionately more men than women reported that condoms would reduce pleasure, the direction and magnitude of the relationship between pleasure attitudes and condom practices were virtually identical for both genders.

Future research and interventions should assess young adults' beliefs about how

condoms reduce pleasure. Failure to do so could mean overlooking the young adults least likely to use condoms. Sexual health professionals might also wish to share ideas on how to better integrate condoms into the sexual experience with both male and female clients. Young men might struggle with condoms' fit and feel, 20,21 whereas young women might struggle with texture or lubrication; such clients should be encouraged to try a variety of condom types, sizes, and lubricants. We believe these findings also underscore the value of affirmative models of sexual health. Attending

^aAll OR values are weighted to account for survey design effects.

^{*}P < .05; **P < .01; ***P < .001.

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to pleasure and sexual well-being for both young men and women could gain new insights compared with a disease model alone.

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Contributors

J. A. Higgins conceived the study design, oversaw the analyses, and took the lead in writing the article. Y. Wang managed the data, conducted analyses, created tables, and assisted with article preparation.

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Human Participant Protection

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References

- 1. Finer LB, Henshaw SK. Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspect Sex Reprod Health*. 2006;38(2):90–96.
- 2. Centers for Disease Control. Sexually Transmitted Disease Surveillance 2010. Atlanta, GA: US Department of Health and Human Services; 2011.
- 3. Sanders SA, Reece M, Herbenick D, Schick V, Dodge B, Fortenberry JD. Condom use during most recent vaginal intercourse event among a probability sample of adults in the United States. *J Sex Med.* 2010;7(suppl 5): 362–373.
- 4. Fortenberry JD, Schick V, Herbenick D, Sanders SA, Dodge B, Reece M. Sexual behaviors and condom use at last vaginal intercourse: a national sample of adolescents ages 14 to 17 years. *J Sex Med.* 2010;7(suppl 5):305–314.
- Santelli JS, Brener ND, Lowry R, Bhatt A, Zabin LS. Multiple sexual partners among US adolescents and young adults. Fam Plann Perspect. 1998;30(6):271–275.
- 6. Reece M, Herbenick D, Schick V, Sanders SA, Dodge B, Fortenberry JD. Condom use rates in a national probability sample of males and females ages 14 to 94 in the United States. *J Sex Med.* 2010;7(suppl 5):266–276.

- Basen-Engquist K. Psychosocial predictors of "safer sex" behaviors in young adults. AIDS Educ Prev. 1992;4 (2):120–134
- 8. Shrier LA, Harris SK, Sternberg M, Beardslee WR. Associations of depression, self-esteem, and substance use with sexual risk among adolescents. *Prev Med.* 2001;33(3):179–189.
- 9. Wulfert E, Wan CK. Condom use: a self-efficacy model. *Health Psychol.* 1993;12(5):346–353.
- Pulerwitz J, Amaro H, De Jong W, Gortmaker SL, Rudd R. Relationship power, condom use and HIV risk among women in the USA. *AIDS Care*. 2002;14(6):789-800
- 11. Crosby R, Milhausen R, Yarber WL, Sanders SA, Graham CA. Condom "turn offs" among adults: an exploratory study. *Int J STD AIDS*. 2008;19(9):590–594
- 12. Randolph ME, Pinkerton SD, Bogart LM, Cecil H, Abramson PR. Sexual pleasure and condom use. *Arch Sex Behav.* 2007;36(6):844–848.
- 13. Conley TD, Collins BE. Differences between condom users and condom nonusers in their multidimensional condom attitudes. *J Appl Soc Psychol.* 2005;35 (3):603–620.
- 14. Hill BJ, Amick EE, Sanders SA. Condoms and US college-aged men and women: briefly assessing attitudes toward condoms and general condom use behaviours. *Sex Health*. 2011;8(3):372–377.
- 15. Hensel DJ, Stupiansky NW, Herbenick D, Dodge B, Reece M. Sexual pleasure during condom-protected vaginal sex among heterosexual men. *J Sex Med.* 2012;9 (5):1272–1276.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). Men and AIDS: A Gendered Approach. Geneva, Switzerland: UNAIDS; 2000.
- 17. Higgins JA, Tanner AE, Janssen E. Arousal loss related to safer sex and risk of pregnancy: implications for women's and men's sexual health. *Perspect Sex Reprod Health*. 2009;41(3):150–157.
- 18. Higgins JA, Fennell JL. Providing for women's pleasure in the next generation of condoms. *J Sex Med.* 2013;10(12):3151–3153.
- Lepkowski J, Mosher W, Davis K, Groves R, Van Hoewyk J. The 2006–2010 National Survey of Family Growth: Sample Design and Analysis of a Continuous Survey. Hyattsville, MD: National Center for Health Statistics: 2010.
- 20. Reece M, Briggs L, Dodge B, Herbenick D, Glover R. Perceptions of condom fit and feel among men living with HIV. *AIDS Patient Care STDS*. 2010;24(7):435–440.
- 21. Reece M, Herbenick D, Dodge B. Penile dimensions and men's perceptions of condom fit and feel. *Sex Transm Infect.* 2009;85(2):127–131.