

Teenage Partners' Communication About Sexual Risk and Condom Use: The Importance Of Parent-Teenager Discussions

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Context: *Teenagers' communication with their partners about sex and their use of condoms may be influenced by the discussions teenagers have with their parents about sex. However, little is known about the process of parent-teenager communication on this topic. Understanding both what parents discuss with their children and how they discuss it may lead to a greater understanding of teenagers' sexual behavior.*

Methods: *Interviews were conducted with 372 sexually active black and Hispanic youth aged 14–17 from Alabama, New York and Puerto Rico. Regression analyses were used to examine parent-teenager discussions about sexuality and about sexual risk, and parental communication skills as predictors of teenagers' discussions about sexual risk with a partner and teenagers' condom use.*

Results: *Parent-teenager discussions about sexuality and sexual risk were associated with an increased likelihood of teenager-partner discussions about sexual risk and of teenagers' condom use, but only if parents were open, skilled and comfortable in having those discussions. Teenagers' communication with their partner about sexual risk also was associated with greater condom use, but the relationship between parent-teenager communication and teenagers' condom use was independent of this association.*

Conclusions: *The influence on teenagers of parent-teenager discussions about sexuality and sexual risk depends on both what parents say and how they say it. Programs that foster parent-teenager communication about sexuality and sexual risk must emphasize both of these aspects.*

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Communicating with a sex partner is an important self-protective health behavior. It can help one to learn about a partner's prior sexual behavior and level of risk, information that will presumably lead to safer sexual behaviors (e.g., abstaining from sex with high-risk partners and using a condom). Without information about a partner's past sexual behavior, people must judge the safety of a sexual encounter on other, less valid indicators, such as the partner's personality traits,¹ appearance² or social group membership.³

Communication about sex as a means to promote safer sex is especially important for adolescents. By age 19, 86% of males and 75% of females have initiated intercourse, and about a quarter have had four or more sexual partners.⁴ However, only 57% of teenagers report having used a condom during their most recent sexual intercourse.⁵ As a result, each year, about three million adolescents acquire a sexually transmitted disease (STD),⁶ and 16% of women aged 15–19 become pregnant.⁷

Several researchers have reported a positive association between communication about sex and safer sexual behaviors among adolescents.⁸ For example, in one study of adolescent women, communi-

cating to a partner a desire to use condoms was associated with increased condom use, and the ability to communicate with prospective partners about their sexual history was associated with having fewer partners.⁹ Thus, encouraging adolescents to communicate with prospective partners about sex is potentially an effective strategy for preventing STDs, including HIV, and teenage pregnancy.

Although talking about sex is an important behavior, it is not a simple one. Despite the pervasiveness of sex in the American media, open discussions about the topic are made difficult by sociocultural taboos and by the "secrecy" surrounding it.¹⁰ Norms that prohibit openness can hinder discussions about sexual behavior and can be obstacles to sexuality education and the dissemination of information about sex.¹¹ The difficulty and discomfort many Americans experience when discussing sexual behavior is illustrated by results from a nationwide survey indicating that 20–25% of married and unmarried adults have no knowledge of their partner's sexual history.¹²

The intimate discussions necessary to obtain information about a partner's sexual history and to negotiate safer sex may be particularly difficult for teenagers, who

have relatively little experience with such discussions. Few data are available about the determinants of adolescent partners' communication about sex. Likely factors include perceived norms for discussing sex, the perceived risk level of one's sex partner, the teenager's knowledge about sex, and the teenager's comfort and skill in discussing sex. All of these factors may be influenced by what teenagers' parents have communicated to them about sex. For instance, one study found that teenagers who had discussed general sexuality issues with a parent were more comfortable communicating with a partner than were their peers who had not, but teenagers who had discussed AIDS-related issues with a parent were less comfortable than others about communicating with a partner.¹³

In addition to what parents say, the way in which they say it can influence teenagers' behavior. For example, a discussion that consists solely of a parent's demanding that a child refrain from having sex may send a message that everything about sex is to be avoided, and may thus suppress the teenager's desire to discuss sex with a partner. By contrast, a discussion in which a parent openly talks about sexuality and invites the child to ask questions is likely to reduce the adolescent's discomfort with discussing sex with a partner and to increase the chances that the adolescent will do so. Although studies of parent-teenager discussions about sex have assessed the content of the discussions,¹⁴ parents' attitudes about sex¹⁵ and the timing of the discussions,¹⁶ few have examined the joint impact of the content and process of parent-teenager discussions.¹⁷

In the research described in this article, we examined how teenagers' communication with their sex partners and their condom use are affected by three factors

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related to parent-teenager communication: parent-teenager discussions about sexuality issues; parent-teenager discussions about issues related to sexual risk; and parents' openness, skill and comfort in discussing sex with their child (which we refer to as responsiveness).

We hypothesized that both types of parent-teenager discussions would promote teenagers' communication with their partners, and that these associations would be moderated by parental responsiveness. We expected that when responsiveness was high, both types of discussion would relate to greater teenager-partner communication, but that when responsiveness was low, the relationship would be weaker and possibly nonsignificant.

We also explored the documented associations of both parent-teenager communication¹⁸ and teenager-partner communication¹⁹ with condom use. We expected that sexuality discussions and risk discussions would each interact with parental responsiveness to predict condom use. Furthermore, we hypothesized that the association between parent-teenager communication and condom use would be mediated by communication between teenagers and their partners.

Methods

Sample

Our analyses are based on a subsample of participants in the Family and Adolescent Risk Behavior and Communication Study, a cross-sectional survey of adolescent-mother pairs conducted between October 1993 and June 1994. Participants were recruited from two public high schools in Montgomery, Alabama, and one public high school each in New York City and San Juan, Puerto Rico. Each selected high school had an overrepresentation of black or Puerto Rican adolescents, groups disproportionately at risk for HIV.²⁰ A description of the sample appears elsewhere.²¹

A list of potential participants was obtained from each high school, and students were recruited through fliers distributed in homerooms and sent to their homes. Interested teenagers contacted the researchers by phone; those who wished to participate and their mothers were screened for eligibility. For an adolescent-mother pair to be eligible for inclusion, the teenager had to be 14–16 years old, had to be enrolled in grades 9–11, and had to have lived with the mother and to have lived in the recruitment area for at least the past 10 years; the mother had to be the teenager's biological or adoptive parent or stepmother. Of the 1,733 pairs who provided

screening information, 1,124 were eligible, and 982 (87% of eligible pairs) were interviewed. The final sample included a few teenagers who had turned 17 between their initial screening and interview.

Face-to-face interviews were conducted separately with the mother and the adolescent by an interviewer of the same ethnicity and gender as the teenager. Mothers were interviewed first whenever possible (91% of the time), to ease the adolescents' concerns that their responses would be discussed with their mother. Mothers were paid \$45 for their participation, and adolescents were paid \$25. Analyses of data collected during the interviews revealed that 75 pairs did not meet eligibility requirements; the final study sample consisted of the remaining 907 adolescent-mother pairs.

Our analyses are restricted to the 372 pairs in which the adolescent reported having engaged in penile-vaginal intercourse at least once. On average, these teenagers had first had intercourse at age 13.7 and had had 3.9 partners.

Measures

The analyses involved five measures: indices of sexuality discussions, risk discussions, responsiveness and partner communication (constructed using factor analysis), and single-item measures of condom use. Because our focus is teenagers' behavior, we took all measures of parent-teenager communication from the adolescents' reports rather than the mothers'. Adolescents' and mothers' reports were significantly but not highly correlated ($r=.54$ for sexuality discussions, $r=.26$ for risk discussions and $r=.28$ for responsiveness).

• *Sexuality and risk discussions.* Adolescents reported whether they had ever discussed with their mother any of 11 topics related to sexuality. A principal-components analysis divided these into two factors: Sexuality discussions comprised seven topics (when to start having sex, birth control, reproduction, physical and sexual development, menstruation, masturbation and handling pressure to have sex), and risk discussions comprised the remaining four (condoms, HIV and AIDS, STDs and choosing sex partners). The sexuality discussions index was formed by summing the number of topics discussed; scores therefore ranged from zero to seven (mean=3.20, standard deviation=2.10, $\alpha=.75$). Similarly, the risk discussions index was computed by summing the number of topics discussed, so scores ranged from zero to four (mean=2.72,

standard deviation=1.28, $\alpha=.66$).

• *Parental responsiveness.* Adolescents rated their agreement (on a scale ranging from one, indicating strong disagreement, to four, indicating strong agreement) with eight items that assessed their perceptions of their mothers' openness, skill and comfort in discussing the 11 topics. The eight items were "My mother tries to understand how I feel about topics like this," "My mother knows how to talk to me about topics like this," "My mother and I talk openly and freely about these topics," "My mother doesn't talk to me about these topics—she lectures me," "My mother doesn't know enough about topics like this to talk to me," "My mother wants to know my questions about these topics," "I can ask my mother the questions I really want to know about topics like this" and "If I talked to my mother about these topics, she would think I'm doing these things." We reversed negatively worded items, then summed adolescents' responses to the eight items to form the index; the range of scores was 8–32 (mean=22.22, standard deviation=4.37, $\alpha=.81$).

• *Partner communication.* Adolescents reported whether they had discussed four topics related to sexual risk—birth control, condoms, STDs, and HIV and AIDS—with their current or most recent boyfriend or girlfriend. We formed the index of partner communication by counting the number of topics discussed; index scores therefore ranged from zero to four (mean=2.65, standard deviation=1.50, $\alpha=.82$).

• *Condom use.* Adolescents reported whether they had used a condom during their most recent sexual intercourse (70% answered yes) and rated their lifetime condom use on a scale of one, signifying never, to five, indicating always (mean=3.79, standard deviation=1.40).

Results

Partner Communication

We first examined the simple correlations between the parent-teenager communication factors and teenagers' communication with their partners. Sexuality discussions were positively related to partner communication ($r=.25$, $p<.001$), as were risk discussions ($r=.18$, $p<.001$); responsiveness showed a tendency for a positive association, but the correlation was of only marginal statistical significance ($r=.09$, $p=.08$).

Next, we used regression analyses to determine whether the relationship between each type of discussion and partner communication was moderated by responsiveness. (Moderation is examined by testing the interaction between two

terms.*) We tested the two interactions in separate analyses because parent-teenager discussions about sexuality can have different effects on adolescents than parent-teenager discussions about risk issues such as AIDS.²²

The first set of analyses focused on sexuality discussions, responsiveness and their interaction. There was a significant effect for sexuality discussions, but also a significant interaction between discussions and responsiveness (Table 1), which indicates that the effect of discussions on teenager-partner communication differed depending on responsiveness. We thus probed the interaction by computing the association between sexuality discussions and teenager-partner communication when responsiveness was high and when it was low. The results revealed that the association was positive and significant when responsiveness was high but was weaker and of marginal significance when responsiveness was low. This contrast can be seen by the slopes of the lines plotting predicted values of partner communication based on this interaction (Figure 1).

A similar pattern of results emerged from the analyses of risk discussion, responsiveness and their interaction. Both risk discussions and the interaction had significant effects; therefore, the association between risk discussions and teenager-partner communication varied at different levels of responsiveness. The probe of the interaction showed that the relationship was positive and significant when responsiveness was high, but was not significant when responsiveness was low.

Condom Use

Next, we turn to our hypotheses that teenagers' communication with both their parents and their partners influences their condom use, and that teenager-partner communication mediates the role of parent-teenager communication. To demonstrate mediation, we must show the following: that parent-teenager communication is associated with partner communication, that

*In testing the interaction terms, we followed procedures outlined elsewhere. (Source: Aiken LS and West SG, *Multiple Regression: Testing and Interpreting Interactions*, Newbury Park, CA: Sage Publications, 1990.) First, we centered all predictors by subtracting the sample mean from each individual's score, and then we created the cross-product terms. Centering the predictors when testing interactions between continuous variables reduces multicollinearity among the predictors and thus facilitates the interpretation of interactions. We probed significant interactions by computing the simple slope of the regressions of sexuality discussions or risk discussions on partner communication at high and low levels of responsiveness, using one standard deviation above and below the mean as the high and low values, respectively.

both teenager-partner and parent-teenager communication are associated with condom use, and that the association between parent-teenager communication and condom use is weakened when teenager-partner communication is controlled.²³ We have already established that the first association exists; we now focus on the remaining steps.

We used logistic regression analysis to assess the effect of teenager-partner communication on condom use at most recent intercourse and linear regression analysis to evaluate its effect on lifetime condom use. The results indicated that partner communication was only marginally related to condom use during most recent intercourse ($b=.172, p=.07$), but greater partner communication was significantly associated with greater lifetime use ($b=.203, p=.001$).

To examine the relationship between parent-teenager communication and condom use, we conducted two series of regression analyses that paralleled those used to examine teenager-partner communication. The first included sexuality discussions, responsiveness and their interaction; the second included risk discussions, responsiveness and their interaction. Each was applied to condom use during most recent intercourse and lifetime condom use.

In the analyses pertaining to sexuality discussions, the interaction between these discussions and parental responsiveness significantly increased the likelihood of both condom use at last intercourse and lifetime use (Table 2, page 120). Probing these interactions yielded similar results (not shown): When parental responsiveness was high, sexuality discussions were significantly associated with increased condom use during most recent intercourse ($b=.212, p=.02$) and lifetime condom use ($b=.110, p=.03$). However, at low levels of responsiveness, sexuality discussions were negatively associated with condom use during most recent intercourse ($b=-.246, p=.004$) and (albeit at a marginal level of statistical significance) to lifetime condom use ($b=-.091, p=.08$).

Similarly, the interaction of risk discussions

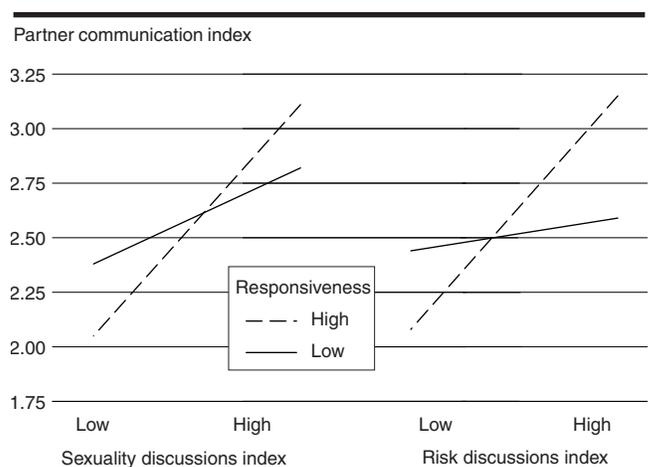
Table 1. Linear regression coefficients showing effects of parent-teenager communication variables on teenager-partner communication about sex, by type of parent-teenager communication, Family and Adolescent Risk Behavior and Communication Study, 1993–1994

Type of communication and variable	b	SE
Sexuality		
Sexuality discussions	.178***	.039
Responsiveness	-.003	.019
Sexuality x responsiveness	.017*	.009
$F(3, 360)=9.25, p<.001$		
$R^2=.07$		
Probe of sexuality discussions at high responsiveness	.252***	.055
Probe of sexuality discussions at low responsiveness	.103	.054
Risk		
Risk discussions	.238***	.066
Responsiveness	.010	.019
Risk x responsiveness	.041**	.014
$F(3, 360)=7.14, p<.001$		
$R^2=.056$		
Probe of risk discussions at high responsiveness	.418***	.098
Probe of risk discussions at low responsiveness	.058	.079

* $p<.05$. ** $p<.01$. *** $p<.001$. Note: SE=standard error.

and responsiveness was significantly associated with increased condom use both at most recent intercourse and over the teenager's lifetime (Table 2). The probe of these interactions showed that at high levels of responsiveness, risk discussions were positively related to condom use during most recent intercourse ($b=.454, p=.004$) and lifetime condom use ($b=.232, p=.01$). However, at low levels of responsiveness,

Figure 1. Predicted values of partner communication from the interaction between sexuality discussions and parental responsiveness and between risk discussions and parental responsiveness



Notes: Scores on the sexuality discussions index ranged from zero to seven; scores on the risk discussions index ranged from zero to four. Predicted values were computed at one standard deviation above and below the mean of sexuality discussions, risk discussions and responsiveness.

Table 2. Regression coefficients showing effects of parent-teenager communication variables on teenagers' condom use at most recent intercourse and on teenagers' lifetime condom use, by type of parent-teenager communication

Type of communication and variable	b	SE
CONDOM USE AT RECENT SEX		
Sexuality		
Sexuality discussions	-.017	.060
Responsiveness	.063*	.030
Sexuality x responsiveness	.052***	.015
$\chi^2(4)=19.02, p<.001$		
Risk		
Risk discussions	.147	.010
Responsiveness	.066*	.030
Risk x responsiveness	.070**	.023
$\chi^2(4)=16.68, p<.001$		
LIFETIME CONDOM USE		
Sexuality		
Sexuality discussions	.009	.037
Responsiveness	.028	.018
Sexuality x responsiveness	.023**	.008
$F(3, 358)=4.12, p<.006$		
Risk		
Risk discussions	.091	.063
Responsiveness	.029	.018
Risk x responsiveness	.032**	.013
$F(3, 358)=3.96, p<.008$		

*p<.05. **p<.01. ***p<.001. Note: SE=standard error.

risk discussions were not significantly associated with either measure of condom use. Thus, in sum, the parent-teenager communication factors predicted condom use in the same manner that they predicted partner communication.

Finally, to determine whether the association between parent-teenager communication and condom use was mediated by teenager-partner communication, we repeated the regression analyses, with communication with the partner included as a predictor. The results (Table 3) were substantially the same as those from the earlier analyses, indicating that the relationship between parent-teenager communication and condom use is direct and independent.

Discussion

We have found that parent-teenager communication about sexuality and about sexual risks may promote teenagers' discussions with their partners about sex, but only when parents communicate with their teenagers in a skilled and open manner. Similarly, parent-teenager communication may encourage teenagers to use condoms, but only if parents are skilled, comfortable and open in discussions about sexuality and risks related to sexual behavior. Moreover, the association between parent-teenager communication

and adolescents' condom use is not mediated by discussions between teenagers and their partners about sex.

These findings underscore the importance of examining both the content and the process of parent-teenager communication about sex to arrive at a more complete understanding of how that communication affects teenagers' sexual behavior. Our results differ somewhat from those of earlier research,²⁴ but the discrepancies may be explained by the earlier study's failure to assess the communication process and by important differences in the types of variables measured and in the way they were measured.

The findings have implications for the prevention of HIV, other STDs and pregnancy among teenagers. Parent-teenager discussions about sex are associated with teenagers' safer sex behavior, including delayed initiation of sexual activity and increased condom use;²⁵ therefore, programs that increase parent-teenager communication about sex may be effective prevention tools. Our work indicates that an important component of such programs would be the inclusion of communication skills training for parents. Obviously, parents need to know what messages are developmentally appropriate for their children; our data indicate that they also need to know how to talk with their children. Parents' manner of communicating with their children can influence the extent to which youngsters hear the message.²⁶

Our research had some limitations. First, the sample comprised only members of racial or ethnic minorities, and participants were not recruited in a systematic manner; thus, the sample may not be representative of all teenagers or even of teenagers in the geographic areas in which the study was conducted. In addition, the way in which the sample was recruited may have caused the more motivated and more stable mother-adolescent pairs to volunteer to participate, so we may have the "cream of the crop" of the sampling frame. Even so, the adolescents included in our analyses had engaged in a considerable level of risk behavior; in addition, black and Hispanic youth are at increased risk for STDs and therefore are an important population to study and target for intervention.

A further limitation is that the data were obtained from the teenagers' reports, and this restricts the extent to which parental responsiveness can be studied. Observing parents and teenagers communicating about sex and sexual risk would be use-

Table 3. Regression coefficients showing effects of parent-teenager communication variables and teenager-partner communication on teenagers' condom use at most recent intercourse and on teenagers' lifetime condom use, by type of parent-teenager communication

Type of communication and variable	b	SE
CONDOM USE AT RECENT SEX		
Sexuality		
Partner communication	.105	.080
Sexuality discussions	-.042	.062
Responsiveness	.064*	.030
Sexuality x responsiveness	.050***	.016
$\chi^2(5)=20.47, p<.001$		
Risk		
Partner communication	.071	.079
Risk discussions	.121	.102
Responsiveness	.066*	.030
Risk x responsiveness	.066**	.023
$\chi^2(5)=16.23, p=.006$		
LIFETIME CONDOM USE		
Sexuality		
Partner communication	.135**	.049
Sexuality discussions	-.019	.037
Responsiveness	.029	.017
Sexuality x responsiveness	.020**	.008
$F(4, 355)=4.97, p<.001$		
Risk		
Partner communication	.123*	.049
Risk discussions	.054	.063
Responsiveness	.028	.017
Risk x responsiveness	.026*	.013
$F(4, 355)=4.70, p<.001$		

*p<.05. **p<.01. ***p<.001. Note: SE=standard error.

ful in corroborating our findings. Third, the construct of parental responsiveness—used here to describe openness and skill in discussing topics related to sexuality and sexual risk—needs to be refined. More refined measures of the components of responsiveness may show that they independently influence teenagers' behavior.

As evidence based on broader samples and more refined measures accrues regarding the importance of the parent-teenager communication process in determining teenagers' sexual risk behavior, such evidence must be incorporated into HIV prevention strategies.

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