Published in final edited form as:
J Youth Adolesc. 2012 April ; 41(4): 515–532. doi:10.1007/s10964-011-9668-0.

The First Sexual Experience Among Adolescent Girls With and Without Disabilities

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Abstract

First sexual intercourse is an important experience in the young adult life course. While previous research has examined racial, gender, and socioeconomic differences in the characteristics of first sexual intercourse, less is known about differences by disability status. Using a racially diverse (27% Black, 20% Hispanic, and 53% non-Hispanic white) sample of 2,729 adolescent girls aged 12–24 at first sexual intercourse from the National Longitudinal Survey of Youth 1997, this article examines the association between disability and type of first sexual relationship, degree of discussion about birth control, and pregnancy wantedness. Regression analyses indicate that girls with mild or learning or emotional disabilities experience first sexual intercourse in different types of relationships than girls without disabilities. Adolescents with learning or emotional conditions have greater levels of discussion about birth control with their first sexual partners than those without disabilities. In addition, among those who do not use birth control at first sexual intercourse, girls with multiple or seriously limiting conditions are more likely to want a pregnancy—versus not want a pregnancy—at first sexual intercourse. Findings indicate that disability status is important to consider when examining adolescent sexuality; however, not all youth with disabilities have equal experiences.

Keywords

Disability; Sexual intercourse; Relationships; Contraception; Pregnancy

Introduction

First sexual intercourse is an important life event that many adolescents consider a turning point in their personal development (Beausang 2000). Engaging in consensual sexual activity enables young people to negotiate physical partnerships and explore their sexual identity. For heterosexual youth, initiation of first sexual intercourse is associated with other life course transitions such as marriage and childbirth (Miller and Heaton 1991). The initiation of sexual activity, however, is not the only salient factor in a young person's life.

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The context in which first sexual activity takes place—such as the committedness of a young person's relationship with their partner and their contraceptive behavior—is crucial for determining how young people are ultimately affected by their experience (Faulkner and Lannutti 2010; Grello et al. 2006; Sprecher et al. 1995). The characteristics of first sexual intercourse are also important to consider in the examination of adolescent sexual behavior.

However, adolescents with disabilities are often neglected from research on sexual behavior, despite evidence that they may experience first sexual intercourse differently than adolescents without disabilities. First, adolescents with disabilities participate in fewer social activities and are less likely to date than adolescents without disabilities (Anderson et al. 1982; Cheng and Udry 2002; Cromer et al. 1990; Stevens et al. 1996). This social isolation may result in fewer opportunities to learn about sex from peers, to engage in sexual experimentation, and to develop the social skills necessary to build sexual relationships. Blum (1997) argues that social isolation— and not an adolescent's impairment—is the primary contributor to sexual issues among young people with chronic conditions. Next, parents of adolescents with disabilities may be more reluctant to discuss sexuality with their children than parents of adolescents without disabilities because of an adolescent's impairment. For example, parents of adolescents with developmental or emotional conditions may anticipate—or observe—inappropriate sexual behavior (Tissot 2009) and wish to avoid discussion of sexuality for fear they may spark additional interest in sexual expression (Nelson 1995). Alternatively, a lack of condition-specific knowledge about sexual functioning may also deter parents from speaking to their children. For example, Blum et al.'s (1991) study of young people with spina bifida and cerebral palsy indicated that less than 20% received any specific information related to their condition and sexuality —either at school, at home, or at a clinic. Parental attempts to shield adolescents from sexual knowledge may not only decrease a young person's understanding of sexual activity but also leave them less prepared to reflect upon and take responsibility for their behaviors. Finally, social stereotypes about individuals with disabilities may lead others to believe that they are asexual—or that they have different sexual aspirations than their peers (Blum 1997; Nosek et al. 1994). An adolescent with a disability or their partner may internalize these stereotypes and feel less comfortable exploring their sexuality—or engage in less positive sexual interactions. Thus, existing research suggests that peers, parents, and a lack of social acceptance may all negatively affect the context in which an adolescent with a disability experiences first sexual intercourse.

Previous quantitative research has explored differences in age at first sexual intercourse (Alderman et al. 1995; Surís et al. 1996) and contraceptive use at first sexual intercourse (Cheng and Udry 2005) for youth with chronic illness and cognitive disabilities. In-depth interviews have provided rich descriptions of the challenges to dating (Howland and Rintala 2001) and developing romantic relationships (Lesseliers and Van Hove 2002; Skar 2003) for persons with physical and developmental disabilities. However, less is known about the association between a young person's disability status and the context in which first sexual intercourse occurs—especially net of other potentially confounding youth and family characteristics. This article contributes to the literature on disability and adolescents' sexual behavior by using multivariate regression to examine data from the National Longitudinal Survey of Youth 1997 and address several questions: Are girls with disabilities likely to be

in different types of relationships with their first sexual partner than girls without disabilities? Are they less likely to discuss birth control with their first sexual partners? And —among those who do not use birth control—are they more likely to want a pregnancy at first sexual intercourse? In doing so, we examine disability both as a function of specific limiting conditions (including chronic health conditions, sensory conditions, learning or emotional conditions or multiple conditions) as well as the severity in which the condition limits the youth (mild disability or serious disability). We focus specifically on adolescent girls, as existing literature suggests signifi-cant gender differences in first sexual intercourse regarding age (Mott et al. 1996; Upchurch et al. 1998), reporting of timing (Upchurch et al. 2002), relationship and voluntariness (de Gaston et al. 1995), and emotional reaction (Sprecher et al. 1995). Results from this analysis of several facets of first sexual intercourse using multiple indicators of disability provide a better understanding of how girls with disabilities differ from their peers without disabilities.

Type of Relationship at First Sexual Intercourse

Previous research (Elo et al. 1999; Manning et al. 2000) suggests that girls' first sexual intercourse experiences occur in a variety of relationship contexts. While the majority of adolescent girls report first sexual intercourse in a steady dating relationship, a sizeable proportion are friends or more occasional dating partners. This variation in relationship type is important for several reasons. First, those who are strangers or just friends at first sexual intercourse are less likely to practice contraception than those who are going steady—a discrepancy that exists regardless of whether or not a young person received birth control education before first sexual intercourse (Manning et al. 2000). Next, a girl's evaluation of sex also differs by relationship type. Those who experience first sexual intercourse in a serious relationship—rather than a casual one—report more pleasure and less guilt (Sprecher et al. 1995). Third, relationship type is also associated with young peoples' emotional functioning. Grello et al. (2006, p. 261) suggest that ''females whose first sexual intercourse partner was someone whom they did not know well reported the most symptoms of depression''. Finally, the type of relationship a young woman is in at first sexual intercourse is associated with subsequent sexual behaviors. A study of college students (Grello et al. 2006) indicates that individuals whose first sexual partner was not a romantic partner were more likely to engage in more recent casual sex unions. Thus, type of relationship at first sexual intercourse has broader implications for other sexual and emotional outcomes.

Despite the implications of the type of relationship at first sexual intercourse, establishing and maintaining more committed types of romantic relationships may be more difficult for adolescent girls with disabilities. For example, social stereotypes may make girls more hesitant to pursue a romantic relationship. Many scholars (e.g. Anderson et al. 1982; Milligan and Neufeldt 2001; O'Toole and Bregante 1992) contend that people with disabilities are often sexually disenfranchised due to the belief that they are asexual and unsuitable as romantic partners. Empirical studies similarly reveal that people without disabilities consider many sexual behaviors less acceptable or inappropriate when performed by a person with a disability (Oliver et al. 2002; Scotti et al. 1996; Wolfe 1997; Yool et al. 2003). Furthermore, Deloach (1994) and Phillips (1990) suggest that women with disabilities may internalize these stereotypes. Individuals with physical disabilities have

been found to have lower levels of sexual esteem than individuals without disabilities (McCabe and Taleporos 2003)— and many consider their disability an obstacle to sexual expression (Taleporos and McCabe 2003) and romantic relationships (Skar 2003)—which may leave them less confident to pursue a more committed partnership than people without disabilities. Thus, emotional and attitudinal barriers may complicate the development of romantic types of relationships for girls with disabilities.

Romantic relationships also may be more difficult for girls with disabilities due to logistical reasons. A lack of specialized sexual education may leave girls with disabilities uninformed about the implications of their disability on sexual functioning, as suggested by studies of youth with spina bifida and cerebral palsy (Blum et al. 1991; Erickson and Erickson 1992). Parents of children with disabilities may be apprehensive about their child's sexuality (Guest 2000; Pendler and Hingsburger 1991; Thorin and Irvin 1992) and place limits on sexual behavior (Lesseliers and Van Hove 2002), which decrease a young person's opportunity to develop sexual relationships. Although Lesseliers and Van Hove's (2002) research studied adults labeled with mental retardation, their results indicate the tremendous effect parents can have on their child's sexual boundaries:

> A striking number of interviewees, when asked if they ‘would like more’ beyond the middle field area, like exploring each other nude, having intercourse, answered something like ‘that we don’t do’...[because] more would not be allowed by their parents; for example, ‘her parents don't want us to do that,’ ‘my parents would not agree and I can’t talk to them about it, they are not ready for it yet,’ or ‘we are not allowed, our parents are angry with us for doing that.’ (Lesseliers and Van Hove 2002, p. 73).

Finally, individuals with physical disabilities may require accommodations that increase their dependence on others and lead to a lack of privacy (Foley 2006; Taleporos and Mccabe 2001). Taleporos and Mccabe's (2001, p. 140) focus groups with adults with physical disabilities suggest, ‘‘practical barriers such as inaccessible homes and meeting places, a lack of transport and a reliance on others, as major hindrances for them in establishing sexual partnerships’’. While knowledge deficits, parental boundaries, and lack of physical accessibility would complicate the ability of any adolescent to establish a romantic relationship, these constraints may be more prevalent for girls with disabilities.

Discussion About Birth Control at First Sexual Intercourse

The use of birth control inherently involves both partners in a sexual relationship (Manning et al. 2000); therefore, couples who fail to discuss birth control before first sexual intercourse may engage in behaviors that are not congruent with their pregnancy intentions. Analyses (Manlove et al. 2003; Ryan et al. 2007) of the National Longitudinal Study of Adolescent Health (Add Health) indicate that young people who discussed contraception or sexually transmitted diseases with their partner before first sexual intercourse were more likely to use contraception, reported greater perceived condom knowledge, and perceived a lower risk of contracting HIV, AIDS, or another sexually transmitted disease. The level of communication is also important. One qualitative analysis (Faulkner and Lannutti 2010, p. 8) of university students’ conversational descriptions about sex suggests that, ‘‘Satisfying

conversations about sexual decision making before the first sexual activity in a relationship often led participants to describe relational rewards such as comfort with a partner, self-expression, and self-disclosing more about their sexual feelings''. Furthermore, these conversations seem to have ongoing effects. Results from Noar et al.'s (2006) meta-analysis of the literature on safer sex communication suggest that the act of communicating about safer sex may promote safer sexual behaviors. In sum, both the occurrence and level of discussion about birth control is related to other positive contraceptive and emotional outcomes.

Previous research suggests that greater levels of communication about birth control could be more complicated for adolescent girls with disabilities. One challenge may be lack of knowledge. Cheng and Udry's (2002) analysis of AddHealth data finds no difference in sexual knowledge between girls with and without physical disabilities. However, other research suggests that these adolescents are uninformed (Berman et al. 1999, on those with physical disabilities) or have a low level (Valencia and Cromer 2000, on those with chronic illness) of knowledge about sexuality—perhaps because sex education is often included in physical education curricula in which adolescents with physical disabilities do not participate. Another more general challenge can arise from greater communication needs. Howland and Rintala's (2001) interviews with women with physical disabilities suggest that poor communication can be a stronger source of dissatisfaction with relationships for women with disabilities because they may also have to discuss disability-related needs in addition to sexual needs. Finally, an adolescent may need to coordinate alternate contraceptive plans if their disability necessitates an additional or substitute method of birth control. For example, the use of certain medications may decrease the effectiveness of oral and implanted contraceptives (Owens and Honebrink 1999). Latex sensitivities may preclude the use of certain barrier devices in lieu of less reliable polyurethane products (Murphy and Young 2005). Thus, the combination of less access to sexual knowledge, more complex communications needs, and greater restrictions to contraceptive use may complicate a girl's ability to discuss birth control with her first sexual partner if she has a disability.

Pregnancy Wantedness at First Sexual Intercourse

Previous research suggests that contraceptive behavior is one marker of pregnancy intentions. Bartz et al.' (2007) analysis of 14–17 year olds' daily coital and contraceptive diaries suggests that teenage girls generally use contraceptives in a manner consistent with their pregnancy intentions. Rosengard et al. (2004) similarly find that sexually active teenage girls who indicated plans to become pregnant in the near future also reported lesser past contraceptive use and lower future contraceptive intentions. These studies suggest that those who do not use contraception at first sexual intercourse may be more likely than those who do use contraception to want a pregnancy. However, they also indicate that many adolescent girls are ambivalent about becoming pregnant—or even if they plan against it, engage in contraceptive behavior inconsistent with these plans. Less than 6 percent of the girls in Bartz et al.'s (2007) sample of adolescents indicated they were trying to get pregnant. Nonetheless, among those who were trying to keep from getting pregnant, less than 52% of coital events were covered by contraception. Thus, the relationship between contraceptive

behavior and pregnancy wantedness is not consistent, as girls who do not contracept do not necessarily want a pregnancy.

Pregnancy wantedness does appear to correspond with adolescents' other aspirations. Stevens-Simon et al. (2005:243.e20) find that, among sexually active but never-pregnant adolescents, ''The single best predictor of the strength of the desire to remain nonpregnant was feeling that avoiding pregnancy is important to achieving future goals and maintaining positive self-esteem.'' Among teenagers who were pregnant, those who intended a pregnancy were less likely than those who did not to believe that teenaged motherhood would interfere with education or career plans (Frost and Oslak 1999). This research suggests that wantedness should be situated among broader life course objectives. For example, educational expectations earlier in adolescence are associated with pregnancy outcomes later in adolescence, with girls with higher goals less likely to become pregnant (Hockaday et al. 2000; Manlove 1998). Additionally, Vernon et al. (1983) also observed significant differences in pregnancy such that young women who expected to work in skilled or professional jobs were less likely to experience a pregnancy than those who expected to work unskilled jobs (but see Hogan and Kitagawa 1985). Thus, pregnancy wantedness is not only reflective of fertility intentions—but is a broader indicator of a girl's anticipated life course trajectory.

There may be several reasons why adolescent girls with disabilities may be more likely than those without disabilities to want a pregnancy at first sexual intercourse. First, prior research suggests that young women with mild to moderate disabilities are more likely than women without disabilities to follow a ''family track'' of marriage and full-time parenthood after high school (Wells et al. 2003), possibly because they anticipate fewer educational and labor market opportunities. Previous research suggests that a substantial number of teenagers with disabilities leave high school and neither work nor continue their education (Blackorby and Wagner 1996; Wells et al. 2003), despite the majority having transition goals to the contrary (Cameto et al. 2004). Furthermore, data from the Bureau of Labor Statistics (2010) indicates that adult women with disabilities have a lower employment-to-population ratio than both women without disabilities and men with disabilities. Second, and relatedly, girls with disabilities may evaluate pregnancy differently than girls without disabilities. Cheng and Udry's (2002) analyses of the AddHealth indicates that girls with a severe physical disability hold more positive attitudes toward pregnancy than girls without physical disabilities. Girls with disabilities face substantially greater barriers to meeting their educational and employment goals than girls without disabilities. These barriers may make pregnancy and motherhood seem like more attainable indicators of adulthood.

Adolescent and Family Characteristics and First Sexual Intercourse

Aside from disability status, previous research suggests that characteristics of the adolescent and the adolescent's family also are associated with aspects of first sexual intercourse. Girls with different racial and ethnic backgrounds are likely to have different sexual and fertility behaviors and expectations. Black and Hispanic women are less likely than non-Hispanic white women to use contraceptives (Manning et al. 2000) but—in the bivariate context—are not significantly different in their likelihood of discussing contraception or sexually

transmitted diseases before first sexual intercourse (Ryan et al. 2007). Evidence also suggests that Hispanic girls have an earlier desired age at first birth than Black girls or non-Hispanic white girls, and that Black girls perceive the greatest likelihood of non-marital childbearing when compared to their Hispanic and non-Hispanic white counterparts (East 1998). An early analysis by Zelnik and Shah (1983) indicates that young Black women were more likely to report dating—but less likely to report going steady with—their first sexual partner, when compared to young white women. More recent research over the course of adolescence suggests that Black teenagers are less likely to experience romantic relationships than white teenagers. When they do, however, they are more likely to progress to a steady relationship (Meier and Allen 2009). Thus, Black and Hispanic girls may be more likely than white girls to want a pregnancy, with Black girls likely to be in less committed types of relationships than white girls.

Age at first sexual intercourse also is associated with other aspects of the first sexual relationship. Younger adolescents are more likely to be just friends or occasional dating partners—and less likely to be going steady or engaged, married, or cohabiting—with their first sexual intercourse partner, when compared to older adolescents (Elo et al. 1999). Adolescents who discuss birth control or sexually transmitted diseases before first sex are also significantly older at first sexual intercourse than those who do not discuss these issues (Ryan et al. 2007). Furthermore, age at first sexual intercourse also is positively associated with contraceptive use at first sexual intercourse and negatively associated with the transition to a teen birth for adolescent girls, net of other individual, family, and first sexual experience characteristics (Manlove et al. 2009). However, other research (Rosengard et al. 2004) indicates no age difference in pregnancy plans or assessment of pregnancy likelihood among adolescents. These studies suggest the importance of controlling for the potentially confounding effects of age at first sexual intercourse on other sexual outcomes.

Family characteristics also have been established as important predictors of adolescent sexual activity. Having a parent who completed at least some college is positively associated with a girl's contraceptive use at first sex and negatively associated with her transition to a teen birth (Manlove et al. 2009). Coming from a family who lived in poverty is positively related—and coming from a two-biological parent family is negatively related—to experiencing a nonmarital birth during adolescence (Trent and Crowder 1997). Low-income adolescents are also more likely than those who are more economically secure to have no romantic relationships, but more likely to move quickly to steady relationships (Meier and Allen 2009). Furthermore, previous research indicates that mother's age is significant related to children's sexual attitudes and behaviors (Thornton and Camburn 1987), including timing of sexual initiation (Taris and Semin 1997). These results indicate that family characteristics also are associated with aspects of an adolescent sexual behavior and should be considered in the analyses—especially because children with disabilities are significantly more likely than children without disabilities to reside in families living below poverty, in single-parent families, and in households with lower educational attainment (Fujiura and Yamaki 2000; Hodapp and Krasner 1994; Hogan et al. 2000).

Goals and Hypotheses

The purpose of this study is to examine the relationship between having a disability and type of relationship with an adolescent's first sexual partner, level of discussion about contraception before first sexual intercourse, and pregnancy wantedness at first sexual intercourse among a nationally representative sample of adolescent girls. In doing so, we consider the association between these outcomes and two distinct measures of disability status, including type of limiting condition as well as the severity of the condition. We utilize multiple regression analyses in order to control for other factors that might affect a girl's sexual behaviors, including the adolescent characteristics of race/ethnicity and age at first sexual intercourse as well as the family characteristics of living with two biological parents, parental education, household poverty, and mother's age at the adolescent's birth.

We test three specific hypotheses. First, adolescent girls with disabilities will be in less committed types of relationships at first sexual intercourse than adolescent girls without disabilities. This hypothesis is motivated by previous research suggesting that the development of romantic relationship may be more difficult for girls with disabilities than girls without disabilities. Aside from social stereotypes regarding the sexuality of individuals with disabilities (Milligan and Neufeldt 2001), a parent's apprehension about the sexuality of their child with a disability (Pendler and Hingsburger 1991), and a lack of accessibility in an adolescent's physical environment (Taleporos and Mccabe 2001) may provide additional barriers to establishing a romantic relationship if an adolescent has a disability. Our second hypothesis is that girls with disabilities will have less discussion about birth control with their first sexual partners than girls without disabilities. This hypothesis is informed by previous research suggesting that many adolescents with disabilities have low levels of knowledge about sexuality (Berman et al. 1999; Valencia and Cromer 2000), greater sexual communication needs arising from their limiting condition (Howland and Rintala 2001), and greater restrictions to their contraceptive use (Murphy and Young 2005; Owens and Honebrink 1999) when compared to adolescents without disabilities. Third, we hypothesize that girls with disabilities will be more likely to want a pregnancy at first sex than girls without disabilities. As girls with disabilities face greater barriers to educational attainment and employment than girls without disabilities (Blackorby and Wagner 1996; Wells et al. 2003), they may be more likely to choose parenthood at an early age.

Data and Methods

The National Longitudinal Survey of Youth 1997 (NLSY97) is a nationally representative household-based sample of the non-institutional population of young persons in the United States (Bureau of Labor Statistics 2009). This is a longitudinal survey that annually collects data on an age cohort of children who were ages 12–16 as of December 31, 1996. Information is utilized from the first eleven waves of data, at which time adolescents have reached the ages of 22 through 27 at last interview. The data file is created such that each respondent has one set of observations corresponding to their first sexual experience. NLSY97 is particularly advantageous for this study in that it includes information on disability, family background, and multiple facets of first sexual experience.

The total sample for this analysis includes adolescent girls with a valid parent interview who experience first sexual intercourse at age 12 or later (N = 3,198). Eight percent of this sample was excluded due to missingness on any dependent variable. Seven percent of this sample was excluded due to missingness on any independent variable. The total sample for this analysis includes 2,729 adolescents with a subsample of 808 young persons who reported not using birth control at first sexual intercourse and thus were asked about pregnancy wantedness. We exclude respondents who report first sexual intercourse before age 12 [defined by Blum et al.(2001) as a proxy for sexual abuse] in an attempt to remove adolescents from the sample who may have experienced first sexual intercourse in a predatory relationship.

Disability

Disability is measured in two overall ways in this article— type of condition and severity of condition—in order to further explore the relationship between having a limiting condition and first sexual experience. Both disability measures are constructed from the same domains from which parents reported youth activity limitations in the NLSY97 in 1997:

Learning Disability or Emotional Condition—Learning disability or emotional condition includes learning disability or attention disorder, emotional/mental problem or behavior problem, eating disorder like anorexia or bulimia, mental retardation, or any other learning or emotional condition that limits the kind of schoolwork or other daily activities the youth can perform, the amount of time the youth can spend on these activities or the youth's performance in these activities.

Chronic Health Condition—Chronic health condition includes asthma, heart conditions, anemia, diabetes, cancer, epilepsy, infectious disease, kidney conditions, allergies, or any other chronic health condition or life threatening disease.

Sensory Condition—Sensory condition includes blindness, vision difficulties, hearing difficulty, deafness, speech impairment, or other trouble seeing, hearing, or speaking.

The type of condition measures includes four dichotomous variables from these responses: three mutually exclusive variables indicating if a youth *has ever* had a learning or emotional condition, chronic health condition, or sensory condition *only*. An additional variable indicates if a youth *has ever* had more than one condition (“Multiple conditions”). These measures are used for the type of relationship at first sexual intercourse and the level of discussion about birth control at first sexual intercourse outcomes; however, due to the reduced sample size for the pregnancy wantedness at first sexual intercourse measure, they are collapsed to “one condition only” and “multiple conditions” versus “no conditions”.

Mild Disability or Serious Disability—The severity of disability categories determine whether a child had one or more “mild” or “serious” limitations as of the 1997 survey date. In cases where a child has multiple limitations, the more serious limitation is categorized. Remaining children were classified as not having a disability if their parents reported a past limitation that was not limiting in 1997 *or* if they never experienced a limitation. Categories of the severity of disability measure are also mutually exclusive.

The NLSY97 also includes a question which asks parents for each reported condition, "How old was [this youth] when the [limiting condition] was first noticed?" that can help determine the temporal ordering of age at disability onset versus age at first sexual intercourse. This is particularly important for respondents who report having first sexual intercourse before the first interview. To address this sequencing issue, we only code a respondent as having a disability if the age the disability was first noticed was before or equal to their age at first sexual intercourse. Adolescents with limiting conditions first noticed after the adolescent reported first sexual intercourse were not coded as having a disability—but were retained in the sample (alternate coding schemes revealed comparable results). Based on this operationalization, 10.2% of the sample has a mildly limiting or seriously limiting condition (Table 1) and 27.2% have a learning/emotional, sensory, chronic, or multiple condition. This discrepancy in disability prevalence results because the condition measures capture the occurrence of *any* disability occurring before first sexual intercourse, whereas the severity measures capture the existence of a condition that occurred before first sexual intercourse but only limited the youth in 1997. Unfortunately, additional data regarding change in severity across time are not available to further refine either measure. However, taken together, these two sets of disability attempt to address cognate but distinct indicators of limiting conditions.

Type of Relationship at First Sexual Intercourse

Type of relationship with first sexual partner was a self-administered question asked annually beginning in Round 4. Youth were asked, "At the time you first had sexual intercourse, how would you describe your relationship with your first sexual partner?". Options included, 1 = "Had just met", 2 = "Were just friends", 3 = "Went out once in a while", 4 = "Were going together or going steady, but not living together", 5 = "Were engaged, but not living together", 6 = "Were living together in a marriage-like relationship", 7 = "Were married", or 8 = "Had some other relationship".

A cross-tabulation using the original categories of the type of relationship with first sexual partner variable and the disability measures revealed empty cells and cells with very small expected frequencies in the "living together" and "married" categories. Therefore, these categories were combined with the "engaged, but not living together" category to create the "Committed relationship" outcome. Additionally, likelihood-ratio tests of the multinomial logit model indicated that the "were just friends" and "went out once in a while" categories could also be combined to create the "Casual acquaintances" outcome [see Long and Freese (2006) for more on multinomial logit model specification]. The final variable includes five categories: the original "Had just met", "Casual acquaintances", "Were going together or going steady, but not living together" (used as the reference category), "Committed relationship", or "Other relationship". The modal category is "Were going together or going steady, but not living together", with 68.1% of the sample reporting first sexual intercourse in this type of relationship.

Level of Discussion About Birth Control at First Sexual Intercourse

Discussion with first sexual partner about birth control was a self-administered question asked annually between Round 4 and Round 9. Youth were asked, "Before the first time you

had sexual intercourse, did you ever talk with your first sexual partner about using birth control?". Options included, "No, didn't ever talk about birth control together", "Yes, talked but only a little", "Yes, talked some", and "Yes, talked a lot". The variable was coded such that higher values correspond to more discussion about birth control. The modal category for the full sample is "No, didn't ever talk about birth control together", followed by "Yes, talked a lot", with 34.2 and 32.8% of the sample reporting each respective category.

Pregnancy Wantedness at First Sexual Intercourse

Wanting a pregnancy at first sexual intercourse was a self-administered question asked annually beginning in Round 1 and only asked of respondents who reported not using birth control at first sexual intercourse. Youth answered yes or no to the question, "Did you or your sexual partner use any birth control method, or do anything to avoid pregnancy such as natural family planning, the first time you had intercourse?". Those who reported that they did not use birth control at first sexual intercourse were then asked, "At that time, did you want a pregnancy?". Available options included "Yes", "No", "Didn't think about it", and "Didn't care". The modal category is "No", with 82.6% of the sample reporting they did not want a pregnancy.

Adolescent and Family Characteristics

Race/Ethnicity—Aside from a child's disability status, models also control for 1997 dichotomous reports of race/ethnicity (as reported by the household informant in the original screening interview) as non-Hispanic Black or Hispanic, as compared to the reference category of non-Hispanic white. In the full sample, 26.9% of girls are non-Hispanic Black and 20.3% are Hispanic.

Age at First Sexual Intercourse—We also control for an adolescent's self-reported age at first sexual intercourse. Respondents were asked the self-administered question, "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?" The mean age at first sexual intercourse is 16.2 years for the total sample.

Family Status—Family status at age 12 is a dichotomous measure that contrasts "Two biological parents" to all other family arrangements. Forty-three percent of the total sample report living with both biological parents at age 12. Missing data on this variable is imputed with information about family status as of the first interview.

Parental Highest Education—Biological parent's highest education is measured by comparing two dichotomous measures of "High school degree only" and "More than high school" to the reference category of "Less than high school". The modal category is "More than high school", with 49.5% of the sample reporting their parents achieved this level of education. We chose these categories, as opposed to "college degree", because the latter resulted in empty cells when examining the pregnancy wantedness outcome. Missing data on this variable is imputed with information about residential parental education.

Income-to-Poverty Ratio—Two dichotomous variables—"Income-to-poverty ratio: 0–100" and "Income-to-poverty ratio: 101–200" were constructed from NLSY97's created measure of a youth's household poverty in 1997 and are compared to the reference category of "201 and above". NLSY97 created an annual poverty status ratio which compared total household income for the year to the United States federal poverty level. The dichotomous measures can be interpreted as indicating whether a youth is from a household *at or below* the federal poverty line ("Income-to-poverty ratio: 0–100") or *slightly above* the federal poverty line ("Income-to-poverty ratio: 101–200"), as compared to the reference category of *economically secure* ("Income-to-poverty ratio: 201 and above"). Twenty-four percent of girls live in households in the 0–100% category and 21.7% live in households in the 101–200% category. Missing data on this variable is imputed with the household income-to-poverty ratio in subsequent years.

Biological Mother's Age at the Adolescent's Birth—Finally, biological mother's age at the adolescent's birth is a continuous measure created by NLSY97 that reflects the age of the respondent's biological mother when the respondent was born. The mean age is 25.3 for the total group of respondents. One extreme case (biological mother's age at the youth's birth greater than 101) was dropped from the analysis.

Regression Analyses

Most of the categories of the type of relationship at first sexual intercourse variable can be ranked from the least commitment ("Had just met") to the most commitment ("Committed relationship", which indicates those who were engaged, cohabiting, or married). However, the "Other relationship" refers to an undefined relationship, and therefore is unable to be ranked. As a result, we model an adolescent's type of relationship at first sexual intercourse using a multinomial logistic approach. This technique estimates regression coefficients for every category of the dependent variable, using one category as the reference category. The reference category for type of relationship at first sexual intercourse is the modal category of "Were going together or going steady, but not living together". The multinomial logit model was also used to analyze the pregnancy wantedness outcome, as the categories "Didn't think about it" and "Didn't care" represent distinct and unrankable ideologies. The reference category for pregnancy wantedness is the modal category of "No, didn't want a pregnancy". The continuous coefficients for each equation (expressed as relative risk ratios) can thus be interpreted as follows: given a one unit increase in our independent variable, the relative risk of being in the dependent group of interest is [relative risk ratio] more likely than being in the dependent reference group, net of all other variables in the model.

The multinomial logit model makes the assumption of independence of irrelevant alternatives (IIA), which means that the odds of each combination of outcomes (with the reference category) do not depend on other available outcomes. Hausman tests and Small-Hsiao tests of IIA do not provide evidence that any of the multinomial models examined in this article fail to meet this assumption. See Long and Freese (2006) for further discussion of multi-nomial logit specification.

The discussion about birth control measure is an ordinal-level variable with categories that can be ranked from the least discussion ("No, didn't ever talk about birth control together") to the most discussion ("Yes, talked a lot"). We analyze this measure using an ordered logistic regression (Baum 2006; Long and Freese 2006), which produces one set of coefficient estimates for all categories of the dependent variable. The continuous coefficients for each equation (expressed as odds ratios) can be interpreted as follows: given a one unit increase in our independent variable, the odds of being in the "Yes, talked a lot" category versus the combined lower categories is [odds ratio] times greater, net of all other variables in the model. Similarly, for a one unit increase in the independent variable, the odds of being in the combined "Yes, talked some" and "Yes, talked a lot" versus the combined lower categories is [odds ratio] times greater.

As is evident from the interpretation, the ordered logistic model assumes that the probability curves for each category of the outcome variable are parallel to each other—in other words, that different "cuts" between different adjacent combined categories result in the same probabilities. Both an approximate likelihood-ratio test (Wolfe and Gould 1998) and a Wald test (Brant 1990) assessed if the coefficients for all variables met this assumption by being simultaneously equal. These tests revealed that the proportional odds assumption was met for the model containing the condition disability variables. However, the assumption was not met for the model containing the severity disability variables. This violation was explored in several ways. First, the violation occurred not from the disability measures, but only the parental high school plus variable. Second, alternative models that do not impose the constraint of parallel regression were also considered for the consistence of the disability results. Both the generalized ordered logit and the multinomial logit models revealed highly comparable results. The ordered logistic model is presented for brevity and comparability to the model with the condition measures of disability.

All models were checked for multicollinearity, with variance inflation factors within acceptable range (Cohen et al. 2003; Stevens 2002). We also explored models using robust standard errors; results were consistent.

Results

Table 1 indicates that adolescent girls with and without disabilities are very similar in the descriptive context when examining the three dependent outcomes. Chi-square results indicate no significant difference in type of relationship at first sexual intercourse, level of discussion about birth control at first sexual intercourse, or wanting a pregnancy at first sexual intercourse.

Minor differences emerge in the characteristics of adolescent girls with and without disabilities. Chi-square results indicate a significant difference in racial/ethnic identification, with a smaller percentage of the disability sample identifying as Hispanic (15.8%) than the non-disability sample (21.9%). Girls with disabilities report a highly similar mean age at first sexual intercourse (16.1 years) than those without disabilities (16.3 years), with t-tests indicating no statistically significant difference between groups.

Family characteristics do vary between the two groups. Girls with disabilities (35.3%) are significantly less likely than girls without disabilities (45.4%) to live with two biological parents at age 12. They also have parents with significantly different levels of education and are less likely to live in households that are financially secure, as 50.4% of those with disabilities live in households with an income-to-poverty ratio above 201—versus 55.7% of those without disabilities. Finally, girls with disabilities also have mothers who are marginally younger than mothers of girls without disabilities; average age at birth is 25.0 for those with disabilities and 25.4 for those without disabilities.

Despite the similarities between those with and without disabilities in the descriptive examination of the context of first sexual experience, important differences emerge in the multivariate results. Table 2 presents relative risk ratios and unstandardized regression coefficients comparing the likelihood of having first sexual intercourse with someone an adolescent just met, were casual acquaintances with, were seriously committed to, or were in an other relationship with—versus the likelihood of having first sexual intercourse with someone with whom they were going steady. Focusing on the condition measures, having a learning or emotional condition compared to no condition is positively and significantly related to having first sexual intercourse with someone in an other relationship, versus someone with whom a girl is going steady. Having a learning or emotional condition is also positively and significantly related to having first sexual intercourse with someone with whom a girl was engaged, cohabiting, or married, versus someone with whom she was going steady. Focusing on the severity measures, the relative risk of having first sexual intercourse with a stranger rather than with a steady partner is increased by a factor of 2.0 by having a mild disability versus not having a disability, net of all other variables in the model. Similarly, the relative risk of having first sexual intercourse in a highly committed relationship rather than with a steady partner is increased by a factor of 2.4 by having a mild disability versus not having a disability.

Table 3 presents multivariate results of the analyses for level of discussion about birth control at first sexual intercourse and wanting a pregnancy at first sexual intercourse. Having a learning or emotional condition is positively related to the level of discussion about birth control at first sexual intercourse. This means that—for adolescent girls with learning or emotional conditions—the odds of greater discussion versus less discussion about birth control are higher than for girls without disabilities. However, no significant differences emerge between those with and without disabilities when examining the severity indicators of disability. Additionally, results indicate that the odds of wanting a pregnancy—rather than not wanting a pregnancy—are increased by a factor of 6.1 by having multiple conditions and 8.0 by having a serious condition versus not having a disability, net of the other variables in the model. There is also a positive and significant relationship between having a multiple or serious condition and not thinking about pregnancy wantedness at first sexual intercourse.

Several other interesting results emerge from the models. Girls who are older at first sexual intercourse are more likely to discuss contraception before first sexual intercourse, less likely to have first sexual intercourse with a stranger than with a steady dating partner and more likely to have first sexual intercourse in a highly committed relationship than with a

steady dating partner. Those who live in households with two biological parents are less likely to have first sexual intercourse with a casual acquaintance and more likely to have first sexual intercourse in a committed relationship than with a steady dating partner. They are also more likely than those in other family configurations to talk more—versus less—about birth control. Finally, those in the lowest socioeconomic category are more likely to "not care" or to want a pregnancy—rather than not want a pregnancy—at first sexual intercourse than those who are financially secure.

Discussion

Existing literature suggests that women with disabilities often experience additional challenges to developing sexual and romantic relationships (McCabe and Taleporos 2003; Skar 2003), greater barriers to communicating about sexuality (Berman et al. 1999; Howland and Rintala 2001; Valencia and Cromer 2000), and additional constraints to accessing family planning (Becker et al. 1997; Waxman 1994) than women without disabilities. Despite the evidence that women with and without disabilities experience aspects of sexuality differently, the relationship between disability and the characteristics of first sexual intercourse among adolescent girls remains under-researched. This relationship is important to understand, as a sizeable proportion of adolescents have some kind of disability (Brault 2008; Snyder and Dillow 2010), and characteristics of the first sexual experience can impact emotional well-being and future sexual and romantic unions (Grello et al. 2006; Miller and Heaton 1991; Paik 2011). This article used nationally representative data and multivariate regression techniques to examine the association between an adolescent girl's disability status and the context in which her first sexual intercourse occurred. Using multiple indicators of disability, and controlling for the potentially confounding effects of youth and family characteristics, we find consistent evidence that relationship type, level of discussion about birth control, and pregnancy wantedness at first sexual intercourse are not equal for girls with and without disabilities.

An important result is that we find a marked bifurcation in the types of relationships that girls with mild disabilities have with their first sexual partner. Results suggest that having a mild disability increases the likelihood of having first sexual intercourse with a stranger versus a steady dating partner. Previous research on the stereotypes associated with disability, sexuality, and positive sexual expression can help inform these findings. A woman who feels sexually disenfranchised or who has lower sexual esteem as a result of her disability (McCabe and Taleporos 2003; Milligan and Neufeldt 2001; Taleporos and McCabe 2003) may be more likely to engage in sexual intercourse with a partner with whom she is less emotionally invested. Having sex with a recently met partner may allow girls with non-apparent disabilities to engage in sexual intercourse without disclosing the presence of a limitation.

Those with apparent disabilities may be more likely to choose a stranger as a first sexual partner to minimize some of the challenges to developing and maintaining romantic relationships (Skar 2003) that may arise due to a limitation. Alternatively, although the analysis excludes girls who report first sexual intercourse before age 12, these results may reflect the increased likelihood for women with disabilities to be victims of sexual assault

than those without disabilities (Martin et al. 2006)—although perpetrators are more often current partners, former partners, or other known persons than they are strangers.

Results also suggest that having a mild disability or a learning or emotional condition also increases the likelihood of having first sexual intercourse in a highly committed relationship versus with a steady dating partner. Women with disabilities also may perceive more constraints to attracting dating partners and more societal and personal barriers to dating (Rintala et al. 1997) than those without disabilities. These same barriers to developing romantic partnerships that may lead some young people with disabilities to avoid commitment may lead others to wait until they are in a marriage-like commitment to trust their partner sexually. Interestingly, this bifurcation in girls with mild disabilities being more likely to have first sexual intercourse with a stranger *and* with a highly committed partner—versus a steady dating partner—does not emerge for those with serious limitations or among any condition type.

Another important finding is that girls with multiple conditions or serious disabilities who do not use contraception at first sexual intercourse are also much more likely to want a pregnancy than their counterparts without disabilities. These results support previous research suggesting that young women with disabilities are more likely than those without disabilities to pursue a “family track” (Wells et al. 2003). However, our finding is particularly notable for several reasons. This relationship persists even after controlling for socioeconomic background, family form, and parental education. Disability status remains statistically significant net of family resources—resources that are also likely to inform an adolescent's perception of their future educational and vocational opportunities. Furthermore, this difference between the pregnancy intentions of girls with and without disabilities emerges very early in an adolescent's sexual life. In other words, the discrepancy between these two groups in their desires to conceive a child occurs even before they engage in sexual intercourse for the first time.

In addition to the increased likelihood that girls with multiple or serious conditions will want a pregnancy at first sexual intercourse, the results in Table 3 also suggest that girls with multiple or seriously limiting conditions are also more likely not to think about pregnancy than to not want a pregnancy, when compared to girls without disabilities. Together, the increased likelihood of wanting a pregnancy or not thinking about it are especially interesting given that respondents with learning or emotional conditions are significantly more likely—and those with multiple conditions are marginally more likely—to have more (versus less) discussion of birth control at first sexual intercourse, when compared to respondents without disabilities. These results do not speak to the content of that discussion—or level of birth control knowledge (but see Berman et al. 1999; Cheng and Udry 2002; and Valencia and Cromer 2000)—but they also do not provide evidence for the hypothesis that adolescent girls with disabilities have less discussion of birth control with their first sexual partners than girls without disabilities. Qualitative research would be especially well-suited to explore the relationship between the substance of these conversations (including whether or not they include discussion about specific impairments) and the desire for a pregnancy at first sexual intercourse.

The results presented in this article have broader policy and clinical implications. They highlight the critical need to provide sex education that focuses not only on any specific impairments that may arise due to a young person's disability but also on developing satisfying sexual relationships. This is especially true for young women who may consider having first sexual intercourse with a partner they just met. More committed unions at first sexual intercourse are associated with more pleasure, less guilt (Sprecher et al. 1995), and lower levels of depression (Grello et al. 2006), which may be doubly deleterious if women already consider their disability an obstacle to positive sexual expression (Taleporos and McCabe 2001). Providing adolescent girls with the tools and support to confront perceived stigma about disability and negotiate the presence of a limiting condition with their partners may increase the likelihood that they can develop more trusting relationships.

Additionally, while it is important that all women are able to plan for and pursue their goals as they transition into adulthood, young people with disabilities often face additional challenges that may complicate their ability to achieve those goals. The results presented here suggest that adolescent girls with multiple and seriously limiting conditions are significantly more likely to want a pregnancy at first sexual intercourse—and thus disability-specific family planning assistance that considers other types of transition planning for education and employment might be most beneficial if provided before these adolescents become sexually active. As a result, when they do have first sexual intercourse, they will be prepared to pursue whatever parenthood aspirations they may hold. This is especially relevant when adolescents have genetic disorders that may increase the likelihood that their child also will have a disability.

This article contributes to the literature on disability and adolescents' sexual behavior by examining data from the National Longitudinal Survey of Youth 1997 to address differences in the characteristics of first sexual intercourse among adolescent girls with and without disabilities. While NLSY97 provides many advantages—most notably, it is a nationally representative dataset with information on a wide spectrum of youth and family characteristics, this analysis is not without its limitations. While our results allow us to draw conclusions about the average differences between adolescent girls with and without disabilities, further research is necessary to address the mechanisms that explain these differences at the individual and dyad levels. For example, it would be informative to explore the relationship between various aspects of an adolescent girl's sex education—including the type, extent, and context of provision—and the outcomes examined here. It also would be instructive to examine the partner's perspective of first sexual intercourse, both to compare the consistency of the outcomes reported here and to understand how a girl's disability status is perceived by her partner. NLSY97 does not provide us with these data; however, interviews with partner dyads would be especially well-suited to address these questions.

In addition to this dearth of data on sexual education and partner-provided reactions to first sexual intercourse, NLSY97 lacks detailed information about the specific timing and seriousness of disability. Annually collected data on the onset and changing severity of limiting conditions as they correspond with sexual activity would be ideal; however, we hope the analyses presented in this article can inform future work on variation in the context

of sexual relationships for young people with disabilities. Furthermore, our sample describes adolescents who experienced first sexual intercourse between 1997 and 2007. The increased use of the internet and social networking sites in more recent years may change the way that adolescents with disabilities form relationships, as online communities may make it easier for them to meet like-minded peers and develop social skills—especially if they feel stigmatized in their school or neighborhood communities. Online peer and mentoring communities already have been established to support young people with disabilities [see Burgstahler and Doyle (2005) for a program to promote the participation of youth with disabilities in science, technology, engineering and mathematics fields], with one study of an online support intervention among youth with cerebral palsy and spina bifida revealing significant increases in the youth's sense of community (Stewart et al. forthcoming). Analyses that can consider the nuances of disability onset and the use of technological advances as they relate to adolescent sexual activity would make an important contribution to our understanding of how girls with disabilities are different from—or similar to—those without disabilities.

Results from these analyses of differences in first sexual intercourse experiences for girls with and without disabilities provided unexpectedly mixed support for our hypotheses. While this research does find some support for our hypothesis that adolescent girls with disabilities will be in less committed types of relationships at first sexual intercourse than girls without disabilities in that they are more likely to have first sexual intercourse with a stranger than a steady dating partner, we also find that the opposite is true: girls with learning or emotional, mild, or multiple disabilities are also more likely to have first sexual intercourse in an engaged, cohabiting, or married relationship. Next, while we hypothesized that adolescent girls with disabilities would have less discussion of birth control with their first sexual partners than young women without disabilities, we found the opposite to be true for those with learning or emotional and multiple conditions. Finally, results support our hypothesis that adolescent girls with serious and multiple conditions who did not use contraception at first sexual intercourse are more likely to want a pregnancy than girls without disabilities. Together, these results indicate that disability status is important to consider when examining adolescent sexuality—however, not all youth with disabilities have equal experiences.

Acknowledgments

The authors wish to thank Dennis Hogan, Lyndi Hewitt, and Christopher Niedt for comments on an earlier draft. A previous version of this manuscript was presented at the 2010 annual meeting of the Population Association of America.

Biography

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Table 1

Descriptive statistics for all variables, by disability status

	Full sample	Disability status		Test statistic[a]
		No disability	Disability	
Dependent measures				
Type of relationship at first sexual intercourse[b]				
Had just met	0.034	0.033	0.038	N/S
Casual acquaintances	0.203	0.202	0.206	
Going together or going steady (reference category)	0.681	0.688	0.663	
Committed relationship	0.052	0.051	0.057	
Other relationship	0.029	0.026	0.036	
Level of discussion about birth control at first sexual intercourse[b]				
No, didn't ever talk about birth control together	0.342	0.347	0.329	N/S
Yes, talked but only a little	0.123	0.124	0.121	
Yes, talked some	0.207	0.213	0.190	
Yes, talked a lot	0.328	0.317	0.360	
Wanted a pregnancy at first sexual intercourse[b]				
No (reference category)	0.826	0.835	0.801	N/S
Yes	0.041	0.040	0.044	
Didn't think about it	0.032	0.027	0.044	
Didn't care	0.101	0.098	0.111	
Adolescent limitations[c]				
Type of condition				
No condition (reference category)	0.728			
Chronic illness only	0.070	–	–	
Sensory condition only	0.123	–	–	
Learning disability or emotional condition only	0.036	–	–	
Multiple conditions	0.043	–	–	
Severity of limitation				
Not limited in 1997 (reference category)	0.898			
Mild limitation	0.083	–	–	
Serious limitation	0.020	–	–	
Adolescent characteristics				
Race/ethnicity[b]				
Non-Hispanic Black	0.269	0.267	0.274	***
Hispanic	0.203	0.219	0.158	
Non-Hispanic White (reference category)	0.529	0.514	0.569	
Age at first sexual intercourse[d]	16.240 (2.022)	16.278 (2.039)	16.138 (1.972)	N/S
Family characteristics				

	Full sample	Disability status		Test statistic[a]
		No disability	Disability	
Two biological parents[e]	0.426	0.454	0.353	***
Parental highest education[b]				
Less than high school (reference category)	0.167	0.174	0.148	*
High school only	0.338	0.322	0.381	
More than high school	0.495	0.505	0.470	
Household income-to-poverty ratio[b]				
0–100	0.241	0.234	0.259	*
101–200	0.217	0.209	0.237	
201 and above (reference category)	0.542	0.557	0.504	
Biological mother's age at adolescent's birth[d]	25.279 (5.413)	25.387 (5.428)	24.988 (5.366)	†
N[f]	2,729	1,987	742	

Source: National Longitudinal Survey of Youth 1997, Waves 1–11

N/S non-significant

** $p < .01$

† $p < .10$

* $p < .05$

*** $p < .001$; two-tailed tests

[a] Contrasts those with no reported disability and those with any reported disability

[b] Data shown are proportions with chi-square tests reported

[c] Data shown are proportions

[d] Data shown are means with standard deviations in parentheses and t-tests reported

[e] Data shown are proportions with two-sample test of proportions reported

[f] Except for the wanted a pregnancy outcome, where full sample N = 808, no disability sample N = 582, and disability sample N = 226

Table 2

Multinomial logistic regression of type of relationship at first sexual intercourse

	Had just met		Casual acquaintances		Committed relationship		Other relationship	
Adolescent limitations								
Chronic health condition only	0.927		1.013		0.725		1.446	
	–0.075		0.013		–0.322		0.369	
	(0.439)		(0.190)		(0.437)		(0.415)	
Sensory condition only	1.261		0.936		1.124		1.429	
	0.232		–0.067		0.117		0.357	
	(0.306)		(0.153)		(0.287)		(0.331)	
Learning disability or emotional condition only	1.007		1.208		3.745***		2.840*	
	0.007		0.189		1.320		1.044	
	(0.613)		(0.262)		(0.360)		(0.460)	
Multiple conditions	1.288		1.078		1.982†		0.692	
	0.253		0.076		0.684		–0.368	
	(0.484)		(0.237)		(0.383)		(0.734)	
Mild condition		1.997*		1.197		2.435***		1.569
		0.692		0.180		0.890		0.450
		(0.320)		(0.175)		(0.275)		(0.391)
Serious condition		1.695		0.960		1.361		2.179
		0.528		–0.041		0.308		0.779
		(0.624)		(0.356)		(0.627)		(0.628)
Adolescent characteristics								
Black	0.865	0.908	0.765*	0.766*	0.668	0.673	1.284	1.278
	–0.146	–0.097	–0.268	–0.267	–0.403	–0.396	0.250	0.246
	(0.268)	(0.269)	(0.125)	(0.125)	(0.276)	(0.276)	(0.294)	(0.296)
Hispanic	0.687	0.731	0.763†	0.761†	1.559†	1.567†	1.224	1.245
	–0.376	–0.313	–0.271	–0.273	0.444	0.449	0.202	0.219
	(0.338)	(0.339)	(0.144)	(0.145)	(0.229)	(0.231)	(0.323)	(0.325)
Age at first sexual intercourse	0.852**	0.851**	0.980	0.979	1.295***	1.281***	0.916	0.910
	–0.160	–0.162	–0.020	–0.021	0.259	0.248	–0.088	–0.094
	(0.059)	(0.059)	(0.025)	(0.025)	(0.043)	(0.042)	(0.062)	(0.062)
Family characteristics								
Two biological parents	0.757	0.780	0.801*	0.812†	1.533*	1.551*	1.414	1.417
	–0.278	–0.248	–0.222	–0.208	0.427	0.439	0.346	0.348
	(0.246)	(0.248)	(0.112)	(0.112)	(0.201)	(0.201)	(0.267)	(0.267)
Parental highest education: high school	0.910	0.913	0.853	0.852	0.420***	0.418***	0.771	0.815
	–0.094	–0.092	–0.159	–0.160	–0.867	–0.871	–0.261	–0.204
	(0.377)	(0.377)	(0.156)	(0.156)	(0.260)	(0.260)	(0.333)	(0.333)

	Had just met		Casual acquaintances		Committed relationship		Other relationship	
Parental highest education: more than high school	1.409	1.397	0.909	0.913	0.456**	0.455**	0.615	0.636
	0.343	0.335	–0.095	–0.091	–0.785	–0.787	–0.487	–0.453
	(0.368)	(0.367)	(0.157)	(0.158)	(0.257)	(0.257)	(0.352)	(0.353)
Income-to poverty ratio: 0-100	1.235	1.159	1.276†	1.294†	1.569†	1.588†	1.278	1.269
	0.211	0.148	0.244	0.257	0.451	0.462	0.245	0.238
	(0.296)	(0.298)	(0.139)	(0.140)	(0.259)	(0.259)	(0.324)	(0.325)
Income-to poverty ratio: 101-200	0.649	0.614	1.169	1.178	1.635*	1.628*	1.115	1.125
	–0.433	–0.488	0.156	0.164	0.492	0.487	0.109	0.118
	(0.328)	(0.329)	(0.130)	(0.131)	(0.237)	(0.238)	(0.313)	(0.313)
Biological mother's age at adolescent's birth	1.029	1.028	0.999	0.998	0.975	0.973	0.995	0.995
	0.028	0.027	–0.001	–0.002	–0.026	–0.027	–0.005	–0.005
	(0.020)	(0.020)	(0.010)	(0.010)	(0.018)	(0.018)	(0.023)	(0.023)
Intercept	–1.121	–1.104	–0.650	–0.621	–6.232***	–6.018***	–1.785	–1.663
Log likelihood	–2,533.209	–2,526.920						
N	2,729	2,715						

Source: National Longitudinal Survey of Youth 1997, Waves 1–11

Data shown are relative risk ratios (first number) and unstandardized regression coefficients (second number) from multinomial logistic regression equations with standard errors for the unstandardized regression coefficients in parentheses. The reference category for all comparisons is “Were going together or going steady, but not living together”

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$; two-tailed tests

Table 3

Ordered logistic regression of level of discussion about birth control and multinomial logistic regression of pregnancy wantedness at first sexual intercourse

	Level of discussion about birth control at first sexual intercourse[a]		Wanted a pregnancy at first sexual intercourse[b]					
			Yes		Didn't think about it		Didn't care	
Adolescent limitations								
Chronic health condition only	0.987							
	–0.013							
	(0.138)							
Sensory condition only	1.116							
	0.110							
	(0.108)							
Learning disability or emotional condition only	1.568*							
	0.450							
	(0.197)							
Multiple conditions	1.348†		6.079**		4.258*		1.390	
	0.299		1.805		1.449		0.329	
	(0.176)		(0.581)		(0.615)		(0.567)	
One condition only			0.901		1.081		1.241	
			–0.104		0.078		0.216	
			(0.527)		(0.504)		(0.281)	
Mild condition		1.147		2.073		2.098		1.364
		0.137		0.729		0.741		0.310
		(0.130)		(0.661)		(0.590)		(0.413)
Serious condition		0.967		7.958**		4.756*		1.016
		–0.034		2.074		1.560		0.016
		(0.260)		(0.669)		(0.710)		(0.781)
Adolescent characteristics								
Black	1.207*	1.190†	0.756	0.882	0.475	0.534	1.154	1.135
	0.188	0.174	–0.280	–0.126	–0.745	–0.628	0.144	0.127
	(0.090)	(0.091)	(0.582)	(0.580)	(0.571)	(0.572)	(0.309)	(0.309)
Hispanic	0.862	0.851	2.662†	3.018*	0.697	0.789	1.266	1.274
	–0.148	–0.162	0.979	1.105	–0.361	–0.237	0.236	0.242
	(0.102)	(0.102)	(0.504)	(0.515)	(0.578)	(0.583)	(0.329)	(0.333)
Age at first sexual intercourse	1.120***	1.116***	0.895	0.915	0.842	0.849	0.978	0.978
	0.114	0.110	–0.111	–0.089	–0.172	–0.164	–0.022	–0.023
	(0.018)	(0.018)	(0.099)	(0.099)	(0.114)	(0.114)	(0.062)	(0.061)
Family characteristics								
Two biological parents	1.210*	1.207*	1.438	1.516	0.574	0.615	0.850	0.851
	0.190	0.188	0.363	0.416	–0.555	–0.487	–0.163	–0.161

	Level of discussion about birth control at first sexual intercourse[a]		Wanted a pregnancy at first sexual intercourse[b]					
			Yes		Didn't think about it		Didn't care	
	(0.080)	(0.080)	(0.411)	(0.415)	(0.507)	(0.511)	(0.280)	(0.281)
Parental highest education: high school	0.845	0.838	1.141	1.008	0.909	0.885	1.261	1.300
	–0.169	–0.177	0.132	0.008	–0.095	–0.122	0.232	0.262
	(0.115)	(0.115)	(0.492)	(0.479)	(0.549)	(0.540)	(0.318)	(0.318)
Parental highest education: more than high school	0.816†	0.807†	0.863	0.868	0.534	0.532	0.595	0.612
	–0.203	–0.214	–0.148	–0.142	–0.627	–0.630	–0.519	–0.491
	(0.116)	(0.116)	(0.536)	(0.531)	(0.602)	(0.602)	(0.372)	(0.373)
Income-to poverty ratio: 0–100	1.052	1.067	6.375***	5.624**	1.613	1.443	1.933*	1.922*
	0.051	0.065	1.852	1.727	0.478	0.367	0.659	0.654
	(0.102)	(0.103)	(0.583)	(0.588)	(0.535)	(0.540)	(0.319)	(0.320)
Income-to poverty ratio: 101-200	1.075	1.082	3.015†	2.899†	1.227	1.155	1.387	1.394
	0.072	0.079	1.104	1.064	0.205	0.144	0.327	0.332
	(0.095)	(0.096)	(0.612)	(0.612)	(0.556)	(0.556)	(0.332)	(0.333)
Biological mother's age at adolescent's birth	0.988†	0.988†	1.024	1.021	0.842	1.039	1.017	1.016
	–0.012	–0.012	0.024	0.020	–0.172	0.039	0.016	0.016
	(0.007)	(0.007)	(0.034)	(0.034)	(0.114)	(0.037)	(0.023)	(0.023)
Intercept 1	0.890	0.788	–3.555*	–3.858*	–1.222	–1.385	–2.514*	–2.459*
Intercept 2	1.414	1.313						
Intercept 3	2.286	2.181						
Log likelihood	–3,560.066	–3,545.709	–476.747	–476.263				
N	2,729	2,715	808	805				

Source: National Longitudinal Survey of Youth 1997, Waves 1–11

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$; two-tailed tests

[a] Data shown are odds ratios (first number) and unstandardized coefficients (second number) from ordered logistic regression equations with standard errors for the unstandardized regression coefficients in parentheses. Higher values indicate more discussion about birth control

[b] Data shown are relative risk ratios (first number) and unstandardized coefficients (second number) from multinomial logistic regression equations with standard errors for the unstandardized regression coefficients in parentheses. The reference category is “No, didn't want a pregnancy”. This question is only asked of respondents who did not report using contraception at first sexual intercourse