

Young Women's Degree of Control over First Intercourse: An Exploratory Analysis

By Joyce Abma, Anne Driscoll and Kristin Moore

Context: While policymakers and researchers alike often seem to believe that young women's decision to initiate sexual intercourse is conscious and free of ambiguity, the actual degree of control that such young women exert over first intercourse has rarely been explicitly examined.

Methods: The 1995 National Survey of Family Growth asked all women who had experienced intercourse to rate, on a 1–10 scale, the wantedness of their first intercourse; they were then asked whether the experience was voluntary. Logistic regression analysis of data for women aged 15–24 who had experienced first premarital intercourse was performed to test the effect of background factors and wantedness scores on contraceptive use at voluntary first intercourse.

Results: Twenty-four percent of women aged 13 or younger at the time of their first premarital intercourse report the experience to have been nonvoluntary, compared with 10% of those aged 19–24 at first premarital intercourse. About one-quarter of respondents who reported their first intercourse as voluntary chose a low value (1–4) on the wantedness scale. Women whose first partner was seven or more years older than themselves were more than twice as likely as those whose first partner was the same age or younger to choose a low value (36% vs. 17%). Women whose partner had been seven or more years older were also less likely than other women to have used contraceptives at first intercourse. After the introduction of controls for demographic and background factors, partner age discrepancy and relationship status, wantedness of voluntary first intercourse was not independently related to the odds of contraceptive use at that intercourse.

Conclusion: Characterizing women's first intercourse as simply voluntary or nonvoluntary is inadequate. Measures that take into account degrees of wantedness may help elucidate relationships between sexual initiation, contraceptive use and teenage pregnancy. The fact that substantial numbers of young women voluntarily participated in a first sexual experience about which they felt ambivalent or negative deserves the attention of program planners and service providers.

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Over the past two decades, the percentage of teenagers who have experienced sexual intercourse has grown (although the increase abated in the early 1990s).¹ Earlier age at first intercourse poses increased risks to the health and well-being of adolescents, as the initiation of sexual intercourse marks the beginning of exposure to the risk of unintended pregnancy and sexually transmitted diseases. These outcomes have important implications for adolescents, and are among the reasons why programs designed to avert negative consequences among girls and young women focus on delaying sexual intercourse and promoting the importance of contraception.

Much of the pertinent research on young women's initiation of sexual activity assumes that the decision to have sex is a choice that young women make after weighing the opportunity costs involved in such a situation. Analyses of young women's first intercourse rarely take into account the degree of control that they have, or perceive themselves as having, over the timing and circumstances of

this event. Consideration of these factors is important, especially given our knowledge that a certain proportion of intercourse is nonvoluntary, and that this proportion is greater at younger ages.² According to 1987 national data, 7% of women and men aged 18–22 had experienced forced intercourse, and almost half of all women's nonvoluntary experiences had occurred before age 14.³

Even when women perceive their first sexual intercourse as having been voluntary, age differences between young women and their partners may imply imbalances in control over the experience. Augmenting what we currently know about sexual initiation with additional information on its wantedness is especially important in light of growing public concern about sexual victimization and teenage pregnancy.

Background

Negative Sexual Experiences

Previous research has focused on several types of negative sexual experiences, ranging from unwanted contact or abuse that

does not include intercourse to unwanted but voluntary sex and to nonvoluntary intercourse and rape. The issue of early age at first sexual experience is intertwined with this topic at all points along the continuum.

Unwanted sexual experiences and abuse that do not include intercourse fall on the less extreme end of the range. A study in Los Angeles, in which 18% of adolescent females reported having had an unwanted sexual experience, suggests that these experiences are not uncommon. Moreover, of the experiences reported in the survey, 39% had occurred before the age of 13, and half had occurred between 13 and 16.⁴

Unwanted intercourse represents a more extreme form of negative sexual experience. A substantial proportion of young women apparently experience unwanted first or early sexual intercourse: In the 1992 National Health and Social Life Survey (NHSL), 25% of women reported that while their first intercourse had not been forced, neither had it been wanted.⁵ Nonvoluntary or forced sexual intercourse, including rape, represents the most extreme category on the spectrum of negative sexual experiences. In the NHSL, 4% of women aged 18–59 described their first intercourse as "forced."

A number of risk factors have been shown to be associated with these negative experiences among girls and young women. For unwanted intercourse, one group of factors involves individual behaviors and characteristics, sometimes interacting with peer influences. Adolescent girls who scored high in peer conformity

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were more vulnerable to unwanted intercourse initiated by their male peers.⁶ In the NHLS, peer pressure was cited by women as the main reason for unwanted voluntary first intercourse.⁷

As is the case with less extreme forms of sexual abuse, younger women are at greater risk of experiencing nonvoluntary intercourse. Life-table estimates of data from the National Survey of Children suggest that women who experienced sex at younger ages were more likely to have experienced nonvoluntary sex than were those whose first intercourse occurred at older ages.⁸

Family of origin may also play an important role in the chance of experiencing forced or coerced intercourse, at both first and subsequent intercourse. White females who lived apart from their parents before age 16 are at higher risk of experiencing nonvoluntary intercourse.⁹ Parenting style is also relevant: Young women who have authoritative parents and whose parents monitored their behavior closely are at lower risk than are other adolescents.¹⁰

Some parental behaviors also appear to be related to the risk of nonvoluntary intercourse. Daughters of parents who drank heavily or used illegal drugs during their preschool or elementary years, for example, are more likely to experience nonvoluntary intercourse than are daughters of parents who did not engage in these behaviors.¹¹ The role played by family income and other resources remains unclear, although family welfare receipt during childhood has been found to be unrelated to the odds of nonvoluntary sex once other factors are controlled.¹²

Religious participation may also be related to the likelihood of nonvoluntary sex. College women who attended religious services relatively less often were found to be more likely to report experiencing coerced sex than were women who attended religious services more often.¹³ Other behaviors, such as alcohol abuse and higher levels of sexual activity, are also associated with an increased likelihood of experiencing forced sex.¹⁴

Outcomes of Abuse and Forced Intercourse

Besides the trauma of the experience of nonvoluntary sexual intercourse itself, other negative outcomes of forced intercourse have been documented. Since nonvoluntary intercourse occurs more commonly at younger ages than does voluntary intercourse, it can produce the same negative consequences that have been shown to result from early first intercourse—among them, a higher frequency of subsequent adolescent sexual activity and a

greater number of partners.¹⁵ These can result in increased and more prolonged exposure to the risks of sexually transmitted diseases and early pregnancy.

Nonvoluntary intercourse may also be associated with subsequent nonvoluntary sexual experiences: A history of sexual abuse in general appears to increase the odds of sexual coercion in junior and senior high school.¹⁶ Although data are scarce and findings are not entirely consistent, nonvoluntary intercourse may be associated with a greater likelihood of pregnancy during adolescence.¹⁷ The experience of nonvoluntary intercourse may increase the likelihood of such risk factors for teenage pregnancy as early first sex, contraceptive nonuse and multiple partners.¹⁸

Sexual abuse, particularly at early ages, has also been linked to subsequent problems, such as involvement in prostitution, impairments to psychological well-being and mental health,¹⁹ alcohol abuse and suicidal ideation.²⁰ A recent national study showed that women who as children experienced sexual intercourse with adults had lower overall well-being than did women who had experienced childhood sexual contact with adults that only included fondling or who did not experience any such sexual contact.²¹

Several explanations have been offered for the processes by which nonvoluntary intercourse may lead to subsequent negative outcomes. One hypothesis is that a high level of sexual activity among young women who have been abused, together with feelings of powerlessness about sex, puts teenage women at greater risk for pregnancy.²² In addition, young women who have undergone developmentally inappropriate sexual socialization may have altered concepts of self and others resulting from adaptations and compromises that were needed for psychological survival.

Resulting “hallmarks of sexual victimization” include perceptions of powerlessness, diminished capacity for academic work and other tasks of adolescence, heightened vulnerability to males, an increased salience of sexual issues, misconceptions about sexual norms and the equation of sex with love and caregiving.²³ From a life-course perspective, sexual contact with an adult during childhood may be the starting point of a sexual trajectory in which individuals are more likely to engage in potentially harmful sexual behavior that in turn produces adverse long-term consequences.²⁴

Although there is some evidence of the negative consequences of early first intercourse, much remains to be learned

about the circumstances of first intercourse. We focus in this article on nonvoluntary first intercourse in a nationally representative sample of women, examining the prevalence of nonvoluntary first intercourse among young women aged 15–24 in 1995. Among the young women who described their first intercourse as voluntary, we explore variations in the degree to which young women wanted first intercourse to happen at that time. We also investigate the possibility that the age difference between a young woman and her partner may be associated with the wantedness of first intercourse. Finally, we address the potential link between wantedness of voluntary first intercourse and contraceptive use at that intercourse. We also perform multivariate regression analysis of the effects on contraceptive use of degree of wantedness of voluntary first intercourse, partner’s age and his relationship with the young woman.

Data and Methods

The National Survey of Family Growth (NSFG) is a periodic survey that collects data on the factors affecting pregnancy, health and childbearing of women in the United States. Cycle 5 obtained information from a national probability sample of 10,847 noninstitutionalized women aged 15–44 in the civilian population. Interviewing took place between January and October 1995. Black women and Hispanic women were oversampled, which facilitates the analysis of many phenomena within these racial and ethnic groups. The sample also included large numbers of teenagers and young adults.

Cycle 5 of the NSFG included a dichotomous measure of women’s perceptions of whether their first intercourse was voluntary or nonvoluntary, and a 1–10 scale representing the degree to which women wanted the first intercourse to occur. Until now, it has been difficult to address the issue of varying degrees of wantedness of first intercourse using existing data. Inclusion of these two measures in Cycle 5 reflects an attempt to allow for the complexity and multidimensionality of the concept of nonvoluntary intercourse.

Cycle 5 also collected data on the characteristics of all first voluntary male sexual partners and a selected subset of subsequent sexual partners. Finally, the survey sought a wide array of information on the women’s family background characteristics and other demographic and attitudinal characteristics, allowing consideration of factors that have been shown

Table 1. Percentage distribution of women aged 15–24 who had premarital first intercourse, by whether first intercourse was voluntary or nonvoluntary, according to wantedness of first intercourse, National Survey of Family Growth, Cycle 5, 1995 (N=2,017)

Wantedness	N	Voluntary	Non-voluntary†	Total
1	231	55.4	44.6	100.0
2	107	77.4	22.6	100.0
3	153	89.5	10.5	100.0
4	157	97.0	3.0	100.0
5	363	97.1	2.9	100.0
6	180	99.3	0.7	100.0
7	220	99.8	0.2	100.0
8	205	100.0	0.0	100.0
9	120	100.0	0.0	100.0
10	281	100.0	0.0	100.0

†Twenty-five women who described their first intercourse as "rape" were not asked whether first intercourse was voluntary or non-voluntary, and so are excluded from this table. Note: In this and subsequent tables, wantedness is classified on a 1–10 scale, with 1=least wanted and 10=most wanted.

to be important risk factors for early, non-voluntary intercourse.

Before presenting the scale and the dichotomous measures of wantedness, interviewers determined whether each respondent had had intercourse, as well as the date of and her age at first intercourse. Interviewers were instructed not to count anything other than vaginal heterosexual intercourse.

Respondents were then asked to rate the wantedness of their first intercourse. The interviewer directed the respondent to look at a card depicting a numbered scale and asked, "Which number would you say comes closest to describing how much you wanted that first sexual intercourse to happen? On this scale, a one means that you really didn't want it to happen at the time, and a 10 means that you really wanted it to happen." If a woman volunteered that it was "rape," all subsequent questions about first intercourse were skipped.

All remaining respondents were next asked: "Would you say then that this first sexual intercourse was voluntary or not voluntary?" Respondents who chose "voluntary" were asked subsequent questions concerning first sexual partners and contraception at first intercourse. As in the case of those who identified the first intercourse as "rape," those who chose "not voluntary" (or "don't know" or "refused") were not asked subsequent questions about their first intercourse.

Because we sought to study these issues among a contemporary cohort, we restricted our analysis to the 2,933 women aged 15–24 at the time of the survey. To maintain consistency of the analysis subsample, we limit the presentation of find-

ings involving the scale to those whose first intercourse was voluntary. In addition, all analyses are limited to the 2,042 women who experienced premarital first intercourse, due to potential differences between married and unmarried respondents in the voluntariness of first sex and other outcomes, such as contraceptive use.

Because this configuration of measures has not been used in any prior survey, intersurvey comparisons may be difficult. However, the measures represent an important first attempt to capture on a national level a more nuanced sense of the experience of first sex than items assessing age at first intercourse and dichotomous measures of voluntariness can provide alone.

Results

Correlation of Responses

Virtually no respondents who assigned scale values at or above the two middle scores (five and six) chose the response "not voluntary" to describe their first premarital intercourse (Table 1). In addition, the proportion who reported voluntary first intercourse increased linearly with rising scale value, with 100% of the young women who chose seven, eight, nine, or 10 also choosing "voluntary."

In contrast, a substantial percentage

who chose low scale values (three and lower) also reported first intercourse as "voluntary." For example, 45% of the young women who chose the lowest scale value reported their experience had been "voluntary." While hardly any respondents who reported that intercourse was not voluntary chose high scale values, about 27% who reported voluntary first intercourse also chose a scale value of four or lower (not shown).

Correlates of Wantedness

Overall, 91% of the women reported that their first intercourse was voluntary (Table 2). Most young women whose first intercourse was voluntary rated the wantedness of this experience in the middle-to-high range: About half classified the experience in the range of 5–8, and about one-sixth assigned it the highest possible value (10). Seven percent gave the experience the lowest value on the scale.

Young black women were more likely to rate the wantedness of their first intercourse as "one" (13%) than were white women (6%) or Hispanic women (4%). At the same time, Hispanic women were more likely to rate the wantedness of their first experience as "10" (21%) than were white women (14%) or black women (12%).

Table 2. Among women aged 15–24 who had premarital first intercourse, percentage whose first intercourse was nonvoluntary, and among those who had voluntary first intercourse, percent distribution by wantedness of first intercourse, all according to selected characteristics

Characteristic	% non-voluntary† (N=2,042)	Wantedness (N=1,859)							
		1	2	3–4	5–6	7–8	9	10	Total
All	9.1	6.9	4.1	15.4	28.0	23.6	6.9	15.1	100.0
Age at first intercourse									
<14	23.6	12.5	6.3	25.4	32.3	12.1	1.0	10.4	100.0
14	9.3	10.3	7.4	15.0	28.7	20.9	6.0	11.7	100.0
15	9.5	7.5	3.2	16.6	31.2	24.7	6.0	10.8	100.0
16	4.7	6.8	4.0	15.1	27.5	25.1	7.0	14.5	100.0
17	5.0	4.0	3.8	14.2	24.7	25.5	9.5	18.4	100.0
18	4.8	2.3	1.5	13.1	28.7	26.4	8.4	19.7	100.0
19–24	9.7	4.5	1.5	7.6	22.5	28.2	10.8	24.9	100.0
Race/ethnicity									
White non-Hispanic	7.9	6.0	3.5	14.9	27.2	25.8	8.4	14.2	100.0
Black non-Hispanic	10.8	12.9	5.8	20.9	28.8	14.8	4.5	12.3	100.0
Hispanic	10.8	4.3	5.6	11.9	29.5	23.8	4.0	20.8	100.0
Childhood living arrangement									
Both biological/adoptive parents from birth	7.9	5.5	3.7	14.7	26.8	25.6	8.6	15.1	100.0
Single parent from birth	11.8	11.9	3.0	17.2	30.1	16.3	0.7	20.9	100.0
Both biological/adoptive parents, then one parent	9.4	5.6	3.1	16.2	28.9	23.6	6.9	15.6	100.0
Stepparent (ever)	8.9	8.5	3.7	15.2	32.1	23.0	5.7	11.9	100.0
Age first lived away from parents									
Never	8.8	6.1	3.4	14.5	29.8	22.5	8.1	15.6	100.0
≤16	12.3	12.2	7.3	20.7	31.6	15.3	1.5	11.4	100.0
17	10.5	9.8	6.9	11.0	31.2	21.2	3.6	16.3	100.0
18	8.4	6.3	3.5	16.7	21.2	27.9	8.3	16.1	100.0
≥19	8.2	5.3	3.2	15.1	31.6	24.3	7.1	13.5	100.0

†Includes 25 women who reported first intercourse to have been "rape." Notes: Percentages may not total 100% due to rounding. See note to Table 1.

Age at first intercourse also showed a strong and regular pattern of differences in wantedness scale ratings. Thirteen percent of those who had voluntary first intercourse at age 13 or younger chose the lowest wantedness value, compared with only 5% of those aged 19–24 at first intercourse. At the opposite end of the scale, 10% of women aged 13 or younger at first intercourse chose the highest wantedness value, compared with 25% of those who were 19–24.

Nine percent of women aged 15–24 who had premarital first intercourse classified their experience as having been nonvoluntary or rape.* Nonvoluntary first intercourse occurred most frequently among those aged 13 or younger at first intercourse (24%). Hispanic and black women experienced higher rates of nonvoluntary first intercourse (11% each) than did white women (8%). Living with both biological or adoptive parents from birth until leaving home was associated with a lower proportion of nonvoluntary first intercourse (8%) than was living with a single parent from birth until leaving home (12%). Respondents who had left home at younger ages had a higher likelihood of nonvoluntary first intercourse.

Age of Partner and Wantedness

The extent of age difference between the partner and the respondent was inversely and significantly associated with the level of wantedness of voluntary first intercourse (Table 3).[†] The wantedness score decreased as the difference between the woman's age and that of her partner increased. The proportion who assigned a wantedness rating of four or lower to their first intercourse was twice as great among women who first had sex with a man seven or more years older as it was among those who had first intercourse with a man of the same age or younger. The differences in the proportions between those with a partner who was the same age or younger and all other age-difference categories were statistically significant.

*Subsequently, "nonvoluntary" first intercourse refers to intercourse that the respondent reported as "rape" or as "not voluntary."

[†]The scale was dichotomized to efficiently and meaningfully present the examination of partner age discrepancy by characteristics of the young woman. The group of ratings representing "low" scale values (1–4) was chosen on the assumption that respondents would tend to rate less wanted experiences lower than the numerical middle of the scale—in this case, five and six. Analyses using different groupings of values (for example, 1–2 vs. 3–10) did not reveal substantially different or more pronounced patterns. Moreover, isolating only the lowest values resulted in small cell sizes, compromising the value of detailed breakdowns of the data.

Table 3. Among women aged 15–24 who had voluntary, premarital first intercourse, percentage who chose wantedness values for first intercourse of less than 5 on a 1–10 scale, by partner's age relative to the woman's, according to selected background characteristics (N=1,859)

Characteristics	All partners	Same age or younger	1–2 years older	3–4 years older	5–6 years older	≥7 years older
Total (standard error)	26.2 (1.11)	17.2 (2.09)*	26.5 (1.71)	29.3 (2.65)	32.7 (4.26)	36.2 (5.54)
Age at first intercourse						
≤14	37.5	33.1	33.9	40.4	40.2	45.2
15	27.5	20.7	27.3	27.3	29.5	42.3
16	25.6	12.8	25.3	29.9	45.5	45.1
17	21.4	17.1	24.8	13.2	21.3	44.3
18	17.0	19.9	19.9	7.0	15.1	16.1
≥19	13.2	7.5	17.7	18.0	16.0	4.1
Race/ethnicity						
White non-Hispanic	24.2	15.7	23.2	29.7	30.7	37.6
Black non-Hispanic	39.5	18.4	45.3	39.1	47.3	53.0
Hispanic	22.0	30.5	19.7	15.5	27.0	23.5

*Differences between this subgroup and other age-difference categories were statistically significant at p<.05.

This pattern was most pronounced among women who were 16 or younger at voluntary first intercourse, and was particularly marked among those aged 16 at first intercourse: These women were more than three times as likely to have given a low scale rating to describe voluntary first intercourse with a man seven or more years older as they were when describing a pairing with a partner who was the same age or younger (45% vs. 13%). Caution is warranted when interpreting the patterns by single year of age at first intercourse, however, as cell sizes become quite small.

The association between partner-respondent age difference and wantedness of intercourse differed by race and ethnic background. Among white women, the proportion with low scale ratings increased steadily with the partner's age difference. Among black women, a slightly different pattern emerges: The proportion choosing low scale ratings increased sharply with an age difference of one year, and remained relatively high, peaking at 53% among women whose first partner was seven or more years older. Hispanic women had a somewhat more erratic distribution: The highest proportion giving a low scale rating was among women whose first partner had been the same age or younger. There was no consistent increase in the percentage reporting low scale values with increasing age difference. Again, small cell sizes may have compromised the stability of some of the percentages for the Hispanic women.

Contraceptive Use at First Intercourse

Altogether, about one-quarter of the women aged 15–24 were not using a contraceptive method when they first had sex (Table 4). Nonuse at first voluntary intercourse decreased gradually, however, with rising wantedness of first intercourse. Thirty-nine percent of young women who scored the wantedness of their first intercourse as 1–2 had not used a method, compared with 22% of those who chose a wantedness value of 9–10. Differences were relatively small in magnitude, but statistically significant: Calculation of confidence intervals showed that the prevalence of contraceptive use associated with scale values 1–2 and 3–4 differed significantly from that for scale values 7–8 and 9–10.

The partner's condom use accounted for most of the reported contraceptive use at first intercourse. The proportion of women who reported condom use by their first partner increased from 43% among the group that selected the lowest wantedness scale values (1–2) to 56% among the women who assigned the next two values (3–4), and then remained at about this level for all of the remaining

Table 4. Percentage distribution of women aged 15–24 who had voluntary, premarital first intercourse, by contraceptive use at first intercourse, according to wantedness of first intercourse (N=1,859)

Wantedness	Any method (and standard error)	Pill	Condom	Other†	None	Total
All	73.0 (1.12)	11.8	55.0	6.3	27.0	100.0
1–2	61.5 (4.03)*	11.1	42.9	7.5	38.5	100.0
3–4	70.3 (2.80)*	8.8	56.3	5.2	29.7	100.0
5–6	72.2 (2.15)	11.5	55.0	5.7	27.8	100.0
7–8	76.6 (2.28)	10.9	60.5	5.3	23.4	100.0
9–10	77.9 (2.37)	15.5	54.3	8.1	22.1	100.0

*Significantly different from categories "7–8" and "9–10" at p<.05. †Includes female condom, foam, jelly or cream, suppository, diaphragm, implant, injectable, IUD, female sterilization, vasectomy, natural family planning, rhythm, withdrawal, spermicidal sponge, morning-after pill, cervical cap and other unspecified methods; women who reported their partner was sterile are also included. Notes: Percentages may not total 100% due to rounding. See note to Table 1.

scale values. The percentage of women who used the pill remained at a fairly steady 11% across the wantedness scale.

We next examined the possible role of women's age, race or ethnicity and mother's education in the relationship between wantedness and contraceptive use at first voluntary intercourse.* Consistent with findings from Table 4, the data in Table 5 indicate that the proportion using contraceptives was significantly greater for the women reporting scale values of five or more than for those reporting lower values ($p \leq .001$ in a chi-square test). Lower levels of contraceptive use among women with lower wantedness scores were evident for most age-groups, including the two youngest. Among those aged 15 and 17 at first intercourse, however, the differences were negligible or nonexistent.

The pattern of lower contraceptive use corresponding to lower scale values was particularly pronounced for young white women. For young Hispanic women, however, the pattern was reversed: Sixty-one percent of those who chose a low wantedness rating had practiced contraception at first intercourse, compared with 47% of those who gave first intercourse a high wantedness rating.

Mother's education was associated with an increased likelihood that the respondent practiced contraception at first intercourse, but only when the wantedness of first intercourse was rated as five or higher. Among the group who rated the wantedness of first intercourse as four or less, there was no relationship between mother's education and contraceptive use at first intercourse.

Logistic Regression Analysis

We performed logistic regression analysis to determine whether age, race and ethnicity, mother's education, relationship with partner, age discrepancy with partner and wantedness score affect contraceptive use at first voluntary intercourse (Table 6). Women aged 13 or younger at first intercourse were less likely than women who were 20 or older at first intercourse to have practiced contraception at that time. Black and Hispanic women had lower odds of having used contra-

*Since the consideration of demographic factors added a level of complexity to the analysis, we returned to our previous classification of scale values as "low" (1-4) and "high" (5-10) to facilitate interpretation of the relationships.

†We tried alternate models to test different ways of analyzing the scale of wantedness of first sex. We tested models that contained a continuous form of the scale, as well as a dichotomous version of the scale with values 1-2 forming one category and values 3-10 forming another. The findings were very similar across the alternative models.

ceptives at first intercourse, and women whose mother had not finished high school were about half as likely as those whose mother had completed four or more years of college to have done so.

When we controlled for these demographic and background characteristics, we found that the women's relationship with their partner at voluntary first intercourse was significantly related to the odds of practicing contraception at that time. Those who were in a more casual relationship with their first partner were significantly less likely than women who had been going steady with or had been engaged to their partner to have used contraceptives.

The age difference between the young woman and her partner also had a significant effect. Women who had voluntary first intercourse with a man seven or more years older were less than one-half as likely as those whose first partner was the same age or younger to have practiced contraception.

The association between wantedness of voluntary first intercourse and contraceptive use at first intercourse was very small and fell short of statistical significance when other factors were controlled.† Thus, while the partner's relative age and the young women's evaluation of the wantedness of first intercourse appear to be related, only the partner's relative age had an independent effect on the odds of contraceptive use.

Discussion

Our findings provide new information on critical issues surrounding young women's first intercourse. While most of the women reported that their first premarital intercourse had been voluntary, a small but important proportion of U.S. women aged 15-24 (9%) said that their first such experience had been nonvoluntary. Consistent with the findings of previous studies, we found this to be the case more frequently among women who were younger at first intercourse.

We also found that women who as children had lived with a single parent from birth or had left home at ages younger than 16 were more likely than others to have experienced nonvoluntary first intercourse. These results parallel those of other studies that have shown the family of origin and parental presence to be an important influence on the odds of a young woman's experiencing nonvoluntary intercourse.²⁵ Further research is needed to clarify the dynamics by which these associations with the family of origin arise. Where possible, future investigations should focus on whether family or residential changes preceded nonvoluntary intercourse.

The women who described their first intercourse as voluntary varied in their assessments of how much they had wanted the experience to happen. About one-quarter of those who described their first intercourse as voluntary nevertheless gave low wantedness scores (1-4), indicating that while they had consented, they had not wanted the intercourse to happen. The reason for these combinations of responses is not currently understood, and future qualitative research might profitably explore the meanings women ascribe to the circumstances in which they first experience intercourse.

The women's responses demonstrate the complexity of characterizing sexual experiences. We found that nonvoluntary experiences were rated lowest on the scale of wantedness, while voluntary experiences were assigned a range of wantedness values. A dichotomy of voluntary versus not voluntary is insufficient to capture the meaning of the first intercourse experience. Our analysis provides more evidence that research on first intercourse and contraception would benefit from being reframed to allow for young women's ambivalence and different degrees of decision-making, rather than universally assuming clear-cut situations and calculated responses. Future research should attempt to elucidate the mechanisms that lead to nonvoluntary, unwanted and early first intercourse, as well as the effects of these experiences on contraceptive use, pregnancy and later adolescent development.

It is generally assumed that a young

Table 5. Among women aged 15-24 who had voluntary, premarital first intercourse, percentage who practiced contraception at first intercourse, by wantedness of first intercourse, according to selected characteristics (N=1,859)

Characteristic	Wantedness	
	1-4	5-10
Total	66.6	75.3
Age at first intercourse		
≤13	48.8	56.2
14	61.3	71.5
15	75.2	75.2
16	63.8	75.6
17	81.5	83.6
18-24	74.9	77.6
Race/ethnicity		
White non-Hispanic	69.2	82.7
Black non-Hispanic	60.8	64.7
Hispanic	61.1	47.0
Mother's education		
<high school graduate	60.0	56.0
High school graduate	70.5	76.7
Some college	67.8	83.8
≥4 years of college	62.2	85.5

Note: See note to Table 1.

woman's lack of control over a sexual experience reduces the likelihood that contraceptives will be used during that experience, particularly coitus-specific methods. The spontaneous nature of some nonvoluntary intercourse may reduce young women's opportunities for forethought or planning, and so lessen even further the likelihood that contraceptives will be used under such circumstances. Thus, the relatively high proportions of sexual experiences that are nonvoluntary among young adolescent women compared with adult women may explain in part why teenagers are especially unlikely to practice contraception²⁶ and why women who have first intercourse before age 19 are less likely to have used a method at first intercourse than are those who were older at first intercourse.²⁷

Since data on contraceptive use during nonvoluntary first intercourse were unavailable, we examined associations between contraceptive use and varying degrees of wantedness of voluntary first intercourse experiences. While maternal education beyond the high school level was positively associated in bivariate analyses with contraceptive use at first intercourse when wantedness was high, this background characteristic did not affect contraceptive use when first intercourse was classified as relatively unwanted. This finding is consistent with research on interpersonal power and the indicators of pregnancy risk that found female power in a relationship to be positively correlated with contraceptive use.²⁸ This pattern suggests that factors known to be related to contraceptive use at first sex may only operate if the young woman consciously chooses and actively wants the experience.

In multivariate regression analysis, the effects of young women's race and ethnicity, age at first intercourse and mother's education were generally consistent with previous studies, in which these factors have all been shown to be related to contraceptive use at first intercourse.²⁹ The finding that women who had had first intercourse with a man seven years or older were less than half as likely to use contraceptives as women whose first partner had been the same age or younger suggests an exception to the usual pattern of higher levels of contraceptive use with increased age: In relationships with large age discrepancies, the partner's advanced age in relation to the young woman works against contraceptive use. Partners who are closer in age, even when both are young, are more likely to take precautions and actively prevent adverse consequences than are couples with

larger age discrepancies.

Because our analysis excluded women who reported first intercourse as nonvoluntary, our findings on the relationship between wantedness of first intercourse and partner age and contraceptive use are conservative. We anticipate that these patterns would be amplified in the population of young women that includes those whose first intercourse was nonvoluntary.

We found that wantedness of first intercourse, after controlling for other relevant situational and background factors, means no greater nor lesser chance of having that first intercourse protected. Rather, the critical predictors were those correlated with wantedness—an older partner, a casual relationship and young age at first sex. To the extent that unwanted intercourse is spontaneous and wanted intercourse is more likely to be planned, wantedness may have stronger implications for those methods that require premeditated effort, such as the pill, than for coitus-specific methods such as the condom. The multivariate analysis considered all methods together, but further insight may be gained from analyzing methods separately in the future.

Despite the lack of an independent relationship between wantedness of intercourse and contraceptive use at voluntary first intercourse, our findings on wantedness of first intercourse are nonetheless important. Scale values were correlated with other significant circumstantial factors, and could serve as an indicator of how often and under what circumstances young women go through a critical experience they would rather have avoided.

The fact that substantial numbers of young women voluntarily participated in a first sexual experience about which they felt ambivalent or negative deserves attention. It is especially salient for research and service programs, given that these "voluntary but unwanted" experiences are most prevalent among young women whose youth or age difference with their

Table 6. Coefficients (and standard errors) and odds ratios from logistic regression showing effects of selected characteristics on contraceptive use at first intercourse (N=1,766)

Characteristic	Coefficient	Odds ratio
Age at first intercourse		
<13	-1.08 (0.33)	0.34**
14-15	-0.35 (0.31)	0.70
16-17	-0.27 (0.31)	0.76
18-19	-0.20 (0.32)	0.82
≥20	ref	1.00
Race/ethnicity		
White non-Hispanic	ref	1.00
Black non-Hispanic	-0.69 (0.14)	0.50***
Hispanic	-1.19 (0.18)	0.30***
Mother's education		
<high school	-0.73 (0.22)	0.48**
High school graduate	-0.31 (0.20)	0.73
Some college	0.09 (0.27)	1.09
≥4 years of college	ref	1.00
Relationship with partner		
Just met/just friends/ went out once in a while	-0.31 (0.14)	0.73***
Going steady/engaged	ref	1.00
Partner's age		
Same age or younger	ref	1.00
1-2 years older	-0.16 (0.16)	0.85
3-4 years older	-0.09 (0.19)	0.91
5-6 years older	-0.28 (0.28)	0.76
≥7 years older	-0.82 (0.25)	0.44**
Wantedness of first intercourse		
1-4	-0.20 (0.14)	0.82
5-10	ref	1.00
<i>Constant</i>	<i>2.30 (0.37)</i>	<i>10.02***</i>

*Difference is significant at p<.05. **Difference is significant at p<.01. ***Difference is significant at p<.001. Notes: See note to Table 1. ref=reference category.

partner decrease the likelihood of contraceptive use at first intercourse.

Some questions remain about the meaning of the scale values. It is unrealistic to expect that all young women would interpret the scale the same way and evaluate their past experiences by a common standard. Undoubtedly, there are differences in interpretation and evaluation, possibly distinctive by subculture. Such lack of uniformity could be a factor in the interpretation of the scale, in the process of remembering first intercourse, in defining life experiences with regard to control and in having experiences subsequent to the one in question that influence how it is evaluated.

The purpose of this article was to provide descriptive information on nonvoluntary first intercourse and its correlates, using measures that have not been used before in a national survey. However, the NFSG focuses on the onset of sexual activity as an indicator of the beginning of women's exposure to the risk of pregnancy and sexually transmitted diseases. The primacy of this mission precluded special focus on nonvoluntary intercourse. In addition, since the NFSG collected information only on vaginal heterosexual inter-

course, our research did not consider other types of sexual activity. Thus, many issues remain for future surveys and developmental work to address.

Given the newness of these measure and the relative scarcity of national data with which to compare results, our analyses should be regarded as exploratory and the findings as suggestive. Nevertheless, these measures fill a gap in evidence about first intercourse, and they augment existing evidence about first intercourse among young women in the United States. They also reinforce the idea that research on the initiation of sexual activity would be enhanced by considering possible nonconsent or ambivalence surrounding first intercourse.

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