DOCUMENT RESUME

ED 477 795 UD 035 735

AUTHOR Albert, Bill, Ed.; Brown, Sarah, Ed.; Flanigan, Christine M., Ed.
TITLE 14 and Younger: The Sexual Behavior of Young Adolescents.
INSTITUTION National Campaign To Prevent Teen Pregnancy, Washington, DC.
SPONS AGENCY Charles Stewart Mott Foundation, Flint, MI.
ISBN ISBN-1-58671-04501
PUB DATE 2003-05-00
NOTE 118p.; For the executive summary, see UD 035 736.
AVAILABLE FROM National Campaign to Prevent Teen Pregnancy, 1776 Massachusetts Avenue, N.W., Suite 200, Washington, DC 20036. Tel: 202-478-8500; Fax: 202-478-8588; e-mail: campaign@teenpregnancy.org; Web site: http://www.teenpregnancy.org.
PUB TYPE Collected Works - General (020) -- Reports - Research (143)
EDRS PRICE EDRS Price MF01/PC05 Plus Postage.
DESCRIPTORS Adolescent Behavior; Contraception; Dating (Social); Disadvantaged Youth; *Early Adolescents; Knowledge Level; Middle School Students; Middle Schools; Parent Child Relationship; Predictor Variables ; Sex Education; *Sexuality; *Student Attitudes; Urban Areas
IDENTIFIERS California; Knowledge Development; *Risk Taking Behavior

ABSTRACT

This collection of papers on early adolescent sexual behavior includes seven papers in two parts. Part 1, "Papers from Nationally Representative Data Sets," includes (1) "Dating and Sexual Experiences among Middle School Youth: Analyses of the NLSY97" (Elizabeth Terry-Humen and Jennifer Manlove); "(2) "Dating Behavior and Sexual Activity of Young Adolescents: Analyses of the National Longitudinal Study of Adolescent Health" (Hannah Bruckner and Peter Bearman); and (3) "Sexual Activity among Girls Under Age 15: Findings from the National Survey of Family Growth" (Christine M. Flanigan). Part 2, "Papers from Small Area Data Sets," includes (4) "The Development of Sex-Related Knowledge, Attitudes, Perceived Norms, and Behaviors in a Longitudinal Cohort of Middle School Children" (Cynthia A. Gomez, Karin K. Coyle, Steve Gregorich, Barbara VanOss Marin, and Douglas B. Kirby); (5) "Youth with Older Boyfriends and Girlfriends: Associations with Sexual Risk" (Barbara VanOss Marin, Douglas B. Kirby, Esther S. Hudes, Cynthia A. Gomez, and Karin K. Coyle); (6) "Community Concerns and Communication among Young Teens and Their Parents: Data from California Communities" (Susan Philliber); and (7) "Sexual Behavior among Young Teens in Disadvantaged Areas of Seven Cities" (Susan Philliber and Michael Carrera). The data come from surveying 12-, 13- and 14-year-olds as one group; surveying a group of 12-year-olds and then following them over time as they turned 13 and 14; and surveying older teens about their experiences when age 14 and younger. Among the findings of the studies: nearly one in five adolescents has had sex before his or her 15th birthday; contraceptive use among young adolescents is relatively low; and sexually experienced youth age 14 and younger are much more likely to smoke, use drugs and alcohol, and participate in delinquent activities than youth who have not

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THE NATIONAL CAMPAIGN TO PREVENT TEEN PREGNANCY

14 and Younger:

THE SEXUAL BEHAVIOR OF YOUNG ADOLESCENTS

MAY 2003

Editors

Bill Albert
Sarah Brown
Christine M. Flanigan

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THE NATIONAL CAMPAIGN TO PREVENT TEEN PREGNANCY

14 and Younger:

THE SEXUAL BEHAVIOR OF YOUNG ADOLESCENTS

A report presenting new analyses from seven teams of investigators

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Acknowledgments

The National Campaign gratefully acknowledges the Charles Stewart Mott Foundation for its support of our research program, in general, and this set of analyses, in particular. We also extend continuing thanks to the David and Lucile Packard Foundation, the Robert Wood Johnson Foundation, the Roger and Vicki Sant Fund of the Community Foundation for the National Capital Region, the William and Flora Hewlett Foundation, and the John D. and Catherine T. MacArthur Foundation for generously supporting the full range of Campaign activities.

As the title page shows clearly, many authors were involved in this project. We thank them all warmly and sincerely for completing their papers on time and tolerating endless questions and edits. We thank the members of the Campaign's Effective Programs and Research Task Force for their keen insights and helpful advice, as well as many Campaign staffers and friends for offering suggestions about numerous earlier drafts of this publication. Anne Brown Rodgers, in particular, helped a great deal through her thorough review and edit of these papers.

Finally, we recognize the unique contributions of staff member Christine Flanigan, the Campaign's research analyst, who not only capably authored one of the chapters in this volume, but also carefully shepherded this entire project from start to finish with grace and determination. In addition, special thanks go to Bill Albert, the Campaign's Director of Communications and Publications, who spent countless hours refining these papers and helping to make them fully accessible to a broad audience. We simply could not have completed this project without his steady, competent guidance.

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ISBN: 1-58671-04501

Suggested citation: Albert, B., Brown, S., & Flanigan, C. (Eds.) (2003).
14 and Younger: The Sexual Behavior of Young Adolescents. Washington, DC: National Campaign to Prevent Teen Pregnancy

Design: *amp&rsand graphic design, inc.*
1700 Connecticut Avenue, NW, Suite 401
Washington, DC 20009
www.ampersand-design.com

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The papers in this volume were developed and reviewed under the auspices of this Task Force. The conclusions, however, are those of the authors and the National Campaign itself.

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Summary

14 and Younger: The Sexual Behavior of Young Adolescents

Why Care About Sexual Activity Among Young Teenagers?

While most adults prefer that teens under age 18 not have sex, consensus is even stronger for "middle school" youth — those age 14 and younger (Moore & Stief, 1991). There is good reason to be especially concerned about sexual activity among these very young adolescents.

- While the proportion of unmarried teen girls age 15-19 who have had sexual intercourse decreased between 1988 and 1995, the proportion of unmarried teen girls who have had sexual intercourse at 14 and younger increased appreciably during the same time period (Terry & Manlove, 2000).
- Compared to delayed sexual activity, early sexual activity has been linked to a greater number of sexual partners over time and an increased risk of both teen pregnancy (Kirby, 2001) and sexually transmitted diseases (Miller, Cain, Rogers, Gribble, & Turner, 1999).
- A recent national survey found that the younger a girl was the first time she had sex, the more likely it was to have been unwanted (Moore, Driscoll, & Lindberg, 1998).
- A 2002 public opinion poll found that 81% of sexually experienced youth age 12-14 wish they had waited longer to have sex, compared to 55% of sexually experienced 15- to 19-year-olds (The National Campaign to Prevent Teen Pregnancy, 2002).
- Children born to girls 14 and younger are more likely than children born to older teens to have health problems — in 2000, for example, 14% of births to girls age 10-14 were low birth weight, compared to 10% of births to girls 15-19 (and 8% of births to women 20-24) (Martin, Hamilton, Ventura, Menacker, & Park, 2002).
- There is no question that the parenting skills of very young teens are highly limited, although their efforts are often sup-

plemented and supported by older relatives and friends.

- An appreciable amount of sexual activity among youth aged 14 and younger runs afoul of state age of consent laws. The age of consent ranges from 14 to 18 years of age; in more than half of the states, the age of consent is 16. (Donovan, 1997).

Oddly, given the many risks and concerns about sexual activity among young adolescents, there actually is very little published information available on this topic. Furthermore, most of the major data sets used to calculate teen sexual activity have important limitations when examining young adolescents. For example, one of the most widely quoted surveys that addresses adolescent sexual behavior — the Youth Risk Behavior Survey — collects data only from high-school-age youth, the vast majority of whom are at least 15 years old.

Given that so little is known about early sexual activity, given its sobering implications, and given the numerous media reports of the past several years speculating on the sexual behavior of young teens, the National Campaign, in partnership with the Mailman School of Public Health at Columbia University, convened an invitational seminar of experts in 2001 to discuss various sex- and pregnancy-related issues among middle-school age youth. One major recommendation of that conference was that the National Campaign commission several new analyses of various existing data sets that have information on young teens in order to help increase our understanding of the sexual behavior and relationships of adolescents 14 and younger. The Campaign acted on that recommendation, and the results are in this report. Both the conference and the analyses reported here were made possible, in large part, by generous financial support from the Charles Stewart Mott Foundation.

This report contains seven papers based on six different data sets — three national and three local ones. These data were collected for different purposes, in different years and places (school, home), and using different interview techniques (self- and interviewer-administered). The surveys also used different methods of gathering data on youth aged 12-14, surveying 12-, 13- and 14-year-olds at the same time; surveying a group of 12-year-olds and then following them over time as they turned 13 and 14; and surveying older teens about their experiences when age 14 and younger. These differences are important and care must be taken in pooling results or making comparisons across different data sets. For example, a survey asking teens 15 and older about earlier experiences can, in theory, capture quite complete data on behavior occurring at ages 14 and younger. But surveys where youth are age 12-14 at the time of interview will necessarily miss some behavior that occurs in the 14th year of life but after the time of the interview, unless a "life table" analytic approach is used, as is the case for a few specific variables in the papers based on national data sets. These technical issues are taken up in detail in the individual papers.

Nonetheless, it is striking that on some of the most basic markers of sexual activity there is a high degree of uniformity — especially among the nationally representative data sets — and a surprisingly consistent picture emerges of sexual relationships and activity among very young teens.

Section one of the report contains three papers derived from nationally representative samples of teens.

- Chapter One, by Elizabeth Terry-Humen and Jennifer Manlove, uses data from the National Longitudinal Survey of Youth 1997 (NLSY97), a survey of youths' transition from school to work.

- Chapter Two, by Hannah Brückner and Peter Bearman, uses data collected between 1994 and 1996 through the National Longitudinal Study of Adolescent Health (Add Health), a large survey of teens and their parents and schools that examined many aspects of adolescent health.

- Chapter Three, by Christine Flanigan, uses data from the Cycle V of the National Survey of Family Growth (NSFG 1995), a fertility survey of females age 15-44, which includes retrospective reports of sexual activity before age 15.

Boxes on the first page of each of these three papers provide summary data on the percentages of youth in that sample who have had sexual intercourse, used contraception at first sex, and have been pregnant, in order to assist readers in making comparisons across these three national analyses.

Section two of the report contains four separate papers based on three small area, more local samples that are *not* nationally representative. The disadvantage to using such data is that one can't necessarily assume that the attitudes and behavior of youth presented in these papers are representative of U.S. youth as a whole. In addition, these local data sets are more subject to possible selection bias than the national data sets (that is, sample participants are not necessarily representative of the population of all possible participants). On the other hand, all of these surveys focused sharply on HIV/teen pregnancy prevention and therefore included questions on a number of issues that were not covered in the more broadly focused national surveys.

- Chapter Four, by Cynthia Gómez and colleagues, describes adolescents' sexual attitudes and beliefs, and how they change between ages 12 and 14. It is one of two papers in this volume that are based on an evaluation of the Draw the Line/Respect the Line (1997-2000) program in a community in northern California. Unlike the three national surveys, this data set contains extensive information about young adolescents' attitudes and beliefs regarding sex.

- Chapter Five, by Barbara Marín and colleagues, is the second paper based on the Draw the Line/Respect the Line evaluation and focuses on age differences between young teens and their partners.

- Chapter Six, by Susan Philliber, is based on data collected (1999) throughout California as part of an evaluation of a statewide teen pregnancy prevention effort funded by the California Wellness Foundation. This study was especially valuable because it asked many questions about attitudes toward and experience with parent-child communication about sex. Because the questions were asked of both adolescents and a parent, Philliber's analysis is able to show differences in attitudes and reporting of past parent-child communication within families on various topics related to sex and relationships.

- Chapter Seven, by Susan Philliber and Michael Carerra, is based on data collected (1996-1997) in seven cities as part of an evaluation of the Children's Aid Society (CAS)-Carrera program. It is one of the few surveys that have asked youth in this age group about oral and anal sex. Such data are important because there is some concern — and some evidence — that adolescents are increasingly engaged in such behaviors (Remez, 2000). Philliber and Carrera's analysis of this data is also important because it provides information on sexual activity and related behavior among some of the nation's most disadvantaged youth.

Results

Below, some of the headline findings from the seven papers are summarized. Information from the three nationally representative data sets is presented first, generally followed by selected information from the smaller area data sets. Remember that these more local data do not represent overall national statistics, and should therefore not be given the same weight. They were included mainly to provide additional texture and context.

Nearly one in five adolescents has had sex before his or her 15th birthday.

The National Picture

Estimates from the three nationally representative data sets of the proportion of youth who have had sex at age 14 or younger are remarkably similar. Overall, these data indicate that 18-19% of youth have had sexual intercourse at age 14 or younger. Percentages increase with age — at age 12, 4-5% have had sex, increasing to 10% at age 13, and 18-19% at age 14. Boys are more likely than girls to have had sex at an early age. At age 12, 2-4% of girls and 6-8% of boys were sexually experienced. At age 14, 14-20% of girls and 20-22% of boys were sexually experienced. It is important to add that each of these surveys approached this issue and question in a somewhat different way, as detailed in the papers that follow this summary. Nonetheless, these three separate data sets all indicate that approximately one in five youth have had sex by his or her 15th birthday.

Additional Information from Local Data

The proportion of sexually experienced youth in the local data sets varies widely. For example, 27% of 14-year-olds in the CAS-Carrera data set were sexually experienced, which is quite a bit higher than the national average. On the other hand, youth in the Cali-fornia Wellness Foundation data set had lower than average levels of sexual experience — overall 9% of 14-year-olds in this sample had ever had sex.

Proportion of Teens Who Have Had Sex at Age 14 and Younger, 3 Nationally-Representative Data Sets

	Male	Female	Total
NLSY ('97)	22%	17%	19%
Add Health ('94-'96)	20%	14%	18%
NSFG ('95)	—	20%	—

In early adolescence, being sexually experienced doesn't necessarily mean that young adolescents are having sex regularly.

The National Picture

For many youth age 14 and younger, sexual activity is quite sporadic. For example, four out of ten of those surveyed by Add Health who reported being sexually experienced had not had sex at all in the 18 months before the survey. Of those who had had sex in the previous 18 months, over half reported only one sexual partner during that same time period. According to the NLSY97, half of sexually experienced 14-year-olds had had sex 0-2 times in the previous year.

Contraceptive use among young adolescents is relatively low. Given that fact, it's not surprising that approximately one in seven sexually experienced 14-year-old girls report having been pregnant.

The National Picture

Reports of contraceptive use at first sex varied among the three national surveys

Results in a Box

Sexual Experience

- Approximately one in five adolescents has had sexual intercourse before his or her 15th birthday.
- Boys age 14 and younger are slightly more likely to have had sex than girls the same age.

Frequency of Sex

- A substantial proportion of teens age 14 and younger who have had sex are not currently sexually active.
- According to one of the national surveys (NLSY), approximately half of sexually experienced 14-year-olds have had sex 0-2 times in the past 12 months.

Contraceptive Use

- Between half and three-quarters of youth age 12-14 report that they used contraception the first time they had sex.
- Slightly more than half of girls age 12-14 and about two thirds of boys say they used some form of contraception the most recent time they had sex.

Pregnancy

- Approximately one in seven sexually experienced 14-year-old girls reports having been pregnant.

Dating

- A significant proportion of those age 12-14 report having been on a date (two-fifths in the NLSY survey) or having a romantic relationship in the past 18 months (half in Add Health).
- Significant minorities of youth age 14 and under report a romantic relationship with someone three or more years older (girls far more than boys).
- Relationships with a significantly older partner — compared with those with someone only slightly older, the same age, or younger — are much more likely to be sexual.

Pressure

- More than one in ten girls who first have had sex before age 15 describe it as non-voluntary and many more describe it as relatively unwanted.

Other Risky Behavior

- Sexually experienced youth age 14 and younger are much more likely to smoke, use drugs and alcohol, and participate in delinquent activities than youth who have not had sex.

Parents

- In general, parents report talking a moderate amount with their children age 12-14 about sex and related issues, although their children recall less communication than the parents claim.
- Parents are more likely to have spoken with their daughters than with their sons about sex and related issues.
- Parents tend to be unaware of what their children are actually doing sexually — only about a third of parents of sexually experienced 14-year-olds know that their child has had sex.

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from 57% to 74%. Two of the nationally representative surveys asked which method was used at first sex, and found that condoms were overwhelmingly the method most often used.

The Add Health paper — the only paper with data on contraceptive use by age at first sex — reports that the likelihood of using contraception at first sex increases dramatically as age at first sex increases.

Among 12-14-year-olds in the Add Health survey, 54% of girls and 66% of boys said they used some form of contraception the *most recent* time (as distinguished from the *first* time) they had sex. Three-quarters of all youth in this survey who used contraception at most recent sex used condoms, and the vast majority of the remaining adolescents who used contraception used such relatively ineffective methods as withdrawal and rhythm.

Because most girls age 14 and younger have not had sex, their *overall* pregnancy rate is low (for example, in 1997, the overall pregnancy rate for 14-year-olds was 12.2 per 1,000, compared to 147.8 per 1,000 for girls age 18-19 (Henshaw, 2001)). However, when one looks at pregnancy just among *sexually experienced* girls, the story is quite different. According to two of the three nationally representative data sets discussed in this volume, 13-15% of sexually experienced 14-year-old girls (about one in seven) report having been pregnant. (Add Health was not used to examine this outcome because it uses a method of calculating pregnancy rates that is not comparable to the other two data sets.)

Additional Information from Local Data

The Draw the Line survey contained several questions measuring youths' attitudes toward condoms. Many young adolescents (girls more than boys) expressed embarrassment about buying and carrying condoms, although these feelings decreased as the young people grew older. For example, the proportion of girls who said they would be embarrassed to buy condoms decreased from 69% of 12-year-olds to 53% of 14-year-olds; comparable percentages for boys were 58% at age 12 and 39% at age 14. About half of the 14-year-olds surveyed thought incorrectly it was against the law for people under 16 years old to buy condoms. For both boys and girls, about half of 12-year-olds and a quarter of 14-year-olds said they would be embarrassed to talk to a partner about using condoms.

The only survey that asked *boys* about pregnancy was the CAS-Carrera data set. In that survey, 1% of boys said they had caused a pregnancy, and another 7% thought they might have but weren't sure.

Many youth in this age group reported dating or being in romantic relationships, sometimes with older partners. Both dating, in general, and dating someone older, in particular, greatly increased the chances of having sex.

The National Picture

The three nationally representative surveys each defined romantic relationships differently. The NLSY97 asked about dating (defined as an unsupervised social outing) and found that 42% of youth age 12-14 had been on a date. Among those who had dated, dating was fairly sporadic — more than half reported either not dating at all in the previous year or only a few times. Add Health, on the other hand, asked about "romantic relationships," (defined as holding hands, telling the partner that he/she liked or loved him/her, etc.) and found that 50% of those age 12-14 reported having been in a romantic relationship in the past 18 months. For 12-year-olds only, the figure was 39%. The NSFG survey did not ask

about dating, per se, but did ask about relationships with *sexual* partners — 81% of girls who first had voluntary sex[a] at age 14 or younger were dating that partner (dating occasionally or "going steady") when the couple began having sex.

The vast majority of young adolescent relationships are with someone of the same or similar age. Nevertheless, significant minorities of young adolescents report dating someone three or more years older. For example, in the Add Health data set, 12% of all romantic relationships reported by youth age 12-14 were with someone three or more years older. And 12% were with someone two or more years older. Girls were more likely to report older romantic partners — 1% of relationships reported by boys were with someone 3 or more years older, compared to 11% of relationships reported by girls.

Romantic relationships with older partners were much more likely to include intercourse — 13% of relationships between same age partners included intercourse, compared to 26% of relationships with a partner who was 2 years older, 33% of relationships with a partner who was 3 years older, and 47% of relationships with a partner who was 4 or more years older. In the NSFG, only 8% of girls who first had voluntary sex at age 14 or younger did so with a partner who was the same age or younger, compared to 24% of girls who first had sex at age 15 or older. One in six girls who had voluntary sex at age 14 or younger reported that her first partner was 5 or more years older.

Add Health also makes clear that, overall, the romantic relationships of young adolescents are of relatively short duration. For example, 25% of relationships among youth age 12-14 ended after 3 months, 50% ended after 6 months, and 75% ended after 15 months. On the other hand, *sexual* romantic relationships in this age group tended to be of longer durations than non-sexual ones; a quarter lasted two years or longer. Over a quarter of sexually experienced youth age 12-14 (27%) also reported multiple recent sexual partners in the past 18 months, which implies, among other things, an increased risk of sexually transmitted diseases (STDs).

Additional Information from Local Data

The Draw the Line survey also found an association between early sexual activity and dating someone older. Among 14-year-olds, 30% of girls and 73% of boys whose oldest "serious boyfriend or girlfriend" was 2 or more years older were sexually experienced, compared to 13% of girls and 29% of boys whose oldest partner was no more than one year older. This analysis went a step beyond simply establishing this association to explore possible reasons *why* having an older boyfriend or girlfriend might be linked to an increased probability of having sex. The authors found that having an older partner is associated with greater opportunities for sex, with having friends who are sexually experienced, with more interest in having sex, and with experiencing more sexual pressure (possibly from the older partner, possibly someone else). Of course, it may also be that certain teens seek out older partners, so that precise direction of causation is not clear.

a The NSFG questionnaire was designed to permit the identification of sexual abuse and other nonvoluntary first sexual experiences. Because questions about partner and relationship characteristics were not asked about nonvoluntary sexual experiences, much of the NSFG analysis in this report focuses on voluntary sex only. In addition to ascertaining whether first sex was voluntary or nonvoluntary, respondents were also asked to rate on a scale of one to 10 how much they wanted to have sex at that time; individuals who indicated that sex was relatively unwanted, but was nonetheless voluntary, *are* included.

Many young adolescents experience pressure to have sex.

The National Picture

Thirteen percent of girls in the NSFG who first had sex at age 14 or younger described it as nonvoluntary, clearly a cause for great concern. Even among those who classified their first sexual experience as voluntary, girls who had sex at age 14 or younger were significantly more likely to say that it was relatively unwanted, compared to girls who had sex for the first time at age 15 or older.

Additional Information from Local Data

The Draw the Line survey asked several questions about sexual pressure and coercion, including attitudes toward the acceptability of pressuring a partner and experiences with pressure and coercion. In this survey, 6% of boys and 5% of girls reported that they had been forced to have sex. The proportion of youth who said that someone had *tried* to force them to have sex in the previous year when they didn't want to increased from 5-7% for 12-year-olds to 14-16% for 14-year-olds. The proportion of youth who said that *they* had tried to have sex in the previous year with someone who didn't want to was much lower, 1% for girls and 5% for boys.

The questions in Draw the Line about the acceptability of sexual pressure found that a substantial proportion of youth feel it's "okay" for someone to pressure a partner for sex if the couple has had sex before. Boys were much more likely to think so than girls: for example, 34% of boys thought it would be okay for a boy to pressure a girl to have sex if they had had sex before, while only 14% of girls thought that such pressure would be okay. Boys were more likely to agree that it is okay for a girl to pressure for sex than for a boy to pressure (34% agreed that it is okay for boys to pressure vs. 42% who agreed that it is okay for girls to pressure). Girls, on the other hand, were equally as likely to agree that either boys or girls can pressure a partner for sex (14% said it is okay for boys to pressure and 15% said it is okay for girls to pressure).

Sexually experienced young adolescents are also engaging in other risky behavior.

The National Picture

According to the Add Health survey, sexually experienced youth age 12-14 were much more likely to also smoke, use drugs and alcohol, and participate in delinquent activities than youth who had not had sex. For example, nearly 1 in 5 sexually experienced youth (18%) reported drinking regularly, compared to only 3% of virgins. Similarly, 29% of sexually experienced youth reported having ever smoked regularly and 43% have tried marijuana; comparable percentages for virgins were 8% and 10%. Ninety percent of sexually experienced youth reported participating in one of 15 types of delinquent behavior (such as shoplifting and fighting) in the previous year, compared to 69% of virgins.

The Add Health paper also includes findings about the association between alcohol and sexual activity. Seven percent of youth used alcohol the first time they had sex, and 6% used alcohol the most recent time they had sex. Alcohol use was not associated with decreased contraceptive use at *first* sex, but it was at *most recent* sex; 45% of those who drank at the time of most recent sex used contraception, compared to 62% of those who did not drink. In addition, 17% of girls and 11% of boys age 14 and younger said that, because of alcohol, they had been in a sexual situation they later regretted.

These data sets do not shed much light on the extent to which young adolescents are engaging in oral sex and other sexual behavior.

The National Picture

In the Add Health survey, 12% of virgins age 12-14 reported that a relationship in the past 18 months included "touching under clothes," and 6% of virgins age 12-14 reported that touching genitals occurred within at least one of their recent romantic relationships. But neither Add Health nor the other two nationally representative surveys included questions *specifically* asking youth age 14 and under about oral and anal sex. Numerous recent media reports have suggested that teens — including young adolescents — are increasingly having oral and/or anal sex, perhaps as a substitute for vaginal intercourse. The three nationally representative data sets described here do not shed any light on whether this is the case or not.

Additional Information from Local Data

In the CAS-Carrera dataset, 3% of youth age 12-14 reported having had oral or anal sex but not vaginal intercourse. By contrast, 7% of youth who reported having vaginal sex also reported oral or anal sex. It should be noted, however, that this data set does not make clear the sequence of behavior. For example, some of the youth in the data set may have engaged in oral and/or anal sex before or after having vaginal intercourse; for others, these actions may have occurred later.

Young adolescents don't seem to know a lot about sex.

The National Picture

Ninety percent of youth age 12-14 reported learning about HIV/AIDS in school, while 81% said they had learned about pregnancy in school, according to Add Health. Note that these percentages are higher than a 1999 survey of teachers, in which about two-thirds said that sex education was taught in grades 6, 7, and 8 in their school (Darroch, Landry, & Singh, 2000; Landry, Singh, & Darroch, 2000).

However, despite such education, basic knowledge about reproductive biology and contraceptive methods was poor, at least among 13-year-olds surveyed by the NLSY97. For example, among the options of withdrawal, condoms, and the pill, less than a third of 13-year-olds was able to identify the most effective pregnancy prevention method (the pill), and only two-thirds were able to identify the most effective STD prevention method (condoms). Only 8% correctly identified the point in the female fertility cycle when pregnancy is most likely to occur.

Additional Information from Local Data

The Draw the Line survey confirmed that young teens are often poorly informed about sex. For example, about half of 14-year-olds (boys and girls) believed it is illegal for youth under 16 to buy condoms (it is not). About 20% of youth age 12-14 erroneously believed that "you could tell if a person has HIV/AIDS by looking at him/her." Nearly four out of ten (39%) 14-year-old boys and half (51%) of 14-year-old girls agreed with the statement, "most teens your age are having sex," even though, as noted earlier, only a minority are.

Parents and youth give mixed reports about family communication about sex, and seem to have misperceptions about each other's attitudes and behaviors.

The National Picture

Parents in the Add Health survey tended to answer, "a moderate amount"

when asked how much they had talked with their child about sex. In terms of specific topics, parents were most likely to report that they have spoken with their children about sexually transmitted diseases, and least likely to have discussed the social consequences of sex. As a general matter, parents were more likely to have spoken about various topics related to sexual activity with daughters than with sons.

Parents in the Add Health survey generally rejected numerous reasons thought to explain why they might *not* speak with their child about sex, such as feeling that they don't know enough, that the child would be embarrassed, that it would only encourage the child to have sex, or that parents don't need to talk to their children because the children will get the information they need elsewhere. In essence, Add Health was not able to readily uncover why parents are sometimes reluctant to talk about sex and contraception with young adolescents.

Parents surveyed by Add Health also tended to be unaware of what their children were actually doing sexually — only 30% of the parents of sexually experienced 14-year-olds believed their child had had sexual intercourse. This percentage was slightly higher for parents of girls (36%) than it was for parents of boys (25%).

Additional Information from Local Data

As other research has noted, youth and parents frequently disagree in their reporting of past experience with parent-child communication about sex, contraception, and pregnancy. In the California Wellness Foundation analysis, two-thirds or more (66-74%) of adolescents age 11-14 said they could speak with a parent on the three subjects, while about 90% of parents/caregivers thought their teen could speak with them. Parents were also more likely to believe that youth felt comfortable speaking with other family members about these topics than the youth themselves reported.

In this same survey, parents and youth disagreed about whether conversations had actually taken place — 41% of youth and 65% of adults said that they had had conversations about sex or birth control. They also disagreed on who started the conversations — youth said they began the conversations about half the time, while parents said that youth began the conversations only a quarter of the time.

One local data set suggests that many young adolescents have ample opportunities to have sex, and many report willingness to have sex.

Information from Local Data (no relevant national data are available)

Though not nationally representative, the Draw the Line data set contains some provocative findings regarding many young adolescents' willingness to have sex, and opportunities to do so. A third of 12-year-olds reported that they had attended a party in the previous three months where no adults were in the house. By age 14, this percentage increased to 51% for boys and 42% for girls. Thirty-eight percent of 14-year-old boys and 30% of 14-year-old girls said that in the past three months they had been alone lying on a couch or bed with "someone they liked."

Many boys, and some girls, in the Draw the Line data set expressed interest in having sex "at this time in their lives." The proportion of boys who said they would have sex with someone they liked very much if they had the opportunity increased from 19% at age 12 to 42% at age 14 (comparable statistics for girls were 5% at age 12 and 8% at age 14). Thirty-six percent of 14-year-old boys and 18% of 14-year-old girls said they would consider having sex if they had a boyfriend or girlfriend they loved. About one-third of

14-year-old boys said they would have sex because of curiosity and an equal proportion said they would do so to "satisfy my sexual desires." Of those girls who would have sex if the opportunity arose, the top three reasons (of seven offered) that they would consider having sex were similar to the boys —18% would do so with a boyfriend they loved, 12% would do so to satisfy curiosity, and 12% would do so because of sexual desire.

Significant proportions of youth surveyed as part of the Draw the Line/Respect the Line evaluation perceived that people in their lives would be accepting, if not approving, of their having sex. Half of boys and a third of girls age 14 said that the majority of their friends think it's acceptable for people their age to have sex with a serious boyfriend or girlfriend. About half of 14-year-olds (boys and girls) agreed that *boys* are more popular if they have sex; 36% of boys and 20% of girls age 14 thought that *girls* are also more popular if they have sex. Virtually no girls thought their parents would approve of them having sex at this time in their lives, but by age 14, 21% of boys thought their fathers would think it was okay and 15% thought that their mothers would think it was okay.

Implications

(1) The findings presented in this report provide substantial evidence that many young adolescents are having sex. Results from all three nationally representative data sets make clear that approximately one in five young adolescents has had sex by age 15, and many have begun dating at an early age. Such facts should serve as a wake up call for parents, program leaders, school officials, community leaders and all those who work with young teens. Sexual activity and dating are important issues for middle school age youth that cannot be ignored.

(2) There is good reason to be concerned about youth who begin having sex at an early age. Youth who have sex at an early age seem to be different from those who do not, both in their sexual behavior and in other areas as well. Early first sexual experiences for girls are more likely to be unwanted, compared to girls who have sex at age 15 or older, and these first sexual relationships end more quickly. Youth age 14 and younger who are sexually experienced are much more likely than peers who have not had sex to use drugs and alcohol and to engage in delinquent behavior; that is, such behaviors often occur together. Over the longer term, girls who begin having sex at age 14 or younger will likely have more sexual partners and an increased risk of teen pregnancy, contracting an STD, and dropping out of school. Although early sexual activity in and of itself may not "cause" these outcomes, it does appear to be an early and important warning sign of risk.

(3) Parents should be concerned about their young teenagers dating, in general, and very cautious about letting their children date someone much older, in particular. One of the most striking and clear findings from this collected research is the great risk inherent in young teens dating older partners. Parents clearly need to discourage early dating, in general, as well as dating older partners specifically, both of which greatly increase the chances of having sex. Although most sexual activity among young teens is voluntary, there is evidence from small area studies that some young teens, like older teens, can get into situations where they feel sexual pressure or coercion. By virtue of their young age, however, they may be less able to handle these situations effectively than older teens. Such data suggest that teaching middle school youth about how to resist and manage sexual pressure is appropriate. Another clear message is that supervising the social behavior of young

teens remains important. Parents and other responsible adults need to know where their children are, what they are doing, and with whom. As noted earlier, one small area study found that fully one-third of 12-year-olds and almost half of 14-year-olds (51% of boys and 42% of girls) report that they have been at a party where there were no adults in the house. National data are not available on some of these issues, as noted earlier, but these smaller area findings nonetheless raise serious concerns.

(4) Parents should communicate more with their young adolescents about sex, love, and relationships. As other research has shown, not all parents are talking with their children about sex and related issues, and the California Wellness Foundation data set also suggests that even when parents report that they are talking to their children about sex, their children don't always remember having these conversations. This apparent mismatch is a clear indicator that parent-child communication needs improvement. At the same time, it's important to add that simple communication between parents and children about sex does not necessarily reduce the chances of early sexual activity. For example, recent research has highlighted the importance of overall closeness between parents and teens, more than specific discussion of sex, as being especially protective (Blum, 2002).

(5) Efforts to prevent teen pregnancy should target young adolescents. Not only do many girls become sexually active before age 15, but of those who do have sex, about one in seven becomes pregnant. These data clearly suggest that addressing sex and its consequences — as well as contraception — for both girls and boys cannot be put off until the high school years.

(6) Sex education is necessary, but not sufficient. Although the majority of youth in this age group reported receiving some sort of sex education, youth surveyed in the NLSY97 lacked a grasp of some very basic facts about reproductive biology and contraception. It may be that middle schools are not adequately covering these topics (or are not covering them at all), it may be that poor quality curricula are being used, or it may be that teens simply are not retaining what they're taught. Because there are programs that have been proven to increase knowledge about these issues, as well as to decrease early sexual activity (Kirby, 2001; Sociometrics, 2002), middle schools should consider adopting such curricula or similar ones.

Nonetheless, as the National Campaign has long argued, it requires more than classroom-based curricula alone to make major reductions in teen pregnancy and related problems. Families, faith leaders and communities generally are also powerful influences on adolescents, and they all need to help teach and guide young people about sexuality. Schools cannot and probably should not do it alone.

(7) We still have much to learn. Finally, the seven analyses in this report also show how much we *don't* know about sexual activity in this age group. Although it is clear that far too many young people are engaged in risky sexual behavior, a more complete picture eludes us. This is partly because objections are often raised to research that asks young people sensitive questions about their sexual knowledge, attitudes, and behavior.

There are several reasons that help explain this queasiness. Some parents, school officials and community leaders are not certain that it is appropriate to ask young adolescents, in particular, direct questions about sexual activity. Some worry that asking such questions "legitimizes" the behavior or will increase teens' interest in engaging in it. Compounding this are some methodological problems of studying the issue. For example,

young teens may not necessarily understand the terms typically used in surveys. In order to get reliable data, investigators may therefore need to use very explicit language, language that parents, school officials, and others may find offensive. These sensitivities need to be discussed and resolved openly and respectfully in order to find ways of learning more about young teens. Absent such information, we are all limited in our ability to provide sound guidance and advice — not only about preventing teen pregnancy, but about sex, love, and relationships generally.

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Part One

Papers From Nationally Representative Data Sets

Chapter One

Dating and Sexual Experiences Among Middle School Youth: Analyses of the NLSY97

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Very few national-level data sets provide information on sexual activity and contraceptive use among youth age 14 and younger. For example, the National Survey of Adolescent Males and the National Survey of Family Growth include teens age 15-19 who retrospectively report early sexual experiences. Similarly, the Youth Risk Behavior Survey, another nationally representative survey that includes information about sexual activity, only includes those youth in grades 9 through 12, the vast majority of whom are 15 or older (Terry & Manlove, 2000). This paper presents descriptive analyses of dating characteristics, pregnancy and sexually transmitted disease (STD) knowledge, sexual experience, sexual activity, and contraceptive use among young adolescents (age 12-14) from the National Longitudinal Survey of Youth 1997 (NLSY97). This paper uses the NLSY97 to answer the following questions:

- What is typical dating behavior among early adolescents?
- What proportion of 12-14-year-olds have had sex before age 15?
- How often, and with how many partners, do sexually experienced 14-year-olds have sex?
- What are the patterns of contraceptive use among sexually experienced 14-year-olds?
- How many sexually experienced 14-year-old girls become pregnant before age 15?
- How much do young adolescents know about pregnancy and sexually transmitted diseases?

The sample

The NLSY97, sponsored and directed by the Bureau of Labor Statistics, U.S. Department of Labor, is designed to document the transition from school to work of a nationally representative sample of 8,984 adolescents in the United States born

Sexual experience, contraceptive use, and pregnancy — this survey finds that:

- 19% of 12-14-year-olds (22% of boys, 17% of girls) report that they became sexual experienced before age 15.
- 74% of 14-year-olds (76% of boys and 72% of girls) reported that they used contraceptives at first sex.
- 15% of sexually experienced 14-year-old girls reported ever being pregnant.

between 1980 and 1984 (ages 12-16 in 1997) (Hering & McClain, 2001). Information on a broad range of topics is collected in this survey. Youth were initially surveyed in 1997, and data are currently available for an additional three waves in 1998, 1999, and 2000.

The full sample for the analyses in this paper consists of 4,643 adolescents ages 12-14 at the time of their interview in 1997 (Wave 1). We use 1997 survey information on dating behaviors among 12-14-year olds for the first part of the paper (Tables 1-2). For analyses of sexual experience (in this paper, sexual experience is defined as "ever having had sexual intercourse"), we follow the full sample of teens until 2000 (Wave 4) in order to examine their likelihood of early sexual activity before age 15 (Tables 3-5). The sample for these tables includes sexually experienced teens who have information on age at first intercourse, as well as teens who were not sexually experienced by age 15.[1]

For analyses of the frequency of sexual activity, partner characteristics, and contraceptive use among middle school youth, we use a subsample of the full sample. Because the NLSY97 does not ask youth about sexual experience and activity until age 14, this sample is restricted to the 245 teens who were sexually experienced and age 14 in Waves 1-4 (Tables 6-11).[2] We report pregnancy information among a subsample of female sexually experienced 14-year-olds (N=101).

The final sample used for this paper consists of 1,717 respondents who were age 13 during Wave 1 for analyses of pregnancy and STD prevention knowledge (Tables 12 and 13). This sample was selected because only those respondents who were age 13 on December 31, 1996, were asked questions on pregnancy and sexually transmitted diseases. This sample includes both sexually experienced and sexually inexperienced teens.

Information is presented by gender, race/ethnicity, and maternal education. Race/ethnicity is a 3-category variable that compares Black and Hispanic with non-Black non-Hispanics (we refer to this category as Non-Hispanic "White" teens). Note that because of small sample sizes, we have removed mixed race Non-Hispanic youth from racial/ethnic analyses. Maternal education is measured in the parent survey and compares teens whose mothers have a high school education or less to those teens whose mothers have some college education or more. A total of 284 teens are missing information on maternal education. Bivariate

1 110 respondents were removed because of missing data on age at first intercourse.

2 Note that in the NLSY97 questionnaire, respondents were first asked about sexual intercourse when they were 14 years old. The specific questions were: "Have you ever had sexual intercourse, that is, made love, had sex, or gone all the way with a person of the opposite sex?" and, if the respondent answered yes, then the following question was asked: "Thinking about the very first time in your life that you had sexual intercourse with a person of the opposite sex, how old were you?" Thus, frequencies in Tables 6 – 11 are for teens between ages 14 years, 0 months and 14 years, 11 months.

Table 1: Dating behavior of youth 12-14 years old, by gender

	Total (n=4,643)	Males (n=2,386)	Females (n=2,257)
Percentage ever dated, Wave 1***	42%	48%	35%
Age at first date, among those who dated***	12.1	11.9	12.4
Number of times in past year dated, among those who dated:**			
Never this year	15%	16%	13%
Few times (1-3)	40%	39%	42%
Less than once per month	19%	21%	17%
1 or 2 times per month	15%	14%	16%
Once a week or more	11%	9%	13%

Statistically significant differences by gender are observed at the following levels: *** = p <.001, ** = p<.01.

analyses, including chi-square and Generalized Linear Model analyses test whether early adolescent characteristics differ by gender and race/ethnicity. All estimates are weighted, and sample sizes are unweighted.

What is typical dating behavior among early adolescents?

Tables 1 and 2 present dating behavior (defined as an "unsupervised social outing") among youth age 12-14 in 1997, by gender and race/ethnicity. Forty-two percent of teens reported that they had ever gone on an unsupervised date with a person of the opposite sex at the time of the 1997 survey (Table 1).

Boys were more likely to report that they had dated (48%) than girls (35%), and boys who had ever dated were younger on average than girls the first time they dated (11.9 years compared with 12.4 years). The frequency of dating among these youth was fairly low. More than half of the total sample of teens who dated in Wave 1 (55%) had 0-3 dates in the past year. Girls who had ever dated were slightly more likely to date once a month or more in the past 12 months than boys (29% vs. 23%).

Dating experience differed significantly by race and ethnicity (Table 2). Black youth were the least likely to report having ever dated (34% compared with 41-44% for other racial/ethnic groups). Non-Hispanic Whites who had ever dated were more likely to date relatively frequently — 28% dated once a month or more, compared to 22% of Blacks and 18% of Hispanics. However, age at first date did not differ significantly by race/ethnicity.

What proportion of 12-14-year-olds had sex before age 15?

Table 3 shows the prevalence of early sexual experience by gender, based on life table analyses of 12-14-year-olds who were followed until they reached age 15 or older.[3]

3 Life table analyses show the proportion of teens who are sexually experienced before age 15 by gender, race/ethnicity, and mother's educational attainment. Life table analyses control for right censoring, which occurs when teens reach age 15 without having sexual intercourse, have incomplete information on sexual experience, or are lost due to attrition from the NLSY sample before they reached age 15.

Table 2: Dating behavior of youth 12-14 years old, by race/ethnicity

	Total (n=4,643)	Black (n=1,189)	Hispanic (n=969)	Non-Hispanic White (n=2,439)
Percentage ever dated, Wave 1***	42%	34%	41%	44%
Age at first date, among those who dated	12.1	12.1	12.0	12.1
Number of times in past year dated, among those who dated:***				
Never this year	15%	22%	20%	13%
Few times (1-3)	40%	44%	38%	40%
Less than once per month	19%	12%	24%	19%
1 or 2 times per month	15%	12%	12%	16%
Once a week or more	11%	10%	6%	12%

*** Indicates statistically significant differences by race/ethnicity at $p < .001$.

Among youth age 12-14 in 1997, 4% had sexual intercourse before age 13. This percentage more than doubles to 10% before age 14, while almost 1 in 5 adolescents (19%) had sexual intercourse before age 15. Table 3 also shows that boys were more likely than girls to have had sexual intercourse before age 15 (22% of boys compared with 17% of girls). It is important to note, however, that because of sample weighting, life table analyses shown by gender, race/ethnicity and mother's educational attainment were not tested for statistical significance.[4]

The proportion of youth who were sexually experienced before age 15 is highest for Black teens (34%) — followed by Hispanic

Table 3: Proportion of young adolescents aged 12-14 who have had sex by age and gender*

	Total (n=4,627)	Males (n=2,376)	Females (n=2,251)
Percentage who had sex:			
before age 13	4%	6%	2%
before age 14	10%	12%	7%
before age 15	19%	22%	17%

* Based on weighted life table analyses

4 Life table analyses were conducted using the proc lifetest procedure in SAS, which overinflates weights, thus reducing standard errors.

Table 4: Proportion of young adolescents who have had sex, by age, race/ ethnicity and mother's education*

	By Race/Ethnicity			By Mother's Education	
	Non-Hispanic White (n=2,430)	Black (n=1,183)	Hispanic (n=968)	<High School (n=2,518)	>High School (n=1,825)
Percentage who had sex:					
before age 13	3%	10%	4%	5%	2%
before age 14	7%	21%	11%	12%	7%
before age 15	16%	34%	21%	24%	15%

* Based on weighted life table analyses

teens (21%) and Non-Hispanic White teens (16%) (Table 4). Differences also occur in the prevalence of sexual experience by maternal education. Among adolescents whose mothers had higher educational attainment (defined as greater than high school), 15% had sexual intercourse before age 15, compared with 24% of adolescents whose mothers completed only a high school education or less.

Table 5 examines whether racial/ethnic differences in the prevalence of sexual experience remain after taking into account a measure of family socioeconomic status, by showing the proportion of male and female teens who were sexually experienced by race/ethnicity within categories of mother's educational attainment. Overall, boys whose mother had a high school education or less were almost twice as likely to be sexually experienced by age 15 as boys whose mothers had more than a high school education (28% compared with 15%, Panel D). Differences by maternal education were smaller for girls: among teen girls whose mothers had a high school education or less, 19% had sexual intercourse before age 15, compared with 14% of those whose mothers had educational attainment beyond high school.

Among boys with mothers who had a high school education or less, Black males were most likely to be sexually experienced before age 15 (50%), followed by Hispanic males (29%), and Non-Hispanic White males (22%). Although the percentage of boys who were sexually experienced was much lower among teens whose mother had a higher education for all three racial/ethnic groups, the racial/ethnic patterns were similar. Black males were the most likely to have had sex at an early age (36% before age 15), and Non-Hispanic White males the least likely (11%). For girls, Blacks showed the greatest likelihood of sexual experience within both maternal education groups. In contrast with racial/ethnic patterns among boys, though, Hispanic girls (versus Non-Hispanic White boys) showed the lowest level of sexual experience within both maternal education groups. Again, however, it is important to note that significance testing was not conducted within life table analyses.

Regardless of race/ethnicity or mother's education, girls, in general, are less likely to have sexual intercourse than their

Table 5: Percentage of sexually experienced young adolescents, by age, race/ ethnicity, gender, and mother's education*

	Males		Females	
	Mother's Ed. < High School	Mother's Ed. > High School	Mother's Ed. < High School	Mother's Ed. > High School
	Panel A: Black			
Percentage who had sex:				
before age 13	18%	11%	4%	2%
before age 14	36%	24%	9%	9%
before age 15	50%	36%	25%	18%
N	(n=359)	(n=183)	(n=367)	(n=177)
	Panel B: Hispanic			
Percentage who had sex:				
before age 13	7%	4%	2%	2%
before age 14	15%	11%	6%	5%
before age 15	29%	24%	13%	11%
N	(n=339)	(n=100)	(n=345)	(n=103)
	Panel C: Non-Hispanic White			
Percentage who had sex:				
before age 13	5%	2%	3%	2%
before age 14	10%	5%	8%	5%
before age 15	22%	11%	18%	13%
N	(n=571)	(n=654)	(n=520)	(n=587)
	Panel D: Total			
Percentage who had sex:				
before age 13	8%	3%	3%	2%
before age 14	16%	8%	8%	6%
before age 15	28%	15%	19%	14%
N	(n=1,278)	(n=946)	(n=1,240)	(n=879)

* Based on weighted life table analyses

male counterparts. Only Non-Hispanic White youth whose mothers had greater than a high school education appear to be sexually experienced by age 15 in similar proportions regardless of gender (13% of Non-Hispanic White girls with higher maternal education were sexually experienced, compared with 11% of boys, for example). Thus, overall gender differences in sexual experience (Table 3) appear to be driven primarily by differences among Black and Hispanic teens.

How often, and with how many partners, do sexually experienced 14-year-olds have sex?

Table 6 shows the number of lifetime sexual partners among sexually experienced 14-year-olds in the sample. Note that this is

a subsample of the full sample and includes only youth who were sexually experienced at the time of their age 14 interview (N=245). These youth reported they had first sexual intercourse at any time before the age 14 interview. We look at respondents who were age 14 at first sexual intercourse because that is the first age that NLSY97 respondents were asked about their sexual experiences. Almost half of the sample (45%) of sexually experienced 14-year-olds reported that they had had only one sexual partner during their lifetime. Boys and girls did not differ significantly on the number of sexual partners that they reported, nor were there significant differences by race/ethnicity.

Not all teens who were sexually experienced had recent sexual partners, however. Table 7 shows two estimates for the number of recent sexual partners — a low and a high estimate.[5] Not surprisingly, the vast majority of 14-year-olds who reported ever having had sexual intercourse had sex in the past 12 months. However, as many as 15% of 14-year-old girls and 17% of 14-year-old boys who had sexual intercourse reported no sexual partners in the past 12 months. About

Table 6: Number of lifetime sexual partners among sexually experienced teens aged 14

	1 Lifetime Partner (n=107)	2 or More Lifetime Partners (n=138)
Total	45%	55%
By Gender:		
Males	43%	57%
Females	48%	52%
By Race/Ethnicity:		
Non-Hispanic White	47%	53%
Black	44%	56%
Hispanic	43%	57%

Table 7: Number of recent sexual partners (past 12 months/ since date of last interview) among sexually experienced teens aged 14, by gender

	Total	Males	Females
	Panel A: Low Estimate		
0 recent sexual partners	16%	17%	15%
1 recent sexual partner	43%	38%	50%
2 or more recent sexual partners	41%	45%	36%
N	(n=243)	(n=141)	(n=102)
	Panel B: High Estimate		
0 recent sexual partners	9%	8%	11%
1 recent sexual partner	50%	47%	54%
2 or more recent sexual partners	41%	45%	36%
N	(n=245)	(n=143)	(n=102)

Because of rounding, not all rows add up to exactly 100%

5 The high estimate assumes that teens who reported a first sexual experience at age 13 had 1 partner in the past 12 months. The low estimate assumes that teens who reported a first sexual experience at age 13 had 0 partners in the past 12 months. These estimates are necessary because teens report their age in years, not in months, at first sex.

Table 8: Number of recent sexual partners (past 12 months/ since date of last interview) among sexually experienced teens age 14 by race/ethnicity

	Total	Non-Hispanic. White	Black	Hispanic
	Panel A: Low Estimate*			
0 recent sexual partners	16%	11%	27%	20%
1 recent sexual partner	43%	47%	34%	43%
2 or more recent sexual partners	41%	43%	39%	37%
N	(n=243)	(n=92)	(n=102)	(n=45)
	Panel B: High Estimate			
0 recent sexual partners	9%	6%	16%	11%
1 recent sexual partner	50%	52%	45%	53%
2 or more recent sexual partners	41%	42%	39%	37%
N	(n=245)	(n=93)	(n=103)	(n=45)

* Number of recent sexual partners is significantly different by race/ethnicity at the p<.10 level. Because of rounding, not all rows add up to exactly 100%.

half of sexually experienced 14-year-olds reported only one partner in the past 12 months (38% of boys and 50% of girls in the low estimate, and 47% of boys and 54% of girls in the high estimate). However, 41% (45% of boys and 36% of girls) reported having had two or more partners in the past 12 months. The number of recent partners did not differ significantly by gender.

The percentage of recent sexual partners (low estimate only) differed among racial and ethnic groups (Table 8). One in 10 Non-Hispanic White 14-year-olds (11%) reported no recent sexual partners compared with 20% of Hispanic 14-year-olds and 27% of Black 14-year-olds. This suggests that sexually experienced Non-Hispanic White teens may have more sexual partners than Black or Hispanic teens.

Table 9 presents information on the frequency of sexual activity in the past year among sexually experienced teens aged 14. Approximately half of these 14-year-olds reported having had sexual intercourse three or more times in the past year. The distribution in the frequency of sexual activity differs by gender and race/ethnicity. Girls were slightly more likely than boys to have had sexual intercourse three or more times in the past year (56% compared with 44% of boys). Further, Non-Hispanic White teens were

Table 9: Estimated number of times sexually experienced teens age 14 had sex in past 12 months/since last interview

	0-2 times (n=124)	3 or more times* (n=116)
Total	51%	49%
By Gender:		
Males	56%	44%
Females	44%	56%
By Race/Ethnicity:		
Non-Hispanic White	44%	56%
Black	59%	41%
Hispanic	63%	37%

*Differences by gender are significantly different at p<.10; white teens are significantly different from black or Hispanic teens (p<.05).

Table 10: Use of birth control methods at first sex among sexually experienced teens age 14

	Yes (n=180)	No (n=55)	Didn't need to, one partner infertile (n=11)
Total	74%	22%	3%
By Gender:			
Males	76%	18%	6%
Females	72%	28%	—
By Race/Ethnicity:			
Non-Hispanic White	74%	25%	1%
Black	73%	17%	11%
Hispanic	82%	18%	0%

Differences are statistically significant at p<.01 by gender and at p<.001 by race/ethnicity using chi-square. Because of rounding, not all columns add up to exactly 100%.

more likely than Black or Hispanic teens to report three or more episodes of sexual activity in the past year.

What are the patterns of contraceptive use among sexually experienced 14-year-olds?

Table 10 presents data on contraceptive use at first sex among sexually experienced 14-year-olds. Approximately three-quarters (74%) of teens who had sexual intercourse before age 15 reported that they used some method of contraception the first time that they had sexual intercourse (including withdrawal or the rhythm method). Fewer girls than boys reported using contraception the first time they had sex. An additional 22% reported they did not use a method, and 3% reported that they didn't need to use a method because they or their partner was unable to have children. Almost 6% of boys reported they did not use a method because either they or their partner were unable to have children, compared with 0.3% of the girls. Racial and ethnic groups also differed significantly — almost 11% of Black teens reported they did not use a method because they did not need to (compared with 1% of Non-Hispanic White and 0% of Hispanic teens). These data also indicate that Hispanic teens were more likely than other racial/ethnic groups to report using contraception at first sex. This finding is at odds with other national data that show Hispanics teens aged 15-19 having the *lowest* levels of contraceptive use (Terry & Manlove, 2000).

Table 11 presents information on which contraceptive method was used most frequently among 14-year-olds who reported having had sex more than once and who had had sex in the previous 12 months. (Readers should note that "sexually experienced" in this paper means ever having had sexual intercourse and "sexually active" means having had sexual intercourse in the past 12 months.) The vast majority of teens reported condoms as the contraceptive method most often used (77%). For 14% of sexually experienced teens, "no method" was the most frequently used method. An additional 5% reported using a long-term or hormonal method such as the birth control pill, IUD, Norplant, Depo Provera or other injectible. Only 4% reported "other"

Table 11: Birth control method used most frequently among sexually active (past 12 months/since date of last interview) 14-year-olds who used any method

	Condom (n=128)	IUD/Hormonal (Pill, Norplant, Depo Provera) (n=6)	Other (n=6)	No Method (n=26)
Total	77%	5%	4%	14%
By Gender:				
Males	84%	3%	3%	11%
Females	70%	7%	5%	18%
By Race/Ethnicity:				
Non-Hispanic White	74%	6%	5%	15%
Black	81%	5%	3%	11%
Hispanic	85%	0%	4%	11%

Because of rounding, not all columns add up to exactly 100%.

methods, such as foam, withdrawal, or diaphragm. The method used most frequently did not differ significantly by gender or by race/ethnicity.

How many sexually experienced 14-year-old girls become pregnant before age 15?

Among sexually experienced 14-year-old girls, 15% reported having been pregnant.[6] Because of small sample sizes, results by race/ethnicity cannot be tabulated.

How much do young adolescents know about pregnancy and sexually transmitted diseases?

The NLSY97 survey included a set of questions for 13-year-old teens only,[7] which assessed their knowledge of pregnancy and STD prevention. In general, adolescents were not very knowledgeable about these topics (Table 12). Only about one-quarter of 13-year-olds (26%) correctly identified which method was the most effective at preventing pregnancy (birth control pills, compared with withdrawal or condoms); 64% knew which method was best at preventing STDs (condoms, compared with withdrawal or birth control pills); and fewer than one in ten (8%) knew when during the female fertility cycle pregnancy was most likely to occur (about two weeks after the period begins, rather than right before the period begins, during the period, about a week after the period begins, anytime during the month, or makes no difference). Girls were more likely than boys to identify the most effective pregnancy prevention method and information about the female fertility cycle. Even so, less than one-third of the girls (32%) identified birth control pills as the most effective pregnancy prevention method, and only 10% knew the correct timing within the female fertility cycle when pregnancy was most likely to occur.

6 Because pregnancy data were only collected for both males and females beginning in Wave 2, information is shown for females only.
7 Age 13 on December 31, 1996, Wave 1.

Table 12: Proportion of 13-year-olds who correctly answered knowledge questions, by gender

	Total	Males	Females
Knowledge of most effective pregnancy prevention method***	26% (n=1,717)	21% (n=886)	32% (n=831)
Knowledge of most effective STD prevention method	64% (n=1,716)	63% (n=887)	66% (n=829)
Knowledge of female fertility cycle and pregnancy likelihood**	8% (n=1,713)	7% (n=884)	10% (n=829)

Statistically significant differences by gender at the following levels: *** = p <.001, ** = p<.01.

In general, 13-year-old adolescents of different racial/ethnic groups were equally knowledgeable about pregnancy and STD prevention. One exception was that Hispanics were more likely than other racial/ethnic groups to correctly identify the most effective pregnancy prevention method. Slightly more than one-third (35%) of Hispanic adolescents correctly identified the birth control pill as the method that best prevented pregnancy, compared with 25% of Non-Hispanic Whites and 26% of Black teens.

Discussion

This paper provides a descriptive overview of sexual experience among middle school aged youth — an especially important group because of their increased exposure to teen pregnancy and STDs.

Four in ten 12-14-year olds have ever been on a date, and the majority dated only a few times in the past year. However, one in four teens aged 12-14 who ever dated were going out on dates at least once a month. Because having a steady dating partner is associated with an increased likelihood of sexual experience (Blum, Beuhring, & Rinehar, 2000), it is important to pay attention to the dating behaviors of young adolescents. African-American teens were less likely to report dating than Non-Hispanic Whites or Hispanics, despite having the highest rates of early sexual experience before age 15. It is

Table 13: Proportion of 13-year-olds who correctly answered knowledge questions, by race/ethnicity

	Total	Black	Hispanic	Non-Hispanic White
Knowledge of most effective pregnancy prevention method*	26% (n=1,717)	26% (n=445)	35% (n=350)	25% (n=909)
Knowledge of most effective STD prevention method	64% (n=1,716)	62% (n=445)	69% (n=349)	64% (n=909)
Knowledge of female fertility cycle and pregnancy likelihood	8% (n=1,713)	7% (n=445)	10% (n=349)	9% (n=906)

*indicates statistically significant differences by gender at =p<.05.

possible that the definition of dating in the NLSY97 — "going on an unsupervised outing with a person of the opposite sex" — may not capture the pre-sexual dating relationships of Black teens as well as it does for other racial/ethnic groups.

These analyses provide recent national estimates of early sexual experience among teens. Almost one in five in this sample had sexual intercourse before age 15, with differences by gender (boys more than girls), race/ethnicity (Blacks most likely to have early sexual experiences), and maternal education (teen children of mothers with lower educational levels more likely to have early sexual experiences). Even after controlling for maternal education, strong differences in early sexual experience remain across racial/ethnic groups. Although boys, on average, reported higher levels of early sexual experience than girls, gender differences appear to be concentrated among racial/ethnic minorities. In contrast, differences between Non-Hispanic White boys and girls are much smaller, and among children of mothers with higher education levels, girls reported a higher incidence of early sexual experience.

More than half of sexually experienced 14-year-olds reported two or more lifetime partners before age 15, the majority occurring within a year of the teen's most recent interview. Nevertheless, not all teens who first had sexual intercourse before age 15 continued to have sex. This finding matches those of other studies indicating that teen sexual experience may be episodic in nature and that some teens may have sex only once and then go for a period of time with no additional sexual partners (Terry & Manlove, 2000).

As with men and women who first have sex during their late teen years or in adulthood, contraceptive use among youth who have sex at an early age is not universal. Although three-quarters of teens reported using a method the first time they had sexual intercourse, another 25% reported no method use. Girls and Black youth reported the lowest levels of use at first sex. Additionally, 14% of sexually active youth still reported that "no method" was used most frequently in the past 12 months. We found that Hispanic teens were the most likely to report using any form of contraception at first sex, which is in contrast with other national data that show especially low levels of contraceptive use among Hispanic teens aged 15 to 19 (Terry & Manlove, 2000). Small sample sizes in this paper, however, may account for such differences.

Analyses indicate that 13-year-olds have a very poor understanding of pregnancy prevention and STD prevention. Although more than three-fifths of 13-year-olds correctly identified condoms as the most effective contraceptive method to avoid STDs, only slightly more than one in four correctly identified the birth control pill as the most effective pregnancy prevention contraceptive method and less than one in 10 knew when pregnancy is most likely to occur in a female fertility cycle. Although sexuality education is almost universal among teens in high school (Hoff, Greene, McIntosh, Rawlings, & D'Amico, 2000) and 86% of students in grades 7-8 report taking at least one sexuality education class, messages about pregnancy and fertility cycles are either not being taught in these grades or are not being retained by the students. Given that 10% of this sample had sexual intercourse before age 14 and almost 20% had sex before age 15, messages about reproductive health need to be clear at earlier ages, especially among higher-risk populations.

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Chapter Two

Dating Behavior and Sexual Activity of Young Adolescents: Analyses of the National Longitudinal Study of Adolescent Health

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Not much is known about the sexual behavior of very young adolescents (age 12-14). Although information on the proportion of young adolescents who report they have had sexual intercourse is available, such data do not tell us much about the context of this behavior. Sexual activity may be sporadic or continuous; it may occur with one steady romantic partner or in multiple casual relationships. Also, although most studies focus on sexual intercourse, concern is growing that even adolescents who are virgins may nonetheless engage in sexual activities that expose them to health risks. (Remez, 2000).

Sexual behavior is especially problematic for young adolescents, who may not have the knowledge or support to use contraception effectively and avoid sexually transmitted diseases (STDs), or to protect themselves from exploitative relationships and avoid the negative psychosocial consequences of sexual activity. Earlier research has shown that young teens tend to have sex in sporadic and

Sexual experience, contraceptive use, and pregnancy — this survey finds that:

- 20% of boys, 14% of girls, and 18% of the entire sample report that they became sexually experienced at age 14 or younger.
- 60% of boys, 54% of girls, and 57% of the entire sample of 12-14-year-olds reported that they used contraception at first sex.
- 9% of sexually experienced girls under 15 reported having been pregnant.

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casual relationships, and that those who are sexually active tend to have multiple partners (Hayes, 1987). These and other issues about young adolescents are addressed in this paper with data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of American adolescents in grades 7-12.

This paper examines the following questions:

- What is typical dating behavior among young adolescents?
- Do young adolescents engage in precursor or alternative sexual behavior beside sexual intercourse?
- What proportion of 12-14-year-olds have had sex?
- What do adolescents age 12-14 report about recent sexual activity?
- What are the patterns of contraceptive use among sexually experienced youth?
- How many sexually experienced females become pregnant before age 15?
- Are sexually experienced adolescents more likely to engage in other risky behaviors?
- Do young adolescents learn about pregnancy and AIDS in school?
- How often do parent talk to their children about sex?

The sample

Add Health is a nationally representative school-based study. It centers on a sample of 80 high schools (defined as schools with a 12th grade and more than 30 students) that were randomly selected from a database listing all high schools in the United States. A "feeder school" (typically a middle school) for each high school was then identified and recruited, yielding one school pair in 80 different communities. Schools varied in size from less than 100 students to more than 3,000 students. The Add Health sample includes private, religious, and public schools from communities located in urban, suburban, and rural areas of the country.

The Add Health study collected data at three points in time. From September, 1994, until April, 1995, in-school questionnaires were administered to all students in each sampled school who were present on the day of data collection, resulting in completed in-school questionnaires from more than 90,000 students. School administrators also completed a self-administered questionnaire in the first and third years of the study.

The second stage of data collection (an in-home survey) took place between May and December, 1995, with most interviews occurring during the summer. Students (whether or not they participated in the in-school survey) were randomly selected for a 90-minute in-home interview, resulting in 20,745 completed in-home interviews. Parents also were interviewed during this wave of data collection; parental interviews are available for slightly more than 85% of all adolescents in the in-home sample. Data collected during this in-home phase of Add Health provide measurements on more sensitive health-risk behaviors, such as drug and alcohol use, sexual behavior, and criminal activities. Audio-CASI technology, which has been shown to reduce response bias associated with sensitive questions and non-normative behavioral items (Turner et al, 1998), was used to collect all sensitive health status and health-risk behavior data.

For the third round of data collection, interviews were conducted between April and September, 1996, with adolescents who participated in the first in-home survey. More than 85% of all eligible respondents from the original in-home interviews

Table 1: Percentage of youth age 12-14 who report a dating relationship, romantic or casual, with an opposite-sex partner in the 18 months preceding the interview, by age and gender

	Female	Male	All	n of Cases
	Panel A: All			
Age 12	35%	46%	39%	357
Age 13	41%	48%	45%	1,719
Age 14	56%	56%	56%	2,109
All	48%	52%	50%	4,185
	Panel B: Virgins Only			
Age 12	32%	40%	35%	326
Age 13	39%	43%	41%	1,527
Age 14	50%	48%	49%	1,696
All	43%	45%	44%	3,549

participated in the second round, resulting in 14,787 interviews.[1]

Descriptive analyses of measures of adolescents' and parents' behavior and attitudes presented in this paper are primarily derived from the first set of in-home interviews and from the parental questionnaire, although a few outcomes combine data from both in-home surveys. On two important variables — the percent of youth who are sexually experienced and the percent of sexually experienced girls who have been pregnant — we use retrospective reports of all adolescents who participated in the in-house surveys so that the full 14th year of life is essentially captured in the analysis. For all other variables, some information from the 14th year is not represented because the 14-year-olds included in the survey were not all at the end of their 14th year. Group differences referred to in the text are statistically significant at p#0.05, unless labeled otherwise. All calculations use the Add Health grand sample weight. Standard errors are adjusted to account for clustered sampling design (Chantala, 2001; Chantala and Tabor, 1999).

What is typical dating behavior among young adolescents?

Being in a dating relationship, in general, and having a relatively large number of recent romantic partners are both strong predictors of sexual debut (Bearman and Brückner, 1999; Bearman and Brückner, 2001). This section explores the extent to which youth age 12-14 engage in dating as well as the behavior occurring in these dating relationships that may lead to sexual intercourse. In this section, "dating relationships" include both romantic and casual relationships. Romantic relationships were captured in the Add Health survey by a question asking, "In the past 18 months, have you had a special romantic relationship with anyone?" For youth who did not respond affirmatively to this question, additional questions asked whether the youth had been in a relationship that involved holding hands, kissing on the mouth, and telling his/her partner that he/she liked or loved them. A relationship that involved all three behaviors was classified as a romantic relationship. In a later section of the questionnaire, adolescents were

1 See Bearman et al. (1997) for a detailed description of the Add Health design and instrumentation.

Table 2: Percentage of youth age 12-14 who report a romantic or casual relationship with an opposite-sex partner in the 18 months preceding the interview, by race/ethnicity and gender

	Female	Male	All	n of Cases
	Panel A: All			
White	49%	51%	50%	2,459
Black	47%	61%	53%	920
Hispanic	44%	56%	49%	537
Asian	30%	19%	24%	184
Other	65%	49%	55%	83
All	48%	51%	49%	4,183
	Panel B: Virgins Only			
White	45%	46%	46%	2,213
Black	37%	46%	40%	649
Hispanic	34%	53%	43%	440
Asian	29%	18%	23%	175
Other	63%	39%	49%	71
All	43%	45%	44%	3,548

asked about experiences with sexual partners who they had not mentioned in the section on romantic relationships; we refer to these as "casual relationships."

Overall, about half of the teens in this age group reported a dating relationship (romantic or casual) in the 18 months preceding the first round of in-home interviews. The proportion increased with age (Table 1, Panel A). At age 12, 39% of teens reported such a relationship, increasing to 56% at age 14. Girls were less likely to report such a relationship than boys, especially at younger ages; at age 12, 46% of boys but only 35% of girls reported a dating relationship. By age 14, boys and girls were equally likely to do so (56%). Virgins were somewhat less likely to report a relationship (44%, Table 1, Panel B). Differences between virgins and sexually experienced teens in a dating experience were more pronounced among boys – only 40% of male virgins reported a dating relationship at age 12, compared to 46% of all males. The difference was smaller for girls (32% compared to 35% at age 12).

A similar prevalence of dating is seen across all racial/ethnic groups, except for Asian adolescents, who were much less likely to report a relationship than were others (Table 2, Panel A).[2] Interestingly, gender differences in dating are most pronounced for Blacks and Hispanics. Among White teens, around 50% of both girls and boys reported dating. Among Black adolescents, in contrast, girls (47%) were much less likely to have dated than boys (61%). The corresponding figures for Hispanic teens are 44% for females and 56% for males. Among Asian

2 These analyses distinguish between Caucasian Whites, Blacks, Hispanics, and Asians. Respondents who reported multiple race/ethnic memberships were asked an additional question about their "main" background. If the answer to this additional question did not fall into one of the four groups mentioned above, respondents were classified as follows: Respondents who mentioned Hispanic background were classified as Hispanic even if they reported multiple racial/ethnic affiliations. Others were classified in a residual category ("other race/ethnicity") together with Native Americans.

Table 3: Duration of relationships (in months) among youth age 12-14, by gender and race

	Female	Male	All
	Panel A: All		
25% ended after...	3 months	2 months	3 months
50% ended after...	6 months	5 months	6 months
75% ended after...	16 months	14 months	15 months
(N of Relationships)	1,146	789	1,935
	Panel B: White		
25% ended after...	2 months	2 months	2 months
50% ended after...	5 months	5 months	5 months
75% ended after...	13 months	13 months	13 months
(N of Relationships)	712	434	1,146
	Panel C: Black		
25% ended after...	4 months	3 months	3 months
50% ended after...	13 months	6 months	9 months
75% ended after...	28 months	23 months	23 months
(N of Relationships)	232	196	428
	Panel D: Hispanic		
25% ended after...	3 months	3 months	3 months
50% ended after...	7 months	6 months	7 months
75% ended after...	28 months	17 months	22 months
(N of Relationships)	147	118	265

Note: Unweighted data, relationships are unit of analysis

teens, in contrast, girls were more likely to date (30%) than boys (19%). Similar results were seen among virgins (Table 2, Panel B). It is noteworthy that among virgins, White teens were more likely to engage in dating than almost any other group, with the exception of Hispanic males and females of "other" race/ethnicity.

Tables 3-6 present data tabulated by relationships (as opposed to data tabulated by survey respondent) in order to explore relationship duration, characteristics of partners, and sexual activity within relationships. The data presented are based on 3,106 romantic relationships reported by teens age 12-14 in the first round of in-home interviews.[3] Table 3 (Panel A) shows, by gender, the time after which 25%, 50%, and 75% of relationships had ended.[4]

After 3 months (2 months for boys), one-fourth of these relationships had ended. The median duration was somewhat shorter for boys (5 months), than for girls (6 months). After 16 months for girls and 14

3 About 37% of the reported relationships are missing a start date, an end date, or both. These are excluded from the analysis of relationship duration. Relationships with missing duration are less likely to be sexual than others, and partners are likely to be younger than the respondent. Males are less likely to report dates, but there are no race/ethnic differences.

4 Youth were asked when relationships began (when they first considered the person a "special friend") and when the relationship ended. Relationships that ended in the same month in which they began are assumed to have a duration of 1 month.

Table 4: Duration of relationships (in months) among teens age 12-14 by gender, race, and sexual activity

	Sexual Relationships			Non-Sexual Relationships		
	Female	Male	All	Female	Male	All
	Panel A: All					
25% ended after...	5 months	3 months	5 months	2 months	2 months	2 months
50% ended after...	14 months	9 months	11 months	5 months	5 months	5 months
75% ended after...	28 months	23 months	27 months	13 months	13 months	13 months
(N of Relationships)	241	167	408	905	622	1,527
	Panel B: White					
25% ended after...	5 months	3 months	4 months	2 months	2 months	2 months
50% ended after...	12 months	8 months	10 months	4 months	4 months	4 months
75% ended after...	27 months	19 months	25 months	10 months	12 months	11 months
(N of Relationships)	113	68	181	599	366	965
	Panel C: Black					
25% ended after...	7 months	4 months	5 months	3 months	2 months	3 months
50% ended after...	15 months	10 months	15 months	11 months	5 months	7 months
75% ended after...	—	23 months	—	23 months	13 months	23 months
(N of Relationships)	78	74	152	154	122	276
	Panel D: Hispanic					
25% ended after...	4 months	5 months	4 months	3 months	3 months	3 months
50% ended after...	28 months	10 months	13 months	6 months	6 months	6 months
75% ended after...	—	17 months	28 months	13 months	22 months	14 months
(N of Relationships)	42	21	63	105	97	202

Note: Unweighted data, relationships are unit of analysis; for Black and Hispanic girls, less than 75% of the reported relationship had ended at the time of the interview (-).

months for boys, 75% of all relationships had ended. Black and Hispanic adolescents tended to have more long-term relationships (Table 3, Panel C and D) than Whites (Table 3, Panel B). The median duration for Black girls (13 months) was twice as high as the median durations for other groups. Three-quarters of all relationships reported by White adolescents ended after about 1 year. It took 28 months for the same proportion of relationships of Black and Hispanic girls to end, about 2 years for Black males, and about 1½ years for Hispanic males.

Relationships in which sexual intercourse occurred tended to have longer durations than non-sexual ones, as shown in Table 4. The median duration for sexual relationships was 11 months (Table 4, Panel A), twice as long as the median duration for non-sexual relationships (5 months). Gender differences were apparent and pronounced, but only for sexual relationships. Three months into the relationship, 25% of boys' relationships had ended. It took two months longer for the same proportion of girls' relationships to end. Half of boys' relationships ended after nine months; the corresponding figure for girls was 14 months. A substantial proportion of sexual relationships continued for two years and longer.

The differences in relationship duration between White, Black, and Hispanic teens

Table 5: Distribution of relationships among youth age 12-14 by age difference with partner in years, by gender

	Female	Male	All	n of Relationships
	Panel A: All			
Younger	11%	25%	18%	548
Same Age	26%	44%	34%	1,047
1 Year Older	25%	21%	23%	718
2 Years Older	17%	7%	12%	386
3 Years Older	11%	1%	6%	195
4+ Years Older	11%	1%	6%	199
	Panel B: White			
Younger	12%	25%	18%	327
Same Age	29%	46%	36%	672
1 Year Older	27%	20%	24%	439
2 Years Older	14%	7%	11%	205
3 Years Older	10%	1%	6%	113
4+ Years Older	8%	1%	5%	90
	Panel C: Black			
Younger	9%	27%	18%	118
Same Age	17%	44%	30%	201
1 Year Older	22%	21%	22%	142
2 Years Older	23%	5%	14%	94
3+ Years Older	29%	3%	16%	104
	Panel D: Hispanic			
Younger	7%	22%	14%	62
Same Age	24%	39%	31%	135
1 Year Older	22%	26%	24%	104
2 Years Older	20%	10%	15%	66
3+ Years Older	27%	2%	15%	63

Note: Unweighted data, relationships are unit of analysis [note: combined 3/4 year older for Black and Hispanic due to small sample sizes]

(see Table 3) are not fully accounted for by the differing prevalence of sexual activity within relationships. This is shown in Table 4, Panels B-D. For example, Black girls reported a median duration of 11 months for non-sexual relationships and 15 months for sexual relationships. For Hispanic girls, the corresponding figures were 28 months for sexual relationships and six months for non-sexual relationships. For White girls, the median duration was lower for both sexual relationships (12 months) and non-sexual relationships (4 months). Such data suggest that much of the sexual activity reported by 12-14-year-old adolescents occurred in the context of relatively long-term relationships, especially for Black and Hispanic girls.

Girls age 12-14 were much more likely than boys to date older partners; the reverse was true for boys (Table 5). Most relationships reported by boys were with partners who were the same age (44%) or younger (25%). In comparison, the proportion of

Table 6: Proportion of relationships among youth age 12-14 that are sexual, by gender and age difference between partners

	Female	Male	All	n of Relationships
Younger	5%	16%	12%	548
Same Age	6%	18%	13%	1,047
1 Year Older	13%	23%	17%	718
2 Years Older	24%	32%	26%	386
3 Years Older	33%	37%	33%	195
4+ Years Older	46%	59%	47%	199
All	18%	20%	19%	3,093

Note: Unweighted data, relationships are unit of analysis

girls' relationships that were with younger (11%) or same-age partners (26%) is much lower. Conversely, girls were 11 times more likely to date partners who were 3 or more years older. These differences are even more pronounced among Black and Hispanic adolescents. Although 18% of White girls' relationships involved a partner who was 3 or more years older (Table 5, Panel B), proportions were much higher among Black girls (29%, Panel C) and Hispanic girls (27%, Panel D). Racial/ethnic differences in age of partner among boys were smaller and not statistically significant.

Age differences between partners are strongly associated with sexual activity, as can be seen in Table 6. Overall, 19% of all relationships were sexual (18% of females' relationships and 20% of males'). The greater the age difference between the partners, the more likely that sex occurred in the relationship. Only 13% of relationships between same-age partners were sexual. By contrast, 26% of the relationships in which a adolescent's partner was 2 years older were sexual. The proportion increased to 33% for partners who were 3 years older. Where partners of young adolescents were 4 or more years older, almost half of all relationships were sexual.

Gender differences in the overall proportion of relationships in which sexual activity occurred (18% for girls versus 20%

Table 7: Percentage of youth who report touching under clothes in a romantic relationship with an opposite-sex partner in the 18 months preceding the interview, by age and gender

	Female	Male	All	n of Cases
	Panel A: All			
Age 12	10%	13%	11%	357
Age 13	10%	13%	12%	1,719
Age 14	24%	24%	24%	2,109
All	17%	19%	18%	4,185
	Panel B: Virgins Only			
Age 12	8%	12%	10%	326
Age 13	7%	9%	8%	1,527
Age 14	17%	15%	16%	1,696
All	12%	12%	12%	3,549

Table 8: Percentage of youth age 12-14 who report touching under clothes in a romantic relationship with an opposite-sex partner in the 18 months preceding the interview, by race/ethnicity and gender

	Female	Male	All	n of Cases
	Panel A: All			
White	17%	16%	17%	2,459
Black	20%	32%	26%	920
Hispanic	14%	22%	18%	537
Asian	5%	4%	5%	184
Other	22%	23%	22%	84
All	17%	19%	18%	4,183
	Panel B: Virgins Only			
White	13%	11%	12%	2,213
Black	11%	16%	13%	649
Hispanic	8%	17%	12%	440
Asian	2%	5%	4%	175
Other	21%	14%	17%	71
All	12%	12%	12%	3,548

for boys) were not significant (Table 6). Within each category of age difference with partner, however, boys were more likely to report sexual activity than girls. In relationships with a younger partner, boys were three times more likely (16%) than girls (5%) to report sexual activity. In relationships between same-age adolescents, 6% of females but 18% of boys reported sexual activity. Where partners were more than 3 years older, 46% of girls and 59% of boys reported sexual activity in the relationship.

Do young adolescents engage in precursor/alternative sexual behavior beside sexual intercourse?

This section focuses on two events: touching each other under the clothes, and touching each other's genitals (often called "petting"). The percentages of adolescents who have experienced each of these events in one or more romantic relationships are reported in Tables 7-10. Overall, 18% of teens age 12 -14 reported touching each other under the clothes in the context of a romantic relationship (Table 7, Panel A). Young adolescents were much less likely to report this behavior (11% at age 12 and 12% at age 13). By age 14, the proportion doubled to 24%. Gender differences were not significant. Virgins were less likely (12%) to engage in this behavior (Table 7, Panel B). For them, as well, there was a steep increase between age 13 and 14. Gender differences, if any, were small.

Although Table 7 shows no gender differences in the aggregate, Table 8 reveals that among Black and Hispanic teens, girls were less likely than boys to report touching under clothes in a romantic relationship (Panel A). The proportions were virtually indistinguishable for Whites, Asians, and others. Black female adolescents (20%) were not statistically different from their White counterparts (17%). Black male adolescents (32%), however, were much more likely than Black female adolescents as well as White male adolescents (16%) to report touching. Similarly, Hispanic female adolescents (14%)

Table 9: Percentage of youth who report touching genitals in a romantic relationship with an opposite-sex partner in the 18 months preceding the interview, by age and gender

	Female	Male	All	n of Cases
	Panel A: All			
Age 12	4%	4%	4%	357
Age 13	7%	9%	8%	1,1719
Age 14	19%	19%	19%	2,109
All	12%	13%	13%	4,185
	Panel B: Virgins Only			
Age 12	1%	4%	2%	326
Age 13	4%	3%	4%	1,527
Age 14	10%	9%	10%	1,696
All	7%	6%	6%	3,549

were less likely to report doing so than Hispanic male adolescents (22%). The behavior was somewhat less prevalent among virgins (12%, Table 8, Panel B). Note that among virgins, differences between White (11%), Black (16%), and Hispanic (17%) male adolescents were much less pronounced and not statistically significant. Gender differences were also smaller and significant only for Hispanic adolescents, with boys (17%) more than twice as likely to report the behavior as girls (8%).

Thirteen percent of adolescents age 12-14 reported touching genitals in a romantic relationship (Table 9, Panel A). Again, the proportion between age 13 and age 14 reporting it increased steeply (from 8% to 19%), and gender differences were virtually

Table 10: Percentage of youth age 12-14 who report touching genitals in a romantic relationship with an opposite-sex partner in the 18 months preceding the interview, by race/ethnicity and gender

	Female	Male	All	n of Cases
	Panel A: All			
All White	12%	12%	12%	2,459
Black	16%	24%	20%	920
Hispanic	12%	15%	13%	537
Asian	5%	3%	4%	184
Other	8%	11%	10%	83
All	12%	13%	13%	4,183
	Panel B: Virgins Only			
White	7%	6%	7%	2,213
Black	6%	5%	5%	649
Hispanic	5%	6%	5%	440
Asian	2%	3%	3%	175
Other	5%	3%	4%	71
All	7%	6%	6%	3,548

Table 11: Percentage of young adolescents who have ever had sexual intercourse, by age and gender

	Female	Male	All	n of Cases
Age 12	2%	8%	5%	18,283
Age 13	6%	13%	10%	18,283
Age 14	14%	20%	18%	18,283

Note: Life table approach. Based on retrospective reports of date of first intercourse from all adolescents interviewed for the Add Health in-home surveys (see footnote 5).

nonexistent. Among virgins age 12-14 (Table 9, Panel B), touching genitals was less prevalent (6% overall). At age 12, 1% of female virgins and 4% of male virgins reported this behavior. By age 14, the percentages increased, but still only about one in ten 14-year-old virgins overall reported this behavior.

As shown in Table 10 (Panel A), black males aged 12-14 (24%) were significantly more likely to report touching genitals in a romantic relationship than both White males (12%) and Black females (16%). Hispanics were not significantly different from Whites, and Asians were less likely to report this behavior than any other group. Among virgins, these group differences essentially disappeared. Engaging in this behavior was quite rare among all groups and nowhere exceeded the 7% reported by White females (Table 10, Panel B). In conclusion, although some teens engage in petting — perhaps as an alternative or precursor to sexual intercourse — they represent a small minority in this age group.

What proportion of 12- to 14-year-olds have had sex?

Table 11 shows the proportion of adolescents who said they had had sexual intercourse, by age.[5] Overall, 18% of adolescents reported having had sex at age 14 or younger, boys (at 20%) somewhat more than

Table 12: Percentage of young adolescents who have sexual intercourse before age 15, by race/ethnicity and gender

	Female	Male	All	n of Cases
White	13%	15%	14%	9,689
Black	24%	45%	34%	3,800
Hispanic	14%	23%	19%	3,128
Asian	10%	8%	9%	1,298
Other	11%	24%	19%	356
All	14%	20%	18%	18,271

Note: Life table approach. Based on retrospective reports of date of first intercourse from all adolescents interviewed for the Add Health in-home surveys (see footnote 5).

5 The question was worded as follows: "Have you ever had sexual intercourse? When we say sexual intercourse, we mean when a male inserts his penis into a female's vagina." Less than 2% of the age group did not respond to this question. We exclude adolescents who report first intercourse before age 8, those who had no sample weight , and those who had a missing month and/or year of time of first intercourse. Figures reported in Table 11 and 12 combine data from the two in-home surveys and are calculated using a life table approach (N= 18,283). Thus, Table 11 gives an estimate of how many adolescents have had sex before they turn 13, 14, and 15, respectively (i.e., at ages 12.92, 13.92, 14.92). Table 12 gives the estimate for the proportion who have had intercourse by age 14.92, broken down by race.

Table 13: Percentage of youth who report no sexual activity in the 18 months preceding the interview, by age and gender

	Female	Male	All	n of Cases
	Panel A: All			
Age 12	98%	95%	97%	357
Age 13	96%	93%	94%	1,719
Age 14	88%	87%	87%	2,109
All	92%	90%	91%	4,185
	Panel B: Non-Virgins Only			
All	37%	42%	40%	579

girls (at 14%). Sexual experience increased with age: 14-year-old boys were more than twice as likely to be sexually experienced as 12-year-old boys (8% compared to 20%); 14-year-old girls were seven times more likely to be sexually experienced as 12-year-old girls (14% compared to 2%). At age 12, boys were four times more likely to report intercourse than girls (8% compared to 2%). After age 13, though, girls began to catch up with the behavior of boys their same age.

Table 12 shows pronounced differences among adolescents according to race/ethnicity. One third (34%) of Black adolescents age 12-14 were sexually experienced, compared to 14% of Whites the same age. These differences are even more pronounced among boys: Black males were three times more likely to be sexually experienced than White males (45% compared to 15%). Nineteen percent of all Hispanics 12-14 reported that they had had sex and 9% of Asian teens (boys and girls) reported sexual experience in this age group. Gender differences were most pronounced for Black adolescents (24% for girls, compared to 45% for boys) and Hispanic adolescents (14% versus 23%) but virtually non-existent for White (13% versus 15%) and Asian adolescents (10% and 8%).

What do adolescents age 12-14 report about recent sexual activity?

Especially among young teens, sexual activity may occur only sporadically. Those adolescents who are sexually experienced (meaning that they have *ever* had sexual intercourse, see Tables 11 and 12) do not necessarily engage in sexual activity *currently*. This section examines whether teens have had sex in the 18 months preceding the interview (hereafter referred to as "recent sexual activity"), and, if so, with how many partners.

Table 13, Panel A, shows that, overall, about nine out of ten teens age 12-14 reported no recent sexual activity. The proportion of those reporting no such activity decreased with age, from 97% at age 12 to 87% at age 14, with no gender differences. Among *sexually experienced* teens, fully 40% reported no recent sexual intercourse (Table 13, Panel B).

Returning to the full sample, Table 14 shows that Black teens were less likely to report no recent sexual activity (79%, see Panel A) than were the other race/ethnicity groups. Hispanics (90%), Asians (96%) and others (93%) were not significantly different from Whites (93%). Although for most

Table 14: Percentage of youth age 12-14 who report no sexual activity in the 18 months preceding the interview, by race/ethnicity and gender

	Female	Male	All	n of Cases
	Panel A: All			
White	94%	93%	93%	2,459
Black	85%	73%	79%	920
Hispanic	90%	90%	90%	537
Asian	95%	97%	96%	184
Other	97%	91%	93%	83
All	92%	90%	91%	4,183
	Panel B: Non-Virgins Only			
White	31%	43%	38%	224
Black	39%	37%	38%	249
Hispanic	48%	47%	48%	84
All	37%	42%	40%	579

Note: Based on 579 sexually experienced teens. Numbers at age 12 too small to report separately, but they are included in the column total.

groups, girls were as likely as boys to report no recent sexual activity, among Black teens, girls (85%) are more likely to do so than boys (73%). Among sexually experienced teen girls (Table 14, Panel B), White females were more likely to report recent activity than were Black females. The proportion was somewhat higher among White boys (43%) than White girls (31%), but these differences was not statistically significant in this small sample of sexually experienced teens.

Table 15 shows the number of recent sexual partners in both casual and romantic relationships reported by sexually experienced teens age 12-14. One-third (33%)

Table 15: Number of recent sexual partners among sexually experienced youth, by age and gender

	No Partner	One	Two	Three or More
	Panel A: All			
Ages 12-13	45%	32%	14%	9%
Age 14	37%	33%	16%	14%
All	40%	33%	15%	12%
	Panel A: Female			
Ages 12-13	47%	33%	12%	8%
Age 14	32%	36%	20%	12%
All	37%	35%	17%	11%
	Panel C: Male			
Ages 12-13	44%	31%	15%	10%
Age 14	41%	31%	13%	15%
All	42%	31%	14%	13%

Note: Based on 579 sexually experienced teens. Numbers at age 12 too small to report separately.

Table 16: Proportion of sexually experienced youth who used contraception at first intercourse, by age and gender

	Females	Males	All	n of Cases
Age 12	N/A	N/A	29%	21
Age 13	56%	50%	52%	162
Age 14	55%	65%	61%	391
All	54%	60%	57%	574

Note: Number of cases too small to show gender differences at age 12, but they are included in the column total.

reported only one partner in the last 18 months, but 15% reported two, and 12% reported three or more partners (Table 15, third row).[6] Girls age 13 and younger were somewhat less likely to report multiple partners than older girls, with 20% reporting two or more partners, compared to 32% at age 14. For boys, age and number of partners had no significant relationship.

In sum, about 40% of sexually experienced teens reported that they had not had sex in the past 18 months; about one-third reported only one partner; and more than a quarter (27%) reported two or more recent sexual partners.

What are the patterns of contraceptive use among sexually experienced youth?

Among young adolescents who are sexually experienced, only 57% reported using contraception the first time they had sex (Table 16). The older adolescents were at sexual debut, the more likely they were to use contraception that first time. Only 29% of 12-year-olds used contraception, while 61% of 14-year-olds did so. Boys reported using contraception slightly more often than girls, but the gender difference was not statistically significant. The association of age with contraceptive use was more pronounced for boys than for girls: Contraceptive use increased between age 13 and 14 for boys (from 50% to 65%), but girls showed no similar increase.

Table 17 shows racial/ethnic differences in contraceptive use at first sex. White and Black teens do not differ in these data. Hispanic teens (49%) were significantly less likely than White (58%) and Black (61%) adolescents to use contraception at first sex. The difference was greatest among girls. Although the difference between males and females varied according to race/ethnicity,

Table 17: Proportion of sexually experienced youth age 12-14 who used contraception at first intercourse, by race/ethnicity and gender

	Females	Males	All	n of Cases
White	54%	61%	58%	222
Black	63%	59%	61%	247
Hispanic	44%	54%	49%	83
All	54%	59%	57%	574

Note: Number of cases too small to report percentage for Asian teens and those of other race/ethnicity separately, but they are included in the column total.

6 Partners may be concurrent or sequential.

Table 18: Contraceptive method used (of those who used contraception) by youth age 12-14 at first intercourse, by gender

	Females	Males	All	n of Cases
Pill, Depo Provera, IUD, Diaphragm	N/A	N/A	N/A	3
Condoms	69%	75%	73%	239
Withdrawal, rhythm, spermicides	30%	25%	26%	86

it was not statistically significant for any of the groups.

Add Health also collected data on which contraceptive methods teens used when they had sex for the first time. Respondents could report up to three different methods. If they did not mention that they or their partner used condoms, the interviewers asked an additional question about condom use. Contraceptive choice, as presented in Tables 18 and 19, means the "best" method — i.e., the method with the lowest failure rate (The Alan Guttmacher Institute, 2001) — that teens mentioned without prompting, both for those who mentioned only one method and for those who mentioned more than one method. Among these young teens, use of birth control pills, an IUD, a diaphragm or Depo Provera is extremely rare (Table 18). Condoms are the best method reported by 73% of those who used any method. The proportion of girls whose best method was condoms (69%) is slightly lower than boys (75%, Table 18), and condom use is higher among Hispanics (77%) than among Whites (71%) or Blacks (72%) (see Table 19), but these differences are not statistically significant.

Adolescents who did not mention using condoms were later asked whether they or their partner used condoms. Most said they did, increasing the proportion of teens reporting condom use at first sex to 95% of those who used any method. Apparently, about 20% of the respondents did not think about condoms when asked about contraception, although condoms were the first item on the list of contraceptive methods given to them. One can perhaps think about these numbers as the upper and lower bounds of the proportion of young teens who use condoms at first intercourse.

In summary, fully 43% of youth age 12-14 said they did not use any contraception the first time they had sex. Of the 57% of young adolescents who reported using some form of contraception the first time they had sex, between 73% and 95% reported using condoms, sometimes in combination with other methods. By contrast, very few youth age 12-14 reported using the pill, Depo Provera, an IUD, or a diaphragm, and 26%

Table 19: Contraceptive method used (of those who used contraception) by youth age 12-14 at first intercourse, by race/ethnicity

	White	Black	Hispanic	n of Cases
Pill, Depo Provera, IUD, Diaphragm	N/A	N/A	N/A	3
Condoms	71%	72%	77%	231
Withdrawal, rhythm, spermicides	29%	28%	23%	84

Note: Number of cases too small for Asian teens and those of other race/ethnicity.

Table 20: Proportion of sexually experienced youth who used contraception at most recent intercourse, by age and gender

	Females	Males	All	n of Cases
Age 12	N/A	N/A	46%	22
Age 13	62%	65%	64%	169
Age 14	53%	67%	61%	387
All	54%	66%	61%	578

Note: Number of cases too small to show gender differences at age 12.

reported using withdrawal, rhythm, or spermicides as their method of contraception.

Table 20 shows that six out of ten sexually experienced youth (61%) age 12-14 reported contraceptive use at most recent intercourse — a slightly higher percentage than those using contraception at first intercourse (57%). The increase was entirely due to males, however. At first intercourse, almost 60% of male teens used contraception, while at most recent intercourse, 66% used contraception. For females, the proportion that reported using contraception is 54% on both occasions. Consequently, contraceptive use at most recent intercourse differs significantly by gender. No significant differences between racial/ethnic groups were found Table 21). In terms of the contraceptive methods used, the "best" method used[7] at most recent sex looks similar to the data for method used at first sex, with the majority of teens using condoms. There were no differences along race/gender lines (Tables 22 and 23).

For 566 teens, data are available on contraceptive use both at first and at most recent intercourse.[8] Forty-eight percent used contraception at both occasions, but 31% did not use contraception on one of these occasions (first or most recent). Eight percent reported using contraception at first, but not most recent intercourse, and the remainder (13%) used it only at most recent, but not first intercourse. Overall, contraceptive use at first intercourse was strongly associated with subsequent contraceptive use — 85% of those who used contraception the first time they had sex also reported using it at most recent intercourse. By contrast, only 29% of those who did not use contraception at sexual debut used it at most recent intercourse.

Table 21: Proportion of youth age 12-14 who used contraception at most recent intercourse, by race/ethnicity and gender

	Female	Male	All	n of Cases
White	55%	65%	62%	222
Black	57%	67%	63%	248
Hispanic	48%	61%	54%	82
All	54%	66%	61%	569

Note: Number of cases too small to report proportions for Asian teens and those of other race/ethnicity separately, but they are included in the column total.

7 Teens could select up to three methods, the best of which was selected to generate Tables 23 and 23. See the discussion in the section on contraceptive methods at first sex.

8 Note that first and most recent intercourse may refer to the same instance for the unknown number of teens who have had sex only once.

Table 22: Contraceptive method used (of those who used contraception) by sexually experienced youth age 12-14 at most recent intercourse, by gender

	Female	Male	All	n of Cases
Pill, Depo Provera, IUD, diaphragm	N/A	N/A	2%	9
Condoms	72%	74%	74%	256
Withdrawal, rhythm, spermicides	25%	24%	24%	72

How many sexually experienced females become pregnant before age 15?

Pregnancy is rare among these young teens. Combining data from both sets of in-home interviews, less than 2% of all girls in the full sample reported a pregnancy before age 15. Most of these pregnancies occur at age 14; only 0.5% reported a pregnancy before age 14.[9] The numbers are quite different, however, when examining only sexually experienced girls: 9% of these girls report a pregnancy before their 15th birthday. Thus, for girls who are having intercourse, the risk of pregnancy is substantial.

Are sexually experienced adolescents more likely to engage in other risky behavior?

Table 24 reports the proportion of 12- to 14-year-olds who engaged in minor delinquencies as well as drug, tobacco, and alcohol use, by gender and sexual experience.

Add Health asked adolescents whether they had "ever smoked cigarettes regularly, that is, at least 1 cigarette every day for 30 days?" Sexually experienced teens were more than three times as likely as virgins (29% vs. 8%) to report having smoked regularly. Similarly, 32% of female non-virgins had ever smoked regularly, compared to 9% of female virgins. For males, the corresponding figures were 7% for virgins and 27% for non-virgins.[10]

Marijuana use was also strongly associated with sexual experience. Only 10% of virgins reported having ever tried marijuana, compared to 43% of sexually experienced adolescents. Sexually experienced teens were also more likely to have tried cocaine, inhalants, and other illegal drugs, and they were more likely than virgins to report

Table 23: Contraceptive method used (of those who used contraception) by sexually experienced youth age 12-14 at most recent intercourse, by race/ethnicity

	White	Black	Hispanic	n of Cases
Pill, Depo Provera, IUD, diaphragm	N/A	N/A	N/A	9
Condoms	70%	77%	73%	256
Withdrawal, rhythm, spermicides	27%	22%	21%	72

Note: Number of cases too small for Asian teens and those of other race/ethnicity to be reported separately.

9 The small number of pregnancies precludes further analysis. Figures are based on retrospective reports of date of first intercourse from all female adolescents interviewed for the Add Health in-home surveys.

10 Virgins tend to be younger than sexually experienced teens and thus less likely to engage in other risky behavior. For the behavior reported here, however, similar differences obtain when controlling for age. Thus, age differences between virgins and non-virgins do not (fully) account for differences in the prevalence of the behaviors reported in Table 24.

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Table 24: Sexual experience and other risky behavior among youth age 12-14, by gender and sexual activity

	All			Sexually Experienced			Virgins		
	Female	Male	All	Female	Male	All	Female	Male	All
Ever smoked regularly	12%	10%	11%	32%	27%	29%	9%	7%	8%
Ever tried marijuana	13%	16%	14%	43%	43%	43%	9%	11%	10%
Ever tried cocaine	2%	3%	2%	5%	10%	8%	1%	2%	1%
Ever tried inhalants	6%	7%	7%	10%	13%	12%	6%	6%	6%
Ever tried any other illegal drug	4%	5%	4%	15%	10%	12%	3%	4%	3%
Drink once a week or more	4%	6%	5%	17%	19%	18%	2%	3%	3%
Delinquency in past year	67%	75%	71%	98%	85%	90%	64%	74%	69%

drinking regularly and frequently (once a week or more often) in the past year (18% vs. 3%).

Finally, Add Health asked how often adolescents committed any of 15 types of delinquent behavior in the past 12 months, including lying to parents, shoplifting, fighting, damaging property, being loud or unruly in a public place, hurting somebody, selling drugs, burglary, and using someone's car without permission. Sexually experienced adolescents (90%) were, again, more likely than virgins (69%) to report any of these delinquencies.

Add Health also included several sets of questions that measure how alcohol and/or drugs may contribute to increased risky sexual activity. The survey asked whether adolescents had used alcohol and/or drugs when they had sexual intercourse for the first time and when they most recently had sex. Few young adolescents reported that they drank (7%) or used drugs (4%) when they had sex for the first time. About 1% both drank and used drugs at that occasion. About 6% said they used alcohol when they had intercourse most recently. Interestingly, contraceptive use at first sex was not significantly lower among those using alcohol or drugs. However, only 45% of those who

Table 25: Proportion of youth who got into a sexual situation because of alcohol, by age and gender

	Females	Males	All	N of Cases
Age 12-13	12%	3%	7%	185
Age 14	19%	15%	17%	394
All	17%	11%	14%	579

Note: Number of cases too small to report age 12 separately.

Table 26: Proportion of youth age 12-14 who got into sexual situation because of alcohol, by race/ethnicity and gender

	Female	Male	All	n of Cases
White	19%	14%	16%	222
Black	11%	8%	9%	247
Hispanic	21%	10%	16%	83
All	17%	11%	14%	579

Note: Numbers for Asians and other race/ethnicity are too small to report separately, but they are included in the column total.

drank before most recent sex used contraception at that time, compared to 62% of those who did not drink alcohol before most recent sex.

An additional question asked youth whether they had gotten into a sexual situation that they later regretted because they had been drinking.[11] Overall, 14% of sexually experienced adolescents say that they had experienced such a situation (Table 25), with girls (17%) more likely to report such an experience than boys (11%). The proportion increases with age, especially for boys. Black teens reported fewer regrets (9%) than White (16%) and Hispanic (16%) teens, but these differences are not statistically significant (Table 26).

Finally, Add Health asked adolescents whether they had ever exchanged sex for money or drugs. Among sexually experienced 12- to 14-year-olds, 3% had done so. Boys (4%) were more likely than females (1%) to report having ever exchanged sex for money or drugs.

Do young adolescents learn about pregnancy and AIDS in school?

Most teens (90%) said that they learned about AIDS in school (Table 27). This percentage varied little across racial/ethnic groups. Girls were slightly less likely to report learning about AIDS than boys (89% vs. 91%). These proportions were nearly

Table 27: Proportion of youth age 12-14 who learned about AIDS in school, by race/ethnicity and gender

	Female	Male	All	n of Cases
White	89%	91%	90%	2,459
Black	91%	91%	91%	920
Hispanic	86%	94%	89%	537
Asian	91%	99%	95%	184
Other	90%	98%	94%	83
All	89%	91%	90%	4,183
Sexually Experienced Only	87%	92%	90%	579

11 This question was only asked of teens who said they had at least one drink in the past year.

Table 28: Proportion of youth age 12-14 who learned about pregnancy in school, by race/ethnicity and gender

	Female	Male	All	n of Cases
White	82%	76%	79%	2,459
Black	90%	81%	86%	920
Hispanic	83%	79%	81%	537
Asian	79%	86%	83%	184
Other	93%	83%	87%	83
All	83%	78%	81%	4,183
Sexually Experienced Only	86%	80%	83%	579

identical to those obtained for sexually experienced teens (Table 27, last row).

Table 28 shows that fewer teens said that they learned about pregnancy in school (81%). Girls (83%) were more likely to say they learned about pregnancy in school than were boys (78%). Black teens were more likely than White teens to have learned about pregnancy in school (86% vs. 79%). Sexually experienced teens were only slightly more likely to have learned about pregnancy in school (83%) than virgins (Table 28, last row).

How often do parents talk to their children about sex?

The majority of youth are hearing about pregnancy and AIDS in school, but what about in the home? Add Health asked parents how much they had talked with their teenager(s) (who were in the Add Health survey) about the negative consequences of pregnancy, the dangers of sexually transmitted diseases, the negative impact of having sex on one's social life, and the moral issues of not having intercourse. In addition, they were asked how much they had talked to their teen(s) about sex and about birth control. Table 29 reports parents' answers to these items. Overall, parents report that they are talking "a moderate amount" about these issues with their children (the mean score is nearly 3 on a 4-point scale, see Table 29, column A). Parents were most likely to talk about the dangers of sexually transmitted diseases (mean=2.97), followed by the moral issues of not having intercourse (mean=2.87), sex in general (mean=2.83), negative consequences of pregnancy (2.76), negative impacts on one's social life (2.55), and birth control (2.47). Most parents disagreed with the statement that they recommended a specific method of birth control to their child (mean=3.45).

Overall, parents were more likely to talk to daughters than sons about these issues, although this was actually only true for mothers (column C), who made up most of the parents who were interviewed.[12] The one exception to this is that both mothers and fathers were more likely to recommend a specific method of birth control to sons than to daughters, although the difference is significant only for mothers. Mothers were always more likely to talk to their daughters than were fathers (column G), except, again, when recommending a birth control method. Only with respect to moral issues were mothers more likely than fathers to talk to their sons. Fathers, on the other hand,

12 The mother was interviewed for 97% of all girls and 91% of all boys under 15.

TABLE 29: Parent/adolescent communication about sex and birth control, from parental questionnaire, by gender of adolescents and parent

		A **Mean (all)**	B **Female/Male comparison**	C **Mean (mothers)**	D **Female/Male comparison**	E **Mean (fathers)**	F **Female/Male comparison**	G **Father/Mother comparison**
How much have you and {NAME} talked about (his/her) having sexual intercourse and…								
…the negative or bad things that would happen if [he got someone/she got] pregnant?	All Female Male	2.76 2.92 2.57	More with daughters	2.77 2.94 2.58	More with daughters	2.47 2.48 2.46	NS	Mother > father Mother > father NS
…the dangers of getting a sexually transmitted disease?	All Female Male	2.97 3.04 2.88	More with daughters	2.98 3.06 2.89	More with daughters	2.64 2.50 2.70	NS	Mother > father Mother > father NS
…the negative or bad impact on (his/her) social life because (he/she) would lose the respect of others?	All Female Male	2.55 2.78 2.31	More with daughters	2.57 2.79 2.32	More with daughters	2.19 2.28 2.16	NS	Mother > father Mother > father NS
…the moral issues of not having sexual intercourse?	All Female Male	2.87 3.03 2.70	More with daughters	2.88 3.04 2.71	More with daughters	2.43 2.43 2.42	NS	Mother > father Mother > father Mother > father
How much have you talked to {NAME}: …about birth control?	All Female Male	2.47 2.52 2.42	More with daughters	2.48 2.53 2.43	More with daughters	2.23 2.00 2.32	More with sons	Mother > father Mother > father NS
…about sex?	All Female Male	2.83 2.95 2.70	More with daughters	2.85 2.97 2.70	More with daughters	2.55 2.31 2.65	More with sons	Mother > father Mother > father NS
You have recommended a specific method of birth control to {NAME}.	All Female Male	3.45 3.60 3.29	More likely for boys	3.46 3.60 3.29	More likely for boys	3.24 3.52 3.13	NS	NS NS NS

Note: All items featured response categories 1-4 (not at all – somewhat – a moderate amount – a great deal), except the last item, which feature response categories 1-5 (strongly agree – strongly disagree). {NAME} refers to adolescent for whom question were asked. NS= comparison not significant. Number of cases: 3,703. Father was interviewed in 6% of these cases.

Table 30: Parent/adolescent communication about sex and birth control, from parental questionnaire, by gender of adolescents and parent

		A **Mean (all)**	B **Female/Male comparison**	C **Mean (mothers)**	D **Female/Male comparison**	E **Mean (fathers)**	F **Female/Male comparison**	G **Father/Mother comparison**
You really don't know enough about sex and birth control to talk about them with {NAME}.	All Female Male	4.35 4.37 4.33	NS	4.36 4.38 4.32	NS	4.36 4.11 4.46	More true for daughters	NS Mother > father Mother < father
It would embarrass {NAME} to talk to you about sex and birth control.	All Female Male	3.66 3.81 3.50	More embarrassing with boys	3.69 3.83 3.53	More embarrassing with boys	3.25 2.85 3.40	More embarrassing with girls	Mother > father Mother > father NS
It would be difficult for you to explain things if you talked with {NAME} about sex and birth control.	All Female Male	4.17 4.25 4.09	More difficult with boys	4.18 4.27 4.09	More difficult with boys	4.11 3.55 4.33	More difficult with girls	NS Mother > father Mother < father
{NAME} will get the information somewhere else, so you don't really need to talk to (him/her) about sex and birth control.	All Female Male	4.41 4.47 4.35	More true for boys	4.42 4.49 4.35	More true for boys	4.37 4.10 4.48	More true for girls	NS Mother > father NS
Talking about birth control with {NAME} would only encourage (him/her) to have sex.	All Female Male	4.39 4.42 4.38	NS	4.41 4.42 4.39	NS	4.35 4.37 4.34	NS	NS NS NS
You disapprove of {NAME}'s having sexual intercourse at this time in (his/her) life.	All Female Male	1.45 1.42 1.48	NS	1.43 1.41 1.44	NS	1.67 1.51 1.73	NS	Mother > father Mother > father NS

Note: All items featured response categories 1-5 (strongly agree – strongly disagree). {NAME} refers to adolescent for whom question were asked.
NS= comparison not significant. Number of cases: 3,703. Father was interviewed in 6% of these cases.

were as unlikely to talk to sons as to daughters, with the exception of the two general items (talking about sex and birth control), about which they were slightly more likely to talk to sons than to daughters.

One question that Table 29 raises is, what *are* parents' reasons for not talking about sex more with their children? Table 30 reports five reasons parents may have for not talking to adolescents about sex and birth control, by parents' and adolescents' gender. In addition, Table 30 reports how much they disapprove of their children having sex at this time in their lives.

Overall, most parents said that the five possible reasons the survey offered for not talking about sex and birth control do not apply to them.[13] They were confident that they know enough about sex and birth control to talk about these things with their children (mean=4.35); they did not think that talking about sex and birth control would be embarrassing for their children (mean=3.66); issues related to sex and birth control are not too difficult for them to explain (mean=4.17); and they did not think that adolescents can get the information elsewhere (mean=4.41). They also disagreed with the idea that talking about sex and birth control would encourage adolescents to have sex (mean=4.39). Finally, parents disapproved of their children having sex (mean=1.45).

Table 30 shows some gender differences. Overall, the interviewed parents found it more difficult or uncomfortable to talk about sex and birth control with sons than with daughters with respect to three out of the five items (Table 30, column B). Because most parents interviewed were mothers, the table also shows the answers separately by whether the parent interviewed was the mother (column C/D) or the father (column E/F). Mothers' and fathers' scores are compared in column G. Regardless of children's gender, mothers and fathers did not differ except for the second and the last item. Fathers (mean=3.25) generally were more concerned than mothers (mean=3.69) that talking about sex and birth control might be embarrassing for their children. Fathers were also slightly less disapproving of their young teenager having sex (mean=1.67, compared to 1.43 for mothers).

Generally, mothers were less comfortable with talking to their sons, and fathers were less comfortable talking with their daughters. This difference is seen with the second item (it would be embarrassing), the third item (difficult to explain), and the fourth item (get information elsewhere). In addition, fathers, not mothers, were more likely to feel that they do not know enough about sex and birth control to discuss these topics with their daughters (mean=4.11), compared to sons (mean=4.46). Finally, fathers disapproved less than mothers of their sons having sex (mean=1.73, compared to 1.44 for mothers). Mothers' and fathers' disapproval of daughters' having sex did not differ significantly.

It is also interesting to probe how aware teens and parents are about each other's attitudes regarding sexual activity. Add Health asked adolescents how much their mother and their father would disapprove of their having sex at this time in their lives; answers were measured on a 5-point scale, from 1 (strongly disapprove) to 5 (strongly approve). Teens' perception of parental disapproval can be compared to actual disapproval reported by parents (Table 30, last row). Overall, adolescents knew that their parents did not want them to have sex; if anything, adolescents in this age group tend to slightly overestimate their

13 Answers are measured on a 1-5 scale, with 1 meaning 'strongly agree' and 5 meaning 'strongly disagree.' Most answers are between 4 and 5, that is, between 'disagree' and 'strongly disagree.'

Table 31: Proportion of parents who know that their teen is sexually experienced, by age and gender

	Female	Male	All	n of Cases
Age 13	39%	16%	25%	135
Age 14	36%	25%	30%	347
All	36%	21%	27%	503

Note: Number of cases too small to report proportions at age 12 separately, but 12-year-olds are included in the column total.

parents' disapproval of sex. Teens thought that their mothers disapproved slightly more than their fathers (mean=1.27, compared to 1.30 for fathers). Girls perceived parents' disapproval as greater (mean=1.16 for fathers' and 1.13 for mothers' disapproval) than do boys (1.38 for mothers' and 1.47 for fathers' disapproval).

One can also compare parental perceptions to reality, in that Add Health also asked the primary caretaker (in most cases, the mother) whether he or she thought that his or her child has had sexual intercourse. Most thought they did not, and mostly, they were right. A small minority (under 1%) thought that the adolescent had had sex, though the adolescents said the opposite. However, only 27% of the primary caretakers of sexually experienced middle-school age adolescents were aware that their child had had sex (Table 31).[14] Recent research (Blum, 2002) using the same Add Health data set from which this paper is derived examined this same question — do mothers know whether their teens have had sex? This analysis focused on an older cohort (8th-11th graders) than reported here. Blum found that when teens said that they have had sexual intercourse, mothers were right in their assessment 49% of the time. Putting these two findings together suggests that parents are often unaware that their teens are having sex, and they are particularly unaware when it comes to very young adolescents.

The proportion was higher for girls (36%) than for boys (21%). For boys only, the proportion increased with age, from 16% for 13-year-olds to 25% for 14-year-olds. For girls, it was much higher at both these ages — with 36% to 39% of parents knowing that their daughter was sexually experienced. This finding suggests that perhaps parents are more concerned with their daughters' sexual behavior. One might also think that the discrepancy could be accounted for by the fact that most of the parents surveyed were mothers. Given that communication about sex takes place mainly between adolescents and their same-sex parents, fathers may have more knowledge about their boys' experiences than mothers, and mothers better knowledge about their daughters than fathers. The latter hypothesis is not, however, borne out by the data. Mothers were as likely to know about daughters' sexual experience as were fathers, and vice versa. Thus, 17% of fathers and 20% of mothers knew that their son was sexually experienced, compared to 33% of mothers and 36% of fathers who knew that their daughter was sexually experienced.[15]

Knowledge of adolescents' sexual experience did not vary among racial/ethnic groups. Overall, 29% of Hispanic teens' parents knew about it, compared to 27% of parents of White teens and 28% of parents of Black teens (Table 32). Gender differences seem to be smaller among Black teens and

14 Among teens 15 and older, slightly more than half of all parents (54%) knew that their teen was sexually active. Although this is not an impressive figure, it is much better than their knowledge about their younger teens.

15 Differences between mothers and fathers are not statistically significant

Table 32: Proportion of parents who know that their teen age 12-14 is sexually experienced, by race and gender

	Female	Male	All	n of Cases
White	35%	21%	27%	206
Black	30%	26%	28%	208
Hispanic	45%	13%	29%	71
All	35%	21%	27%	503

Note: Numbers for Asians and other race/ethnicity are too small to report separately, but they are included in the column total.

larger among Hispanic teens, but the differences were not significant in the small sample of sexually active teens for which a parental questionnaire is available.

Discussion

The good news is that most middle school age adolescents abstain from sexual activity, including both intercourse and petting. Even those adolescents age 14 and younger who have had sexual intercourse tend to report little recent sexual activity. Most sexual activity occurs in the context of relatively long-term romantic relationships. Sexual activity with multiple partners is the rare exception. The data show that adolescents know that their parent(s) think they should not have sex.

The bad news is that those young adolescents who do have sex are not likely to use contraception. Between 40% and 50% of sexually experienced teens did not protect themselves against STD's or pregnancy when they had sex for the first time. A small minority of adolescents engages in high-risk sexual activity with multiple partners, and although contraceptive use is a bit higher at most recent sex, exposure remains great. Almost 10% of sexually experienced girls report a pregnancy before their 15th birthday. Adolescents who are sexually experienced often engage in other risky behavior such as drinking, smoking, drug use, and delinquency. Even among these young adolescents, alcohol is a risk factor. Adolescents who drink are at risk of getting into a sexual situation that they later regret, especially girls.

Parents are not likely to know about their young teens' sexual activity and unfortunately we do not understand very well why some parents are reluctant to talk with their child(ren) about sex, contraception, and related issues.

Author Acknowledgments: Data for this paper are drawn from the National Longitudinal Study of Adolescent Health (Add Health), a program project designed by J. Richard Udry and Peter Bearman, (Udry Bearman, 1998) and funded by a grant HD31921 from the National Institute of Child Health and Human Development to the Carolina Population Center, University of North Carolina at Chapel Hill, with cooperative funding participation by the following agencies: The National Cancer Institute; The National Institute of Alcohol Abuse and Alcoholism; the National Institute on Deafness and other Communication Disorders; the National Institute on Drug Abuse; the National Institute of General Medical Sciences; the National Institute of Mental health; the Office of AIDS Research, NIH; the Office of Director, NIH; The National Center for Health Statistics, Centers for Disease Control and Prevention, HHS; Office of Minority Health, Centers for Disease Control and Prevention, HHS, Office of the Assistant Secretary for Planning and Evaluation, HHS; and the National Science Foundation.

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Chapter Three

Sexual Activity Among Girls Under Age 15: Findings from the National Survey of Family Growth

Christine M. Flanigan, The National Campaign to Prevent Teen Pregnancy

This paper uses data from the 1995 National Survey of Family Growth (NSFG) — a periodic, nationally representative survey of civilian, noninstitutionalized women age 15 to 44 — to examine the following questions regarding sex among girls age 14 and younger:

- How common is sexual activity among girls age 14 and younger?
- Do the circumstances surrounding first sex at an early age differ from those surrounding first sex in later adolescence?
- What is known about the sexual and contraceptive behavior of these young adolescents?
- What adverse outcomes are associated with becoming sexually active at an early age?

The sample

Unlike the data analyzed in the other papers included in this report, the data presented here are not derived from interviews of 12- to 14-year-olds about their behavior. Instead, this paper presents data from girls

Sexual experience, contraceptive use, and pregnancy — this study finds that:

- 20% of girls report that they became sexually experienced at age 14 or younger.
- 72% of girls who had voluntary sex at age 14 or younger report that they used contraceptives at first sex.
- 15% of girls who had voluntary sex at age 14 or younger report being pregnant before turning 15.

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Table 1: Prevalence of sexual experience at age 14 or younger, among girls age 15-19 at interview, 1995

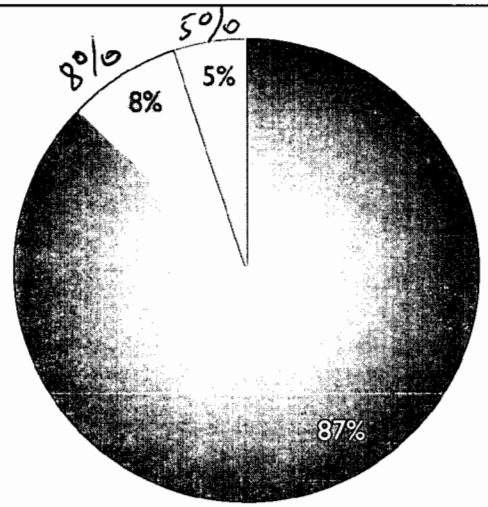
	first sexual intercourse (n=1,396)	first *voluntary* sexual intercourse (n=1,396)
By Age:		
age 12 or younger	3%	2%
age 13 or younger	9%	7%
age 14 or younger	20%	18%
By Race/Ethnicity:		
Hispanic	24%	23%
Non-Hispanic White	17%	16%
Non-Hispanic Black	31%	27%

age 15 to 19 at interview (n=1,396), a subset of the 1995 National Survey of Family Growth (NSFG) — relying on their report of *past* behavior. The oldest teen in this sample was born in February, 1975, and the youngest was born in March, 1980. This means that the teens were age 12- 14 between 1987-1995. Detailed information about the survey design is available from the National Center for Health Statistics (Kelly, et al., Mosher, Duffer, & Kinney, 1997).

Although the NSFG is an important source of nationally representative data, using the NSFG for this type of analysis has three major disadvantages. The first drawback is that estimates rely on respondents accurately remembering events that may have happened several years in the past. For example, the average time between the interview and reported date of first voluntary sex for those who first had voluntary sex before age 15 was about 3½ years, compared to about 2 years for those who first had voluntary sex at age 15 or older. It is encouraging, to note, however, that estimates of early sexual experience from the NSFG are quite similar to estimates from the other two nationally representative data sets that directly question 12- to 14-year-olds, especially given the differences between the three national surveys in purpose and timing (see Brückner & Bearman and Terry-Humen & Manlove, in this volume). A second disadvantage to using this data set is that it includes females only, as opposed all of the other papers in this report, which have data for males and females.

The final disadvantage of using the NSFG in this type of analysis emerges in Tables 2, 3, and 5, where girls who have had sex at age 14 or younger are compared to girls who have had sex at age 15 or older. Although we can identify all of the girls (aged 15-19) in the sample who have had sex before age 14, we cannot identify all girls who will have sex at age 15-19. This is because the data drawn from the comparison group of 15- to 19-year-olds does not

Figure 1: Among girls who had sex before age 15, first sex was nonvoluntary for 13 percent. Over a third of girls whose first sex was nonvoluntary also had voluntary sex before age 15.



○ Voluntary first sex

○ Nonvoluntary first sex, no voluntary sex before age 15

○ Nonvoluntary first sex, also voluntary sex before age 15

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Table 2: Characteristics of 1st voluntary sex before age 15 versus at age 15 or later

	1st voluntary sex before age 15 (n=276)	1st voluntary sex at age 15 or later (n=468)
Previous nonvoluntary 1st sex	5%	9%
Wantedness of sex, among only girls whose first intercourse was voluntary:	(n=264)	(n=422)
Low (1-3)	27%*	15%
Medium (4-7)	48%	43%
High (8-10)	26%*	42%
First voluntary sex occurred before menarche	7%*	1%
Any contraceptive use at first voluntary sex	71%	77%
Distribution of those who used contraception at first voluntary sex, by method used:		
condom	88%	82%
pill	7%	12%
other method	5%	6%
Of all first voluntary sexual relationships, cumulative proportion ended within:	(n=273)	(n=465)
1 month	31%*	20%
3 months	44%*	30%
12 months	61%	51%
24 months	75%	62%
Proportion of first sexual relationships ended by interview	88%	65%

*Significantly different from estimate for teens who have sex at 15 or older, p=.05.

include the experience of teens who will have first sex at some point in the age 15-19 interval, but have not yet done so at the time of the interview. One way this problem could have been avoided would have been to construct the comparison group from 20- to 24-year-olds instead of 15- to 19-year-olds, but because the NSFG teen sample is older than any other sample of teens used in this report (respondents are on average, four years older than the average Add Health respondent and an average of six years older than the average NLSY respondent), it was decided that such data would simply be too out of date to provide any insights on the sexual behavior of today's young adolescents.

How common is sexual activity among girls age 14 and younger?

One in five teen girls (20%) report having had sex at age 14 or younger (Table 1). Of those who first had sex at age 14 or younger, about half did so when 14 years old, the other half when 13 or younger.

Among the three largest racial/ethnic groups, sex at age 14 or younger is most common among non-Hispanic Black adolescents (31%) and least common among non-Hispanic White adolescents (17%). Twenty four percent of Hispanics report having had sex at age 14 or younger.

Table 3: Characteristics of first voluntary sexual partner, and whether first voluntary sex was at age 14 or younger versus age 15 or older

	1st voluntary sex at age 14 or younger (n=276)	1st voluntary sex at age 15 or later (n=468)
Relationship type:		
just met/just friends	18%	12%
dating occasionally	12%	8%
going steady	69%	73%
other	1%*	7%
Partner different race or ethnicity	19% (n=276)	16% (n=463)
Partner different religious affiliation than religion in which R was raised	45% (n=206)	38% (n=399)
Partner age difference:	(n=275)	(n=462)
same age or younger	8%*	24%
1 to 2 years older	39%	45%
3 to 4 years older	36%*	22%
5 or more years older	16%*	9%

The NSFG questionnaire was designed to permit the identification of sexual abuse and other nonvoluntary first sexual experiences. Figure 1 shows that 87% of first sexual experiences at age 14 or younger were voluntary. Of the other 13% of teens who were sexually experienced before their 15th birthday, 8% reported *only* nonvoluntary sex; the other 5% of girls reported both that their first sexual experience was nonvoluntary and that they also had voluntary sex at age 14 or younger. (Due to a lack of data in the NSFG regarding nonvoluntary sexual activity, Tables 2-5 below focus on the 93% of all girls sexually experienced at age 14 or younger who engaged in voluntary sexual activity.)

Screening out those adolescents who only had nonvoluntary sex and looking at age at first voluntary sex, the overall proportion of girls who are sexually experienced decreases slightly, and ranges from 2% at age 12 to 18% at age 14 (Table 1). Looking only at voluntary sex also lowers the percentage of sexually experienced girls for all three major racial/ethnic groups, so that 27% of non-Hispanic Black girls, 23% of Hispanic girls, and 16% of non-Hispanic White girls age 15-19 have had voluntary sex at age 14 or younger.

Do the circumstances surrounding first sex at an early age differ from those surrounding first sex in later adolescence?

Circumstances surrounding first voluntary sex, as well as some characteristics of the first voluntary sexual partner, appear to be different when first voluntary sex occurs at age 14 or younger, compared to later in the teen years. For example, young girls are less likely than older girls to report that their first sexual experience was "wanted." More specifically, when asked to rate on a scale of

1 to 10 how much they wanted sex to occur at that time, girls whose first voluntary sex occurred at age 14 or younger were significantly more likely to answer with a low score (27% versus 15%) and significantly less likely to answer with a high score (26% versus 42%) compared to teen girls whose first voluntary sex occurred at age 15 or later (Table 2).

Not surprisingly, when first voluntary sex occurred at age 14 or younger, it was more likely to occur before menarche (7% versus 1%), when risk of pregnancy is very low. Contraceptive use at first voluntary sex also appears to be less likely among girls whose first sex occurs at age 14 or younger compared to first sex at age 15 or later, but this difference is not statistically significant.

First voluntary sexual relationships end more quickly when they occur at age 14 or younger. Nearly a third (31%) end the same month they begin, compared to 20% of first voluntary relationships among older teens.[1] Likewise, 44% of first relationships among girls age 14 and younger ended within three months, compared to 30% of first relationships among girls age 15 or older.

Table 3 provides information on first voluntary sexual partners for younger and older girls. The only statistically significant difference in relationship types between first voluntary sexual partners of girls age 14 and younger and girls age 15 and older is that more relationships among older teens fall into the "other" category (7%, versus 1% for girls 14 and under), which includes engaged and married couples.

It is important to note that more than half of girls who had first voluntary sex at

Table 4: Outcomes by 15th birthday among those who have had sex at age 14 or younger

	1st voluntary sex at age: 13 or younger (n=114)	14 (n=162)	Total (n=276)
Months of sexual activity by 15th birthday	12.6 months*	4.3 months	7.7 months
Average number of lifetime partners by 15th birthday	1.7 partners	1.3 partners	1.4 partners
Number of partners by 15th birthday:			
one	52%*	82%	71%
more than one	48%*	18%	29%
Proportion of months of sex occurring before menarche	7%	2%	4%
Any contraceptive use at last month of sex with first partner (or month of 15th birthday)	70%	74%	73%
Reported a pregnancy conceived before 15th birthday	24%*	5%	13%

* Significantly different from estimate for teens who have sex at 14, p=.05.

1 Relationship lengths are substantially shorter than lengths reported in the Brückner and Bearman analysis of the National Longitudinal Survey of Adolescent Health (Add Health) in this volume, probably because that survey measures the entire length of the romantic relationship, as opposed to the NSFG, which just measures the relationship beginning when sex first occurs.

Table 5: Outcomes at interview for teens who have sex at younger versus older ages

	1st voluntary sex at age 14 or younger (n=276)	1st voluntary sex at age 15 or later (n=468)
Age at interview	16.9 years old*	17.9 years old
Ever pregnant (*reported*)	41%*	27%
Ever given birth	21%*	14%
Among teen mothers, percent of first births that were unintended	71%	74%
Number of lifetime partners:		
one	20%*	46%
two	19%	24%
three to five	36%*	21%
six or more	25%*	9%
Average number of lifetime partners	4.7 partners*	2.5 partners
Average number of partners (lifetime) per year of sexual activity	1.3 partners per year	1.3 partners per year
Dropped out of school	20%*	10%
Intends to complete at least 16 years of education (i.e., 4-year college degree)	50%*	72%
Mother (figure) expects at least a 4-year college degree	63%	73%

*Significantly different from estimate for teens who have sex at 15 or later, p=.05.

age 14 or younger report that their partner was *at least* 3 years older. First voluntary partners among girls 14 and younger were less likely to be younger or the same age (8% versus 24%) and more likely to be 3 to 4 years older (36% versus 22%) or 5 or more years older (16% versus 9%), compared to first voluntary partners of girls 15 or older.

What is known about the sexual and contraceptive behavior of these young adolescents?

Sexual activity before age 15 appears to be fairly sporadic (Table 4). By their 15th birthday, girls who were sexually experienced had been sexually active during an average of 7.7 months. More than two-thirds (71%) had had only one sexual partner. Not surprisingly, given that they had more time to accumulate relationships, girls whose first voluntary sex occurred at age 13 or younger, as opposed to at age 14, were more likely to have had more than one partner (48% versus 18%) and had been sexually active during a greater number of months (12.6 versus 4.3) before turning 15.

Despite fairly high levels of contraceptive use, a substantial proportion of adolescents still get pregnant at age 14 or younger. Seventy-three percent of girls used some

form of contraception during the month their first voluntary sexual relationship ended (or, for girls whose first relationships lasted later into their teen years, the month they turned 15), which is actually a slightly greater proportion than the 71% of girls who used contraception at first voluntary sex (Table 2). Still, 13% became pregnant at least once before age 15. Girls whose first voluntary intercourse was at age 13 or younger were much more likely than girls whose first intercourse was at age 14 to experience a pregnancy before age 15 (24% versus 5%) .

What adverse outcomes are associated with becoming sexually active at an early age?

Whether early sexual activity leads to a continued pattern of risky behavior or simply indicates a set of underlying risk factors, teen girls who have voluntary sex for the first time at age 14 or younger have a variety of unfavorable outcomes compared to teen girls who have sex for the first time at age 15 or later (Table 5).

First, teens who have sex at an early age are significantly more likely to have reported ever being pregnant (41%) or to have given birth by the time of the NSFG interview (21%), compared to teens who have sex at an older age (27% and 14%, respectively — see Table 5). It is not clear, however, whether having sex at an early age in and of itself increases the risk of teen pregnancy or if the two outcomes are correlated because early sex and early pregnancy are both influenced by the same underlying risk factors, perhaps family dysfunction or a propensity to choose "risky" romantic partners.

Girls whose first voluntary sex was at age 14 or younger had more lifetime sexual partners, on average, than girls whose first voluntary sex was at age 15 or older (4.7 versus 2.5), were less likely to have had only one partner (20% versus 46%) and more likely to have had between 3 and 5 partners (36% versus 21%) or 6 or more partners (25% versus 9%). Because the two groups of teens had the same average number of partners per year of sexual activity (1.3), it appears that the increased average number of lifetime sexual partners lies solely in beginning sexual activity at an early age.

Finally, girls who had first sex at age 14 or younger had worse educational outcomes by the time of the interview. They were twice as likely to have dropped out of school – 20% of girls whose first voluntary sex was before age 15 had dropped out of school by the interview, versus 10% of girls who had sex for the first time at age 15 or older. (Of course, because girls in both categories are fairly young, it is possible that more will eventually drop out before graduating, and that some of those who have dropped out may return to school.) Not surprisingly, given that they were more likely to have dropped out of school, girls whose first voluntary sex was at age 14 or earlier were less likely to expect that they would graduate from college (50% versus 72%). These two facts may have a causal relationship, but they also may simply indicate characteristics that affect both risk of early sexual activity and poor educational outcomes. Brückner and Bearman's paper in this volume, for example, found that less academically inclined students at ages 12-14 were more likely to have sex at an early age, and presumably poor school performance in the "middle school years" is predictive of poor school performance later.

Discussion

It appears that beginning to have sex at age 14 or younger is a different experience than beginning to have sex later in the teen years. First voluntary sex among girls under 15 was less wanted, was with relatively older partners, and occurred within relationships that ended more quickly than was true for girls whose first voluntary sex occurred at

age 15 or older. Sex at this very young age is relatively infrequent — about 80% of all girls did *not* have sex before age 15. Those who did have sex were only sexually active for about 8 months during the entire time before they turned 15, and 71% had only one sexual partner up until their 15th birthday. Still, during the time before turning 15 when girls were sexually active, about 1 in 8 became pregnant.

The outcomes shown in Table 5, including an increased risk of teen pregnancy, teen childbearing, and school dropout by the interview, are alarming. More research is needed to determine whether or not the relationships among the factors shown above are actually causal. In the meantime, however, girls who have had sex at age 14 or younger or who are at high risk of doing so should be prime targets for teen pregnancy prevention interventions due to their high risk of poor outcomes.

Acknowledgments: This research was partially funded by the Charles Stewart Mott Foundation.

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Part Two

Papers From Small Area Data Sets

Chapter Four

The Development of Sex-Related Knowledge, Attitudes, Perceived Norms, and Behaviors in a Longitudinal Cohort of Middle School Children

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The development of effective, age-appropriate programs for young adolescents that deal with sexual health depends in large part on our ability to understand how sex-related knowledge, attitudes, perceived peer and parental norms, and actual behavior evolve during early adolescence. The data presented here provide a broad and in-depth example of how one group of urban middle school students changed and behaved as they aged. In addition, these data demonstrate how girls and boys may differ in their development of sex-related knowledge, attitudes, norms, and behavior. Specifically, this paper addresses the following questions:

- How does HIV-related knowledge change over time?
- What do youth believe their peers are doing?
- Would youth be more popular with peers if they had sex and what would parents think?
- How comfortable are youth when it comes to condoms?
- Do youth believe they can stop certain sexual behaviors?
- What sexual behaviors would youth allow?
- Do youth find themselves in situations that could lead to sex?
- What reasons do youth endorse for *not* having sex?
- What reasons do youth say motivate them to have sex?

- If partners have had sex once, is it okay to pressure them to do it again?
- What kinds of sexual coercion have youth experienced?
- Are they willing to be coercive themselves?
- How many youth are sexually experienced and sexually active?

The sample

This report focuses on data collected as part of a larger study of 2,829 middle-school students participating in a 36 month randomly controlled intervention trial. The *Draw the Line/Respect the Line* intervention was implemented from spring, 1997 to spring, 1999 and students were surveyed as part of an evaluation of this program from 1997-2000. The trial involved 19 ethnically and socioeconomically diverse public middle schools in an urban area of Northern California. Ten schools were randomly assigned to receive the *Draw the Line* program; the remaining nine schools served as controls and continued with usual classroom activities regarding HIV, other sexually transmitted diseases, and pregnancy prevention. Self-reported data were collected from a cohort of sixth-grade students at all 19 schools using trained data collectors. The baseline data were collected in spring, 1997. Follow-up data were collected in the spring of 1998, 1999, and 2000.

For these analyses, we restricted our sample to students who were age 12, in the sixth or seventh grade, and participated in at least three subsequent annual waves of data collection. We also limited the sample to control students only, to avoid confounding effects of the intervention. The final sample consisted of 958 students (455 boys and 503 girls). The racial/ethnic breakdown of the sample, as reported at baseline, was 59% Latino, 18% Asian/Pacific Islander, 15% White, 4% African American, and 3% other.

The self-administered survey contained 101 questions assessing demographics, sexuality- related psychosocial factors, and coercive and non-coercive sexual behaviors. The instrument was initially developed in English and subsequently translated into Spanish. Approximately 10% of students completed the survey in Spanish.

Active parental and student consent was required for survey participation. Ninety percent of students enrolled in the study schools at baseline returned parental consent forms, but only 76% of these parents consented to allow their children to complete the survey, resulting in an overall response rate of 68% at baseline. Retention rates for this sample were 91% at first follow-up, 88% at second follow-up, and 64% for the third follow-up. Differential attrition within the sample selected for these analyses was found by gender, with more males lost to follow-up (<. 0001); youth reporting sexual activity at each wave also were less likely to be retained in the following wave (<. 01).

Based on theoretical models of behavior change, these analyses examine some of the fundamental factors believed to influence sexual initiation and safer sexual practices. These included: HIV prevention knowledge, sex-related beliefs, perceived peer norms regarding sexual behavior and attitudes toward sex, perceived parental norms regarding sex, perceived self-efficacy, attitudes about coercive and non-coercive sexual behavior, and actual behavior.

To examine how these factors and behaviors changed over time, data are shown for the sample at age 12, 13, and 14. The paper also shows how these changes differed by gender. Tests of significance for age and gender differences were assessed using GEE logistic regression analyses, which accommo-

Table 1: Percentage of students who answered selected HIV-related items correctly, by gender and age

	Correct Answer	Boys (n=455)				Girls (n=503)			
		Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
It is against the law for people under 16 years old to buy condoms.[d]	False	26%	34%	50%	37%	25%	39%	54%	40%
You can get AIDS from kissing someone who has AIDS.[d, iii]	False	46%	48%	61%	52%	42%	52%	66%	54%
Condoms help protect against HIV, the virus that causes AIDS.[a,d]	True	69%	78%	76%	74%	58%	61%	66%	62%
Condoms protect people from getting pregnant.[b,d]	True	65%	74%	80%	73%	63%	65%	75%	67%
You can get HIV/AIDS if you only have sex once or twice without a condom.[c,d,iii]	True	67%	70%	75%	71%	65%	77%	82%	75%
You can tell if a person has HIV or AIDS just by looking at them.[a,f]	False	71%	77%	83%	77%	74%	80%	87%	81%
Not having sex is the safest way to keep from getting pregnant or getting a disease like AIDS.[a,d]	True	71%	76%	81%	76%	78%	84%	92%	85%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$; [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

date intra-person correlation of response. Each table also presents a time-averaged percentage column separately for boys and girls, which provides an average proportion by gender considering all responses from ages 12 to 14.

How does HIV-related knowledge change over time?

The proportion of youth with accurate HIV-related knowledge increased with age (Table 1). Most youth realized that abstinence is the safest way to prevent pregnancy or disease, with a larger proportion of girls than of boys endorsing this notion. By age 14, most youth realized that it is not possible to tell whether a person has HIV or AIDS just by looking at him or her. In general, boys were more likely than girls to correctly answer questions about condom effectiveness at each age. By the time girls were age 14, two-thirds correctly reported that condoms help protect against HIV, and 75% reported that condoms help protect against pregnancy. However, only about half of 14-year-old

Table 2: Percentage of students who report that half or more of their friends think or do the following, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Half or more of friends think it is OK for people their age to have sex with a serious boyfriend or girlfriend.[a,d]	24%	36%	49%	36%	11%	17%	32%	20%
Half or more of friends think people their age should wait until they're older to have sex[a,d]	69%	63%	50%	60%	87%	84%	73%	81%
Half or more of friends have a boyfriend or girlfriend.[d]	43%	52%	55%	50%	43%	54%	58%	52%
Half or more of friends have kissed a boy or a girl.[d]	42%	60%	77%	60%	43%	65%	80%	63%
Half or more of friends have touched someone else's private parts below the waist.[a,d]	8%	21%	37%	22%	4%	11%	26%	14%
Half or more of friends have had sex.[b,d]	5%	10%	18%	11%	3%	6%	15%	8%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$; [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$.

boys and girls believed it is legal for people under 16 to buy condoms.

What do youth believe their peers are doing?

Unfortunately, normative beliefs favoring abstinence decline as boys and girls get older. Still, the majority of boys and girls at all ages believed that their friends endorse the notion of delaying sex until they are older (Table 2). Girls were much more likely than boys to report these beliefs among their friends.

Beliefs regarding peers' dating and sexual behaviors varied by behavior, age, and gender. For example, at age 12, just over 40% of boys and girls reported that their peers are kissing. This proportion increases significantly as teens get older. At age 12, 43% of boys and girls believed that approximately half of their peers have a girlfriend/boyfriend. One year later, approximately half of all boys and girls held this belief. The belief that friends are touching others below the waist was uncommon among 12-year olds, although twice as many 12-year-old boys (8%) thought their friends had touched someone below the waist, as compared to the 12- year old girls (4%). For both boys and girls, a belief that friends are touching below the waist increases as they age.

Few students believed their friends have had sex, but the proportion that reported having friends who have had sex nearly doubled with each passing year. By age 14, 18%

Table 3: Percentage of students who believe peers are having sex, and whether those who have wish they had waited, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Most teens your age are having sex[a,d]	22%	32%	39%	31%	31%	41%	51%	41%
Most teens who have had sex wish they had waited until they were older[a,f,ii]	48%	48%	45%	47%	61%	66%	72%	66%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

of boys and 15% of girls believed that the majority of their friends have had sex.

Interestingly, when youth were asked whether most teens their age are having sex (Table 3), they responded affirmatively in much larger proportions (39% of boys and 51% of girls by age 14) than when reporting on what they believe their own friends are doing. That is, they did not believe that many of their friends have had sex, but they *did* believe that many more youth their age have had sex.

Nearly half of the 14-year-old boys and three-fourths of the 14-year-old girls thought that most teens who have sex wish they had waited until they were older (Table 3). Girls were much more likely than boys to believe this, and the proportion of girls (but not boys) agreeing with this statement increased over time.

Table 4: Percentage of students who have certain beliefs regarding sex, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Boys are more popular if they have sex.[b,d]	40%	51%	53%	48%	35%	39%	46%	40%
Girls are more popular if they have sex.[a,iii]	35%	41%	36%	37%	23%	19%	20%	21%
If you had sex now your father or stepfather would think it was OK.[a]	10%	17%	21%	16%	3%	2%	2%	3%
If you had sex now your mother or stepmother would think it was OK[a,f]	6%	11%	15%	10%	3%	2%	3%	3%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

Table 5: Percentage of students who feel embarrassed about condoms, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Would you be embarrassed to talk with a boyfriend or girlfriend about using condoms?[d]	53%	41%	27%	40%	49%	36%	24%	36%
Would you be embarrassed to buy condoms?[a,d]	58%	49%	39%	49%	69%	60%	53%	61%
Would you be embarrassed to carry a condom with you in a wallet, purse, or backpack?[a,d]	52%	38%	24%	38%	60%	48%	37%	48%

[a]Effects for gender, $p<.001$. dEffects for age, $p<.001$.

Would youth be more popular with peers and if they had sex and what would parents think?

Our data suggest that having sex is more likely to contribute to a boy's popularity than to a girl's. By age 14, about half of the students (53% of boys and 46% of girls) agreed with the statement that boys are more popular if they have sex. Far fewer students (36% of boys and 20% of girls) agreed that girls are more popular if they have sex (Table 4). Few girls (2% to 3%) believed their parents would accept their having sex now. Boys showed much more variability, with a definite increase over time in the percentage of boys who thought their father would say it was okay to have sex now (from 10% to 21%), and a definite increase, although in smaller proportions, who thought their mother would accept it (6% to 15%) (Table 4).

How comfortable are youth when it comes to condoms?

In general, substantial percentages of students said they would be embarrassed talking about, purchasing, or carrying condoms (Table 5). The proportion of youth who would feel embarrassed discussing condom use with a girlfriend or boyfriend decreased for both genders as they aged, but was still quite high at age 14. The same pattern held true for feeling embarrassed by purchasing or carrying condoms. In general, boys were less embarrassed to purchase or carry condoms than were girls. Overall, nearly half of boys and two-thirds of girls said they would be embarrassed to buy condoms.

Do youth believe they can stop certain sexual behaviors?

To assess whether students believed they could stop themselves or a partner from engaging in certain romantic/sexual behaviors, they were asked to imagine themselves alone with someone they liked very much. In all areas and across all ages, most youth believe they could stop themselves or a partner from engaging in sexual behavior, or that they could tell their partners to buy or use a condom, if needed.

Table 6 illustrates important differences by gender and only slight differences across time. As they age, boys became less confi-

Table 6: Percentage of students who believe they "probably could" or "definitely could" manage each situation, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Imagine you are alone with someone you like very much...								
Could you stop them if they wanted to kiss you on the lips?[a,e]	74%	69%	66%	70%	89%	88%	85%	87%
Could you stop them if they wanted to tongue/French kiss you?[a,f]	75%	70%	66%	70%	90%	90%	88%	89%
Could you stop them if they wanted to touch your chest/breasts?[a,iii]	83%	81%	75%	80%	94%	95%	96%	95%
Could you stop them if they wanted to touch your private parts below the waist?[a,f,ii]	87%	88%	81%	85%	94%	97%	97%	96%
Could you stop them if they wanted to have sex with you?[a,f,ii]	85%	84%	81%	84%	94%	98%	98%	97%
Could you stop yourself from having sex if the person said they would break up with you unless you had sex with them?[a,e,iii]	85%	84%	83%	84%	94%	97%	98%	96%
Could you stop yourself from having sex if you had strong sexual feelings for someone?[a,iii]	72%	69%	62%	68%	86%	86%	87%	86%
Could you stop yourself from having sex if you had been drinking alcohol?[a]	63%	59%	57%	60%	77%	78%	77%	77%
If you decided to have sex, could you tell the other person you wanted to use a condom?[a,d]	82%	85%	90%	86%	89%	93%	95%	92%
If you needed a condom, could you go to the store and buy one?[d,iii]	63%	75%	80%	73%	69%	70%	78%	72%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

dent that they could stop their partners from kissing them, or touching their chest. They seemed only slightly less confident over time of their ability to stop a partner from touching below the waist or having sex. Girls lose a little confidence over time when it comes

Table 7: Percentage of students who would allow certain behaviors to occur with someone they liked, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Imagine you are alone with someone you like very much...								
Would you let them kiss you on the lips?[a,d]	68%	86%	90%	81%	58%	75%	85%	73%
Would you let them tongue kiss or French kiss you?[a,d]	51%	71%	81%	68%	37%	60%	75%	58%
Would you let them touch your private parts below your waist?[a,d]	20%	38%	52%	37%	6%	12%	17%	12%
Would you let them have sex with you?[a,d]	19%	30%	42%	30%	5%	6%	8%	6%

[a]Effects for gender, $p<.001$. [d]Effects for age, $p<.001$.

to kissing, but remain highly confident across ages that they could stop a partner from touching their breasts, touching below the waist, or having sex.

Boys were least confident in their ability to stop themselves from having sex if they had been drinking alcohol or if they had strong sexual feelings for someone. This confidence got even weaker over time. Slightly more girls felt they could stop themselves if they had been drinking (77% on average, compared to 60% on average for boys), and significantly more girls than boys thought they could stop themselves if they had strong sexual feelings for someone. Most boys and almost all girls felt confident that threat tactics (i.e., a partner threatening to break-up with them if they didn't have sex) would not lead them to have sex.

As boys and girls get older, their confidence grows regarding condom purchase and negotiation skills. Boys were slightly more confident than girls about buying condoms, and girls were slightly more confident than boys about talking about condoms.

What sexual behaviors would youth allow?

Though most students believed they *could* mange most sexual situations, it appears that what they could do was different than what they *would* do (Table 7). Given the opportunity, the majority of 12-year-old boys and girls would let someone kiss them, and the proportions increase with age. Boys were also more likely than girls to allow someone to touch them below the waist, with significant increases in proportion as they aged (from 20% at age 12 to 52% at age 14). Fewer girls would allow this, but the proportion that would allow it also increased over time (from 6% at age 12 to 17% at age 14). Finally, boys were more likely than girls to allow partners to have sex with them, and these proportions increased more for boys than girls over time.

Do youth find themselves in situations that could lead to sex?

Each year students were asked: (1) how often in the previous three months had they been alone with someone they were attracted to; (2) how often had they been alone kissing and touching someone they really liked; (3) how often had they laid on a couch or bed alone with someone they liked; and (4) how often had they been at a party where there were no adults in the house.

Table 8 shows that more than half of boys and girls reported being in at least one such situation in the previous three months. The proportion of both boys and girls finding themselves in such situations definitely progressed with age. By age 14, more than half of boys and two-fifths of girls had attended a party with no adult supervision, nearly half of both boys and girls had been alone kissing and touching someone they liked, and about a third had laid down on a couch or bed alone with someone they liked.

What reasons do youth endorse for *not* having sex?

Given that youth seem to have opportunities that could lead to sex, it is important to assess what might stop them from having sex. Students were given a list of reasons for not having sex and asked to respond whether each reason was true for them or not. Fewer boys than girls endorsed each reason regardless of their age, but "not wanting to get AIDS or other diseases you can get from sex" remained the most commonly noted reason for most youth across all ages (Table 9). Other major reasons included: not wanting a baby, parental anger, and being too young to have sex.

As boys grew older, not wanting to get diseases, not wanting a baby, parental anger,

Table 8: Percentage of students reporting situations in the previous three months that could lead to a sexual encounter, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
In the past 3 months...								
have you been alone with someone you are very attracted to?[d]	46%	63%	69%	59%	41%	58%	69%	56%
have you been at a party where there were no adults in the house?[a,d]	34%	46%	51%	44%	30%	35%	42%	36%
have you been alone kissing and touching someone you really like?[b,d]	25%	40%	49%	38%	16%	33%	45%	31%
have you laid down on a couch or bed alone with someone you like?[a,d,iii]	15%	30%	38%	28%	6%	19%	30%	18%

[a]Effects for gender, $p<.001$; [b]$p<.01$;[c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

Table 9: Reasons for *not* having sex, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
I don't want to get AIDS or other diseases you can get from sex.[a,ii]	81%	78%	80%	80%	89%	94%	94%	92%
I do not want to have a baby right now.[a,f,ii]	76%	76%	75%	76%	86%	91%	93%	90%
Not at my age because my parents would be angry.[a,d]	76%	69%	59%	68%	83%	82%	77%	81%
I'm too young to have sex.[a,d]	74%	60%	48%	60%	86%	81%	72%	80%
Not at my age because I would lose respect for myself.[a,d]	58%	47%	33%	46%	81%	76%	69%	75%
Not at my age because I don't want to get a bad reputation.[a,d,iii]	57%	49%	38%	48%	75%	74%	70%	73%
Not at my age because I would feel guilty afterwards.[a,d]	57%	47%	37%	47%	75%	71%	64%	70%
Not at my age because it is against my beliefs.[a,d]	41%	30%	27%	33%	48%	40%	39%	42%
Not at my age because I think it's gross.[a,d]	25%	14%	8%	15%	52%	38%	27%	39%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

and being too young to have sex remained the primary reasons for not having sex. However, by age 14, disease and pregnancy prevention seemed most important, while less than two-thirds were concerned about parental anger and less than half believed they were too young to have sex.

Girls showed a similar pattern in terms of the most important reasons not to have sex, but in higher proportions. Nearly nine out of every ten 12-year-old girls selected: not wanting to get AIDS or other diseases, not wanting a baby, parental anger, and being too young as reasons not to have sex. Not wanting a bad reputation, loss of self-respect, and guilt were only slightly less likely to be selected by girls than other options but were more important for girls than for boys at every age. By age 14, 94% of girls reported not wanting to get sexually transmitted diseases and 93% reported not wanting a baby as reasons for not having sex. Parental anger (77%) and being too young (72%) also continued to be important reasons not to have sex as girls aged.

What reasons do youth say motivate them to have sex?

The top three reasons that most motivated youth to have sex were love, curiosity, and desire (Table 10). Boys at any age were more likely than girls to see reasons for having sex. For example, about a third of 14-

year-old boys would have sex for love, curiosity, and/or to satisfy sexual desires as compared to 18%, 12%, and 12% of 14-year-old girls, respectively. Wanting to feel more loved, avoiding a relationship break-up, following what friends are doing, or wanting to be more popular, were not strong reasons for having sex for either boys or girls.

If partners have had sex once, is it okay to pressure them to do it again?

Several survey items assessed whether or not students approved of pressuring others to kiss or have sex in situations where the couples have engaged in the behavior before. In general, pressuring someone to kiss was more acceptable than pressuring someone to have sex regardless of gender, although more boys than girls accepted pressuring across all behaviors (Table 11). Boys were more than twice as likely as girls to accept a boy pressuring a girl to have sex, and nearly three times more likely than girls to accept a girl pressuring a boy to have sex. Surprisingly, getting older only slightly changed the opinions of either boys or girls on this issue.

What kind of sexual coercion have youth experienced?

In the course of the 36-month intervention, an average of 6% of boys and 5% of girls reported that someone had forced them to have sex in their lifetime (Table 12). Coercive experiences in the 12 months before the survey were also assessed. As shown in Table 13, the proportion of boys and girls reporting that they were coerced was surprisingly similar.

Are they willing to be coercive themselves?

Few students reported coercing others in the previous 12 months (Table 14). More boys than girls reported pressuring someone

Table 10: Reasons for having sex, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
I had a boyfriend or girlfriend I loved.[a,d]	17%	27%	36%	27%	9%	12%	18%	13%
I'm curious to know what it's like.[a,d]	22%	24%	32%	26%	5%	10%	12%	9%
To satisfy my sexual desires.[a,d]	17%	25%	33%	25%	5%	7%	12%	8%
To feel more accepted and loved.[a,iii]	8%	13%	10%	10%	5%	3%	3%	4%
So my boyfriend or girlfriend would not break up with me.[a,f,ii]	9%	10%	9%	9%	5%	2%	1%	3%
My friends are having sex.[a]	6%	7%	7%	7%	2%	2%	2%	2%
To be more popular.[a,iii]	6%	9%	7%	7%	2%	1%	2%	1%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

Table 11: Percentage of students who believe it is okay to pressure in certain contexts, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Is it OK for a boy to pressure a girl for a kiss if they have kissed before?[a,f]	50%	48%	47%	48%	37%	31%	30%	33%
Is it OK for a girl to pressure a boy for a kiss if they have kissed before?[a,f]	55%	57%	53%	55%	37%	32%	30%	33%
Is it OK for a boy to pressure a girl to have sex if they have had sex before?[a,f,iii]	34%	35%	33%	34%	17%	14%	10%	14%
Is it OK for a girl to pressure a boy to have sex if they have had sex before?[a,e,iii]	38%	46%	40%	42%	18%	16%	12%	15%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

across all the sexual behaviors noted on Table 14 and older boys were slightly more likely than younger boys to report coercion related to tongue kissing and touching below the waist. The proportion of girls reporting coercive behaviors changed little, if at all, as they got older.

How many youth are sexually experienced and sexually active?

Twenty-three percent of 14-year-old boys reported they had had sex (were "sexually experienced"), compared to 14% of the 14-year-old girls. The proportion of boys and girls reporting they had had sex doubled with each passing year. Looking at sexual activity only in the previous year ("sexually active" youth as opposed to "sexually experienced" youth), the proportions dropped slightly – 20% of boys and 12% of girls age 14 reported recent sexual activity.

Discussion

These data provide a rich source of information about the knowledge, beliefs, and behavior of young adolescents concern-

Table 12: Percentage of students who reported a history of forced sex, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Has someone ever forced you to have sex?	4%	8%	6%	6%	4%	4%	5%	5%

Table 13: Percentage of students who reported attempts at being coerced into certain sexual behaviors in the previous 12 months, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
In the previous 12 months...								
Has someone tried to kiss you on the lips when you didn't want to?[e,ii]	27%	22%	27%	25%	24%	27%	34%	28%
Has someone tried to tongue kiss or French kiss you when you didn't want to?[d]	14%	17%	22%	18%	12%	20%	26%	20%
Has someone tried to touch your private parts below your waist when you didn't want to?[d]	9%	16%	21%	15%	11%	17%	22%	17%
Has someone tried to get you to have sex when you didn't want to?[d]	7%	12%	14%	11%	5%	13%	16%	11%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$. [i]Gender by age interaction effects, $p<.001$; [ii]$p<.01$; [iii]$p<.05$.

Table 14: Percentage of students who reported being coercive in the previous 12 months, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
In the past 12 months...								
Have you tried to kiss someone on the lips, but they didn't want you to?[a]	13%	13%	15%	14%	5%	6%	7%	6%
Have you tried to tongue kiss or French kiss someone, but they didn't want you to?[a,f]	9%	11%	13%	11%	3%	5%	5%	5%
Have you tried to touch someone's private parts below the waist, but they didn't want you to?[a,f]	5%	10%	13%	9%	3%	3%	3%	3%
Have you tried to have sex with someone, but they didn't want you to?[a]	3%	6%	7%	5%	1%	1%	1%	1%

[a]Effects for gender, $p<.001$; [b]$p<.01$; [c]$p<.05$. [d]Effects for age, $p<.001$; [e]$p<.01$; [f]$p<.05$.

Table 15: Percentage of students who reported having sex in the previous 12 months, by gender and age

	Boys (n=455)				Girls (n=503)			
	Age 12	Age 13	Age 14	Time Avg.	Age 12	Age 13	Age 14	Time Avg.
Have you ever had sex?[a,d]	8%	14%	23%	15%	4%	7%	14%	8%
Have you had sex in the past twelve months?[a,d]	6%	12%	20%	12%	3%	6%	12%	7%

[a]Effects for gender, p<.001. [d]Effects for age, p<.001.

ing sex. The data suggest that significant gender and age differences exist and they have implications for prevention programs for this age group.

Most youth believed in delaying sexual initiation and thought that those who become sexually active would have preferred to wait longer. This suggests that middle school children are a prime age for prevention interventions, and that these beliefs could form the basis of a clear message supporting abstinence as the safest choice for preventing HIV, other STDs, and pregnancy.

General knowledge regarding HIV was fairly high, though there were important gaps. For example, many youth lacked knowledge regarding condom effectiveness and about half thought it is against the law for adolescents to buy condoms, suggesting a need for more effective education regarding condoms and how to obtain them.

The majority of boys and a large portion of girls believed that boys who have sex are more popular, particularly once they reach age 14. This was not true for the girls – that is, sex is not seen as boosting popularity – an early sign of the "double standard." By age 14, as many as one in five boys also believed their father would say it was okay to have sex by that age. Therefore, some young boys entering high school may be primed to believe that becoming sexually active is an expectation both from their peers and from their parents, suggesting the importance of addressing these ideas early in middle school.

Most youth believed they could stop themselves from engaging in sexual behavior when they are alone with someone they like very much. However, boys' belief that they could stop themselves from engaging in such behavior gradually decreased as they got older and less than two-thirds of 14-year-old boys indicated that they would probably could or definitely could stop themselves from having sex if they had been drinking or had strong sexual feelings for someone. This recognition underscores the importance of providing youth with the necessary skills to refrain from alcohol consumption as well as how to handle the strong emotional and biological forces that are so typical in adolescence.

By age 14, most boys would allow themselves to be tongue kissed if they are alone with someone they like very much, more than half would allow themselves to have their genitals touched, and two in five boys would let that person have sex with them. More than two-thirds of 14-year-old boys and girls had been alone with someone they were attracted to in the previous 3 months. The experience of being alone together in situations that could lead to a

sexual encounter, including lack of parental supervision, seemed quite common among these students at all ages. It is critical for parents and other adults to try to balance the desire to promote independence as their children age with the security of sufficient supervision that assists them in preventing sexual initiation at an earlier age than most seem to want. Further, prevention programs for youth can include instruction on identifying and handling risky situations.

The majority of girls and boys believed they were too young to have sex and said it was one of their top four reasons for not having sex. Though a majority of the total sample of both boys and girls said they thought they were too young to have sex (60% and 80%, respectively), a closer look at the age-specific percentages show some important gender differences. At each age, the boys were less likely than the girls to cite their young age as a reason for not having sex and the percentage drop across the three years for boys was almost twice that of the girls (74% to 48% vs. 86% to 72%, respectively). The other three most important reasons cited by both boys and girls had to do with the consequences of having sex, i.e., sexually transmitted diseases, pregnancy, and parental anger. Girls were also more concerned about the potential emotional and social consequences of sex – getting a bad reputation, losing self-respect, and guilt – perhaps highlighting the early establishment of gender-based norms regarding sexual behaviors.

Reasons to have sex, particularly among boys, included curiosity, love, and desire. These data suggest it is extremely important to educate middle school youth about the potential consequences of sex while also acknowledging the role of love and desire in their lives. This is an opportune time for parents to talk with their children about love and affection, and to discuss how people can show affection without having sex.

Finally, it is important to acknowledge that some young people have a history of forced or coerced sex, which will likely influence their own sexual development. In this study, 5-6% of youth reported a history of forced sex (and this is likely to be underreported). For these youth, additional resources are needed to help them cope with such experiences and prevent long-term effects such as depression, premature sexual disinhibition, and poor relationship development. Peer coercion to engage in kissing and touching genitals was experienced by nearly one in five 14-year-olds, and 14-16% reported being pressured to have sex. Skills to overcome these types of pressures are critical because they can increase as youth get older.

It is evident that this age group will benefit from sex education that increases their knowledge of sexually transmitted diseases and condom efficacy, and encourages them to maintain their own personal limits regarding sex, particularly because they believed that most other students who had sex wish they had waited. Further, school-based programs can provide youth with the skills to refuse pressure from peers and learn how to respect the personal limits set by their peers.

It is important to note that these results do not provide information regarding which factors may contribute to sexual initiation. The data are meant to describe actual behavior and developmental changes in some of the fundamental factors believed to influence sexual initiation and safer sexual practices. In addition, the sample is not a representative sample of 12- to 14-year-olds, and therefore may not be true for all middle school students.

In summary, middle school youth in this sample had a strong desire to delay sexual initiation, believed many young people their age were engaging in sex, and acknowledged having situations in their lives that

could lead to a sexual encounter. Important gender differences (e.g., boys having less strict personal sexual limits and believing that they would be more popular if they have sex; and girls overestimating who is having sex and being less comfortable getting and carrying condoms) suggest that some messages may need to be targeted by gender.

Parents and families have the important role of teaching their children about love and desire, and providing adequate supervision that helps youth avoid being in situations that can lead to a sexual encounter. They also need to understand how important it is for them to communicate their own values and their specific preference that youth delay sex. Middle school youth may be at the most critical age for receiving these important lessons from their teachers, their parents, and other important adults in their lives.

Acknowledgments: This research was funded by the National Institute of Mental Health grant number MH 51515. The authors gratefully acknowledge the many contributors to this research project, including: Romy Bernard, Nancy Calvin, Hector Campos, Scott Carvajal, Tiffany Chinn, Jennifer Cummings, Cherri Gardner, Leticia Gonzales, Estie Hudes, Deborah Ivie, Samuel Jinich, Sylvia Ortiz, and Benny Vasquez. Additionally, we thank school board members, district representatives, principals, teachers, school staff, and students who welcomed us at their schools and made this research possible.

Chapter Five

Youth with Older Boyfriends and Girlfriends: Associations with Sexual Risk

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Compared to girls with same-aged partners, teenage girls with older romantic partners are more likely to begin sex early, less likely to use condoms if they have sex, and more likely to become pregnant or contract a sexually transmitted disease (Boyer et al., 1999; Landry & Forrest, 1995; Lindberg, Sonenstein, Ku, & Martinez, 1997; Males & Chew, 1996; Marín, Coyle, Gómez, Carvajal, & Kirby, 2000; Miller, Clark, & Moore, 1997). However, little is known about how older romantic partners affect sexual risk for younger adolescents, in particular.

This paper uses data from various urban middle schools in Northern California to examine the following questions:

- How often do middle school youth have an older boyfriend or girlfriend?
- Are youth with an older boyfriend or girlfriend more likely to ever have had sex?
- Why are youth with an older boyfriend or girlfriend more likely to have had sex?
- Does having an older boyfriend or girlfriend affect opportunities to have sex?
- Do youth with an older boyfriend or girlfriend have more friends who have had sex?
- Are those with an older boyfriend or girlfriend more likely to consider having sex?
- Do youth with an older boyfriend or girlfriend experience more pressure to have sex?

The sample

In this study, a sample of students in 10 ethnically and socioeconomically diverse

middle schools in an urban area in Northern California were surveyed, first in the 6th grade, and then again in the 7th, 8th, and 9th grades. The surveys took place from 1997 through 2000 as part of an evaluation of the sexuality education program in these schools. In this report, we included the same students who are included in the preceding paper by Gómez et al. Of these 455 boys and 503 girls, 59% were Hispanic or Latino, 4% were African-American, 18% were Asian/Pacific Islander, 15% were White, 4% were African American, and 3% were of other races. For further details about the sample, see Chapter Four in this volume.

Students were asked a variety of questions about their behavior, attitudes, and beliefs regarding sex, HIV, and pregnancy. For example, students were asked whether they had ever had a "serious" boyfriend or girlfriend, and, if they answered yes, the age of the oldest of these boyfriends/girlfriends. The analyses below divide the students into three groups:

1) Students who reported never having a "serious" boyfriend or girlfriend.

2) Students whose oldest boyfriend or girlfriend was younger, the same age, or 1 year older than the student was at the time of the interview (referred to in the tables below as "same age").

3) Students whose oldest boyfriend or girlfriend was 2 or more years older than the student was at the time of the interview.

How often do middle school youth have an older boyfriend or girlfriend?

From age 12 to 14, the proportion of youth reporting no serious boyfriend/girlfriend decreases, from 50% to 44% for boys and from 59% to 42% for girls (Table 1). At the same time, the proportion of youth reporting a same age partner increases slightly for boys and girls. However, the increase in having an older partner (two or more years older) is much larger for girls. The proportion of boys reporting an older girlfriend increases from 8% at age 12 to 11% at age 14, while the proportion of girls reporting an older boyfriend increases from 12% at age 12 to 28% at age 14. Several explanations are possible for this gender difference. For example, young girls may seek out older partners more often than younger boys because girls are more mature or

Table 1: Percent of students with a serious girlfriend/boyfriend, by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=442)	Age 13 (n=439)	Age 14 (n=438)	Age 12 (n=489)	Age 13 (n=489)	Age 14 (n=500)
No Partner	50%	42%	44%	59%	45%	42%
Partner "Same Age"*	42%	46%	45%	29%	32%	30%
Partner 2 or More Years Older	8%†	12%	11%†	12%	23%	28%

From 2 multinomial logistic models that take the longitudinal structure of the data into account, the p values measuring the association between partner age gap and student age are both statistically significant. For boys, $p<.01$; for girls, $p<.0001$. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

Table 2: Percent of students who ever had sex by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=437)	Age 13 (n=429)	Age 14 (n=427)	Age 12 (n=485)	Age 13 (n=486)	Age 14 (n=496)
No Partner	1%	2%	5%	0.3%	2%	3%
Partner "Same Age"*	13%	18%	29%	6%	6%	13%
Partner 2 or More Years Older	30%†	42%	73%†	19%	18%	30%
Total	8%	14%	23%	4%	7%	14%

From a logistic regression model that takes the longitudinal structure of the data into account, the p values measuring the association of "ever had sex" to partner age gap, student age and gender are all statistically significant at p<.0001. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

because more social status is attached to an older partner. Older boys, in turn, may seek out younger partners more than older girls because, perhaps, the boys lack social skills for interacting with girls their age (Phillips, no date; Raymond & Associates, 1996).

Are youth with an older boyfriend or girlfriend more likely to ever have had sex?

Table 2 presents the proportions of those who reported having had sex. Proportions are reported at each age for boys and girls in each boyfriend/girlfriend category. Not surprisingly, very few boys and girls without a serious boyfriend or girlfriend reported sexual activity at ages 12-14, but those with a boyfriend or girlfriend were much more likely to report having had sex, especially if the boyfriend or girlfriend was older. More than 40% of 13-year-old boys and 70% of 14-year-old boys with a girlfriend two or more years older reported being sexually experienced, compared to less than 18% of 13-year-olds and 29% of 14-year-olds with a same-age girlfriend. Among 14-year-old boys, those with older girlfriends were more than 14 times more likely to have had sex than those boys with no girlfriend. The same pattern holds for girls: One-fifth to one-third of girls 12-14 years old with an older boyfriend reported having had sex, compared to 6% to 13% of girls with a "same age" boyfriend. For each age group, girls with older boyfriends were roughly ten times more likely to have had sex than girls with no boyfriend. Although boys are less likely to have an older partner than girls, if they do, they are more likely to have had sex.

Why are youth with an older boyfriend or girlfriend more likely to have had sex?

In this study, students were asked (1) whether they had ever had sex, and (2) the age of their oldest boyfriend or girlfriend. Those who reported both sexual experience and an older partner, however, were not directly asked whether the older boyfriend or girlfriend was a sexual partner. Whether or not the older partner was a sexual partner, a number of reasons may explain why youth are more likely to have had sex if they have an older boyfriend or girlfriend. If we assume the survey respondent did have sex with the older partner, it may be because the power

differential between an older partner and a younger one can be quite large. Older partners generally have more resources, "maturity," and status (Phillips, no date; Raymond & Associates, 1996). Also, a young person is at a social and developmental disadvantage when dating someone several years older, making it more difficult to refuse sexual advances. The older partner is more likely to be sexually experienced than the younger one, and some research suggests that older males may seek out younger partners precisely because they are more able to control the younger partner and their interaction with her (Phillips, n.d.; Raymond & Associates, 1996). Finally, older boyfriends or girlfriends, especially if they have access to automobiles, may provide more opportunities for privacy and, thus, for sexual activity. On the other hand, even if the young person did not have sex with the older boyfriend or girlfriend, by associating with an older boyfriend or girlfriend, a youth is likely to be exposed to his/her partner's friends, who are likely to be older. Older youth, in general, are more likely to have had sex and to express positive attitudes toward sex.

The following analyses examine the association of having an older partner with increased opportunities for sex, more sexually experienced peers, increased willingness to have sex, and the experience of a greater amount of sexual pressure.

Does having an older boyfriend or girlfriend affect opportunities to have sex?

Table 3 reports the proportion of youth in each gender, age, and partner category who have been alone with someone to whom they were very attracted. The proportions clearly increase with age and do not differ by gender. However, the largest differences are among the partner categories. Although less than half of youth with no boyfriend or girlfriend have been alone with someone to whom they are very attracted, well over half of those with a boyfriend or girlfriend, and 9 out of 10 of those with an older boyfriend or girlfriend have been alone with a partner to whom they are attracted.

Table 3: Percent of students ever alone with someone they're very attracted to, by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=438)	Age 13 (n=434)	Age 14 (n=435)	Age 12 (n=489)	Age 13 (n=485)	Age 14 (n=498)
No Partner	21%	39%	44%	24%	32%	46%
Partner "Same Age"*	68%	77%	87%	59%	74%	84%
Partner 2 or More Years Older	83%†	86%	93%†	84%	89%	88%
Total	46%	62%	69%	42%	59%	69%

From a logistic regression model that takes the longitudinal structure of the data into account, the p values measuring the association of "ever alone with someone you're very attracted to" to partner age gap, student age and gender are statistically significant at $p<.0001$ for partner age gap and student age; the gender effect is not statistically significant. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

Table 4: Percent of students with a friend who has had sex by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=430)	Age 13 (n=417)	Age 14 (n=426)	Age 12 (n=476)	Age 13 (n=478)	Age 14 (n=489)
No Partner	6%	17%	33%	9%	18%	39%
Partner "Same Age"*	26%	37%	59%	20%	29%	55%
Partner 2 or More Years Older	41%†	75%†	83%†	49%	54%	80%
Total	17%	33%	50%	17%	30%	55%

From a logistic regression model that takes the longitudinal structure of the data into account, the p values measuring the association of "have a friend who has had sex" to partner age gap, student age and gender are statistically significant at $p<.0001$ for partner age gap and student age; the gender effect is not statistically significant. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

Do youth with an older boyfriend or girlfriend have more friends who have had sex?

It is likely that youth with older boyfriends or girlfriends socialize with their partners' friends, many of whom will also be older. Because the likelihood of having had sex increases with age, young people with older partners are probably exposed to more people who are sexually active. Youth with an older boyfriend or girlfriend might also choose friends their own age who are "acting older," which might include being sexually active. (It is also possible, though, that young people who have had sex assume that their friends have also had sex.) Table 4 shows the proportion of young people in each age, gender, and partner category who report having at least one friend who has had sex. As might be expected, the proportions increase with age. However, the largest differences are in the partner categories. At age 12, nearly half (41%-49%) of those with older partners report having friends who have had sex, compared to 20-26% of those with "same age" romantic partners and less than 10% of those with no partner. By age 14, 80-83% of those with older partners report having friends who have had sex, compared to 55-59% of those with "same age" romantic partners and 33-39% of those with no partner.

Are those with an older boyfriend or girlfriend more likely to consider having sex?

Youth were asked the question, "Imagine that you are alone with someone that you like a lot. Would you let him/her have sex with you?" Students were given the following answer options: "definitely yes," "probably yes," "probably not," or "definitely not." Those who answered "probably not," "probably yes," or "definitely yes" are classified as those who would consider letting someone have sex with them, while those who answered "definitely not" are classified as those who would not consider it, as shown in Table 5.

The most striking element of Table 5 is the difference between the boys and the girls. Although many boys (25% to 91%) would consider letting someone they were attracted to have sex with them, fewer girls (6% to 38%), even the girls with older boyfriends, would consider letting someone

Table 5: Percent of students who would consider letting someone have sex with them, by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=424)	Age 13 (n=425)	Age 14 (n=421)	Age 12 (n=474)	Age 13 (n=480)	Age 14 (n=493)
No Partner	25%	37%	53%	6%	6%	12%
Partner "Same Age"*	41%	57%	69%	13%	15%	23%
Partner 2 or More Years Older	60%†	86%†	91%†	32%	38%	34%
Total	34%	52%	64%	11%	16%	21%

From a logistic regression model that takes the longitudinal structure of the data into account, the p values measuring the association of "would consider letting someone have sex" to partner age gap, student age and gender are all statistically significant at p<.0001. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

have sex with them. However, youth with an older boyfriend or girlfriend are far more likely to consider having sex than are those having a same age or no boyfriend or girlfriend.

Do youth with an older boyfriend or girlfriend experience more pressure to have sex?

Youth in this study were asked whether someone had tried to touch their "private parts below the waist" when they didn't want the person to touch them. Table 6 shows the proportion of who answered "yes" to the question.

Although we expected that girls would be more likely to report such attempts and that those with an older partner also would report more unwanted sexual advances, the data show that boys and girls are equally likely to report that someone tried to touch their genitals when they didn't want the

Table 6: Percent of students reporting someone tried to touch their genitals when they didn't want it, by gender, age, and boyfriend/girlfriend status

	Boys			Girls		
	Age 12 (n=438)	Age 13 (n=432)	Age 14 (n=437)	Age 12 (n=487)	Age 13 (n=489)	Age 14 (n=499)
No Partner	2%	5%	11%	5%	6%	12%
Partner "Same Age"*	14%	21%	24%	12%	15%	23%
Partner 2 or More Years Older	29%†	36%	46%†	37%	36%	36%
Total	9%	16%	21%	11%	16%	22%

From a logistic regression model that takes the longitudinal structure of the data into account, the p- values measuring the association "reporting someone tried to touch their genitals when they didn't want it" to partner age gap, student age and gender are statistically significant at p<.0001 for the 2 first predictors; the gender effect is not statistically significant. † - calculation based on fewer than 50 cases. * - "same age" indicates that the oldest partner was younger, the same age, or 1 year older than the respondent.

person to do so. Because of the wording of the question, it is unclear *who* tried to touch them, but for both boys and girls, it is more likely that they had this experience if they also reported a boyfriend or girlfriend 2 or more years older. By age 14, although more than one in three of those with an older boyfriend or girlfriend report someone tried to touch their genitals when they did not want it, less than a quarter of those with a same-age boyfriend or girlfriend report such attempts and only about one in 10 of those with no boyfriend or girlfriend have experienced this pressure Reports of someone trying to touch the youth's genitals increase somewhat with age for both genders.

Discussion

Having a boyfriend or girlfriend, especially having an older boyfriend or girlfriend, appears to play a key role in accelerating sexual activity in young adolescents age 12-14. Both boys and girls are at risk of early sexual initiation if they have romantic relationships, and this risk increases as the age gap between partners increases (as noted by Brückner & Bearman in Chapter Two). The high proportion of girls with older boyfriends by age 13 and the high proportion of boys who report having sex if they report an older girlfriend are cause for particular concern.

Having an older boyfriend or girlfriend is likely to expose youth to a more sexually experienced group of friends, according to these data. Youth with older boyfriends or girlfriends were also more likely to report being in risky situations, such as being alone with a boyfriend or girlfriend and experiencing attempts at unwanted sexual touching. All of these circumstances may weaken youth's intentions to postpone sex, and those who have an older boyfriend or girlfriend are the most likely to consider having sex.

It is not clear why some youth have older partners. Learning more about who chooses to have a boyfriend or girlfriend, especially an older one, and why they get involved in the first place, could help in tailoring interventions to address this issue. Most curricula in middle schools do not address dating in general or dating older partners, but they clearly should. Parents need to carefully monitor their young adolescents' dating and romantic activities.

Some cautions about these findings are in order. Students were not asked whether they had had sex with their "serious boyfriend or girlfriend," nor were they asked the age of any of their sexual partners, due to the difficulty posed by child abuse reporting requirements. Thus, it is not certain that the older boyfriend or girlfriend was also the sexual partner for those who had sex. Nevertheless, the fact that having an older boyfriend or girlfriend is so strongly associated with sexual activity, strongly suggests its importance. Also, students who were underage or overage for their grade were not included in these analyses, which could change the results in unknown ways. Despite these limitations, the sample is large, it represents an ethnically diverse population, and these reported results are highly statistically significant.

Acknowledgments: This research was funded by the National Institute of Mental Health, grant number MH 51515. The authors would like to thank Deborah Ivie and Tiffany Chinn for their support in collecting, coding, and cleaning the data.

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Chapter Six

Community Concerns and Communication Among Young Teens and Their Parents: Data from California Communities

Susan Philliber, Ph.D., Philliber Research Associates

Are young teens and their parents particularly concerned about teen pregnancy and related issues? Do they talk to each other about these concerns? The data presented here explore these questions, as well as the perceptions of young teens and their parents about the family planning and sex education programs in their communities. Family members were asked whether they talked with each other about sex, birth control, and pregnancy, and how comfortable these conversations were.

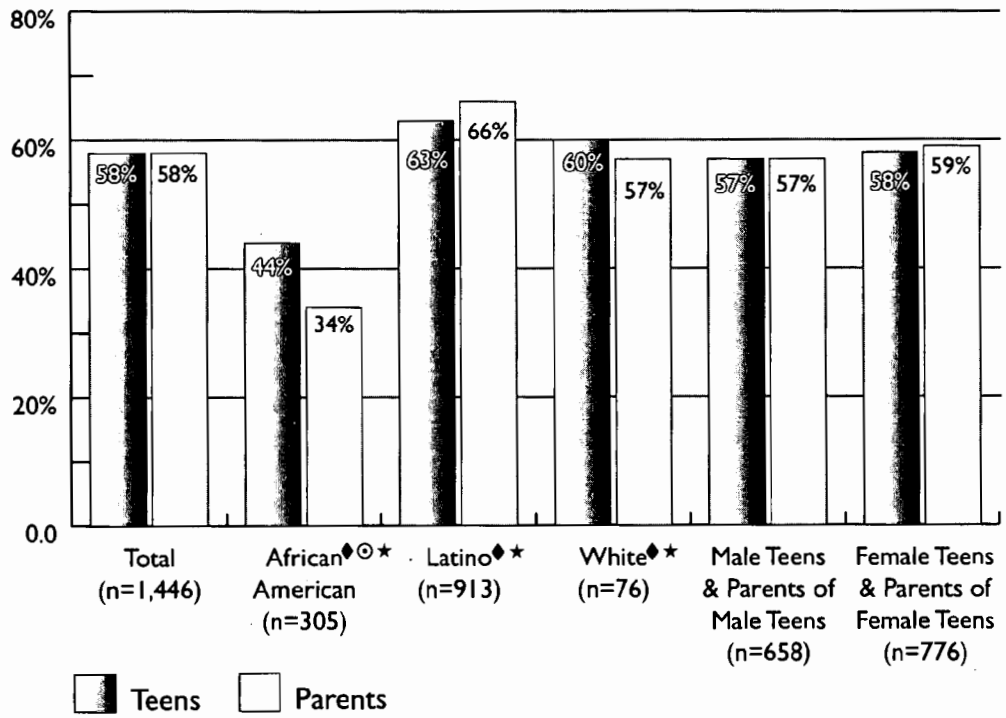
Specifically, this paper uses data from seven disadvantaged communities in California with teen pregnancy rates well above the state average to answer the following questions:

- Are teens and parents satisfied with the sex education and family planning services available in their community?
- Are teens and parents concerned about teen pregnancy and sexually transmitted diseases?
- How comfortable are teens with speaking to parents/caregivers about sex?
- How much parent-child communication about sex actually occurs?

The sample

The Teen Pregnancy Prevention Initiative (TPPI) is a 10-year, $60 million grantmaking program approved by the California Wellness Foundation's board of directors in March 1995. The goal of the Initiative is to help decrease the incidence of teen pregnancy by increasing the proportion of teens who delay the initiation of sexual activity and/or effectively use contraception. As part of the TPPI, grants were made to seven Community Action Programs to reduce teen pregnancy through a combination of direct service and community mobi-

Figure 1: Percent of parents and adolescents (age 11-14) who stated that their communities are "excellent" or "good" at providing teens with access to family planning services



♦ Teens differ significantly by ethnicity.
⊙ Parents differ significantly by ethnicity.
★ Teens are significantly different from parents within ethnic group.

lization activities. The communities that have received grants are in Hollywood, Indio, Modesto, Madera, Oceanside, Richmond, and South Los Angeles. Within each of these locations, disadvantaged neighborhoods were selected. Some were central city areas, and others were smaller communities in more isolated locations. All communities had teen pregnancy rates that were well above the state average.

To prepare for the long-term assessment of outcomes in these communities, baseline data were collected in 1999 from random samples of households that included youth age 11-19. Each neighborhood or community area was mapped, and random samples of dwelling units were selected for screening. Screening for eligibility of the household (presence of a teen age 11-19) was completed in more than 80% of the selected households. Refusal rates among eligible households were below 2% in every community. In each of these households, a parent or other adult caregiver and an adolescent were interviewed. Randomization procedures were used to select the particular parent/caregiver and teen interviewed in each household. The parents and teens were separated to answer the interview questions and given incentives in exchange for their time.

A total of 2,995 pairs of interviews were completed, of which 1,446 were from households with young people age 14 or younger. Although the sample is not representative of the U.S. or of California com-

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Figure 2: Percent of parents and adolescents (age 11-14) who stated that their communities are "excellent" or "good" at providing teens with sexuality education programs

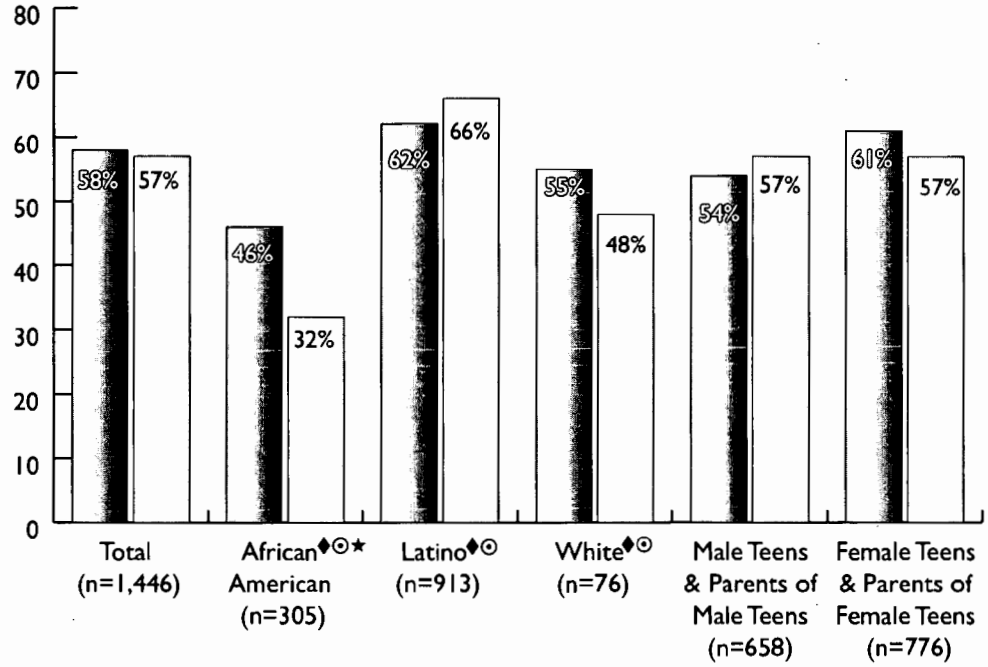

Figure 3: Percent of parents and adolescents (age 11-14) who stated that they are "extremely concerned" about the threat of AIDs and other STDs among teens

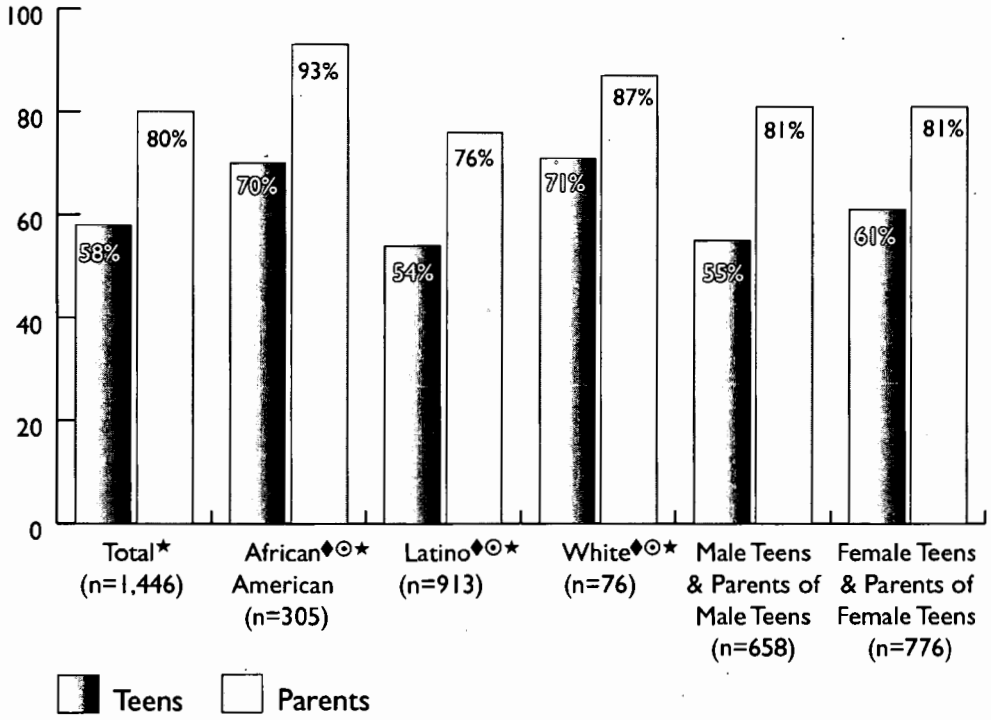

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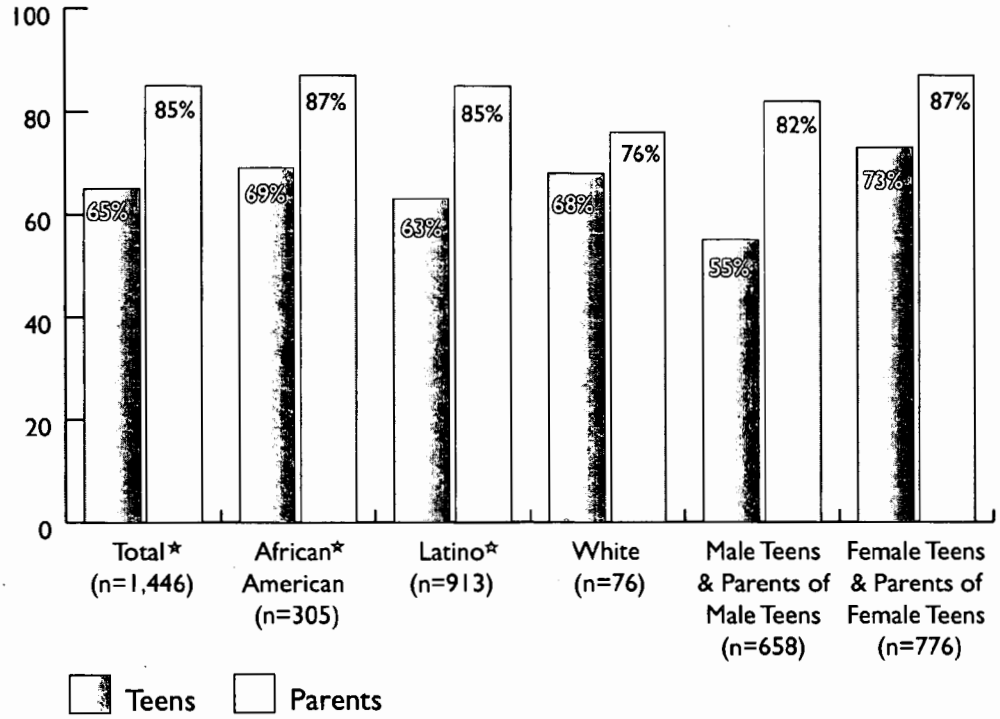
Figure 4: Percent of parents and adolescents (age 11-14) who stated that they are "extremely concerned" about teen pregnancy



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munities, it is a random sample of families with adolescents in these particular California communities with high teen pregnancy rates. Moreover, because the data set includes matched interviews with parents and children, it permits the exploration of similarities and differences among family members. The sample is ethnically diverse, allowing these topics to be examined among African American, Latino, and White families.[1]

Sexual activity is relatively uncommon among the youth in this sample. Nine percent of all 14-year-olds report that they are sexually experienced (10% of girls and 8% of boys). Nineteen percent of the sexually experienced 14-year-old girls reported that they had been pregnant.

Are teens and parents satisfied with the sex education and family planning services available in their community?

Young people and their parents were asked to rate their communities (from very poor to excellent) on providing teens with sex education programs and access to family planning services (Figures 1 and 2).

Except among African American families, teens and parents were fairly positive about their communities' programs in these

1 In the analyses to follow, the .05 level of significance is used to indicate significant differences.

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two areas. African American teens and parents were less likely than their counterparts in other ethnic groups to feel the community was doing an excellent or good job in these areas. Latino teens and parents gave their communities the highest ratings for providing these services. The only significant difference between teens and their parents was that young African American teens were generally more positive than their parents about the community's success in providing family planning services and sex education programs. Last, although teens did not differ from parents within gender groups, young women were significantly more likely than young men to say their communities were "excellent" or "good" at providing sexuality education programs.

Are teens and parents concerned about teen pregnancy and sexually transmitted diseases?

Young people and their parents were asked how concerned they were with teen pregnancy and the threat of AIDS and other sexually transmitted diseases (STDs) (Figures 3 and 4). Substantial percentages of both parents and teens were extremely concerned about each issue. With the exception of White teens, however, teens were significantly less concerned than their parents about teen pregnancy. Also, girls were

Figure 5: Percent of parents who believed their children *could* talk to them about sex, and percent of adolescents (age 11-14) who believed they *could* talk to their parents about sex

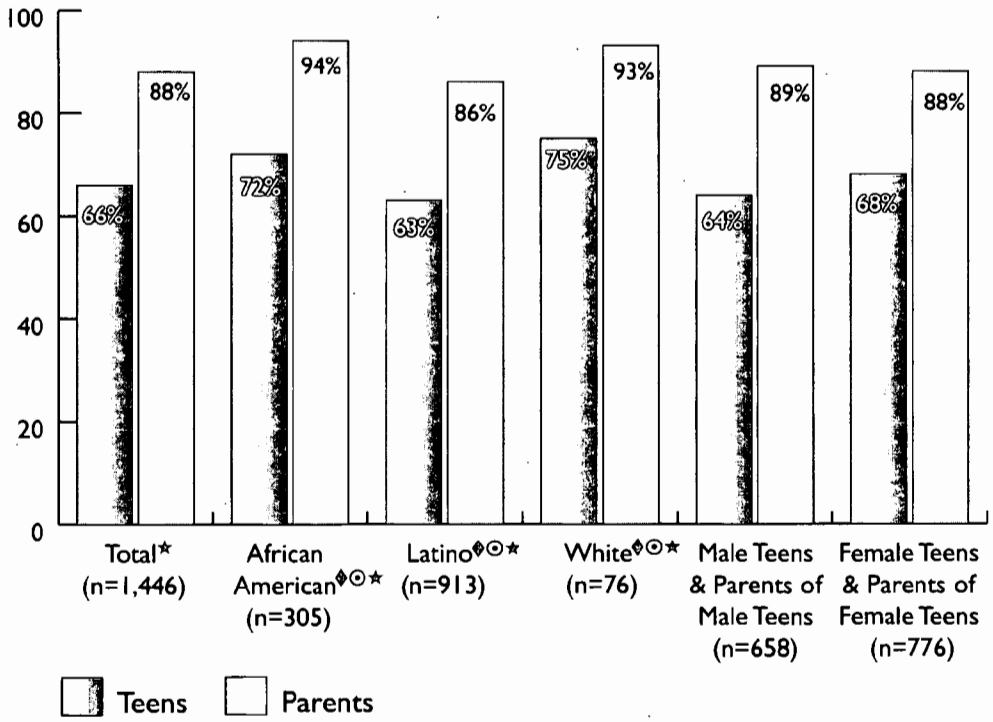

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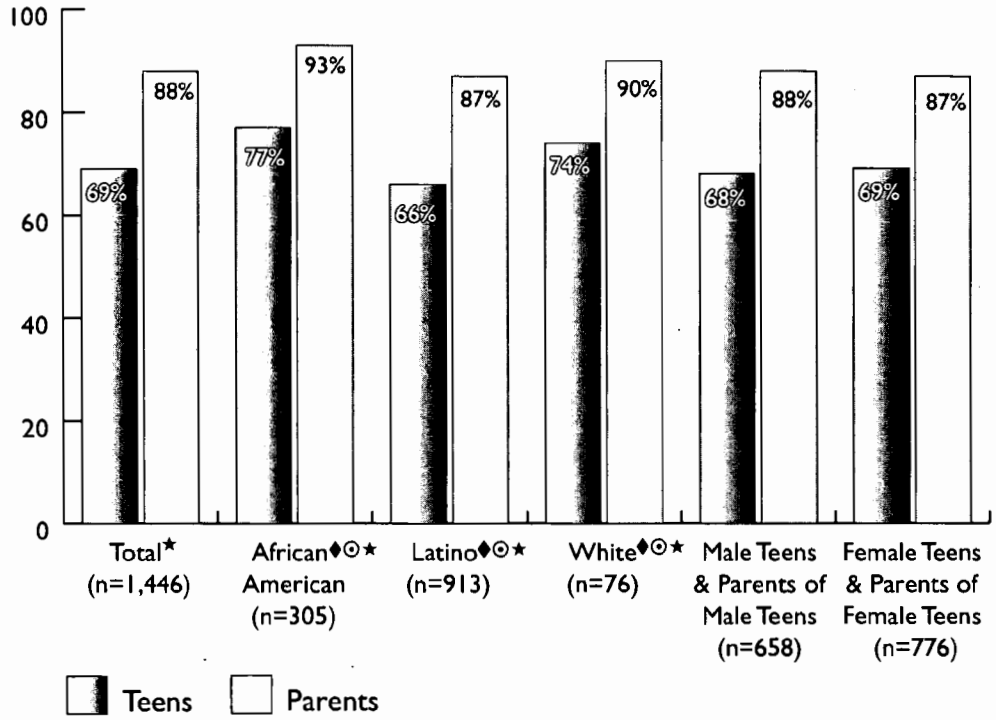
Figure 6: Percent of parents who believed their children *could* talk to them about birth control, and percent of adolescents (age 11-14) who believed they *could* talk to their parents about birth control



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significantly more concerned than boys about both teen pregnancy and AIDS/STDs.

Figures 3 and 4 also show that Latino teens and parents were less alarmed about AIDS and STDs than were African Americans and Whites. Perhaps the lower rate of sexual experience among the Latino teens is the reason for this difference. Among parents, Whites were less concerned about teen pregnancy than were Latino or African Americans teens. Again, these variations in concern may reflect the differences in teen pregnancy rates among these various groups.

As part of this survey, teens and parents were also asked how concerned they were about drugs and violence in their communities (data not shown). Both of these issues elicited more concern than did STDs or teen pregnancy. Although this survey indicates that teen pregnancy and STDs are viewed as important, they are not as important as other issues among either parents or teens.

How comfortable are teens with speaking to parents/caregivers about sex?

Teens were asked whether they could speak with their parents/caregivers about three topics: sex, birth control, and pregnancy (separate from whether or not such discussions had ever taken place). Parents were asked whether they believed their teen could speak with them about these three

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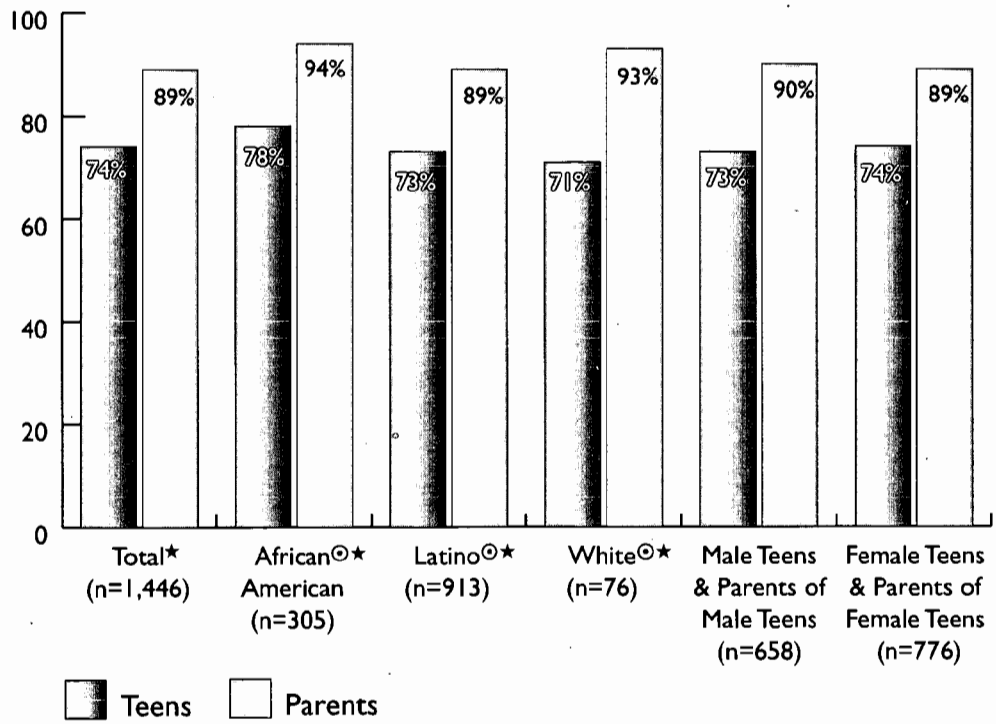
Figure 7: Percent of parents who believed their children *could* talk to them about pregnancy, and percent of adolescents (age 11-14) who believed they *could* talk to their parents about pregnancy



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topics. The results, shown in Figures 5, 6, and 7, show a consistent pattern across all three ethnic groups, and by gender. Parents were significantly more likely than their children to say that parents are open to conversations about sex, birth control, and pregnancy.

Differences between male and female teens were not significant, nor were differences between the parents of males and the parents of females. However, both teens and parents of Latino origin were significantly less likely than African Americans or Whites to believe that parents were approachable on these topics.

Figures 8 and 9 show the degree of comfort these young people and their parents feel in discussing sex and contraception with each other. The same pattern seen in the three previous figures occurs for these two questions as well: In each ethnic and gender grouping, young people were significantly less likely than parents to say that they are very comfortable discussing sex and contraception. Only a quarter of the Latino young people surveyed said they were very comfortable in having such conversations, significantly less than the proportions of White and African American teens who reported being very comfortable. Even among African American and White teens, though, fewer than half said they are very comfortable talking about these topics with their parents. Like their children, Latino parents were less likely than parents in other

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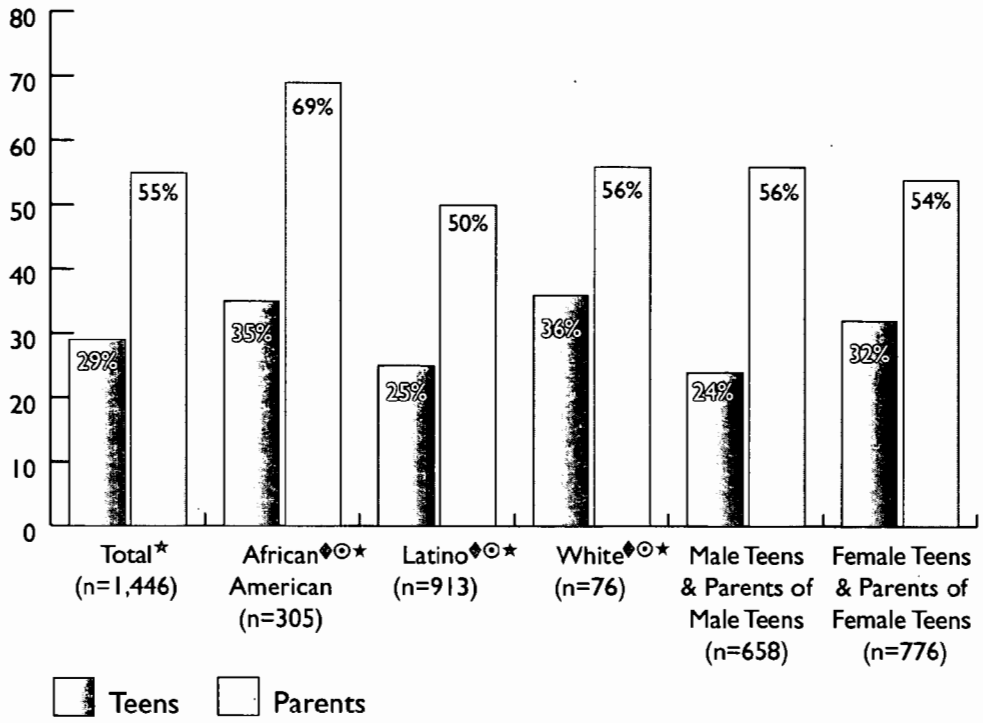
Figure 8: Percent of parents and adolescents (age 11-14) who stated that they are "very comfortable" in talking to each other about sex



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ethnic groups to say they are very comfortable having such conversations. Girls were significantly more comfortable talking to their parents about sex than were boys.

How much parent-child communication about sex actually occurs?

Not only do parents and teens differ in their comfort levels regarding parent-child discussions about sex, they also disagree in their perceptions of the *content* of discussions that actually take place. Although 65% of the parents in this sample said they have talked to their children about sex or birth control, only 41% of the children reported that such conversations have occurred (Figure 10). This gap held true for males and females, although communication was significantly more likely to occur between girls and their parents than between boys and their parents. Similarly, White, African American, and Latino teens were less likely to report conversations than were their parents, although discussions were most likely to occur among African American teens and parents, and least likely to occur among Latino teens and parents.

Some disparity also exists in parent/child reports about who most often starts these conversations. Teens were more likely to say that they start these conversations themselves, though parents are more likely to insist that *they* are the instigators of such talks (Figure 11). Over half of those young adolescents surveyed (53%) said that they usually started parent-child conversations

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about sex or birth control but only 26% of parents said that teens were the instigators of such conversations. This finding held true across all ethnic and gender groups. No significant differences existed in teens' reports by gender or ethnicity, but African American parents were less likely to say that teens usually began conversations, compared to White and Latino parents.

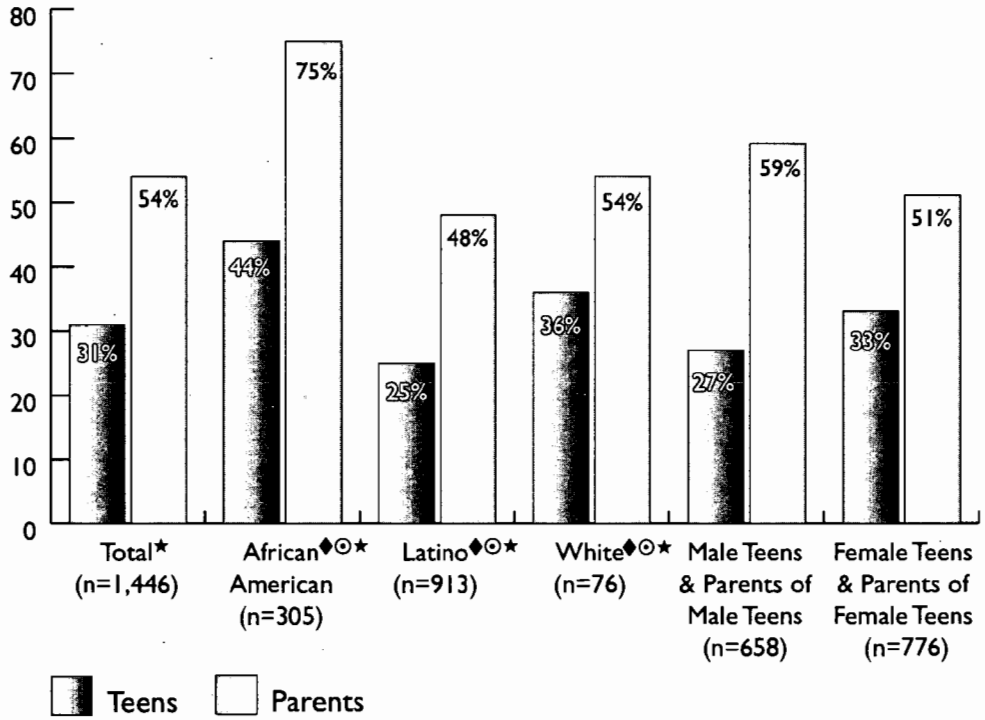
Discussion

Among those surveyed from these California communities with high teen pregnancy rates, both the young people and their parents showed high levels of concern about AIDS, STDs, and teen pregnancy. Drugs and violence caused more concern, but pregnancy and STDs were certainly viewed as serious issues, especially by parents.

However, parents and teens differed substantially in their views and even in their reports of events. Parents were more likely than their children to say they are willing to talk about sex, birth control and pregnancy, that they are comfortable having such conversations, and that they are in fact, communicating. These are not the first data to show such differences (Miller, 1998; Miller et al., 1998).

This means that neither parents nor their children – alone – are likely to be able to accurately describe the content and frequency of household conversations about teen pregnancy and related issues. Communication programs that focus

Figure 9: Percent of parents and adolescents (age 11-14) who stated that they are "very comfortable" in talking to each other about birth control



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exclusively on parents or their teens are thus unlikely to be as successful as programs that work with both so that parents and teens are aware of the views of the other and can potentially reconcile disparate ideas.

Although programs often assume that parents are the roadblocks to successful communication, the young people surveyed here may be equally or even more hesitant to engage in conversations about sexuality, birth control, or pregnancy with their parents. It is likely that teens fear personal questions, pressure to disclose their own behavior, or disapproval (O'Sullivan et al., 2001). Many parent-child communication programs work to educate parents about sexuality so that they can have accurate, literate conversations with their children. However, fewer explore the emotional issues that children and parents may bring to these conversations. Parent awareness and skills in these other aspects of communication also appear to be important. As others have noted, *what* parents say and *how* they say it are both important (Whitaker et al., 1999).

The many ethnic differences highlighted here and in other studies (O'Sullivan et al., 2001) again make it clear that programs must be culturally appropriate and culturally knowledgeable to be effective. Latino parents and teens in this survey show less concern about STDs, for example, perhaps believing that they are not at risk, but give the community higher marks for providing relevant services, as compared to the other groups surveyed. These same Latino parents

Figure 10: Percent of parents who said they *had* talked with their child about sex or birth control, and percent of adolescents (age 11-14) who said they *had* talked to their parents about sex or birth control

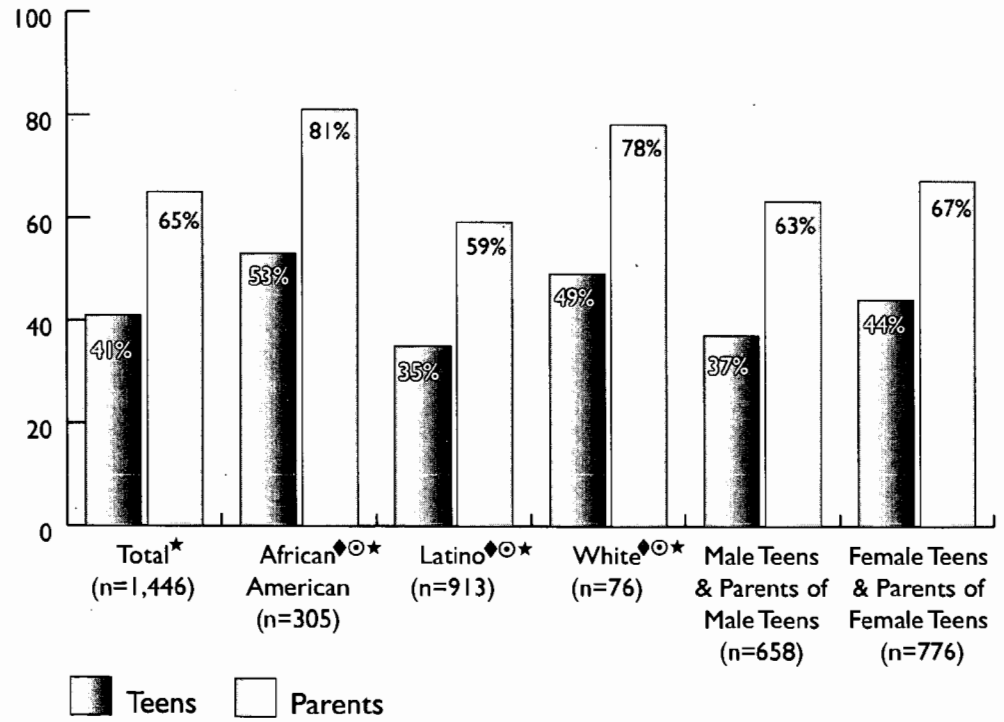

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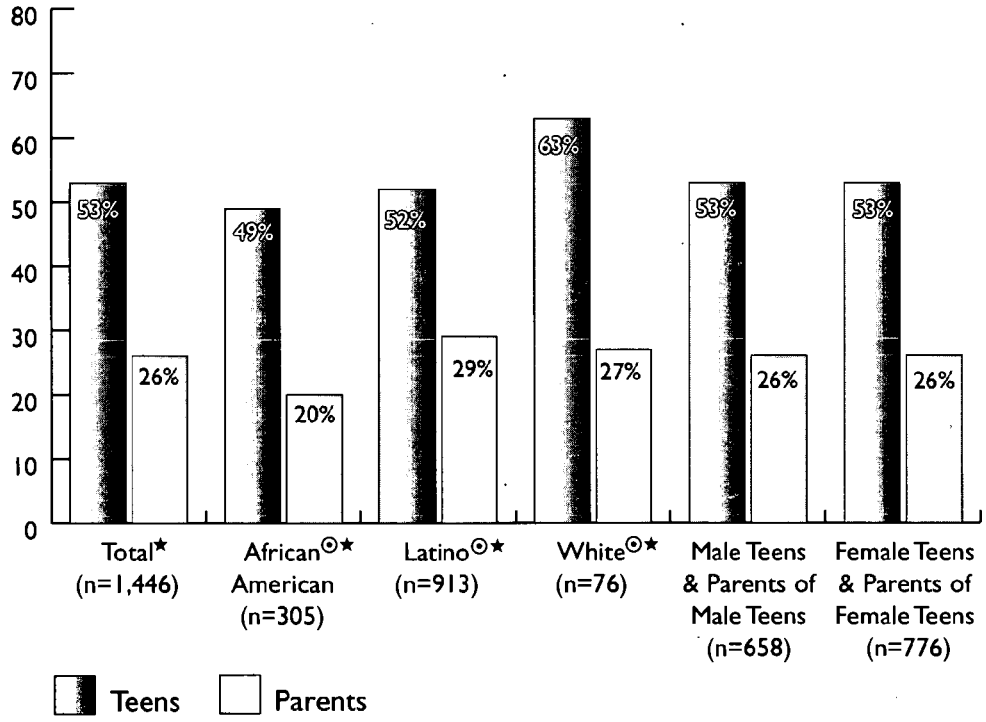
Figure 11: Percent of parents and adolescents (age 11-14) who stated that the teen usually starts parent-child conversations about sex or birth control



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and teens are less likely to say that parent-child conversations about pregnancy-related issues are possible or have occurred and their expressed comfort levels in having such conversations are lower than the comfort levels of African American or White families.

Gender differences also exist. Girls report more conversations with parents than do boys. Perhaps because these conversations have occurred, they also report more comfort in talking to their parents. Indeed, programs to promote communication between male teens and their parents are rare.

A constant across all ethnic and gender groups is the teen-parent disparity in perceived openness, comfort, and actual occurrence of communication. Closing these parent-child gaps would is a worthy, important goal.

Acknowledgments: The Teenage Pregnancy Prevention Initiative (TPPI) is a 10-year, $60 million grantmaking program approved by the California Wellness Foundation's (TCWF) Board of Directors. Created in 1992 as an independent, private foundation, TCWF's mission is to improve the health of the people of California by making grants for health promotion, wellness education, and disease prevention programs. The TPPI is being jointly evaluated by Philliber Research Associates, the Center for Education and Human Services at SRI International, and the Institute for Health Policy Studies at the University of California, San Francisco.

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Chapter Seven

Sexual Behavior Among Young Teens in Disadvantaged Areas of Seven Cities

Susan Philliber, Ph.D., Philliber Research Associates
Michael Carrera, Ed.D., The Children's Aid Society

This paper reports information from a non-representative sample of young people age 14 or younger in disadvantaged neighborhoods of seven U.S. cities. The data offer a picture of how high the risk can be for some of our youngest teens and provide program staff working in cities with disadvantaged young people a description of the overall risks in this population. This paper supports the view that in some areas of our nation, teens are more likely to be sexually experienced at very young ages.

Specifically, this paper answers the following questions:

- Are youth from disadvantaged neighborhoods more likely to engage in risky sexual behavior?
- Are sexually experienced youth in these same neighborhoods engaging in other risky behavior?

The sample

In 1996 and 1997, data were collected from 1,163 youth age 12-15 (15-year-olds were excluded from this analysis) in seven communities: Hollywood, FL; New York, NY; Portland, OR; Rochester, NY; Seattle, WA; Baltimore MD; and Houston, TX. In New York City, six sites were included from Brooklyn, the Bronx, Queens, and Manhattan. Some 877 (75%) of the adolescents in the entire seven-city sample were age 14 or younger. All were from high-risk and disadvantaged areas of these communities and were being recruited for potential participation in a comprehensive teen pregnancy prevention program. Most were African American (41%) or Latino (30%). The others were White, Asian, or of mixed ethnicity. Nearly half (46%) lived in single-parent homes, most with their mothers. After the data reported here were collected, these young people were randomly assigned to either participate in this program or in another youth development program offered in the same community.

Data were gathered from these young people in group settings. Individuals also were separated and asked to complete an administered questionnaire. A few non-readers or slow readers were given the questionnaire by interview. Before collecting the data, the respondents were assured of confidentiality and were promised, in particular, that their families, program staff, or friends would never see their answers. Subsequent data collection with this sample over 4 years and multiple analyses have provided opportunities to repeatedly check and clean these data. The self-reports of sexual behaviors appear valid.

Are youth from disadvantaged neighborhoods more likely to engage in risky sexual behavior?

Table 1 shows the percentage of young adolescents, by age, who reported having had vaginal, oral, and/or anal sex. Readers will note that the prevalence of sexual intercourse is higher in this sample as compared to the national data sets. Fully 27% of the 14-year-olds in this sample reported having had vaginal intercourse, versus 18%-19% in the national samples.

Table 1: Prevalence of sexual behavior among those age 12-14

Vaginal Intercourse	
12 year olds	8%
13 year olds	17%
14 year olds	27%
Anal Sex	
12 year olds	0
13 year olds	3%
14 year olds	5%
Oral Sex	
12 year olds	0
13 year olds	6%
14 year olds	11%

Table 2 provides weighted averages of the entire sample of 12-14-year-olds who reported having had vaginal, oral, and/or anal sex. Seven percent reported having engaged in more than one of the behaviors.

Three percent of the sample reported oral or anal sex but no vaginal intercourse. The young people in this sample who are sexually experienced reported an average of almost two sexual partners in the past six months. Since their sexual debut, the young people had an average of almost three sexual partners.

A relatively high percentage (76%) of the sexually active young people (those that reported having had vaginal, oral, and/or anal sex in the past six months) in this sample reported using a condom at last intercourse. Almost three-fifths (59%) of the sexually experienced youth said that they use some kind of protection or birth control every time they have sex. However, the others said they use contraception only sporadically.

Approximately 5% of sexually experienced girls in this sample reported having been pregnant and 1% of sexually experienced boys reported they caused a pregnancy. Another 7% of the boys said they believe they may have caused a pregnancy. (Youth who were pregnant or parenting at the time of the survey were excluded from the sample, which may explain why these percentages are less than those from the nationally representative data sets earlier in this volume.)

Are sexually experienced youth in these neighborhoods engaging in other risk behaviors?

Table 3 shows that very early initiation of sexual intercourse and engaging in oral and anal sex are only some of the risky behaviors that are prevalent among these urban, disadvantaged young people. The sex-

Table 2: Prevalence of sexuality-related behaviors among 12-14-year-olds*

	Total (n=877)	Males (n=402)	Females (n=475)
Have had vaginal sex:	22%	30%	14%***
Have had oral sex:	8%	12%	5%***
Have had anal sex:	4%	6%	2%***
Have had vaginal, oral, or anal sex:	25%	34%	17%***
have had vaginal only	15%	18%	11%
have had vaginal + oral or anal	7%	12%	3%
have had oral or anal only	3%	4%	3%***
Number of sexual partners in last six months (sexually active):	1.9	2.0	1.6
Number of sexual partners ever:	2.9	3.4	2.1***
Used condom at last intercourse:	76%	79%	70%
Use some kind of birth control:			
every time	59%	64%	52%
most of the time	13%	9%	21%
half of the time	6%	4%	8%
some of the time	14%	13%	15%
never	8%	10%	4%
Pregnancies:			
ever pregnant/caused a pregnancy (entire sample)	N/A	0.2%	2%
ever pregnant/caused a pregnancy among those (sexually experienced)	N/A	1%	5%
ever caused or think they may have caused a pregnancy (sexually experienced)	N/A	8%	N/A

* These figures are weighted averages for the entire sample of 12-14 year olds.

*** Difference between males and females is significant at $p < .001$

ually experienced young people were significantly more likely than those who were not sexually experienced to be in physical fights, in a gang, have carried or used weapons, shoplifted, been arrested or picked up by the police, or used alcohol or marijuana.

Discussion

This group of 12-14-year-olds comes exclusively from disadvantaged neighborhoods in large American cities. Their relatively higher rate of sexual activity – 25% among the total sample of very young teens and 34% among the males – is alarming. Moreover, it is clear that some of these young people are engaging in oral and anal sex, as well as vaginal intercourse. Most are using contraception sometimes but many are not consistent users of either condoms or other methods of birth control.

As disturbing as these numbers may be, this sample may not represent the worst case scenario. All of these young people tried to get into an after-school program that required a substantial commitment of their time. They brought back consent forms from their parents. They showed up for data collection. It is quite possible that sexual activity is even more prevalent among other groups of young people (age 12-14) in these neighborhoods.

Table 3: Other risk behaviors by sexual experience

Risk Behaviors	Not Sexually Experienced (n =659)	Sexually Experienced (n =218)
Fighting	45%	64%***
Gang membership	5%	22%***
Carried a weapon	14%	39%***
Used a weapon	4%	20%***
Shoplifted	25%	41%***
Arrested or picked up by police	5%	19%***
Used alcohol	25%	56%***
Used marijuana	9%	45%***

*** Difference between sexually inexperienced and sexually experienced is significant at $p < .001$

Nationally representative samples have found a correlation between early intercourse and other risky behaviors. Still, among these young adolescents, the data underscore that some of our most disadvantaged urban young people are in a great deal of danger, many of them at an early age.

These findings have several program implications. In neighborhoods like these, interventions to prevent all of these risk behaviors must begin earlier than age 12. As a result of the information gained in this study, for example, the Carrera-model program – a long-term and intensive program in which participants are provided with family life and sex education, given academic and work-related help, and participate in arts and sports programs – is working with young people in these communities beginning at age 11, rather than at age 13. Moreover, those who work in such environments need to recognize the multiplicity of risks for these young people and focus on preventing more than one negative outcome. Because of the clustering of risky behaviors, program staff working with young people in these neighborhoods may find that they present substantial challenges.

Author Acknowledgements: Funding for this research was provided by the Charles Stewart Mott Foundation and the Robin Hood Foundation. The authors gratefully acknowledge these funders as well as Jackie Kaye, who coordinated the data collection efforts of this project, and to Scott Herrling, who provided data analysis assistance. We extend special gratitude to the site coordinators and the young people in each of these seven cities who patiently and faithfully answered our questions.

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Peter Bearman, Ph.D., is Director of the Institute for Social and Economic Theory and Research and the Paul F. Lazarsfeld Center for the Social Sciences at Columbia University. His research cuts across a number of sub-disciplines within sociology, from historical
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Hannah Brückner

Hannah Brückner, Ph.D., Assistant Professor of Sociology, focuses on the micro-level impact of macro-historical changes, specifically, the relationship between social change and stratification. This interest has led to research and teaching in diverse substantive areas, including stratification, gender inequality, life course, social policy, welfare states, organizations, social networks, and adolescent behavior. Her focus on process has sparked an interest in quantitative methods for describing and analyzing longitudinal data, especially event history analysis. Her most recent article, co-authored with Peter Bearman, is "Promising the Future: Abstinence Pledges and the Transition to First Intercourse" published in 2001 in the *American Journal of Sociology*. She is currently working on temporal and contextual dynamics in adolescent risk behavior, and beginning a comparative research project on gender inequality in the labor market in the U.S. and Germany.

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Dr. Michael A. Carrera is Thomas Hunter Professor Emeritus of Health Sciences at Hunter College of the City University of New York, and Adjunct Professor of Community Medicine at The Mount Sinai Medical Center in New York. He began his teaching career in 1959 at a junior high school in the Bronx. Since 1970, Dr. Carrera has directed the Adolescent Sexuality and Pregnancy Prevention Programs for The Children's Aid Society in New York.

Dr. Carrera's first book, *Sex, The Facts, The Acts and Your Feelings*, has been translated into 17 languages. His two books *Sexual Health for Men: Your A to Z Guide,* and *Sexual Health For Women: Your A to Z Guide* are widely used by health services and child care agencies. Another book, *The Language of Sex*, is a high school and college resource book. His latest book is *Working With Teens When The Topic Is Hope - Lessons For Lifeguards.*

Dr. Carrera has served as President of the Board of Directors of the Sex Information and Education Council of the U.S. (SIECUS), and he has served as President of the American Association of Sex Educators, Counselors and Therapists (AASECT).

In 1984, Dr. Carrera received the American Association of Sex Educators, Counselors and Therapists National Award for Distinguished Service in Sexuality Education. In 1987, he received the Robert Wood Johnson Medical School, Rutgers University, Award for Outstanding Contribution to Sexuality Education. In 1990, Dr. Carrera received an award from

The Center For Population Options (CPO) in recognition of his achievements in enhancing the health and well being of adolescents during 1980s. In 1991, the Society For the Scientific Study of Sex awarded Dr. Carrera its Community Service Award for his outstanding contributions in the area of adolescent sexuality to communities throughout the United States. In 1995, Columbia University, Teachers College named him *Distinguished Alumni* for his contributions to young people and families in the area of adolescent sexuality and pregnancy prevention and the Planned Parenthood leaders in Education named him recipient of The Mary Lee Tatum Award.

In 1998, the Child Welfare League of America (CWLA) awarded Dr. Carrera their Florence Crittenton Award for his exemplary work in Adolescent Pregnancy Prevention. Also in 1998 the New York City Mission Society honored him with their *FIRST PERSON AWARD* for his work with young people.

Through his work at the National Adolescent Sexuality Training Center for The Children's Aid Society he has designed and helped implement 50 long-term, holistic, adolescent pregnancy prevention programs in twenty states throughout the country. His approach, which centers on developing a multi-dimensional, community-based parallel family system program is serving as a model to increasing numbers of family and youth service organizations.

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Karin Coyle, Ph.D., specializes in the development and evaluation of health promotion programs, particularly HIV, other STD, and pregnancy prevention programs. Her current interests include studying the role and potential impact of service learning and other youth development approaches on sexual risk-taking behaviors. Dr. Coyle has been or is currently Principal Investigator or Co-Principal Investigator for several large demonstration projects. These include: All4You!: HIV, Other STD, and Pregnancy Prevention in Alternative Settings, funded by the U.S. Centers for Disease Control and Prevention (CDC); Draw the Line/Respect the Line: Hispanic Middle School HIV Prevention, funded by the National Institute of Mental Health; Keep Me Smokefree, funded by The Tobacco Related Diseases Research Program, University of California, and Safer Choices: Evaluation of School-Based Intervention to Reduce HIV/STD and Pregnancy, funded by the CDC through a sub-contract with the University of Texas.

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Christine Flanigan is a Research Analyst and Database Administrator with The National Campaign to Prevent Teen Pregnancy. Her work at the Campaign includes writing fact sheets and reports, managing the review of all Campaign research publications by the Effective Programs and Research Task Force, and answering research-related questions from Campaign staff and the general public. Previously, she supported the Campaign's work in state and local action and religion and public values as a Program Assistant. Before joining the Campaign in 1997, she worked for two years at a government consulting firm, on contracts with the Office on Smoking and Health, CDC; The National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health; and the Bureau of Justice Assistance, U.S. Department of Justice.

Cynthia A. Gómez

Cynthia Gómez, Ph.D., is Co-Director of the Center for AIDS Prevention Studies (CAPS) at the University of California at San Francisco (UCSF) and an Assistant Professor in the Department of Medicine. She received her Masters' in Psychology from Harvard University and her Ph.D. in

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Steve Gregorich

Steve Gregorich, Ph.D., is a Senior Statistician at CAPS. He received his doctoral training in social psychology and psychometrics and has been involved with the assessment of behavioral interventions since 1987. He provides technical contributions regarding research methods. His current projects include assessments of two "safe-sex" interventions that target adolescent women from a U.S. suburban area and urban adults living in four third-world countries. Dr. Gregorich is developing a cross-cultural extension of a standardized measure of coping strategies. His research and technical interests include the effects of attitudes and attitude strength on interpersonal and health behaviors, training evaluation, psychometric development and validation of self-report instruments, behavioral observation techniques, and as bootstrapped and parametric approaches to multivariate statistical modeling.

Ester S. Hudes

Esther Hudes, Ph.D., is a Specialist Statistician with CAPS in the Department of Epidemiology and Biostatistics at UCSF. She has collaborated on papers in operations research, genetics, and health-related research, such as smoking cessation, breast cancer, and AIDS. Her recent HIV-related collaborative publications have included papers on determinants of survival among Brazilian AIDS patients; prevalence of AIDS-related risk factors and condom use in the United States; HIV antibody testing among persons at risk for infection; demographic characteristics of heterosexuals with multiple partners; seroconversion among HIV-sero-discordant couples in Africa; beta 2-microglobulin as a predictor of death in HIV-infected women in Kigali, Rwanda; evaluation of the WHO HIV staging system; and frequency of HIV testing among alcoholics and drug users. Most recently, Dr. Hudes has been involved in supervising statistical analysts as well as consulting and performing data analysis for scholars with the International Scholars program. Her research interests are AIDS prevention, design and analysis of complex surveys, and theoretical aspects of Statistics.

Douglas B. Kirby

Douglas Kirby, Ph.D., is a Senior Research Scientist at ETR Associates in Scotts Valley, California. For almost 25 years, he has directed statewide or nationwide studies of adolescent sexual behavior, abstinence-only programs, sexuality and HIV education programs, school-based clinics, school condom-availability programs and youth development programs. He co-authored research on the *Reducing the Risk, Safer Choices*, and *Draw the Line* curricula, all of which significantly reduced unprotected sex, either by delaying sex, increasing condom use, or increasing

contraceptive use. He has painted a more comprehensive and detailed picture of the risk and protective factors associated with adolescent sexual behavior, contraceptive use, and pregnancy, and has identified important common characteristics of effective sexuality education and HIV education programs. In 1997, he authored *No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy* and *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy (2001)*. Both publications have been widely acclaimed. Over the years, he has also authored or co- authored more than 100 volumes, articles, and chapters on adolescent sexual behavior and programs designed to change that behavior. These have included reviews of the field for the CDC, the National Institutes of Health, the former Office of Technology Assessment, and various foundations.

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Jennifer Manlove, Ph.D., is a Senior Research Associate and Content Area Director for the Fertility and Family Structure area at Child Trends, a nonprofit, nonpartisan research organization. Dr. Manlove has a background in life-course research in education and family demography. She has worked on multiple research projects examining both antecedents and consequences of teenage sexuality, pregnancy, and childbearing. Her current research assesses multiple hypotheses to help explain demographic trends in sexual activity, contraceptive use, and childbearing among American teens and young adults. Dr. Manlove has also been involved in several projects that assess the potential effects of community context, including welfare policies, on teenage and nonmarital childbearing in the U.S.

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Barbara VanOss Marín, Ph.D., is Professor of Medicine at the Center for AIDS Prevention Studies, University of California at San Francisco. Her primary interests over the past 20 years have been on strategies for promoting healthy behaviors among Latinos in culturally appropriate ways and mentoring scientists of color. She has also emphasized use of appropriate research methods with communities of color. Her most recent research project was developing and evaluating an HIV prevention curriculum in predominantly Latino middle schools. She is director of the Collaborative HIV Prevention Research in Minority Communities Program which provides funding and mentoring for individuals doing HIV prevention research with ethnic minority communities. She is also a Guest Researcher at the CDC and in that role she directs the Postdoctoral Fellowship on HIV Prevention in Communities of Color for the Divisions of HIV/AIDS Prevention at the National Center for HIV, STD and TB Prevention. Dr. Marín holds degrees from Loyola University of Chicago in Applied Social Psychology and did a postdoctoral fellowship at UCSF in Health Psychology. She has published numerous research articles on HIV prevention in the Latino community, has written a report on HIV prevention interventions for ethnic minorities for the Office of Technology Assessment and consults frequently with others interested in HIV prevention research in communities of color.

Susan Philliber

Susan Philliber, Ph.D., one of the founders and senior partners in Philliber Research Associates, has some 30 years experience in evaluation and basic research. Dr. Philliber received her Ph.D. in sociology and demography from Florida State University and has been on the faculty at the University of Utah, the University of Cincinnati, and Columbia University, where she currently holds an appointment as an adjunct professor. She is extensively published and widely recognized for her ability to provide training in

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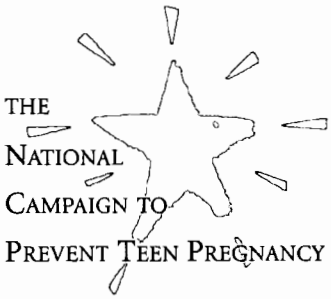

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