

Boyfriends, Girlfriends and Teenagers' Risk of Sexual Involvement

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CONTEXT: Having a boyfriend or girlfriend, especially an older one, is associated with increased sexual risk in early adolescence. The mechanisms underlying this association are unclear.

METHODS: Middle school students in Northern California were surveyed annually from 1997 to 2000. For a sample of 1,214 males and 1,308 females who were sexually inexperienced in seventh grade, logistic and linear regression were used to explore associations between relationship status in seventh grade and sexual activity in ninth grade, controlling for sixth-grade and eighth-grade characteristics.

RESULTS: Males who had had a girlfriend their age by seventh grade were more likely than those who had had no relationship to report sexual activity in ninth grade (odds ratio, 2.1). Similarly, for females, the odds of being sexually active in ninth grade were elevated among those who had had a boyfriend their age (2.9); however, they also were higher among those who had had an older boyfriend than among those who had had one their age (2.1). With sixth-grade risk factors controlled, relationship status in seventh grade remained significant only for females; the association was explained by early menarche and by participation in situations that could lead to sex and riskier peer norms in eighth grade. For males, eighth-grade situations that could lead to sex, Hispanic ethnicity and sixth-grade peer norms explained ninth-grade sexual behavior.

CONCLUSIONS: To reduce the risk of adolescent sexual activity, parents and communities should encourage youth in middle school, especially females who experience early menarche, to delay serious romantic relationships.

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Various problems arise when young females have older male partners. For example, sexual relationships between females aged 15 or younger and males three or more years their senior are less likely to be voluntary, less likely to involve contraceptive use and more likely to result in pregnancy than relationships between young adolescents who are close in age.¹ And high proportions of babies born to teenage mothers were fathered by adult men;² these teenage mothers are more likely to be involved in problem behaviors than are their counterparts with similar-age partners.³

In addition, having an older boyfriend may increase women's risk of acquiring an STD. For example, among 258 sexually active young women attending an adolescent health clinic, having a partner two or more years older was associated with increased odds of having an STD at screening.⁴ Similarly, in a sample of pregnant black teenagers, the chances of testing positive for chlamydia were four times as high, and the chances of reporting that their partner had other partners were twice as high, among those with older partners as among those with same-age partners; young women with older partners also reported almost twice the number of unprotected sexual encounters as those with partners closer in age.⁵

Elevated rates of pregnancy, childbearing and STD among young women with older partners are not surprising, because these women initiate sexual activity earlier and use

contraceptives less frequently than others.⁶

The effects of having an older boyfriend on sexual behavior are most pronounced among the youngest teenagers.⁷ In the National Longitudinal Study of Adolescent Health (Add Health), the odds of having intercourse were six times as high among 13-year-olds with older boyfriends as among those with boyfriends their own age; for 17-year-olds, by contrast, the odds were only doubled.⁸ In the 2002 National Survey of Family Growth (NSFG), 37% of women who had first had sex before age 14 had had a first male partner who was four or more years their senior, compared with 16% of those whose first intercourse had occurred at ages 17–19.⁹ In a state survey in Vermont, 34% of females who had first had sex at age 11–12 had had a first partner who was five or more years older, compared with only 7% of those whose first sex occurred at ages 16–18.¹⁰

Having a boyfriend of any age is associated with an increased likelihood of sexual initiation. In one study of Add Health participants in grades 7–12, the most important predictor of sexual experience (among a set of 50) was having been in a romantic relationship during the previous 18 months.¹¹ Other studies using the same data set but different analytic methods have reached similar conclusions.¹²

Evidence is mixed on the effect of having a girlfriend, especially an older one, on males. In a study of mostly non-Hispanic white eighth graders, having a girlfriend was not

associated with males' initiation of sex.¹³ However, in a sample of sixth graders from largely Hispanic middle schools, males with a same-age or older girlfriend were significantly more likely than those with no girlfriend to have had sex, even when peer norms and unwanted sexual advances were controlled for.¹⁴ In the Add Health sample, regardless of race or ethnicity, the most important risk factor for initiation of sex for males (as for females) was having been in a romantic relationship.¹⁵

While having a boyfriend or girlfriend, particularly an older one, is associated with sexual initiation, relatively little is known about how or why this happens. Several mechanisms can be hypothesized. Having a boyfriend or girlfriend may increase the opportunity for engaging in precoital behaviors, which may be followed by sex.¹⁶ Furthermore, having a boyfriend or girlfriend may expose a youth to a new set of friends, who may share more permissive norms about sex, especially if they are older; many studies have demonstrated that youth whose peer norms encourage sexual activity have an increased likelihood of being sexually active.¹⁷ Because young people see having a boyfriend or girlfriend as desirable,¹⁸ pleasing that person and that person's friends is probably important to many youth.

Also, some youth experience coercion to have sex. The youngest teenagers frequently report that their first intercourse was nonvoluntary or unwanted.¹⁹ Additionally, teenagers reporting first sex as unwanted are more likely than others to report that their first partner had been three or more years their senior.²⁰

Youth who become involved with a boyfriend or girlfriend may have more risky attitudes and behaviors than those who do not, even before starting a relationship. Some youth may put themselves in situations or associate with friends who encourage early dating or early sex. Others may actively seek out a boyfriend or girlfriend. For example, females who mature physically may be more interested in or more attractive to males than their peers; they may also be more interested in sex. Teenage women who report some of the common causes of adolescent problem behavior (including delinquency, difficulty in school and substance use) also report entering into relationships with older boyfriends.²¹

Some evidence suggests that Hispanic culture condones relationships between younger women and older men.²² In Hispanic culture, men are expected to have a dominant role in sexual situations, and this may be easier when the age difference between the man and the woman is large.

Using a longitudinal sample of urban, ethnically diverse middle school students, the analyses below attempted to answer five questions: What is the association between seventh-grade relationship status (i.e., having had an older, same-age or no boyfriend or girlfriend) and engaging in sexual behavior in the ninth grade? Do sixth-grade characteristics explain seventh-grade relationship status? Does relationship status in seventh grade explain eighth-grade psychosocial characteristics? Does the association between seventh-grade relationship status and ninth-grade sexual activity remain after sixth-grade characteristics are controlled

for? Do eighth-grade psychosocial characteristics mediate the association between seventh-grade relationship status and ninth-grade sexual activity?

METHODS

Study Design

The data for this study come from a randomized controlled trial testing the effects of a middle school intervention to reduce sexual risk behaviors. The initial study involved 19 predominantly Hispanic middle schools (10 treatment and nine control) and 2,829 students (1,412 treatment and 1,417 control) in an urban area of Northern California. Students represented a mix of racial and ethnic backgrounds: Fifty-nine percent were Hispanic, 17% white, 16% Asian, 5% black and 3% other races or ethnicities. Paper-and-pencil surveys were administered in school each spring from 1997 to 2000, beginning when participants were in sixth grade. Students no longer attending a study school during follow-up were surveyed by mail. Ninety-one percent of the baseline sample were followed up in grade seven, 88% in grade eight and 64% in grade nine. (Follow-up of ninth graders was difficult because students were no longer in the same schools.) More information on the full sample, response rates and methods has been published elsewhere.²³

To examine the impact of having an early romantic relationship on subsequent sexual behavior, we restricted our sample to the 2,269 students (1,070 males and 1,199 females) who indicated in seventh grade that they had never had sex. (In all, 2,573 students were surveyed in seventh grade. Of these, 13% of males and 8% of females reported sexual experience; 3% of males and 1% of females failed to respond to the question about sexual behavior.) The racial background of our sample paralleled that of the main study.

Instrument

The survey instrument was based on a theoretical model developed by the authors to guide the design of the prevention curriculum. It contained 100 questions tapping such areas as demographic characteristics, self-efficacy to resist sexual advances, peer norms regarding sexual behavior, reasons for having or not having sex, knowledge about HIV and condoms, and coercive and noncoercive sexual behaviors. The instrument was developed in English and translated into Spanish; a back-translation and decentering procedure was used to assure that the English and Spanish versions were equivalent.²⁴

• *Seventh-grade relationship status.* Students were asked "Have you ever had a serious boyfriend or girlfriend?" and "How old was your oldest serious boyfriend or girlfriend?" Responses to the latter question were "I've never had a serious boyfriend or girlfriend," "10 years old or younger," "11 years old" and so forth to "18 years old or older." Responses were categorized as no relationship if the student reported never having had a serious boyfriend or girlfriend, as same-age boyfriend or girlfriend if the boyfriend or girlfriend was less than two years older, and as older boyfriend or girlfriend if the boyfriend or girlfriend was two or more

TABLE 1. Percentage distribution of middle school students who participated in annual interviews in grades 6–9 and were sexually inexperienced in seventh grade, by relationship status in seventh grade, according to gender, California, 1997–2000

Relationship status	Male (N=1,214)	Female (N=1,308)
No relationship	46.8	50.7
Same-age boyfriend/girlfriend	47.0	31.1
Older boyfriend/girlfriend	6.2	18.3
Total	100.0	100.0

Notes: Relationship status refers to type of relationship students had ever had by seventh grade. Missing data were multiply imputed.

years older than the respondent. Two or more years was chosen because in middle school, even this small difference has been found to be important.²⁵

In analyses where relationship status was an explanatory variable, we used adjacent backward differences coding (older vs. same-age and same-age vs. no relationship) rather than dummy variable coding with a single reference level. This was accomplished by using Stata command *xi3* with the *b* option.²⁶

•**Ninth-grade sexual behavior.** In ninth grade, students were asked “Have you had sex in the last 12 months?” The phrase “having sex” was defined as “man’s penis in a woman’s vagina.” To avoid identifying illegal sexual behavior that would have had to be reported, we did not ask students the age of any of their sexual partners or whether they had had sex with a “serious boyfriend or girlfriend.” We did not explicitly measure same-gender sexual behavior.

•**Psychosocial variables.** Using measures assessed in both sixth and eighth grades, we created four psychosocial scales: unwanted sexual advances, peer norms regarding sex, situations that could lead to sex and sexual limits.

For unwanted sexual advances, we averaged responses to survey items asking whether, in the last 12 months, someone had tried to “kiss” the respondent, “tongue or French kiss” the respondent or “touch [the respondent’s] private parts below the waist [defined as the penis or the vaginal]” when the respondent did not want to be kissed or touched (alpha=0.64 for both males and females in sixth grade; 0.73

TABLE 2. Percentage of students who reported sexual activity in ninth grade, by relationship status in seventh grade; and odds ratios from logistic regression analyses examining associations between seventh-grade relationship status and the likelihood of reporting sexual activity in ninth grade; all according to gender

Measure and relationship status	Male	Female
Percentages		
No relationship	12.0	8.9
Same-age boyfriend/girlfriend	21.7	21.9
Older boyfriend/girlfriend	23.0	36.8
Odds ratios		
Same-age vs. no relationship	2.05**	2.87***
Older vs. same-age boyfriend/girlfriend	1.07	2.08**

p<.01. *p<.001. Notes: Relationship status refers to type of relationship students had ever had by seventh grade. Sexual activity refers to reports of having had sex in the 12 months before the ninth-grade interview.

for males and 0.79 for females in eighth grade). Possible responses were “no,” “yes, someone tried, but it didn’t happen” and “yes, someone tried and it happened”; a response of “no” was coded 0, and either of the others was coded 1.

We measured peer norms by averaging responses to six items that assessed perceptions of peers’ sexual behavior and attitudes—e.g., “How many of your friends have had sex?” and “How many of your friends think that people your age should wait until they’re older to have sex?” (alpha=0.66 for males and 0.68 for females in sixth grade; 0.80 and 0.79, respectively, in eighth grade). The five-point response scale (1–5) ranged from “none” to “all.”

To measure situations that could lead to sex, we averaged responses to four items: how often in the past three months respondents had been alone with someone they were very attracted to, had kissed and touched someone they were very attracted to, had lain on a couch or bed alone with someone they really liked, and had been at a party with no adults in the house (alpha=0.69 for each gender in sixth grade; 0.82 for each in eighth grade). Possible responses (coded from 1 to 4) were “never,” “1–2 times,” “3 to 5 times” and “6 or more times.”

The sexual limits measure combined responses to items asking if students would permit someone they liked very much to engage in four behaviors, ranging from “kiss you on the lips” to “have sex with you” (alpha=0.81 for males and 0.71 for females in sixth grade; 0.81 and 0.86, respectively, in eighth grade). Responses (coded from 1 to 4) ranged from “definitely yes” to “definitely not.”

To address the skewed shape of and gaps in the distribution of these four scales, we used an ordinal version rather than the actual values. For three of the four, we used categorization at the five quintile points. The unwanted sexual advances scale did not vary enough, so it was categorized into four levels.

•**Ethnicity.** For their ethnicity, respondents could mark as many of the following categories as applied: Hispanic/Latino/Mexican; black/African American; Asian/Pacific Islander; American Indian/Alaskan Native; white/Caucasian; and other. For these analyses, students who identified themselves as Hispanic in sixth or seventh grade were compared with all others.

•**Menarche.** Females in sixth grade were asked whether they had had their first period or menstruation; those answering “yes” (coded 1) were compared with those answering “don’t know” or “no” (coded 0). Males were not asked a question about sexual maturation, because no clear demarcation is available.

Analytic Plan

We used a variety of analytic techniques to examine our five research questions. All analyses were performed separately for each gender.

•**Association between seventh-grade relationship status and ninth-grade sexual behavior.** Using logistic regression, we regressed sexual behavior in the ninth grade on seventh-grade relationship status.

TABLE 3. Relative risk ratios from multinomial logistic regression analyses examining associations between selected sixth-grade predictors and seventh-grade relationship status, by gender

Predictor	Same-age boyfriend/ girlfriend vs. none	Older boyfriend/ girlfriend vs. same-age
Unwanted sexual advances		
Male	1.76***	1.39**
Female	1.83***	1.41***
Peer norms favoring sex		
Male	1.54***	1.32**
Female	1.56***	1.23**
Situations that could lead to sexual behavior		
Male	1.61***	1.23*
Female	1.43***	1.29***
Sexual limits		
Male	0.69***	0.76*
Female	0.60***	0.79**
Hispanic		
Male	1.41**	1.21
Female	1.23	2.03***
Menarche		
Male	na	na
Female	1.22	2.66***

*p<.05. **p<.01. ***p<.001. Note: na=not applicable.

• **Association between sixth-grade characteristics and seventh-grade relationship status.** Using multinomial logistic regression, we regressed seventh-grade relationship status individually on sixth-grade psychosocial variables, Hispanic ethnicity and sixth-grade menarche. The resulting relative risk ratios combine in a single model the odds ratios for having had a same-age boyfriend or girlfriend versus no relationship, and the odds ratios for having had an older versus a same-age boyfriend or girlfriend. Instead of two binary logistic regression models on parts of the data, all of the data are used for the estimation, resulting in better statistical efficiency.²⁷

• **Association between seventh-grade relationship status and eighth-grade characteristics.** Using linear regression, we regressed eighth-grade psychosocial variables individually on seventh-grade relationship status, controlling for the corresponding sixth-grade psychosocial variables.

• **Effects of controlling for sixth-grade characteristics.** Using logistic regression, we regressed ninth-grade sexual behavior on seventh-grade relationship status, controlling for sixth-grade psychosocial variables, Hispanic ethnicity and menarche.

• **Mediating effects of eighth-grade characteristics.** Using logistic regression, we regressed ninth-grade sexual behavior on seventh-grade relationship status, controlling for eighth-grade and sixth-grade psychosocial variables.

For all analyses, we used two-tailed tests and a 5% level of significance. All regression models included the variable “treatment versus control schools,” which was not statistically significant in any of the analyses. These analyses were not meant

to assess the impact of the intervention on initiation of sex; the results of an impact analysis are presented elsewhere.²⁸

Because of attrition, and because some respondents did not answer all questions, substantial amounts of data would have been lost if we had used casewise deletion of observations with missing data. To the extent that the data were not missing completely at random, or at least approximately so, attrition could bias the results. To address this threat to validity, we used multiple imputation techniques for all analyses.²⁹ Twenty data sets were imputed using SAS PROC MI on data from the full sample; because PROC MI assumes a multivariate normal distribution, imputed values for binary and ordinal variables were rounded to the nearest applicable integer.³⁰

Imputed data sets were generated separately for males and for females, to accommodate the need for the female-specific variable (menarche). To create the 20 data sets used in the analyses, all outcomes and explanatory variables described in this article were included. Using the Stata command *micombine*,³¹ we fitted the same model to each data set; using special formulas, we combined parameter estimates from the fitted models into the overall parameter estimates and their standard errors. The significance tests were performed for the overall parameter estimates. The Ns in Table 1 are averaged over the 20 multiply imputed data sets.

RESULTS

In seventh grade, about half of both males and females in the sample reported never having had a serious boyfriend or girlfriend (Table 1). Six percent of males and 18% of females reported having had a boyfriend two or more years their senior.

• **Association between seventh-grade relationship status and ninth-grade sexual behavior.** One in 10 males and females who reported no relationship in seventh grade said that they had had sex in the 12 months before the ninth-grade interview, compared with at least one in five who reported in seventh grade having had a same-age or older girlfriend or boyfriend (Table 2). Results of the logistic regression analysis confirm that compared with students who initially reported no relationship, those who had had a relationship with someone their age had more than twice the odds of being sexually active in ninth grade (odds ratio, 2.1 for males and 2.9 for females). Females who had had an older boyfriend by seventh grade were more likely than those who had had a same-age boyfriend to report sexual activity in ninth grade (2.1).

• **Association between sixth-grade characteristics and seventh-grade relationship status.** Youth who reported unwanted sexual advances in sixth grade were more likely to have had a same-age boyfriend or girlfriend than to have had none by seventh grade (relative risk ratio, 1.8 for each gender—Table 3), and more likely to have had an older boyfriend or girlfriend than to have had one of their age (1.4 for each). Findings were similar for youth who reported having peers with more permissive sexual norms in the sixth grade and for those who reported more situations that could lead to

TABLE 4. Means of scales measuring eighth-grade outcomes, by seventh-grade relationship status; and standardized coefficients from linear regression analyses examining associations between seventh-grade relationship status and eighth-grade outcomes; all according to gender

Outcome	Means			Coefficients	
	No boyfriend/ girlfriend	Same-age boyfriend/ girlfriend	Older boyfriend/ girlfriend	Same-age boyfriend/ girlfriend vs. none	Older vs. same-age boyfriend/ girlfriend
Unwanted sexual advances (range, 0–3)					
Males	1.39	1.86	2.03	0.37***	0.07
Females	1.49	1.80	2.31	0.25***	0.45***
Peer norms favoring sex (range, 1–5)					
Males	2.28	3.19	3.81	0.69***	0.49**
Females	2.18	3.06	3.53	0.60***	0.33***
Situations that could lead to sexual behavior (range, 1–4)					
Males	2.20	3.27	3.67	0.80***	0.30
Females	2.19	3.04	3.59	0.69***	0.41***
Sexual limits (range, 1–4)					
Males	2.88	2.26	2.10	-0.45***	-0.05
Females	3.73	2.97	2.83	-0.51***	-0.01

p<.01. *p<.001. Notes: For sexual limits, higher scores indicate less risky behavior; for all other outcomes, higher scores indicate riskier behavior. All regression models include the sixth-grade psychosocial variables corresponding to eighth-grade outcome (p<.0001 in all cases).

sex. Youth with strong sexual limits in sixth grade were at reduced risk of having had a same-age boyfriend or girlfriend rather than none by seventh grade (0.6–0.7), and of having had an older boyfriend or girlfriend rather than one of their age (0.8 for each gender). In addition, females who had experienced menarche by the sixth grade and females who were Hispanic were more likely to have had older boyfriends by seventh grade than to have had same-age

TABLE 5. Odds ratios from regression analyses examining associations between selected predictors and the likelihood of reporting sexual activity in ninth grade, by gender

Predictor	Model 1		Model 2		Model 3	
	Male	Female	Male	Female	Male	Female
Seventh grade						
Same-age boyfriend/ girlfriend vs. none	2.05**	2.87***	1.50	2.11**	1.01	1.33
Older vs. same-age boyfriend/girlfriend	1.07	2.08**	0.86	1.58	0.69	1.32
Sixth grade						
Unwanted sexual advances	na	na	0.92	0.97	0.93	0.95
Peer norms	na	na	1.30**	1.27**	1.26*	1.04
Situations that could lead to sex	na	na	1.04	1.08	0.95	0.99
Sexual limits	na	na	0.84	0.80*	0.89	0.90
Hispanic	na	na	1.63*	1.14	1.66*	0.96
Menarche	na	na	na	1.57*	na	1.63*
Eighth grade						
Unwanted sexual advances	na	na	na	na	0.92	1.02
Peer norms	na	na	na	na	1.17	1.44***
Situations that could lead to sex	na	na	na	na	1.50***	1.80***
Sexual limits	na	na	na	na	0.86	0.90

*p<.05. **p<.01. ***p<.001. Note: na=not applicable, because the predictor was not included in the model.

boyfriends. Compared with males of other ethnic backgrounds, Hispanic males were more likely to report a same-age girlfriend rather than none.

•Association between seventh-grade relationship status and eighth-grade characteristics. Large differences in mean scores on the eighth-grade psychosocial variables (0.6–1.5 points on four- and five-point scales) suggest that youth who had had no relationship by seventh grade differ substantially from those who had had an older boyfriend or girlfriend (Table 4). For both genders, having had a same-age boyfriend or girlfriend by seventh grade was associated with greater risk on all psychosocial outcomes in eighth grade than was having had no relationship. By contrast, having had an older, rather than a same-age, boyfriend or girlfriend by seventh grade was a much less consistent predictor of eighth-grade outcomes. It was significant for both males and females only with regard to riskier peer norms in eighth grade; for females, it also predicted unwanted sexual advances and involvement in situations that could lead to sex.

•Effects of controlling for sixth-grade characteristics. The first model shown in Table 5 repeats our findings on associations between seventh-grade relationship variables and ninth-grade sexual behavior. The second model shows that when sixth-grade variables were added, males who reported having had a same-age girlfriend in seventh grade, rather than none, no longer had significantly elevated odds of reporting sexual activity in ninth grade. Instead, sixth-grade peer norms and Hispanic ethnicity were significantly associated with reports of sexual activity in ninth grade. For females, when sixth-grade variables were added to the analysis, the effect of having had a same-age boyfriend, rather than none, was reduced but remained significant. Also, having had an older boyfriend rather than a same-age one was no longer significant for females. In this model, sixth-grade peer norms, sexual limits and menarche predicted ninth-grade reports of sexual activity.

•Mediating effects of eighth-grade characteristics. The final model in Table 5 shows that when eighth-grade variables were added to the previous model, seventh-grade relationship status did not predict sexual behavior in ninth grade for males or females. For males, sixth-grade peer norms and Hispanic ethnicity remained significant; eighth-grade situations that could lead to sex also predicted ninth-grade reports of sexual activity. For females, peer norms and situations that could lead to sex in eighth grade were associated with reported sexual behavior in ninth grade, and menarche in sixth grade remained significant.

DISCUSSION

Over the past decade, several studies have shown that adolescent and preadolescent females with an older boyfriend experience various types of sexual risk.³² Youth in middle school, particularly females who have had a same-age boyfriend and males, have not been studied as extensively. We have found that having had a boyfriend or girlfriend by seventh grade is both a predictor of having sex in the ninth grade and a marker of prior risks for sex. Patterns of results

differed for males and females.

Males who had had a girlfriend by seventh grade were more likely than those who had not to be sexually active in ninth grade; however, the risk was the same for those who had had an older girlfriend and those whose girlfriend had been their age. Given that only 6% of males reported having had an older girlfriend by seventh grade, our analysis may have lacked sufficient power to assess the impact of older girlfriends. Furthermore, we had no information on the duration or seriousness of early relationships.

Males who reported a girlfriend in seventh grade were already on a trajectory leading to early sex. In sixth grade, they reported riskier peer norms, lower sexual limits, more situations that could lead to sex and more unwanted sexual advances than their peers who had not had a relationship. Without a biological indicator of puberty, it is impossible to assess the extent to which these differences might be due to early maturation.

Our study is one of the first to examine in depth the effects of having a girlfriend on males' later sexual behavior. Although only peer norms in sixth grade and situations that could lead to sex in eighth grade were significant in our multivariate analyses, they effectively controlled for and mediated the association between having a girlfriend in seventh grade and being sexually active in ninth grade. Males who reported being in more situations that could lead to sex in eighth grade may have had less parental monitoring or may have had a stronger interest in or more opportunities for sex because of physical maturity. More work is needed to determine if these associations are found in other populations.

It is striking that having peers who endorsed early sex in sixth grade would be predictive of having sex three years later. This may indicate the power of these early friendships or that such friendships are in part a marker for other family and community risk factors. If peer norms are directly linked to risk, parents, especially fathers, need to be vigilant about getting to know their sons' friends of both genders, as well as providing unambiguous messages about the inappropriateness of early sex.

Hispanic males in this sample were more likely than non-Hispanic males to have had a girlfriend by seventh grade and more likely to be sexually active in ninth grade. These findings are consistent with those of other studies. For example, in a study based on the Add Health data set, Hispanic males were more likely than white males and less likely than black males to report sex before age 15.³³ Hispanic culture, including traditional gender roles, puts pressure on men to be sexually active,³⁴ and this pressure is almost certainly transmitted to adolescent males.

By contrast, females who reported a same-age boyfriend in seventh grade were more likely than those reporting no boyfriend in seventh grade to say they had had sex in ninth grade, and those reporting older boyfriends in seventh grade were more likely than those reporting a same-age boyfriend to be sexually active in ninth grade. The differences are large (represented by odds ratios of 2.9 and 2.1, respectively) and important, and suggest that any "serious" relationship in

seventh grade should be cause for concern. The increased risk associated with having a boyfriend was not limited to a small proportion of females: Half of females reported in seventh grade that they had had a serious boyfriend.

The one-fifth of females in the sample who had had an older boyfriend by seventh grade were at particularly high risk of being sexually active in ninth grade. Females might be attracted to older males for many reasons. For example, older men generally have more resources than younger men. They may also be more mature and have higher status in the eyes of younger females and their friends. Unfortunately, these same characteristics may create an imbalance of power and thereby increase the pressures for sex and unprotected sex.³⁵ In addition, a younger teenager may be at a social and developmental disadvantage when dating someone several years older, making it even more difficult to refuse sexual advances. Finally, an older boyfriend is more likely than a younger one to be sexually experienced, and therefore is more likely to expect sex in a relationship. In fact, some older men may seek out younger partners precisely because they are more able to control younger partners and interactions with them.³⁶

Parents should be warned of the risks of interactions between middle school females and older boyfriends, even when those boyfriends are only two years older. Programs and parents need to find creative ways to address the risks of having an older boyfriend without making such activities appear more attractive than they already are.

Females who have had boyfriends by the seventh grade are different from those who have not. Their riskier peer norms, lower sexual limits and greater likelihood of having experienced menarche in sixth grade partially explained the association between having had a boyfriend by seventh grade and ninth-grade sexual activity. As with males, having a romantic relationship in seventh grade may be a marker for a more general pattern of behavior and biology predisposing females to early sex. However, eighth-grade mediating factors of peer norms and situations that could lead to sex, along with early menarche, more fully explained the relationship between seventh-grade relationship status and ninth-grade sexual behavior.

Females who had physically matured early were at particular risk of having had an older boyfriend by seventh grade and of being sexually active in ninth grade, and this association was unchanged when the eighth-grade variables were included in the analysis. This suggests that early menarche is a unique risk factor, explaining variance unexplained by the eighth-grade psychosocial risk factors.

This finding is of concern because young females are experiencing menarche at increasingly early ages.³⁷ Physical maturity does not equate to emotional, social and cognitive maturity, and young females who develop early may require special interventions or counseling to teach them how to handle both the sexual harassment common in grade schools³⁸ and interactions with older males. During the testing of our intervention,³⁹ many young people asked when they would be "ready for sex." It might be useful for inter-

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ventions aimed at postponing sexual involvement to address the issue of physical maturity and "readiness" for sex, emphasizing that the two are not the same.

Having a serious boyfriend in seventh grade appears to make it more likely that females will put themselves in situations that may lead to sex in eighth grade. There are a number of ways that being in these situations might lead to sex. For one, kissing and touching are enjoyable and likely to increase curiosity and sexual desire. Also, once females are seen as having been romantically involved, they may get a reputation that encourages others to approach them, again placing them in situations that could lead to sex. To some extent, this reasoning also applies to males.

Youth who are poorly supervised and live in a permissive environment may be more likely than others to be in situations that could lead to sex. Less supervision in high school has been associated with sexual initiation, more sexual partners and (among males) more STDs.⁴⁰ Discouraging dating and other social activities in middle school that make having a boyfriend or girlfriend look attractive and normative, and encouraging greater parental supervision, could be part of a comprehensive school-based sex education program to better address these issues.⁴¹

Although this study has a number of strengths, including its longitudinal design, some of its data should be viewed with caution. For example, the question about having an older or any boyfriend or girlfriend in seventh grade was quite general, and the analyses cannot determine if youth had had sex with that boyfriend or girlfriend or a different one. However, the strong association between that measure and sexual activity in the ninth grade suggests it is important. Another data limitation is the lack of any measure of early maturation for the males in this study. Only 75 males both had had an older girlfriend and were sexually inexperienced by seventh grade. Thus, conclusions about the effects of males' having an older girlfriend should be considered tentative. The relatively low response rate in ninth grade and lack of information about same-gender behavior are also limitations. On the positive side, the total sample was quite large, included both genders and represented an ethnically diverse population.

Given the complex biological, normative and behavioral issues, addressing the risk factors for early sexual involvement will be challenging. Helping girls to handle the social changes related to early pubertal development, deemphasizing social activities that may pave the way for risky behavior and encouraging parental supervision may help reduce early involvement with a boyfriend or girlfriend.

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