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Quality of Parent-Adolescent Conversations about Sex and Adolescent Sexual Behavior: An Observational Study

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Abstract

PURPOSE—Studies suggest that the quality of parent-adolescent communication about sex uniquely predicts adolescent sexual behavior. Previous studies have relied predominantly on self-report data. Observational methods, which are not susceptible to self-report biases, may be useful in examining the associations between the quality of parent-adolescent communication about sex and adolescent sexual behavior more objectively.

METHOD—With a sample of adolescents (N = 55, 58% male, 44% White, $M_{\rm age} = 15.8$) and their parents, we used hierarchical logistic regression analyses to examine the associations between the observed quality of parent-adolescent communication about dating and sex and the likelihood of adolescents' sexual intercourse.

RESULTS—The quality of parent-adolescent communication about dating and sex predicted sexual behavior. Specifically, lecturing was associated with a higher likelihood of adolescents having had sexual intercourse.

CONCLUSIONS—The quality of parent-adolescent communication about sex is a unique correlate of adolescent sexual behavior and warrants further investigation. Thus, it serves as a potential target of preventive interventions that aim to foster adolescent sexual health behaviors.

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Keywords

sexual behavior; adolescent; observation; parent-child communication; quality of communication

Parents' direct communication with their adolescent children about sex plays a key role in preventing adolescents' early and risky sexual behavior. The majority of research on parent-adolescent communication about sex has focused on the frequency and/or content of their sex-related conversations. Research has shown, however, that the quality of these conversations is also a reliable predictor of adolescent sexual health and behavior. Specifically, parent-adolescent communication about sex that is receptive, supportive, and open in moderate degrees is associated with later age of initiating sexual intercourse, diminished sexual risk-taking, and early adolescents' greater valuing of sexual abstinence.

On the other hand, when this sex-related communication is parent-dominated or harsh, it may have the opposite effect. Lefkowitz and colleagues⁷ observed mother-adolescent conversations about AIDS and found that mothers' domination of these conversations predicted greater discrepancies between mothers' and adolescents' knowledge about AIDS transmission and prevention. A follow up study showed this same pattern in an ethnically diverse sample, specifically that mothers who dominated conversations about AIDS had adolescents who knew less about these same AIDS topics than did mothers who engaged their adolescents with a more interactive communication style.⁸ Studies on other forms of adolescent problem behavior have shown a similar trend, specifically that caregivers' use of criticism and contempt to solve difficulties with adolescents may exacerbate problem behavior over time.⁹ In sum, when it comes to parent-adolescent conversations about sex, the quality of parents' communication with their adolescent children may uniquely relate to how well adolescents' internalize parents' messages.

Currently, most of the associations between the quality of communication and adolescent sexual behaviors are derived from retrospective and self-report data.² Such data are informative, but are also susceptible to self-report biases that could misrepresent how parents and adolescents actually communicate about sex. Observational coding by independent observers may tap these communication processes with increased precision, an approach that has already been successfully employed in a number of studies.^{8, 10, 11}

Building on this research, we used trained observer ratings of parent-adolescent conversations about dating and sex to examine the associations between the quality of parent-adolescent communication and adolescents' engagement in sexual intercourse. Based on the literature previously discussed, we hypothesized that open and supportive communication characterized by reciprocity and teaching would be associated with adolescents' diminished likelihood of sexual intercourse, whereas harsh communication characterized by lecturing would be associated with an increased likelihood of sexual intercourse. We examined these relations while controlling for two general parenting variables, parental monitoring and parent-adolescent relationship quality. Both these variables are protective factors in adolescents' sexual behavior and health.^{12, 13}

Furthermore, parental monitoring and parent-adolescent relationship quality may manifest in how families communicate about dating and sex.

Method

Participants

Participants were a subgroup of families from a randomized intervention study in which the Family Check-Up intervention 14 was administered to 197 families of middle school students. Of those families, 55 (28%) opted for additional follow-up support and comprise the current sample. The average age of the adolescents was 15.8 years (SD = 0.59). Thirty-two of the adolescents (58.2%) were male; 24 (44%) self-reported as White, 14 (25%) as Latino/a, and 9 (16%) as African American. The median gross annual income of the families was \$35,000-\$45,000, slightly below the national average of \$52,000. 15

Procedure

After obtaining approval through the University of Oregon Institutional Review Board, participating families were visited in their homes or invited to come into the Oregon Child and Family Center lab, where they participated in a series of videotaped conversation tasks. First, they discussed expectations for their adolescent regarding friendships and dating for five minutes. Second, they discussed expectations around sex, alcohol and drug use, and risky behaviors for eight minutes. At least one (n = 36; 33 mothers, 3 fathers), but sometimes both (n = 19) parents were present for these conversations. Immediately upon completing these conversation tasks, family members filled out surveys assessing a variety of health and problem behaviors.

Measures

Quality of parent-adolescent communication—The first two authors developed a coding manual that assessed global parent-adolescent communication processes. A subset of the coding manual was designed to examine the quality of parent-adolescent communication. Quality of communication about sex-related topics has typically been conceptualized as the degree of openness, mutuality, and comfort between the conversing parties. Based on this conceptualization, we developed 19 items tapping various parent-based aspects (e.g., teaching, lecturing, interest/exploration, prying, limit-setting) and family-level aspects (e.g., reciprocity) of communication quality, all on a 9-point scale.

Two coders were trained for reliability purposes. These coders were instructed to code parent-adolescent communication only when dating and sex were the specific topics under discussion (i.e., coders did not code parent-adolescent communication when the topic under discussion was something other than dating or sex, such as friends or drug use). The topic of sex included topics about kissing; non-coital sexual behaviors such as petting, necking, and oral sex; sexual intercourse; contraceptives; and pubertal development. Dating included topics around attraction to another person, desirable qualities in a partner, romantic interests, 'flirting,' going on dates, and having a committed dating relationship. During training, if coders' scores were discordant (off by more than 2 points), coding episodes were reviewed

with the first two authors. Training meetings were held until an inter-rater reliability of .73 was reached. Thirty percent of the tapes were coded by both coders for reliability purposes.

After all 55 families' conversations were coded we ran an exploratory factor analysis (principal axis factoring) using an oblique (promax) rotation to identify the latent structure underlying the quality of parent-adolescent communication about dating and sex. Items loading below .40 and/or cross loading above .35 on any of the factors were removed from the model. One additional item was removed because it displayed poor inter-rater reliability. The final extraction revealed 12 items loading onto three underlying dimensions that explained 63.99% of the variance among the items (see Table 1). These underlying dimensions were *reciprocity*, *lecturing*, and *teaching*.

Reciprocity consisted of four items, and represented the family members' positive and mutual participation in the conversation. Thus, reciprocity was coded as the degree of mutuality among family members verbally (e.g., all family members exchanging ideas) emotionally (e.g., positive or neutral emotional expressions among all family members), and behaviorally (e.g., complementary body language among family members). As a subscale, these items displayed adequate internal consistency ($\alpha = .70$).

Lecturing consisted of four items and represented the parents' cautioning and warning about the negative consequences of dating and sex that was done in a harsh and/or demeaning tone. Thus, lecturing was coded when attempts were made by the parent to belittle or disempower the adolescent and his/her opinions (e.g., '...does the parent treat the child as if his/her opinion didn't matter?'). As a subscale, these four items displayed adequate internal consistency (a = .85).

Teaching consisted of four items representing the direct communication about positive and/or negative issues around dating and sex, done in a positive or neutral tone. The key difference between teaching and lecturing was that teaching was characterized by a spirit of education and/or instruction and was absent of a demeaning or belittling tone (e.g., 'Does the parent explain/clarify positive emotional aspects of relationships?' and 'Does the parent explain the risks of sexual activity?'). These four items together displayed adequate internal consistency ($\alpha = .87$).

When both parents were present for the conversation, mothers' and fathers' scores were averaged, as a one-way MANOVA revealed no significant mean differences between mothers and fathers on *reciprocity*, *lecturing*, or *teaching*, F(3, 70) = 0.61, p = .61.

Sexual Intercourse—Sexual intercourse was the dependent variable and was measured with a single item assessing whether adolescents had ever had sexual intercourse (0 = no, 1 = yes).

Control variables—*Parental monitoring* was included as a control variable because of its documented association with adolescent sexual behavior. Parents reported the frequency of their monitoring with 8 items (e.g., 'How often do you know what your child does during his/her free time?') scored on a five point scale ($I = almost\ never$, $S = almost\ always$). This scale displayed adequate internal consistency (C = 0.81).

A composite variable of adolescents' and parents' reported *relationship quality* was calculated. Adolescents reported on the quality of their relationships with each parent by indicating their level of agreement on 9 items (e.g., I feel close to my mom/dad), each scored on a five point scale (I = strongly disagree, 5 = strongly agree). Item scores were averaged for a total score, and adolescents' total scores for their mothers and fathers were averaged for an overall adolescent-reported relationship quality score ($\alpha = .93$). Parents reported on the closeness of their relationships with their adolescent on a single item with a ten point scale (I = distant, 10 = close). Adolescent- and parent-reported scores were strongly correlated, r = .77, and were standardized and summed to create our overall relationship quality composite score.

Finally, we assessed *percentage of time spent discussing dating/sex* during the videotaped conversations (e.g., 'What percentage of the time does the family discuss dating and sex?'). This single item was coded on a scale of 0-10, and displayed adequate inter-rater reliability (ICC = .73).

Demographic variables—Demographic characteristics of the adolescent included age (in months), ethnicity (African-American, Asian-American, European American, Hispanic/Latino/a, other), and gender (0 = female; 1 = male). Parents reported on their gross annual income.

Analytic Strategy

After calculating means and standard deviations, we used independent samples t-tests and Pearson chi-square tests to compare adolescents who did and did not report having had sexual intercourse on the communication dimensions and on the control variables. We also conducted zero-order correlations and independent samples t-tests to examine the associations among the communication dimensions and the control variables. We then used hierarchical logistic regression analyses to examine how the parent-adolescent communication dimensions were associated with the likelihood that adolescents reported having had sexual intercourse. In the first step, we controlled for parental monitoring and parent-adolescent relationship quality. We also controlled for time spent discussing dating/sex, gross annual income, gender, age, and dummy codes for ethnicity (White, Latino/a, and African American), each controlled for separately. In the second step, we entered the parent-adolescent communication dimensions. In a final step, interactions between the communication factors and time spent discussing dating/sex, income, gender, age, and ethnicity were tested.

Results

Descriptive Statistics

Means and standard deviations are presented in Table 2. Of the 55 adolescents, 15 (27.3%) reported having had sexual intercourse. On average, parents and adolescents discussed dating and sex for about half of the taped conversation tasks (M = 5.00, SD = 1.50). These conversations about dating and sex displayed moderate to high levels of reciprocity (M = 1.50).

6.01, SD = 1.74), with low levels of both lecturing (M = 2.23, SD = 1.53) and teaching (M = 2.08, SD = 0.96).

Independent-samples t-tests were also conducted to examine differences between adolescents who did and did not have sexual intercourse. Lecturing was higher for families of adolescents who reported having had sexual intercourse (M = 3.44, SD = 1.99) versus families of adolescents who reported not having had sexual intercourse, (M = 1.77, SD = 1.05); t(51) = 13.88, p < .001. Parental monitoring was lower for families of adolescents who reported having had sexual intercourse (M = 3.36, SD = 1.06) versus families of adolescents who reported not having had sexual intercourse, (M = 4.32, SD = 0.52); t(51) = -3.19, p < .01.

Pearson chi-square tests were then conducted to examine the relations among demographic factors of ethnicity with sexual intercourse. Results revealed a marginally significant effect for African Americans, χ^2 (1, N=53) = 3.31, p=.07, suggesting that African American adolescents were more likely to reported having had sexual intercourse than adolescents of other ethnic groups. There were no significant gender differences in sexual intercourse, χ^2 (1, N=53) = 0.58, p<.49.

Zero-order correlations were also computed to examine the relations among the parenting dimensions and various controls. Reciprocity and parental monitoring were negatively associated with sexual intercourse, while lecturing was positively associated with sexual behavior (see Table 2).

Quality of parent-adolescent communication—One-way ANOVAs were conducted to examine group mean differences in the communication dimensions and demographic factors of ethnicity and gender. Results showed significant group mean differences in lecturing, F(3, 51) = 5.72, p < .01. Follow-up comparisons showed that lecturing was higher among African American families (M = 3.75, SD = 0.48) than in White families (M = 1.57, SD = 0.28). There were no group differences in reciprocity, F(3, 51) = 0.98, p = .41, or teaching, F(3, 51) = 0.62, p = .60. Finally, results showed no significant gender differences in the communication dimensions of lecturing, F(1, 52) = 0.05, p = .82, reciprocity, F(1, 52) = 1.77, p = .19, or teaching, F(1, 52) = 0.53, p = .47. Thus, the prevalence of the three communication dimensions did not differ significantly when the child was a male or a female.

Logistic Hierarchical Regression

Finally, to test this study's main hypotheses, a logistic hierarchical regression analysis was performed to examine how the parent-adolescent communication dimensions were associated with the likelihood that adolescents reported having had sexual intercourse. After controlling for parental monitoring, relationship quality, age, gender, ethnicity, annual income, and time spent discussing dating and sex, results of the logistic regression showed that lecturing predicted adolescents' sexual intercourse, $e^{\beta} = 1.86$, p < .05 (see Table 2 for final model). The stronger presence of parents' lecturing during conversations about dating and sex increased the likelihood that adolescents reported having had sexual intercourse by

86%. Interactions with time spent discussing dating/sex, income, gender, age, and ethnicity were not significant.

Discussion

This study examined the associations among the quality of parent-adolescent communication about dating and sex and adolescents' engagement in sexual intercourse. Findings showed that communication about dating and sex characterized by lecturing was associated with an increased likelihood of sexual intercourse. Specifically, parents who lectured their adolescents during conversations about dating and sex were more likely to have children who reported engaging in sexual intercourse. Notably, this association emerged despite the relatively low presence of lecturing in these conversations. One interpretation of these findings is that lecturing adolescents about dating and sex may effectively increase adolescents' chances of engaging in sexual intercourse because they may be less likely to internalize messages about sexuality that are delivered in a harsh manner. This explanation is consistent with previous work on parent-child communication about other sensitive topics. During conversations about AIDS, mothers' conversational dominance was associated with lower levels of adolescents' AIDS knowledge, 7, 8 and during conversations about problem behaviors, caregivers' use of criticism and contempt was associated with greater problem behavior over time. 9

An alternative explanation is that adolescents' sexual activity may elicit harsher parenting around sex. Although parents' knowledge was not readily detectable through our observations, it is possible that adolescents' previous sexual activity may be known by some of the parents in our sample, which for certain families could be a source of continuing parent-adolescent conflict. In such cases, the presence of lecturing during these conversations may simply be a reflection of this continuing conflict. Previous work has found that some parents are expressly uncomfortable about accepting their adolescents' developing sexuality, which may manifest in less mutual conversations about sex. ¹⁷ For these kinds of parents, learning about their adolescents' sexual activity may result in deliberate attempts to control and restrict their adolescents' sexual behaviors.

Regarding high quality communication about dating and sex, our results showed that neither reciprocity nor teaching were associated with adolescents' likelihood of having had sexual intercourse. Previous work shows that high quality communication about sex is associated with adolescents' diminished sexual risk taking. ^{4, 5} In this study, we examined engagement in sexual intercourse; it is possible that an association would emerge had we examined sexual risk behaviors. Future work would do well to examine the associations among quality of parent-adolescent communication about dating and sex and adolescents' engagement in risky sexual behaviors.

Some caution should be exercised when interpreting these results. First, our data are cross sectional and cannot test the directionality of the association between quality of communication and sexual intercourse. Whether lecturing predicts sexual intercourse, sexual intercourse predicts lecturing, or both, can be better estimated using longitudinal data. Second, our sample was not large enough to allow for highly reliable multiple group

comparisons (i.e., across ethnicity) on the communication dimensions and on the dependent variable, sexual intercourse. Finally, we observed communication about dating and sex in a single laboratory setting in which parents and adolescents were prompted to discuss these issues. Thus, these conversations may not fully capture families' naturally occurring (or non-occurring) communication processes about these topics.

Despite these limitations, our findings contribute to broader literature and practice by showing that the quality of parent-adolescent communication about dating and sex may be a unique correlate of adolescent sexual behavior. Specifically, the quality of parent-adolescent communication about dating and sex was associated with adolescent sexual intercourse after controlling for general parenting variables, including parental monitoring and relationship quality, both of which are known correlates of adolescent sexual behavior. As such, these findings encourage more research on the quality parent-adolescent communication about dating and sex in adolescents' sexual health. Our findings also suggest that the quality of parent-adolescent communication may be an effective target for existing family-based interventions aiming to foster adolescent sexual health. Finally, our findings are of value to teachers, youth workers, and health care professionals who also communicate with adolescents regarding their sexual health.

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Implications and Contributions

The quality of parent-adolescent communication about sex may be uniquely associated with adolescent sexual behavior. Parents that were observed lecturing their adolescents about dating and sex had children who reported a higher likelihood of sexual intercourse. Family-based intervention services targeting quality of parent-adolescent communication are justified.

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Table 1

Rotated pattern matrix with factor loadings for quality of communication about dating and sex.

	Pa	attern Matrix	
Item	Reciprocity	Lecturing	Teaching
How behaviorally reciprocal is the family?	1.030	.207	.042
How emotionally reciprocal is the family?	.852	072	008
How verbally reciprocal is the family?	.741	005	.011
How much does the family seem to agree during the discussion?	.709	184	.030
Does the parent lecture the child about the risks and dangers of romantic relationships?	.056	.980	.077
While explaining issues surrounding relationships, does the parent treat the child as if his/her opinion didn't matter?	046	.905	.044
Does the parent diminish the importance of romantic relationships?	.074	.720	219
Does the parent forbid the child from being involved in a romantic relationship?	044	.501	122
Does the parent explain and/or clarify positive emotional aspects of relationships?	.084	009	.972
Does the parent discuss the benefits of romantic relationships?	025	092	.778
Does the parent explain the risks of sexual activity?	251	.265	.416
Does the parent explain how to employ relationship skills, how partners should treat each other, or how one should feel in a relationship?	.079	109	.413

Note. Bolded loadings indicate the factor that the item loaded onto

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Table 2

Descriptive statistics for the key variables and final logistic regression model

	Correl	Correlations among communication factors and controls	ng com	munica	tion fac	tors an	d contr	ols	Final logistic regression model predicting sexual behavior	sion model predic	ting sexual behavior
Variables	(1)	(2)	(3)	(4)	(5)	(9)	(7) (8)	8	β	SE	$\operatorname{Exp}(oldsymbol{eta})$
(1) Reciprocity	١								-0.10	.28	06.0
(2) Lecturing/Belittling	41	I							0.62	.30	1.86
(3) Teaching Controls	.16	60	1						0.55	.39	1.74
(4) Parental monitoring	* 44. **	39	80.	1					-0.80	.62	0.45
(5) Relationship Quality	.13	03	.00	.34	1						
(6) Time Discussing Sex	08	.38	.13	.18	.17	1					
(7) Age	90.	10	.05	01	15	07	1				
(8) Annual Income	80.	29	.01	.15	03	03	1.	1			
(10) Gender											
(11) Ethnicity- Afr. Am.									.74	96:	2.09
(12) Ethnicity- White											
(13) Ethnicity- Latino											
M	6.01	2.23	2.08	4.14	0.00	5.00	15.8				
SD	1.74	1.53	96.0	0.96 0.77 1.54 1.50	1.54	1.50	0.59				
						I		١			

 ^{+}p < .10

Note. Controls included in the final model are those that were related to sexual intercourse in descriptive analyses. These include parental monitoring and the dummy code for African American.

p < .01 p < .01 p < .001