# Relationship Characteristics and Contraceptive Use Among Dating and Cohabiting Young Adult Couples

***CONTEXT:*** *Contraceptive decision making occurs in the context of relationships. Although many individual-level characteristics have been linked to youths' contraceptive use, less is known about associations between contraceptive use and relationship-level characteristics.*

***METHODS:*** *Data from the 2001–2002 romantic pair subsample of the National Longitudinal Study of Adolescent Health were used to describe characteristics of 322 dating relationships and 406 cohabiting relationships among young adults aged at least 18 years. Logistic regression was employed to assess associations between these characteristics and hormonal or long-acting contraceptive use and condom use. Data from both partners allowed discordance in reports between partners in some measures to be examined.*

***RESULTS:*** *Cohabiting couples were less likely than dating couples to have used condoms (19% vs. 37%) and hormonal or long-acting methods (40% vs. 57%) at last sex. In dating relationships, couples reporting discordant levels of intimacy and couples in which neither partner reported a high level of intimacy had greater odds of condom use than couples in which both partners reported high intimacy (odds ratios, 4.5 and 3.3, respectively); mistrust and male problem drinking were negatively associated with condom use (0.3 for each). For cohabiting couples, frequency of sex was negatively associated with condom use and hormonal method use (0.8 for each).*

***CONCLUSIONS:*** *At least for dating couples, contraceptive use is linked to multiple dimensions of relationships, particularly measures reflecting relationship quality—both positive and negative.*

*Perspectives on Sexual and Reproductive Health, 2015, 47(1):27–36, doi: 10.1363/47e2515*

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Unintended pregnancy and STDs among young adults in the United States are major public health concerns. Young adults aged 20–24 have the highest rate of unintended pregnancy in the country;[1] the rate is particularly high among sexually active unmarried youth.[2] Additionally, youth aged 15–24 account for roughly one-half of the 20 million new STDs diagnosed every year.[3] It is critical that young adults who are sexually active use effective contraceptive methods and condoms to reduce their risk of these events.

Over the past several decades, researchers examining teenagers and, somewhat less often, young adults,[4,5] have identified a large range of individual and family background characteristics that are linked to patterns of condom and contraceptive use. However, although 75% of young adults aged 18–25 report being in some type of relationship,[6] little research has focused on the relationship dyad, one of the most proximate social contexts in which sexual decision making occurs.[4,7–11] In this article, we use the romantic pair data set from the National Longitudinal Study of Adolescent Health (Add Health) to describe the characteristics of young adult dating and cohabiting relationships, and to examine the associations between these relationship characteristics and hormonal or long-acting contraceptive use and condom use.

The use of this unique data set allows us to make several contributions to the knowledge base on relationships and reproductive health. First, the richness of these data allows us to identify and examine a broad range of relationship characteristics, including both demographic and quality-related elements. Little research has been able to examine these aspects of relationships simultaneously, although demographic elements may act as proxies for quality-related aspects of relationships. Second, in contrast to most data sets, which contain data from one partner, this one contains detailed relationship information from both romantic partners. This not only allows us to account for the characteristics of both actors in the relationship, it also allows us to identify discordance between partners' reports of relationship quality. Third, given the age of the respondents, we are able to focus on the relationships of young adults, whereas most prior research focuses on the relationships of teenagers.[8,9,12–15]

## BACKGROUND

### Relationship Type and Contraceptive Use

Romantic and sexual relationships are central to the lives and healthy development of teenagers and young adults.[16,17] Estimates suggest that 35% of youth aged 18–25 are in a dating relationship, 20% are cohabiting and 21% are married.[6] In this article, we focus on dating and cohabiting relationships, because married couples, even young married couples, have a lower risk of STDs and unintended pregnancy.

Unmarried heterosexual couples rely on a combination of contraceptive methods, often using condoms in new and less-serious relationships, and then switching to hormonal or long-acting methods as the relationship becomes more established.[4,8] This shift reflects a transition from STD and pregnancy prevention to primarily pregnancy prevention. Consistent with this, dating couples more often rely on condoms than on other methods, while cohabiting couples more often rely on other methods (primarily hormonal methods) than on condoms, although their level of contraceptive use is lower overall.[6,10]

Even within dating and cohabiting relationships, however, there is variation in patterns of condom and contraceptive use, which is likely tied to the demographic characteristics and the quality of these relationships. For example, among dating couples, greater frequency of sex has been linked to lower levels of condom use and higher levels of hormonal method use.[10] In this article, we examine dating and cohabiting couples separately, because both the nature of their relationships and their patterns of contraceptive use differ in important ways. Additionally, we examine condom use and hormonal or long-acting method use separately, because there are often different motivations for the use of each type of method.

### Relationship Characteristics and Contraceptive Use

***•Demographic.*** The nature and dynamics of young adult relationships are shaped in part by men's and women's demographic characteristics, such as their age, race or ethnicity, and education.[18] Consistent with this, a woman's reported contraceptive use has been linked to her age, as well as to the age difference between herself and her partner. For example, women (particularly teenagers) in sexual relationships with older men are less likely than women with similar-age partners to use hormonal contraceptives or to use condoms.[9,13,19] This association may reflect that women with older sex partners tend to have less relative power within relationships and lower levels of self-efficacy than others.[9,13] We expect that women's increased age and smaller age differences between partners will be associated with increased contraceptive use for young adults as well.

An extensive body of research finds that black and Hispanic women use the pill less often than do white women,[20,21] although black women use condoms more often.[20] However, the racial or ethnic background of the partner is also related to method use. For example, youth with partners of different racial or ethnic backgrounds are more likely to have ever used a condom and are less likely to have ever used hormonal methods.[9,10] Interracial and interethnic couples face unique challenges, such as greater social and psychological barriers to their relationships, that can be linked to lower relationship quality and may make establishing more serious relationships difficult.[22,23] And, as reviewed above, condoms are more frequently used in less-serious relationships. Less research has linked educational differences between partners to contraceptive use; people often partner with those of similar educational status, but those who partner with someone of a different educational status may face additional challenges in their relationships. Thus, we expect that young adults in relationships that are heterogamous with respect to race or ethnicity or to education will have lower levels of hormonal contraceptive use, and higher levels of condom use, than couples in homogamous relationships.

Finally, being a parent is linked to reduced levels of hormonal contraceptive use and condom use in young adult dating relationships.[4] The presence of children, particularly children of just one of the partners, may add stress and conflict to a relationship, both of which are linked to lower levels of contraceptive use.[4,8] However, in cohabiting households, the presence of children may add to the durability of the union,[24] which may translate to increased commitment. For this reason, we expect that the presence of children among cohabiting couples will be associated with lower levels of condom use, but higher levels of hormonal method use.

***•Relationship quality.*** Although prior research explicitly examining quality-related elements of relationships primarily focuses on teenagers or select samples of adults (e.g., college students), it finds that both positive elements and negative elements are linked to contraceptive use.[8,15] Individuals who are more satisfied in their relationships are less likely to use condoms and more likely to use other contraceptive methods than those who are less satisfied.[12,15] Similarly, high levels of emotional closeness and relationship commitment are associated with lower levels of condom use and higher levels of hormonal method use.[4,8,12,25] Many couples stop using condoms and begin using other methods as the relationship becomes more serious or committed.[26,27] Consequently, we expect that high levels of relationship satisfaction and emotional intimacy will be associated with higher levels of hormonal contraceptive use and lower levels of condom use in both cohabiting and dating relationships.

However, partners in a couple, particularly those in dating relationships, do not always report the same level of intimacy or satisfaction.[28] For example, analyses of the same data being used in this article show that in approximately 30% of couples, only one partner was very satisfied with or very committed to the relationship.[29] We are aware of no work that examines how discordance in reports of intimacy or satisfaction is associated with contraceptive use. To the extent that discordance represents imbalances in or limited communication within a relationship, we expect that it will be associated with lower levels of hormonal contraceptive use and condom use.

Negative dimensions of relationship quality are often associated with lower levels of condom and contraceptive use. For example, power imbalances within relationships—often indicated by levels of conflict or violence and mistrust—and problem drinking may be linked to both the desire to use contraceptives and the ability to do so.[18] A case-control study in Boston found that women experiencing physical and emotional abuse were less likely than others to use their preferred method of contraception,[30]

while a study of family planning clinic clients found that women who had not used either a condom or a hormonal contraceptive at last intercourse were more likely than women who had to report being in a violent relationship.[31] Prior research has also linked alcohol use within a relationship to lower levels of contraceptive use, although this association appears to depend, at least to some extent, on other characteristics of the relationship, such as whether the couple is cohabiting or dating.[32] We expect that couples in relationships characterized by violence, problem drinking and mistrust will report less hormonal contraceptive use and less condom use than other couples.

## METHODS

### Sample

We used data from Add Health's romantic pair subsample. Add Health is a nationally representative and longitudinal study that has followed a sample of adolescents into adulthood. Respondents were initially interviewed in 1994–1995; a second wave of data was collected in 1995–1996, and a third wave in 2001–2002.[33] The romantic pair subsample data were collected at Wave 3 and provide individual- and relationship-related information on 1,507 randomly selected respondents aged 18–26 and their partners; partners were interviewed separately.[34] To be included in the romantic pair subsample, respondents and their partners had to be at least 18 years of age and in a heterosexual relationship of at least three months' duration.

Although the selection criteria for the romantic pair subsample result in a sample of longer term relationships, there are some real strengths of these data that make them ideal for use in this article. First, the romantic pair subsample was designed to consist of approximately 500 married, 500 cohabiting and 500 dating couples.[34] This allows us to examine associations across relationship type. Second, a much broader range of relationship-level information was collected from this subsample than is gathered in most individual-level data sets, including the broader Add Health survey. Third, the subsample allows for a detailed look at how relationship-level characteristics, as reported by both partners, are associated with contraceptive use.

For the analyses in this article, we limited our sample to 919 heterosexual couples in dating or cohabiting relationships. Because Add Health does not include a measure on prospective pregnancy intentions, we excluded married couples, to reduce the risk of including couples who may be planning a pregnancy. Additionally, we excluded 63 couples because they had not had sex, 31 because the female was pregnant, 46 because they provided no valid responses on contraceptive use and 51 because no valid analytic weight was available; the resulting analytic sample consisted of 322 dating and 406 cohabiting couples.*

### Measures

•***Contraceptive use.*** We created two dichotomous dependent variables. The first identified couples who used a condom at last sex. The second identified couples who used a hormonal or long-acting birth control method (i.e., the pill, an injectable, an implant or an IUD) at last sex. There are two important things to note about our construction of these measures. First, we used female reports of contraceptive use, because females have better knowledge about hormonal method use than their male partners. To be consistent, we also used female reports of condom use. Second, these measures are not mutually exclusive. However, we chose to analyze the measures separately because we wanted to assess which couples were most effectively protecting themselves against STDs (i.e., were using condoms, regardless of any other method use) and which were protecting themselves against unintended pregnancy (i.e., by using hormonal or long-acting methods).

•***Demographic dimensions of relationships.*** We measured five demographic dimensions of relationships, using information provided by both respondents and their partners. A three-category race measure identified couples in which both partners were white, in which both were nonwhite, and in which one was white and one was nonwhite (limited sample size precluded a more detailed breakdown). A continuous measure of female age in years was included, as was a continuous measure of the absolute age difference, in years, between partners. Using one variable that assessed educational level and one that measured current school enrollment, we created a three-category measure that identified couples in which both partners had some postsecondary education, neither did and only one did. Relationship duration was the average of the female and male reports of relationship length, in months. Presence of any children indicated whether any biological children or stepchildren lived in the household of at least one partner. Exploratory analyses examined various specifications of these measures. We included specifications that were meaningful and that also provided the best model fit.

•***Relationship quality.*** Using a combination of male and female reports, we measured eight dimensions of relationship quality, both positive and negative.

Relationship satisfaction was assessed on the basis of responses to the question "In general, how satisfied are you with your relationship with (partner)?" We created a three-category measure identifying couples in which both partners were very satisfied with their relationship, in which neither was and in which only one partner was.

Emotional intimacy was measured on a scale composed of five items assessing love for partner, perceived love of partner, commitment, closeness and relationship permanence. We created a three-category measure, indicating whether a high level of emotional intimacy (i.e., a score above the gender-specific median) was reported by both partners, by neither partner or by only one partner.

*Analytic weights are designed so that our sample is representative of the 8,206 relationships in the full Add Health sample that were eligible for the romantic pair subsample. The proportion of males with problem drinking was lower, and the average lifetime number of sexual partners was higher, among the 191 dating and cohabiting couples excluded from our sample than among included couples.

A measure of relationship equality was based on responses to the question "Considering what you put into the relationship compared to what you get out of it, and what (partner) puts in compared to what (he/she) gets out, who is getting the better deal in the relationship?" We created a dichotomous measure distinguishing couples in which both partners reported that they got an unequal deal from all others.

We created two gender-specific dichotomous measures of problem drinking. Females and males were each identified as problem drinkers if they reported either drinking four or five drinks in a row at least once a week or being drunk at least once a week, as well as one of the following alcohol-related issues: problems with friends, problems with someone they are dating, being hung over, getting into sexual situations they regret and driving drunk.

A couple-level measure of relationship violence was created on the basis of participants' reports that in the last year, they had been victims of violence (i.e., had been threatened, hit or injured by their partner) or had perpetrated violence against their partner. Because male and female reports of violence were highly correlated, we did not analyze this measure separately by gender.

We also include a measure of sexual insistence. We created two dichotomous measures—one for males and one for females—indicating whether respondents had ever insisted on or made their partner have sex with them when their partner did not want to and whether respondents had ever been made to have sex with their partner when they did not want to.

As a rough indicator of mistrust, we created a dichotomous measure that indicated whether either partner believed that his or her partner had ever had another sexual relationship during the course of the relationship. (Very few respondents or their partners reported having any other sexual partners; as a result, we could not include multiple partnerships as a separate measure.)

Finally, using female reports, we created a measure of the frequency of sex (number of times per week).

*The proportion of respondents for whom data were missing was less than 5% for all variables except frequency of sex (8%) and female's parents' education (14%), living situation during high school (10%) and parents' welfare receipt (9%). Our imputation model included all outcomes of interest, controls and dependent variables, as well as the following female-reported auxiliary variables: frequency of partner's religious service attendance, Add Health Picture Vocabulary Test score, primary initiator of sexual relations, frequency with which the respondent notices partner mood changes, whether the respondent and partner have a joint bank account, and whether the interviewer reported that the female was embarrassed to answer questions.

†Although examining characteristics associated with discordance in reports of contraceptive use was not the aim of this article, it is worth noting that females reported slightly more condom and hormonal method use at last sex (33% and 55%) than males (30% and 50%). However, the difference varied by relationship type. In dating relationships, it was 4–5 percentage points. In contrast, cohabiting couples were almost in perfect agreement about condom use at last sex, but differed by about seven percentage points in their reports of hormonal use.

•***Controls.*** In the multivariate models, we added controls for some of the females' social and demographic background characteristics and sexual history measures that prior research has found to be consistently associated with patterns of contraceptive use.[5] Three dichotomous variables identified females who had at least one parent with at least some college education, who had lived with both biological parents during high school and whose parents had received welfare while the respondents were in high school. Additionally, two variables measured the female's age at first sex (in years) and her lifetime number of sexual partners (capped at 10). We use female characteristics for two reasons: to remain consistent with our measures of the dependent variables and to keep the models as parsimonious as possible. Controlling for male background characteristics did not significantly improve model fit.

### Analytic Strategy

For the bivariate analyses, t tests and chi-square tests were used to identify significant differences between dating and cohabiting couples in contraceptive use, demographic characteristics of relationships and quality-related relationship characteristics.

Multivariate logistic regression analyses were then employed to examine associations between relationship characteristics and our two contraceptive use measures for dating couples and for cohabiting couples. We ran three regression models for each outcome. The first model included only the demographic characteristics of relationships and the control variables, the second model included only the quality-related measures and the control variables, and the final model included both the demographic and the quality-related measures with the control variables. All analyses were run in Stata and weighted to be representative of all couples eligible for inclusion in the romantic pair subsample. Multiple imputation was used to address missing data.* Because sample sizes for these multivariate analyses are quite small, we report associations that are marginally significant ($p<.10$) or better.

## RESULTS

### Bivariate Findings

Contraceptive use was more common among dating couples than among cohabiting couples (Table 1).† Thirty-seven percent of dating couples used condoms at last sex, while only 19% of cohabiting couples did so. Similarly, 57% of dating couples used a hormonal or long-acting contraceptive method at last sex, compared with 40% of cohabiting couples. Some 9–11% of dating and cohabiting couples used another method, while 41% of cohabiting couples and 23% of dating couples used no method at last sex (not shown). Twenty-five percent of females in dating relationships and 8% of females in cohabiting relationships reported dual method use (not shown).

It was more likely in cohabiting couples than in dating couples for both partners to be white (67% vs. 55%) and for neither to have any postsecondary education (41% vs.

21%). Additionally, heterogamy with respect to education and age was more common among cohabiting couples than among dating couples. The mean age for females was 21.5 years in cohabiting couples and 21.0 years in dating couples. The mean age difference between partners was 2.7 years for the former and 2.1 for the latter. The relationships of both types of couples in this sample were of similar duration (an average of 32–34 months). Forty-nine percent of cohabiting couples had at least one child in the household, compared with 14% of dating couples.

Cohabiting and dating couples were similar across some measures of relationship quality. For example, in most couples, both partners were very satisfied in their relationship (58–63%), and similar proportions felt that their partner did not get an equal deal in the relationship (36% for each). However, almost 30% of both dating and cohabiting couples had discordant reports of relationship satisfaction. Similar proportions of partners across dating and cohabiting relationships experienced sexual insistence (8–11%) and believed that their partner had had other sex partners (21–24%).

However, dating and cohabiting couples differed in reports of emotional intimacy, problem drinking, violence and frequency of sex. Not surprisingly, a higher proportion of cohabiting couples than of dating couples had both partners report high levels of emotional intimacy (37% vs. 29%). Moreover, discordant reports of emotional intimacy were also more common in cohabiting couples than in dating couples (41% vs. 31%). Problem drinking was more common in dating relationships (13% among females and 25% among males) than in cohabiting relationships (4% and 16%, respectively); violence was more common in cohabiting than in dating relationships (33% vs. 24%). Finally, cohabiting couples had a higher mean frequency of sex (3.8 times per week vs. 3.2 times).

A review of the control measures reveals that cohabiting women had more disadvantaged families and had a higher sexual risk profile than women in dating relationships. Women in dating couples were more likely than women in cohabiting couples to have at least one parent with at least some college education (56% vs. 40%) and to have lived with both biological parents during high school (65% vs. 56%). They also reported an older average age at first sex (16.7 vs. 15.7) and fewer lifetime sexual partners (4.2 vs. 4.9) than did women in cohabiting relationships.

***TABLE 1. Selected characteristics of young adult couples, by relationship type, National Longitudinal Study of Adolescent Health romantic pair subsample, 2001–2002***

| Characteristic | Dating (N=322) | Cohabiting (N=406) |
|---|---|---|
| **Contraceptive use†** | | |
| Condom*** | 37 | 19 |
| Hormonal or long-acting method*** | 57 | 40 |
| **Demographic** | | |
| Couple-level race** | | |
| Both white | 55 | 67 |
| Both nonwhite | 32 | 20 |
| One white, one nonwhite | 13 | 13 |
| Mean female age (range, 18–36)* | 21.0 | 21.5 |
| Mean age difference between partners (in yrs.; range, 0–19)* | 2.1 | 2.7 |
| Couple-level education*** | | |
| Both have some college/are enrolled | 56 | 28 |
| Neither has some college/is enrolled | 21 | 41 |
| Only one has some college/is enrolled | 23 | 31 |
| Mean duration of relationship (in mos.; range, 1–144) | 31.6 | 33.9 |
| Any children in the household*** | 14 | 49 |
| **Relationship quality** | | |
| Relationship satisfaction | | |
| Both very satisfied | 58 | 63 |
| Both not very satisfied | 14 | 8 |
| Only one very satisfied | 28 | 29 |
| Emotional intimacy*** | | |
| Both high | 29 | 37 |
| Neither high | 41 | 22 |
| Only one high | 31 | 41 |
| Both report unequal deal for partner | 36 | 36 |
| Female problem drinking*** | 13 | 4 |
| Male problem drinking** | 25 | 16 |
| Relationship violence* | 24 | 33 |
| Female experiences sexual insistence | 11 | 11 |
| Male experiences sexual insistence | 8 | 10 |
| Mean weekly frequency of sex (in days; range, 0–7)**,† | 3.2 | 3.8 |
| Relationship mistrust | 24 | 21 |
| **Controls†** | | |
| Parent has some college*** | 56 | 40 |
| Lived with both biological parents during high school* | 65 | 56 |
| Parent received welfare | 10 | 12 |
| Mean age at first sex (range, 10–25)*** | 16.7 | 15.7 |
| Mean lifetime no. of partners (range, 1–10)* | 4.2 | 4.9 |

*p<.05. **p<.01. ***p<.001. †Based on female report. *Note:* Unless otherwise indicated, data are percentages.

## Multivariate Findings

***•Dating couples.*** In the first model, none of the demographic measures were linked to condom use (Table 2). In the second model, some quality-related characteristics were linked to condom use. Couples with discordant reports of relationship satisfaction had marginally increased odds of condom use—twice those of couples in which both partners were very satisfied (odds ratio, 2.3). Similarly, couples with discordant reports of emotional intimacy had higher odds of condom use than couples in which both partners reported a high level of intimacy (3.4); couples in which neither partner reported a high level of intimacy had marginally elevated odds of condom use (2.6). Feeling that one's partner was not getting an equal deal in the relationship, male problem drinking and the belief that one's partner had had another partner were all linked to reduced odds of condom use (0.3–0.4). In the model including all measures, very little changed: Low levels of education for both partners became marginally associated with increased condom use (2.3), and the odds ratios for the emotional intimacy measures became somewhat larger; the odds ratio for couples in which neither partner reported a high level of intimacy increased (to 3.3) and became significant.

For hormonal use, the duration of the relationship was marginally associated with increased odds of use in the first model (odds ratio, 1.02). Additionally, couples in which both partners were nonwhite had marginally lower odds of reporting hormonal use than couples in which both partners were white (0.5). In the second model, couples in which females experienced sexual insistence (i.e., they

***TABLE 2. Odds ratios from logistic regression models assessing associations between selected characteristics and condom use and hormonal or long-acting method use in dating relationships***

| Characteristic | Condom use | | | Hormonal or long-acting method use | | |
|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 1 | Model 2 | Model 3 |
| **Demographic** | | | | | | |
| Couple-level race | | | | | | |
| Both white (ref) | 1.00 | na | 1.00 | 1.00 | na | 1.00 |
| Both nonwhite | 0.97 | na | 1.04 | 0.52† | na | 0.50† |
| One white, one nonwhite | 1.49 | na | 1.73 | 0.76 | na | 0.73 |
| Female age§ | 1.18 | na | 1.08 | 1.06 | na | 1.06 |
| Age difference between partners§ | 1.03 | na | 1.00 | 0.96 | na | 0.94 |
| Couple-level education | | | | | | |
| Both have some college/are enrolled (ref) | 1.00 | na | 1.00 | 1.00 | na | 1.00 |
| Neither has some college/is enrolled | 1.26 | na | 2.33† | 0.83 | na | 0.85 |
| Only one has some college/is enrolled | 0.99 | na | 1.08 | 0.64 | na | 0.62 |
| Duration of relationship§ | 1.00 | na | 1.01 | 1.02† | na | 1.02* |
| Any children in the household | 0.71 | na | 0.70 | 0.67 | na | 0.67 |
| **Relationship quality** | | | | | | |
| Relationship satisfaction | | | | | | |
| Both very satisfied (ref) | na | 1.00 | 1.00 | na | 1.00 | 1.00 |
| Both not very satisfied | na | 1.00 | 0.96 | na | 1.05 | 1.24 |
| Only one very satisfied | na | 2.34† | 2.25† | na | 0.96 | 0.90 |
| Emotional intimacy | | | | | | |
| Both high (ref) | na | 1.00 | 1.00 | na | 1.00 | 1.00 |
| Neither high | na | 2.55† | 3.32* | na | 1.35 | 1.44 |
| Only one high | na | 3.37** | 4.54** | na | 1.37 | 1.65 |
| Both report unequal deal for partner | na | 0.42* | 0.37* | na | 0.84 | 0.78 |
| Female problem drinking | na | 2.24 | 2.14 | na | 1.28 | 1.05 |
| Male problem drinking | na | 0.31* | 0.29* | na | 1.22 | 1.05 |
| Relationship violence | na | 0.95 | 0.74 | na | 1.45 | 1.33 |
| Female experiences sexual insistence | na | 0.36 | 0.52 | na | 0.34† | 0.39 |
| Male experiences sexual insistence | na | 0.81 | 0.49 | na | 0.99 | 0.91 |
| Frequency of sex‡,§ | na | 0.98 | 1.01 | na | 1.08 | 1.13 |
| Relationship mistrust | na | 0.30* | 0.30* | na | 0.75 | 0.74 |
| **Controls‡** | | | | | | |
| Parent has some college | 1.10 | 1.13 | 1.32 | 1.52 | 1.75 | 1.66 |
| Lived with both biological parents during high school | 0.63 | 0.56 | 0.59 | 0.88 | 1.00 | 0.88 |
| Parent received welfare | 2.71† | 3.14* | 3.47† | 0.79 | 0.59 | 0.84 |
| Age at first sex§ | 0.84 | 0.88 | 0.86 | 1.05 | 1.04 | 1.05 |
| Lifetime no.of partners§ | 0.79** | 0.81** | 0.80* | 0.93 | 0.88* | 0.92 |
| *Wald chi-square* | *1.48* | *2.93*** | *1.94*** | *1.69* | *1.29* | *1.25* |

*p<.05. **p<.01. †p<.10. ‡Based on female report. §Continuous measure. *Notes:* Unless otherwise noted, characteristics for which no reference group is shown are dichotomous. ref=reference group. na=not applicable.

reported experiencing it or their partner reported perpetrating it) had marginally reduced odds of hormonal contraceptive use (0.3). Results were essentially the same in the full model, except that females' experience of sexual insistence lost its marginal significance, and relationship duration became significant.

***•Cohabiting couples.*** In the first model, demographic characteristics were not associated with condom use, as was the case for dating couples (Table 3). In the second model, frequency of sex was negatively associated with odds of condom use (odds ratio, 0.8); discordance in relationship satisfaction was also negatively associated with odds of condom use, but this finding was marginal (0.5). These associations remained the same in the third model, when all variables were included.

For hormonal use among cohabiting couples, the first model shows that as age difference between partners increased, use of hormonal or long-acting methods decreased (odds ratio, 0.8). No other demographic characteristics were associated with hormonal method use. In the second model, only frequency of sex was associated with hormonal use (0.8); this association remained unchanged in the full model.

## DISCUSSION

### Couple Characteristics

Cohabiting and dating relationships of young adults differed in important ways across our dependent and independent variables. Consistent with prior work,[20,27] cohabiting couples were less likely than dating couples to use condoms and hormonal methods. This may reflect, in part, the greater tendency of cohabiting couples to be trying to get pregnant or to be ambivalent about pregnancy.[35]

In general, compared with those in dating relationships, partners in cohabiting couples were older, had a greater age difference and had lower levels of education. These differences are not unexpected, as youth tend to move from less serious to more serious relationships as they get older, leave

***TABLE 3. Odds ratios from logistic regression models assessing associations between selected characteristics and condom use and hormonal or long-acting method use in cohabiting relationships***

| Characteristic | Condom use | | | Hormonal or long-acting method use | | |
|---|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 1 | Model 2 | Model 3 |
| **Demographic** | | | | | | |
| Couple-level race | | | | | | |
| Both white (ref) | 1.00 | na | 1.00 | 1.00 | na | 1.00 |
| Both nonwhite | 0.78 | na | 0.82 | 0.86 | na | 0.87 |
| One white, one nonwhite | 0.87 | na | 0.90 | 0.96 | na | 0.75 |
| Female age§ | 0.98 | na | 0.96 | 0.93 | na | 0.90 |
| Age difference between partners§ | 0.95 | na | 0.97 | 0.79*** | na | 0.79*** |
| Couple-level education | | | | | | |
| Both have some college/are enrolled (ref) | 1.00 | na | 1.00 | 1.00 | na | 1.00 |
| Neither has some college/is enrolled | 0.60 | na | 0.67 | 0.67 | na | 0.75 |
| Only one has some college/is enrolled | 0.71 | na | 0.86 | 0.76 | na | 0.98 |
| Duration of relationship§ | 1.01 | na | 1.01 | 1.00 | na | 1.01 |
| Any children in the household | 0.78 | na | 0.67 | 0.80 | na | 0.75 |
| **Relationship quality** | | | | | | |
| Relationship satisfaction | | | | | | |
| Both very satisfied (ref) | na | 1.00 | 1.00 | na | 1.00 | 1.00 |
| Both not very satisfied | na | 0.69 | 0.77 | na | 0.47 | 0.51 |
| Only one very satisfied | na | 0.45† | 0.44† | na | 1.59 | 1.66 |
| Emotional intimacy | | | | | | |
| Both high (ref) | na | 1.00 | 1.00 | na | 1.00 | 1.00 |
| Neither high | na | 0.63 | 0.63 | na | 1.03 | 1.20 |
| Only one high | na | 0.76 | 0.77 | na | 0.95 | 1.05 |
| Both report unequal deal for partner | na | 1.42 | 1.38 | na | 0.77 | 0.86 |
| Female problem drinking | na | 2.09 | 1.88 | na | 0.60 | 0.49 |
| Male problem drinking | na | 0.59 | 0.52 | na | 0.98 | 0.95 |
| Relationship violence | na | 0.66 | 0.65 | na | 0.67 | 0.65 |
| Female experiences sexual insistence | na | 0.86 | 0.74 | na | 1.36 | 1.12 |
| Male experiences sexual insistence | na | 1.00 | 0.96 | na | 1.25 | 1.12 |
| Frequency of sex‡,§ | na | 0.83* | 0.83* | na | 0.79*** | 0.79*** |
| Relationship mistrust | na | 1.12 | 0.95 | na | 0.92 | 0.73 |
| **Controls‡** | | | | | | |
| Parent has some college | 1.22 | 1.37 | 1.29 | 1.09 | 1.33 | 1.23 |
| Lived with both biological parents during high school | 0.68 | 0.68 | 0.61 | 0.78 | 0.83 | 0.72 |
| Parent received welfare | 2.79* | 2.64* | 2.96* | 0.89 | 0.79 | 0.88 |
| Age at first sex§ | 1.08 | 1.05 | 1.08 | 1.06 | 1.01 | 1.10 |
| Lifetime no. of partners§ | 0.94 | 0.93 | 0.97 | 0.99 | 0.99 | 1.03 |
| *Wald chi-square* | *1.40* | *1.90** | *1.46* | *1.96** | *1.69** | *1.97*** |

*p<.05. **p<.01. ***p<.001. †p<.10. ‡Based on female report. §Continuous measure. *Notes:* Unless otherwise noted, characteristics for which no reference group is shown are dichotomous. ref=reference group. na=not applicable.

school and gain economic independence.[36,37] Also, consistent with prior research, cohabiting couples were more likely than dating couples to have children.[35,38] However, it is now fairly well established that a certain threshold of economic security is needed before couples transition to marriage.[39–41] Thus, couples who remain in cohabiting unions, even when they have children together, are more likely to be socioeconomically disadvantaged than comparable married couples or than dating couples who ultimately marry.[42] We see this reflected in the generally lower socioeconomic characteristics of the parents of cohabiting female partners compared with those found among the parents of dating female partners in this sample.

Particularly interesting, in terms of relationship quality, is the relatively high level of discordance between partners in dating and cohabiting relationships on measures of relationship satisfaction and emotional intimacy. In general, research has found higher levels of concordance within couples on objective reproductive events (e.g., frequency of intercourse, number of live births and current contraceptive use) than on subjective matters (e.g., attitudes and intentions).[43] Here, we found the most discordance in intimacy among cohabiting couples. One possible explanation for this is that we captured couples making the transition to the higher level of intimacy associated with cohabitation, and it is unlikely that both partners make the transition at the same time.

### Relationship Characteristics and Contraceptive Use

The relationship characteristics of young adult couples were linked to contraceptive use, but associations varied by type of relationship. In dating relationships, relationship quality was linked to condom use (although not hormonal use). For cohabiting couples, however, there were relatively few associations between relationship characteristics and either condom or hormonal contraceptive use. Additionally, there was little evidence that the associations between the demographic characteristics of relationships

and contraceptive use were mediated by the measures of relationship quality included in these analyses.

Some demographic characteristics were linked to contraceptive use, however: relationship duration and the couple's racial composition for dating couples, and age difference between partners for cohabiting couples. These associations were all in the expected directions. It is fairly well established that couples in dating relationships switch to hormonal methods over time as the relationships become more serious and stable.[4,8] That we did not see a link between relationship duration and contraceptive use among cohabiting couples is not that surprising, because many couples likely made the switch to hormonal methods before they began cohabiting. Prior research also finds greater use of hormonal methods—in particular, the pill—among white women than among black and Hispanic women.[44] This may be, at least in part, because white women have greater access to health care services and more trust in health care providers than other women.[45,46] Additionally, minority young adult women are more likely than white women to be concerned about the side effects of hormonal methods.[47] These differences did not extend to cohabiting couples in our analyses.

We were somewhat surprised that the age difference between partners emerged so strongly for hormonal use among cohabiting couples, and not for contraceptive use among dating couples. This finding appears to be inconsistent with results of prior research, which argues that power differentials and poor communication may make it challenging for women (and men) to negotiate contraceptive use, particularly the use of condoms.[9,10,13] By contrast, this finding is consistent with quantitative research that links greater age differences with higher odds of having a birth within a cohabiting union (rather than having no birth or a birth outside of a union);[4] perhaps the women involved perceive these relationships to be more serious and older men to be better fathers.[48] More surprising is that so few other demographic variables were linked to contraceptive use, particularly condom use.

Among dating couples, high emotional intimacy was associated with lower levels of condom use. This may be, as others have suggested,[26,27] because relationships with high levels of intimacy are characterized by more trust and communication and because the couples in these relationships are more likely to rely on hormonal methods. However, our results suggest this finding is true only when both partners report high intimacy; couples in which one partner reported high intimacy reported much higher levels of condom use. Thus, discordance in reports of emotional intimacy may in itself be an indicator of poorer communication or negotiation skills, or of a more casual relationship.

Consistent with expectations, we also found that negative quality-related elements of relationships were linked to lower levels of condom use in dating relationships. Problem drinking has been linked to an impaired ability to negotiate condom use, reduced intent to use condoms and reduced condom use.[32] However, this is particularly the case in newer, less serious relationships,[32] which may be why this association is not significant among cohabiting couples. Our measure of mistrust was also linked to reduced condom use, consistent with the work of Manning et al., who found a similar association (albeit with a different measure of mistrust) among a regional sample of teenagers.[8] This finding is particularly concerning since youth at increased risk of STDs (because their partner has multiple sex partners) are the ones least likely to be using condoms. Interestingly, however, actual reports of having multiple sex partners were extremely rare (so rare that we could not include it as a measure). Perhaps our measure of mistrust is serving as a marker of emotional discontent or imbalance within the relationship, rather than of actual infidelity.

Finally, discordance in reports of relationship satisfaction was associated, albeit marginally, with higher levels of condom use in dating couples and lower levels of condom use in cohabiting couples. For dating couples, discordance may simply reflect that one partner considers the relationship to be casual, and is thus more likely to use condoms. For cohabiting couples, it may reflect conflict within the relationship. Other research has found greater conflict and less intimacy to be associated with lower levels of contraceptive use in longer term dating relationships.[49]

### Limitations

Our study has several limitations. First, and perhaps most important, we do not have a measure of prospective pregnancy intentions. The contraceptive behavior of some couples included in our analyses, particularly cohabiting couples, is likely shaped by an intention or desire to become pregnant or even ambivalence about pregnancy. To help explore this possibility, we took a very conservative approach and reran our analyses, restricting the sample to couples who used a contraceptive at last sex—on the assumption that those not using a method may be planning a pregnancy. In general, the direction and significance of associations did not change, though some, particularly those for dating couples and condom use, became substantively larger. Although this lends support to our findings, we must also remember that some respondents excluded from the sensitivity analyses would be those unmotivated to use protection, a critical component of what we are trying to measure.

Second, although we have access to quite a few measures of relationship quality, it would be useful to have access to more—particularly ones related to communication between partners and sexual negotiation and more robust measures of power dynamics. Third, the relationships included in the romantic pair data set are quite select. They are fairly long-term; even the dating relationships included in this sample have an average duration of 32 months. Thus, results cannot necessarily be generalized to all romantic relationships. It would be wonderful to have couple-level data from a wider range of couples. Also, the Add Health data are now quite old (from 2001). And

finally, the sample sizes are quite small. This means that some important nuances in couples' contraceptive use cannot easily be examined with these data. For example, age differences may have a weaker link to contraceptive use among couples in which both partners are highly educated.

## Conclusion

This article adds to the growing literature on associations between the characteristics of romantic relationships and the contraceptive use behaviors of young adults, an age-group with high rates of unintended pregnancy and STDs.[1] Our analyses show fairly low levels of contraceptive use among young adults at last sex, particularly among those in cohabiting relationships. Lower levels of contraceptive use in cohabiting relationships may reflect, in part, positive (or indifferent) pregnancy intentions. However, the majority of pregnancies among cohabiting couples are still unintended,[1] which emphasizes the importance of discussing family planning needs in these more committed relationships. Although lower levels of condom use are expected in long-term relationships, couples not actively seeking pregnancy need to be able to successfully switch from condoms to more effective methods. However, very few pregnancy prevention programs have been targeted to young adult populations, and even fewer have been evaluated.[50] More research needs to be done to identify the best approaches to reaching young adult and adult populations.

Our analyses also point to the need to recognize that contraceptive decision making occurs in the context of relationships. As such, the research community should invest more time examining the associations between relationships and contraceptive use—ideally with newer data and with more couples. Notably, positive and negative characteristics of relationships are associated with lower levels of condom use in young adults' dating relationships, as they are in teenagers' relationships.[8] Thus, while it is important to examine positive dimensions of relationships, such as communication and negotiation skills that can build intimacy and satisfaction,[50] it is also important to simultaneously examine how young adults can build intimacy and maintain consistent use of effective contraceptive methods. Examining the negative dimensions is important as well, because it will help improve understanding of how young adults can negotiate contraceptive use when one partner drinks or when there are unequal power dynamics in the relationships.

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## Acknowledgments

*The authors thank the anonymous reviewers for their thoughtful comments, as well as Elizabeth Cook and Bianca Faccio for their assistance in the revision of an early draft of this article. Funding for this research was supported by grant 1 FPRPA006049–01–00 from the Office of Population Affairs of the U.S. Department of Health and Human Services. The conclusions and opinions expressed here are those of the authors and not necessarily those of the funding agency. This research uses data from Add Health, a program project directed by Kathleen Mullan Harris and designed by J. Richard Udry, Peter S. Bearman and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill, and funded by grant P01-HD31921 from NICHD, with cooperative funding from 23 other federal agencies and foundations. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Information on how to obtain the Add Health data files is available on the Add Health Web site (<http://www.cpc.unc.edu/addhealth>). No direct support was received from grant P01-HD31921 for this analysis.*

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