

# **Childbearing Desires, Intimate Relationships, and Heterosexual Intercourse during the Transition to Adulthood\***

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## **Childbearing Desires, Intimate Relationships, and Heterosexual Intercourse during the Transition to Adulthood**

**Abstract** Most theoretical models of sexual behavior among young people focus on “in-the-moment” decision-making processes – for example, how sexual desire or drive increases the probability or frequency of sexual intercourse, or how immature executive functioning inhibits the reasoned decision-making process that would discourage adolescents from having sexual intercourse. We focus on mid- and longer-term attitudes and preferences and how they influence intimate relationships and sexual behavior within those relationships. We use the Relationship Dynamics and Social Life dataset (n = 952 women and 2,103 intimate relationships), based on a random sample of 18- and 19-year-old women in a Michigan county. We find that young women who are generally positive about young childbearing, who want large families, who prefer young motherhood, and who want to get pregnant in the near future spend more of the subsequent 2.5 years in intimate relationships, transition to sexual intercourse more quickly within those relationships, and subsequently have more frequent/regular sex throughout those relationships. These links are net of a wide range of attitudes, experiences, and background characteristics that might influence both childbearing desires and sexual behavior. We conclude that sexual decision-making likely does not occur only “in the moment,” and that mid- and longer-term desires play a role in structuring women’s opportunity for sexual intercourse as well as their decisions about whether to engage in it.

Key Words: Sexual Behavior \* Transition to Adulthood \* Attitudes \* Childbearing Desires/Preferences

## INTRODUCTION

Although childbearing desires are consistently related to childbearing behavior, demographers have debated nearly since the inception of the field about whether they predict childbearing behavior as well as should be expected, particularly given the large fraction of pregnancies that women say were undesired when they were conceived.

The cognitive-social model of fertility and fertility intentions, popular among Demographers in recent years, is based on the “dual-system” or “dual-process” models developed and tested by cognitive psychologists. These models describe two processes in the brain that drive decision-making – a subconscious system that involves little deliberative thought, and a conscious system associated with reasoned actions. Kahneman (2011) calls these two processes “thinking fast” and “thinking slow.” In the cognitive-social model, Bachrach and Morgan (2013) emphasize the subconscious aspects of fertility desires and their links to behavior. Demographic research on sexual behavior has especially emphasized subconscious processes affecting behavior, arguing that pregnancy and childbearing are far from young people’s conscious thoughts when deciding whether to have sexual intercourse.

We investigate whether “slow thinking” also influences sexual behavior. We investigate mid- and longer-term childbearing desires as predictors of intimate relationship and sexual behaviors, during this important stage of the life course.

We use a newly available dataset, from the Relationship Dynamics and Social life study, to address this question. The data are well suited for our purpose in three specific ways. First, the age of the women in the sample spans the crucial years during the transition to adulthood – ages 18 through 22. Second, because women were interviewed weekly for 2.5 years and reported all of their intimate partners (sexual and non-sexual) during that period, the sample includes a large

number of intimate relationships, including multiple relationships from the majority of women. Third, the weekly interviews included a measure of whether heterosexual intercourse occurred each week during the relationship, providing a continuous record of sexual frequency/regularity during the relationship.

## **THEORETICAL FRAMEWORK**

1. Neurocognitive processes affecting short-, mid-, and long-term thinking and decision-making (e.g., executive function).
2. Potential reasons that childbearing attitudes/preferences might affect sexual behavior.
3. The role of sex drive/attitudes toward sex/sexual experiences.
4. Individual characteristics that might predict childbearing attitudes/preferences and sexual behavior.

## **METHODS**

### **Data**

The Relationship Dynamics and Social Life (RDSL) study is based on a simple random sample of 1,003 18- and 19-year-old women drawn from driver's license and personal state ID card<sup>1</sup> records in a racially and socioeconomically diverse Michigan county. The response rate was 84% overall (94% of located respondents agreed to participate). A 60-minute face-to-face baseline survey interview in March 2008 through July 2009 assessed sociodemographic characteristics, attitudes, and adolescent experiences related to pregnancy. Respondents were then invited to participate in a 2.5-year follow-up study with weekly 5-minute surveys assessing their intimate relationships, sexual behavior, attitudes, and related behaviors.

Respondents were mailed \$5 in advance and were paid \$30 for the baseline interview.

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<sup>1</sup> Personal ID cards are issued by the Secretary of State in Michigan for those who need a state-issued identification card (e.g., for public benefits, air travel) but are not licensed to drive. Approximately 25% of the sampling frame was from ID cards, 75% from driver's licenses. At the time of the survey, University of Michigan's Survey Research Center sampling statisticians estimated that the combined lists represented 95% of the 18- and 19-year-old women represented by U.S. census data.

Additional incentives were \$5 per weekly interview for the first four weeks and \$1 per interview thereafter, with \$5 bonuses for on-time completion of five interviews in a row.

Of the 1,003 baseline interview participants, 992 (99%) agreed to participate in the weekly follow-up study, and 952 (95%) completed at least two weekly surveys.<sup>2</sup> In all, 84% participated for at least 6 months; 79% for at least 12 months; and 75% for at least 18 months. The follow-up study concluded in January 2012, and yielded 58,594 weekly interviews. Our analyses focus on the 952 women and their 2,704 unique intimate partners, and the weekly interviews during those intimate relationships. Our unit of analysis and sample size differ across our three dependent variables; we describe those specifics below, in Analytic Strategy.

## Measures

The exact question wording and coding for all measures are presented in Table 1. Below, we describe each measure in greater detail.

***Dependent Variables.*** Each week, a series of questions ascertained whether the respondent had an intimate partner of any kind during the prior week. For a new (not discussed in a prior interview) partner, they provided initials or a nickname.<sup>3</sup> If the partner was different from the most recent interview, but had been discussed in a prior interview, they chose from their list of initials/nicknames, to link interviews about the same partner across time regardless of breaks or other intervening partners. The *proportion of the study period with an intimate partner* is the number of weekly interviews when a woman reported any type of intimate partner divided by the total number of weekly interviews she completed.

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<sup>2</sup> One additional woman completed two weekly interviews. However, she had sex in her second interview. Because we use attitude measures at time  $t$  to predict hazard of first sex at time  $t+1$ , she is not at risk of first sex in our models. Thus, to keep our sample consistent across the dependent variables, we do not include her in any model.

<sup>3</sup> In the rare weeks (1%) when a respondent identified more than one partner, only the most important or most serious one was discussed in detail.

In each weekly survey when a woman identified an intimate partner she was asked, “In the past \_\_\_ days, did you have sexual intercourse with \_\_\_? By sexual intercourse, we mean when a man puts his penis into a woman’s vagina.” Each week is coded 1 if she reported having heterosexual intercourse, and 0 otherwise. We use this question about sexual intercourse to create two dependent variables. First, *timing of first sexual intercourse* indicates the first week that a woman reported sexual intercourse with each partner. It is coded 0 for every week of the relationship before first sexual intercourse, and is coded 1 during the first week sexual intercourse was reported. Second, *sexual frequency/regularity* is the number of weeks that included sexual intercourse divided by the total number of weeks with that partner, using only the week of first sex and subsequent weeks.

***Attitudes/Preferences Related to Childbearing.*** In the baseline interview, as well as in a series of quarterly rotating surveys that were asked in every 14<sup>th</sup> weekly survey, women were asked multiple questions about how they feel about childbearing. Questions about desire for pregnancy and desire to avoid pregnancy during the upcoming month were asked in every weekly survey. (See Table 1 for the specific survey questions.)

One series of questions asked about attitudes toward childbearing in general, for women in general – whether motherhood is fulfilling, it is alright to be a single mother, children cause worry and emotional strain, and intimate relationships improve after a baby is born. Another set of questions assessed women’s personal preferences for their own childbearing – her ideal family size, ideal age to have a baby, and desire for and to avoid pregnancy in the upcoming month. In contrast to the measures of general attitudes toward childbearing, these measures all include the word “you” in the question, and are specific to the respondent herself.

***Attitudes toward Sex.*** Because we argue that attitudes and preferences related to

childbearing and sexual behavior are intertwined, our models include control variables representing attitudes toward unmarried sex – whether sex before marriage is wrong, premarital sex is alright, and a girl should have sex with a long-term boyfriend.

***Experiences with Sex.*** Our models include several control variables representing *adolescent* sexual behavior (prior to the study). These variables control, to the extent possible in random-effects regression models, for the reciprocal effect of early sexual behavior on attitudes and preferences related to childbearing.

We use four dichotomous measures of adolescent experiences with sex and pregnancy that were assessed during the baseline survey, and one measure based on the weekly interview questions about sexual intercourse: first sex before age 17; two or more sexual partners during adolescence; had sex without contraception during adolescence; and pregnancy/birth history (no pregnancy or birth, pregnancy but no birth, or birth). Whether the woman ever had sex before her current partnership varies across relationships (but not across weeks within the same relationship), and is thus included in our models of sexual behavior (but not our models of time spent with an intimate partner). For each relationship, it is coded 1 if the woman reported at the baseline interview or a weekly interview that she had sexual intercourse, and 0 otherwise.

***Individual Characteristics.*** We use several time-invariant woman-level control variables assessed in the baseline interview in all models. Three measures indicate women's demographic characteristics: age (at the beginning of the relationship), self-identified race (Black or non-Black; Latina women are coded according to their self-selected race<sup>4</sup>); and whether she is highly religious. Four dichotomous measures represent the following aspects of disadvantaged family background: biological mother had a teen birth; mother didn't graduate from high school; grew

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<sup>4</sup> RDSL includes < 80 Latinas, which precludes analyzing them as a separate category.

up without two coresidential parents; and family received public assistance during childhood.

***Relationship Duration.*** In our relationship-level models of sexual behavior, we also include a measure of relationship duration. This is coded in exact months, based on the first weekly survey in which the woman mentioned the partner. In our models of time to first sexual intercourse within a relationship, which analyzes person-months within each relationship, this measure varies monthly. We also include a squared term, to model a decreasing slope over time. In our models of sexual frequency/regularity, which analyzes relationships as a whole, the measure is not included in the models, but is used in the denominator to calculate the dependent variable (the number of weeks that included sexual intercourse divided by the total number of weeks in the relationship).

***Sensitivity Analyses.*** We also conducted sensitivity analyses with two additional control variables, instead of experiences with sex, which are described in the Results section. First, RDSL included a subset of the survey questions used for the Hurlbert Index of Sexual Desire (Hurlbert 2010), which represent *sex drive* or *desire for sex*. The specific questions are listed in Appendix Table 1. In a one-time journal supplement, women responded to 10 statements about their desire for sex as either 1 (“true”) or 0 (“false”). This measure is the proportion of responses to those statements that indicate a positive desire for sex. To measure *sexual self-control*, young women were asked, “Imagine being with a partner and you both want to have sexual intercourse, but you have no birth control available. What are the chances that you could stop yourself once you were highly aroused or turned on?” Respondents chose a number between 0 (“absolutely no chance”) and 100 (“absolutely sure to happen”).

### **Analytic Strategy**

We have three dependent variables in our analyses, each of which requires a different



statistical method, modeling approach, and/or research design. All analyses were conducted using Stata/SE 15 MP-2.

Our first dependent variable is the proportion of the time during the study period that women reported any type of intimate partner. The unit of analysis is women because the dependent variable summarizes a woman's behavior over the entire study period. This continuous dependent variable, which ranges from .00 to 1.00, is close to equally distributed across the range (except that about one-third of women of women reported an intimate partner in 96-100% of their weekly interviews). We use random-effects OLS regression (*regress* in Stata, with the option *re*). For this analysis, we use all 952 women who completed at least two weekly surveys.

Our other analyses focus on sexual behavior *within* intimate relationships (including those relationships that lasted for one week or less and involved sex but not spending much time together – i.e., hookups or one-night stands). In these models, we analyze the 2,103 *new* intimate relationships that were reported by 654 women during the study period. Note that 601 relationships were ongoing when the study began *and* had already included sexual intercourse in the past. Thus, because we do not know when sexual intercourse first occurred during the relationship, we cannot include those relationships in our analyses of sexual behavior.

Our second dependent variable is the time to first sex within a relationship. We use hazard models (survival analysis) to estimate these models. Because the data are precise to the week, we use logistic regression (*logistic* in Stata) to estimate discrete-time models; person-weeks of exposure are the unit of analysis. Women were at risk of first sex within a relationship during all weeks they reported a partner with whom they had not yet had sexual intercourse. Thus, we estimate these models with the 8,172 weekly interviews with young women during the

weeks up to and including first sexual intercourse in their relationships.

Although using person-weeks of exposure to risk as the unit of analysis substantially increases the sample size, Petersen (1986; 1991) and Allison (1982; 1984) showed that using discrete-time methods does not deflate the standard errors and thus provides appropriate tests of statistical significance. Further, because the probability of first sex is so small within each week, the estimates from discrete-time methods are similar to those of continuous methods.

All time-varying measures in the hazard models are lagged by at least one week. In other words, we use the attitude/preference measure from the nearest prior week to predict the probability of sex in the current week. We adopt this strategy to guard against reciprocal causation, because attitudes and preferences may shift after an intimate relationship becomes sexually active.

Because xx% of women reported more than one intimate relationship during the study period, we also estimate fixed-effects models comparing women's time to first sex in a specific relationship to her time to first sex in her other relationships, based on the differences in her attitudes/preferences. We estimate these models because they effectively control for all time-invariant characteristics that may affect attitudes *and* sexual behavior, thus eliminating the reciprocal causation (early sexual behavior affects attitudes/preferences) and unobserved heterogeneity (unmeasured or poorly measured characteristics of women affect attitudes/preferences and sexual behavior). However, these models can only include women who reported more than one relationship during the study period ( $n = xxx$ ; xx%), and cannot include women with one stable relationship throughout the study period. To be included in these models, women's attitudes must also vary across their relationships, or there would not be two distinct within-woman situations (in terms of attitudes/preferences) in which to compare time to first sex.

In all, xxx women (xx%) met both of these criteria. Thus, we present the more inclusive random-effects models and describe the fixed-effects models.

Our third dependent variable is the proportion of weeks within each relationship when sexual intercourse occurred, out of the total weeks after first intercourse occurred – the sexual frequency/regularity of the relationship. The unit of analysis is the relationship, because the dependent variable summarizes the entire relationship. This continuous dependent variable, which ranges from .00 to 1.00, is fairly equally distributed across the range, except that about 25% of the relationships did not include sex (and thus are coded .00). We use OLS regression with random-effects for these models (*regress* in Stata, with the option *re*).

Similar to the approach described above for time to first sexual intercourse, we also estimate fixed-effects regression models for this dependent variable. This allows us to compare a woman's sexual frequency/regularity in one relationship to her sexual frequency/regularity in her other relationships. Again, this approach controls for reciprocal causation and unobserved heterogeneity, but can be estimated only for the select sample of women who reported more than one relationship, and who varied across relationships in terms of attitudes/preferences and sexual frequency/regularity.

For all three dependent variables, we use a model-building approach. We begin with bivariate regression models to show the overall pattern of association between the attitudes/preferences and the dependent variables. This describes the association between, for example, wanting a large family and the dependent variables, without regard to what types of women want large families. We next estimate models including only demographic characteristics and family background, which account for how attitudes vary across demographic groups and levels of disadvantage. Next, we include controls for attitudes toward sex, because attitudes

toward sex and childbearing are intertwined. And, finally, we add controls for experiences with sex. Note that these models controlling for experiences with sex are, to some extent, “overcontrolled” because early attitudes/preferences for childbearing may have affected these early sexual experiences. Thus, we consider the coefficients for attitudes/preferences in these models to be a lower bound for these associations. We use formal tests of mediation (*decomp* and *ldecomp* in Stata) to indicate which attitude coefficients are significantly explained by attitudes and experiences with sex, and demographic and family background characteristics.

Before presenting our statistical models, we first present means, standard deviations, and ranges for all measures included in the analyses. The statistics for the proportion of time with an intimate partner and the time-invariant individual characteristics refer to the 953 women in the study (who completed two or more weekly surveys), but all other statistics refer to the 2,103 relationships used in our analyses of sexual behavior. The corresponding statistics for all 2,734 intimate relationships did not noticeably differ, except . . . . We also present a correlation matrix for all measures in Appendix Table 2. We present this at the relationship level, to correspond to our relationship-level analyses; thus, the correlations should not be interpreted at the woman level.

## RESULTS

### Sample Description

Table 1 provides descriptive statistics for all variables included in our models. Overall, women in the sample spent an average of 68% of the study period with an intimate partner, they had sexual intercourse 2.12 months after their intimate relationship began, and they had sexual intercourse in 32% of weeks after the first time they reported sexual intercourse. On average, the relationships lasted 4.36 months, which is an underestimate because some relationships were

ongoing when the study ended.

Overall, the young women in the RDSL study were positive toward childbearing, with the majority agreeing that motherhood is the most fulfilling thing for a woman and that it is alright to be a single mother, and the majority disagreeing that children cause worry and emotional strain for their parents. On the other hand, the majority also disagreed that having a baby improves the relationship between the parents. These measures are not highly correlated at the individual (not shown in tables) or relationship level (see Appendix Table 2), and thus seem to be representing various distinct feelings about motherhood.

Personal preferences for childbearing vary widely for the women in the RDSL study. The range for ideal family size is from zero to five, with xx% indicating a preference for no children (not shown in tables). Women's ideal age for having a baby also varies widely, from age 15 to age 70, but with a (bottom-coded at 15 and top-coded at 30) mean around the average age at first birth for U.S. women, 25.95 years. The two measures of short-term pregnancy desire are strongly correlated, at .75 (not shown in tables). However, other published research demonstrates that they independently predict subsequent pregnancy rates (Miller et al. 2013), so we do not combine them in our analyses.

The RDSL young women are also relatively positive about sex outside of marriage, with xx% disagreeing that sex before marriage is wrong, xx% agreeing that premarital sex is alright, and xx% agreeing that a young woman should have sex with a long-term boyfriend.

The sample is relatively sexually experienced. More than half (52%) had sex before age 17, nearly two-thirds (60%) had two or more sexual partners before the study began, almost half (48%) had sex without birth control in the past, about a quarter (26%) had a pregnancy or birth before the study period, and 15% were cohabiting at the time of the baseline interview.

On average, the women were 19.19 years old at the baseline interview. About one-third (34%) of the sample is Black, and more than half (57%) are highly religious. More than a third of the mothers of the respondents gave birth as teens and 8% didn't graduate from high school. Nearly half of their families did not include two parents (either biological or step), and more than a third (37%) received public assistance at some point.

Overall, the RDSL sample is similar to the 18 and 19-year-old women in the National Survey of Family Growth's nationally representative sample from 2006-10, except that Black women are overrepresented in the RDSL (34%) compared to the U.S. population (16%) (Ela and Budnick 2017). Correspondingly, a higher proportion of RDSL women relative to the NSFG women consider themselves highly religious and more RDSL than NSFG women had a disadvantaged family background.

### **Intimate Partners**

Table 2 shows that all of our measures of attitudes and preferences related to childbearing are strongly associated with how much time women spent partnered during the study period. Women who feel that motherhood is the most fulfilling thing women can do and that it is alright to be a single mother spent more time in intimate partnerships during these ages than women who disagreed with those sentiments. These bivariate associations changed very little once demographic characteristics and family background are added to the model, because they are largely unassociated with time spent partnered. The one exception is that Black women spent less time partnered than white women.

Women who feel that it is alright to be a single mother also have more permissive attitudes toward sex outside of marriage, which explains some of its association with time with an intimate partner. And women who think motherhood is the most fulfilling thing tend to be

more sexually experienced at a younger age, which explains some of its link to time with an intimate partner.

Individual preferences for childbearing are also associated with time in an intimate relationship – preferences for young motherhood and pregnancy in the near future, along with weaker preferences for avoiding pregnancy in the near future, are associated with more time in intimate relationships during these ages. This is largely unexplained by demographic and family background differences, but only preferences for young motherhood are associated with more time in an intimate relationship once the other childbearing preferences are included in the model. Almost none of this association is explained by the strong link between attitudes toward sex and childbearing preferences. However, adolescent experiences with sex explain some of the preference for young childbearing—intimate relationship link. This suggests that adolescent experiences with sex are both predicted by but also lead to preferences for young childbearing.

Recall that we also conducted sensitivity analyses with an indicator of sex drive to counter the hypothesis that having a high sex drive could lead to pro-childbearing attitudes and early childbearing preferences, as well as intimate relationships and sexual behavior, rather than the reverse (not shown in tables). High sexual drive/desire for sex is indeed a strong predictor of spending more time in intimate relationships. However, it is also associated with more negative general attitudes toward childbearing, smaller family size preferences, and older age at first birth (not shown in tables), which means that it cannot explain the link between these attitudes/preferences and subsequent intimate relationship and sexual behaviors. On the other hand, women with high sexual drive/desire for sex have higher probability of desiring a pregnancy and lower probability of wanting to avoid a pregnancy during the upcoming month, so it could explain the link between those preferences and intimate relationship/sexual behavior.

However, although it is strongly associated with spending more time in an intimate relationship net of all other variables in our models, it does not explain the significant associations between attitudes/preferences and behavior in Table 2.

### **Sexual Behavior**

Before describing our models of the time to first sexual intercourse within a relationship<sup>5</sup>, we first describe the 256 women who had ongoing sexual relationships when the study began and who reported no additional partners during the study period. These relationships began when the women were much younger than the relationships observed during the RDSL study period – on average, age xx. They were also much longer-term – 20.85 months at the end of the study, compared to a total mean duration of 4.36 months for the in-study relationships. And they were much more stable; 87% remained with that partner at the conclusion of the study. In all, about one-third (34%) of the relationships were coresidential (vs. x% for in-study relationships, not shown in tables), and women reported sexual intercourse in 69% (vs. 32%) of the weeks within those relationships.

The 256 women themselves also differed substantially from the full sample of women in the study. They were more likely to have had first sexual intercourse before age 17 (75% vs. 52%), more than twice as likely to have had two or more partners when the study began (75% vs. 60%), and more likely to have had sex without contraception (68% vs. 48%).

Overall, these relationships were much more serious (longer lasting, coresidential) and had much greater sexual frequency/regularity, and the women were much more sexually experienced compared to those we analyze in Tables 2 and 3.

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<sup>5</sup> In the RDSL dataset, all sexual intercourse takes place within an intimate relationship because having sex with a partner is defined as a “relationship.”



***Time to First Sexual Intercourse within a Relationship.*** Table 3 shows the logistic regression hazard models of the time to first sexual intercourse within an intimate relationship. Women who feel that motherhood is the most fulfilling thing women can do and who feel that it is alright to be a single mother have sex earlier within their relationships than women who are less positive about motherhood and single motherhood. However, those who believe that children improve parental relationships tend to have sex later within their intimate relationships.

For the most part, the association between positive attitudes toward motherhood and earlier transition to sex, and the association between thinking that children improve relationships and later transition to sex, are robust to controls for attitudes toward sex, but are partially significantly explained by experiences with sex.

Personal preferences for young childbearing are related to how quickly a relationship becomes sexual in a more complex way. The bivariate associations are strong for all measures. However, only weak desire to avoid pregnancy in the upcoming month is associated with faster transition to sex in a relationship. This association, however, is net of individual characteristics, attitudes toward sex, and experiences with sex. Also note that while sexual desire/drive is a strong predictor of the time to first sex within a relationship, it does not explain the significant associations in Table 3 (not shown in tables).

***Sexual Frequency/Regularity.*** Table 4 shows that young women with positive attitudes toward childbearing and personal preferences for early childbearing have more frequent and/or regular sex within their intimate relationship, as well. Young women who feel positively toward childbearing in general – that childbearing is the most fulfilling thing for a woman and that having a baby improves an intimate relationship – have more frequent/regular sex within their intimate relationships. In addition, young women who have any desire for a pregnancy in the

upcoming month and/or weak desire to avoid pregnancy in the upcoming month have more frequent/regular sex, and women who prefer older motherhood have less frequent/regular sex. However, those who believe that a baby improves parental relationships have less frequent/regular sex. In the adjusted models, desire for pregnancy does not affect sexual frequency/regularity net of its link to weak desire to avoid pregnancy. Little of these associations is explained by attitudes toward sex, experiences with sex, or individual characteristics.

## **DISCUSSION**

Overall, we find that near- and longer-term feelings about childbearing are strong predictors of intimate relationship behaviors, including sexual behavior, among young women during the transition to adulthood. Our models demonstrate that, not surprisingly, attitudes toward sex and adolescent experiences with sex are strong predictors of subsequent intimate relationship and sexual behaviors. However, even net of those clear linkages, childbearing number and timing preferences are strong predictors of being in an intimate relationship, initiating sex within that relationship, and subsequently having sex frequently/regularly.

Although many have assumed that sexual decision-making occurs “in-the-moment,” or with an orientation toward the immediate future, our analyses demonstrate that near- and longer-term preferences also shape decisions about whether to have sexual intercourse. Note that we also found evidence consistent with other research emphasizing “thinking fast” as a determinant of sexual behavior – for example, the RDSL’s measure of high sexual desire/drive is strongly associated, net of other factors, with spending more time in intimate relationships and having quicker and more frequent/regular sexual intercourse within those relationships.

Researchers interested in pregnancy during the transition to adulthood, particularly undesired pregnancy, have focused almost exclusively on contraceptive use as the most

important proximate determinant. This implies that sexual intercourse is either ubiquitous during these ages, or that it is not part of a reasoned process translating the desire for pregnancy (or lack thereof) into correspondingly necessary behaviors. We found substantial variance in intimate relationship behaviors (e.g., between xx% and xx% of the study period in a relationship), the rate of sexual initiation within intimate relationships (from immediately to xx weeks after the relationship began), and the frequency/regularity of sexual intercourse within intimate relationships (xx% to xx% of weeks). And we also found that these behaviors respond to near- and long-term childbearing preferences. In other words, intimate relationships and the sexual behaviors that occur within them are likely to be important proximate determinants of whether young women are able to implement their family planning goals.

## **LIMITATIONS**

Our study has limitations that leave crucial questions unanswered. First, the regional sample limits the generalizability of our results to the broader U.S. population and beyond. We are unaware of existing research that has investigated regional differences in how attitudes/preferences are linked to behavior, but we hope that our analyses motivate such research.

Second, the RDSL study collected information from women only during a short period in their lives. Although ages 18-22 constitute a particularly important period in terms of sexual behavior and the risk of having an undesired pregnancy, we cannot provide insight into decision-making about sexual intercourse among young adolescences, or among older adults.

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**Table 1** Descriptive Statistics of Measures Used in the Analyses (n = 2,103 intimate relationships Relationship Dynamics and Social Life study)

Measure	Survey Question	Mean	SD	Min.	Max.	Response Options/ Code
<b>Dependent Variables</b>						
Proportion of study period with an intimate partner†	See manuscript for description.	.68	.35	0.00	1.00	%
Timing of first sexual intercourse (in months)	See manuscript for description.	2.12	6.49	0.08	97.93	months
Proportion of partnered weeks with sexual intercourse	See manuscript for description.	.32	.29	0.00	1.00	%
<b>Total Duration of Relationship</b>	[Computed from 1st week partner was discussed & end of relationship/end of study.]	4.36	8.65	.08	98.26	months
<b>Attitudes toward Childbearing</b>						
Motherhood is most fulfilling thing	Being a mother and raising children is the most fulfilling experience a woman can have.	2.11	.74	1	3	<sup>a</sup>
Alright to be a single mother	It is alright for a woman to have a child without being married.	1.40	.62	1	3	<sup>a</sup>
Children cause worry and emotional strain	Children cause worry and emotional strain for their parents.	2.22	.66	1	3	<sup>a</sup>
Having a baby improves the relationship	Relationships between men and women improve after they have a baby together.	1.95	.65	1	3	<sup>a</sup>
<b>Preferences for Childbearing</b>						
Ideal family size	If you could have just the number you want, what number of children would you want to have when your family is completed?	2.42	.99	0	4	children; top-coded at 4
Ideal age to have a baby	If you do have a baby and if it were just up to you, what do you think would be the ideal age for you to have that baby?	25.95	2.89	15	30	years; bottom-coded at 15 and top-coded at 30
Any desire for pregnancy in upcoming month	How much do you want to <u>get</u> pregnant during the next month?	.07		0	1	<sup>b</sup>
Weak desire to avoid pregnancy in upcoming month	How much do you want to <u>avoid</u> getting pregnant during the next month?	.09		0	1	<sup>b</sup>
<b>Attitudes toward Sex</b>						
Sex before marriage is wrong	Young people should not have sex before marriage.	2.46	.70	1	3	<sup>a</sup>
Premarital sex is alright	It is alright for young people to have premarital sex even if they are just friends.	1.89	.73	1	3	<sup>a</sup>
Should have sex with a long-term boyfriend	If a girl has been seeing a guy for a while, she should have sex with him.	2.25	.56	1	3	<sup>a</sup>
<b>Experiences with Sex</b>						
First sex before age 17†	How old were you the first time you had sexual intercourse?	.52		0	1	years; coded yes if < 17
Two or more sexual partners during adolescence†	With how many total partners have you had sexual intercourse?	.60		0	1	#; coded yes if ≥ 2
Had sex without contraception during adolescence†	Have you ever had sexual intercourse without using some method of birth control such as condoms, pills, or another method?	.48		0	1	yes/no
<b>Pregnancy/Birth History</b>						
No pregnancy or birth	How many times have you been pregnant in your life? In which way did the pregnancy end?	.74		0	1	yes/no
Birth	With your (1st - 10th) pregnancy, how many babies did you have that were born alive?	.14		0	1	yes/no
Pregnancy (no birth)		.12		0	1	yes/no
Cohabiting with a partner at baseline interview†	Do you have a place you live that is separate from where ____ lives?	.15		0	1	yes/no
Never had sex before the current partner	See manuscript for description.	.19		0	1	yes/no
<b>Individual Characteristics time-invariant†</b>						
Demographic Characteristics						
Age at the baseline interview	[Based on birthdate, from sampling frame.]	19.19	.57	18.12	20.34	years
African American	Which of these groups, that is [list] would you say best describes your racial background?	.34		0	1	coded yes if "Black or African American"
Highly religious	How important, if at all, is your religious faith to you?	.57		0	1	yes/no
Family Background						
Mother had a teen birth	How old was your biological mother when she had her first child?	.37		0	1	yes/no
Mother didn't graduate from high school	What is the highest level of education your mother completed?	.08		0	1	yes/no
Grew up without 2 parents bio or bio/step	When you were growing up, which of the following people did you live with? Which of these people did you live with for the majority of the time when you were growing up?	.48		0	1	yes/no
Received public assistance during childhood	When you were growing up, did your family ever receive public assistance?	.37		0	1	yes/no
<b>Variables for Sensitivity Analyses</b>						
Sex Drive/Desire for Sex††	See appendix Table 2 for list of questions.	.49	.31	0.00	1.00	% of responses that are yes
Sexual self-control	Imagine being with a partner and you both want to have sexual intercourse, but you have no birth control available. What are the chances that you could stop yourself once you were highly aroused or turned on?	70.47	30.73	0	100	tertiles (high/medium/low)

† n = 952 women. These measures do not vary across relationships; thus, we present descriptive statistics for women rather than relationships.

†† n = 533 women who responded to the special survey supplement.

<sup>a</sup> Likert-scale response options were strongly agree, agree, disagree, or strongly disagree. In the baseline interview, the professional interviewers did not offer "neither agree nor disagree" as an option, but if respondents provided that answer, interviewers accepted it. We recoded all Likert-scale measures into three categories. We coded each measure as high, medium, or low based as closely as possible on tertiles in the data set.

<sup>b</sup> Respondents chose a number from 0 to 5, where 0 was labeled "not at all" and 5 was labeled "really want to" for desire for pregnancy or "really want to avoid" for desire to avoid pregnancy. We dichotomized these variables -- any non-zero response to desire for pregnancy, or any response other than 5 ("really want to avoid") for desire to avoid pregnancy, are coded 1; other responses are coded zero -- because very few people gave the answers coded 0, and because the dichotomous versions of these variables are strongly related to subsequent pregnancy rates (see Miller et al. 2013).

**Table 2** OLS Regression Models of the Proportion of Study Period with an Intimate Partner (n = 952 women; Relationship Dynamics and Social Life Study)

	Bivariate	Attitudes Toward Childbearing			Preferences for Childbearing		
		1	2	3	4	5	6
<b>Attitudes toward Childbearing</b>							
Motherhood is most fulfilling thing	.08 *** (.02)	.08 *** (.02)	.08 *** (.02)	.05 ** (.02)			
Alright to be a single mother	.06 ** (.02)	.05 * (.02)	.02 (.02)	.01 (.02)			
Children cause worry and emotional strain	.00 (.02)	-.01 (.02)	-.01 (.02)	-.01 (.02)			
Having a baby improves the relationship	.01 (.02)	.01 (.02)	.02 (.02)	.00 (.02)			
<b>Preferences for Childbearing</b>							
Ideal family size	.01 (.01)				.00 (.01)	.01 (.01)	.01 (.01)
Ideal age at first birth	-.02 *** (.00)				-.02 *** (.00)	-.02 *** (.00)	-.01 ** (.00)
Any desire for pregnancy in upcoming month	.16 *** (.04)				.04 (.08)	.05 (.08)	.06 (.08)
Weak desire to avoid pregnancy in upcoming month	.16 *** (.03)				.08 (.08)	.07 (.08)	.03 (.07)
<b>Attitudes toward Sex</b>							
Sex before marriage is wrong	-.06 *** (.02)		-.05 *** (.02)	-.04 (.02)		-.05 * (.02)	-.04 * (.02)
Premarital sex is alright	.03 (.02)		.01 (.02)	.02 (.02)		.01 (.02)	.02 (.02)
Should have sex with a long-term boyfriend	.06 ** (.02)		.04 (.02)	.02 (.02)		.03 (.02)	.01 (.02)
<b>Experiences with Sex</b>							
First sex before age 17	.17 *** (.02)			.03 (.03)			.03 (.03)
Two or more sexual partners during adolescence	.20 *** (.02)			.12 *** (.03)			.11 *** (.03)
Had sex without contraception during adolescence	.19 *** (.02)			.10 *** (.03)			.08 ** (.03)
Pregnancy/Birth History (ref = no pregnancy or birth)							
Birth	.12 *** (.03)			-.02 (.04)			.00 (.04)
Pregnancy (no birth)	.13 *** (.03)			.01 (.03)			.02 (.03)
Cohabiting with a partner at baseline interview	.27 *** (.03)			.17 *** (.03)			.16 *** (.03)
<b>Individual Characteristics (time-invariant)</b>							
Demographic Characteristics							
Age	.04 (.02)	.04 (.02)	.04 * (.02)	.02 (.02)	.04 (.02)	.04 * (.02)	.02 (.02)
African American	-.07 ** (.02)	-.08 ** (.03)	-.07 ** (.03)	-.08 ** (.03)	-.08 ** (.03)	-.07 ** (.03)	-.08 ** (.03)
Highly religious	-.05 * (.02)	-.02 (.03)	.00 (.03)	.01 (.02)	-.02 (.02)	.00 (.03)	.01 (.02)
Family Background							
Mother had a teen birth	.02 (.02)	.02 (.02)	.02 (.02)	-.01 (.02)	.01 (.02)	.01 (.02)	-.02 (.02)
Mother didn't complete high school	.04 (.04)	.03 (.04)	.03 (.04)	.01 (.04)	.03 (.04)	.03 (.04)	.01 (.04)
Grew up with one parent	.01 (.02)	.02 (.02)	.02 (.02)	-.02 (.02)	.02 (.02)	.02 (.02)	-.01 (.02)
Received public assistance during childhood	.00 (.02)	-.01 (.02)	-.01 (.02)	-.04 (.02)	-.01 (.02)	-.02 (.02)	-.04 (.02)
R <sup>2</sup> (adjusted)		.04	.05	.16	.06	.08	.18

\* p &lt; .05, \*\* p &lt; .01, \*\*\* p &lt; .001; two-tailed t-tests.

**Table 3** Logistic Regression Hazard Models of the Time to first Sex within an Intimate Relationship (Coefficients, Standard Errors in Parentheses) (n = 8,172 person-weeks in 2,103 intimate relationships, Relationship Dynamics and Social Life study)

	Bivariate	Attitudes Toward Childbearing			Preferences for Childbearing		
		1	2	3	4	5	6
<b>Attitudes toward Childbearing</b>							
Motherhood is most fulfilling thing	.21 ** (.09)	.25 ** (.08)	.31 *** (.08)	.19 * (.08)			
Alright to be a single mother	.75 *** (.10)	.52 *** (.10)	.31 ** (.11)	.18 (.10)			
Children cause worry and emotional strain	-.05 (.10)	-.04 (.09)	-.06 (.09)	-.09 (.09)			
Having a baby improves the relationship	-.25 ** (.09)	-.19 * (.09)	-.22 * (.09)	-.15 (.08)			
<b>Preferences for Childbearing</b>							
Ideal family size	-.29 ** (.10)				-.10 (.09)	-.03 (.09)	-.01 (.07)
Ideal age at first birth	-.06 ** (.02)				-.04 (.02)	-.04 (.02)	-.01 (.02)
Any desire for pregnancy in upcoming month	.61 ** (.23)				-.03 (.32)	-.04 (.32)	-.05 (.31)
Weak desire to avoid pregnancy in upcoming month	.79 *** (.21)				.73 ** (.28)	.68 * (.28)	.59 * (.27)
<b>Relationship Duration</b>							
Duration	-.15 *** (.02)	-.14 *** (.02)	-.13 *** (.02)	-.10 *** (.02)	-.14 *** (.02)	-.13 *** (.02)	-.09 *** (.02)
Duration <sup>2</sup>	.002 *** (.0003)	.002 *** (.0003)	.001 *** (.0003)	.001 *** (.0003)	.002 *** (.0003)	.001 *** (.0003)	.001 *** (.0003)
<b>Attitudes toward Sex</b>							
Sex before marriage is wrong	.76 *** (.09)		.43 *** (.10)	.21 * (.10)		.47 *** (.10)	.23 * (.10)
Premarital sex is alright	-.62 *** (.09)		-.25 ** (.10)	-.15 (.09)		-.25 ** (.10)	-.15 (.09)
Should have sex with a long-term boyfriend	-.30 ** (.10)		-.25 ** (.10)	-.21 * (.09)		-.25 * (.10)	-.19 * (.09)
<b>Experiences with Sex</b>							
First sex before age 17	1.96 *** (.18)			.31 (.18)			.34 (.18)
Two or more sexual partners during adolescence	2.32 *** (.17)			.68 *** (.19)			.67 *** (.19)
Had sex without contraception during adolescence	1.87 *** (.18)			.31 (.17)			.26 (.17)
<b>Pregnancy/Birth History (ref = no pregnancy or birth)</b>							
Birth	1.97 *** (.33)			.40 (.26)			.50 (.26)
Pregnancy (no birth)	.88 ** (.32)			-.35 (.23)			-.33 (.23)
Cohabiting with a partner at baseline interview	1.17 ** (.38)			.11 (.27)			.10 (.27)
Never had sex before the current partner	-2.68 *** (.17)			-1.24 *** (.19)			-1.30 *** (.19)
<b>Individual Characteristics (time-invariant)</b>							
<b>Demographic Characteristics</b>							
Age	.31 *** (.06)	.29 *** (.06)	.26 *** (.06)	.14 * (.06)	.32 *** (.06)	.27 *** (.06)	.15 ** (.06)
African American	.36 (.21)	.25 (.21)	.29 (.20)	.06 (.18)	.29 (.21)	.36 (.20)	.11 (.18)
Highly religious	-.88 *** (.20)	-.67 *** (.19)	-.36 (.19)	-.24 (.16)	-.81 *** (.19)	-.41 * (.19)	-.25 (.16)
<b>Family Background</b>							
Mother had a teen birth	.84 *** (.21)	.46 * (.19)	.40 * (.18)	.05 (.16)	.43 * (.19)	.36 * (.18)	.03 (.16)
Mother didn't complete high school	.76 * (.38)	.48 (.33)	.50 (.32)	.52 (.27)	.46 (.33)	.51 (.32)	.54 (.28)
Grew up with one parent	.74 *** (.20)	.41 * (.18)	.36 * (.18)	.11 (.15)	.48 ** (.19)	.41 * (.18)	.14 (.15)
Received public assistance during childhood	.50 ** (.21)	.07 (.19)	.06 (.18)	.04 (.16)	.08 (.19)	.06 (.18)	.04 (.16)
Chi-Square		203.99	253.94	448.76	182.14	242.32	445.56
Log-likelihood		-2466	-2445	-2369	-2477	-2451	-2371
Pseudo R <sup>2</sup>		.04	.05	.08	.04	.05	.08

\* p < .05, \*\* p < .01, \*\*\* p < .001; two-tailed t-tests.

**Table 4** OLS Regression Models of Sexual Frequency/Regularity (n = 2,103 intimate relationships; Relationship Dynamics and Social Life Study)

	Bivariate	Attitudes Toward Childbearing			Preferences for Childbearing		
		1	2	3	4	5	6
<b>Attitudes toward Childbearing</b>							
Motherhood is most fulfilling thing	.04 *** (.01)	.06 *** (.01)	.06 *** (.01)	.03 *** (.01)			
Alright to be a single mother	.09 *** (.01)	.07 *** (.01)	.03 * (.01)	.01 (.01)			
Children cause worry and emotional strain	.02 (.01)	.02 * (.01)	.02 (.01)	.01 (.01)			
Having a baby improves the relationship	-.04 *** (.01)	-.04 *** (.01)	-.05 *** (.01)	-.03 ** (.01)			
<b>Preferences for Childbearing</b>							
Ideal family size	-.01 (.01)				-.01 (.01)	.00 (.01)	.00 (.01)
Ideal age at first birth	-.02 *** (.00)				-.02 *** (.00)	-.02 *** (.00)	-.01 *** (.00)
Any desire for pregnancy in upcoming month	.14 *** (.03)				-.02 (.04)	-.03 (.04)	-.04 (.04)
Weak desire to avoid pregnancy in upcoming month	.16 *** (.02)				.12 *** (.04)	.13 *** (.04)	.10 ** (.03)
<b>Attitudes toward Sex</b>							
Sex before marriage is wrong	-.08 *** (.01)		-.05 *** (.01)	-.02 (.01)		-.06 *** (.01)	-.02 * (.01)
Premarital sex is alright	.08 *** (.01)		.04 *** (.01)	.01 (.01)		.04 *** (.01)	.01 (.01)
Should have sex with a long-term boyfriend	.06 *** (.01)		.03 ** (.01)	.01 (.01)		.02 (.01)	.01 (.01)
<b>Experiences with Sex</b>							
First sex before age 17	.20 *** (.01)			.03 (.01)			.04 * (.01)
Two or more sexual partners during adolescence	.25 *** (.01)			.10 *** (.02)			.10 *** (.02)
Had sex without contraception during adolescence	.19 *** (.01)			.06 *** (.01)			.05 *** (.01)
Pregnancy/Birth History (ref = no pregnancy)							
Birth	.17 *** (.02)			.02 (.02)			.01 (.02)
Pregnancy (no birth)	.08 *** (.02)			-.04 * (.02)			-.05 ** (.02)
Cohabiting with a partner at baseline interview	.21 *** (.02)			.17 *** (.02)			.16 *** (.02)
Ever had sex before the current partner	-.32 *** (.01)			-.17 *** (.02)			-.18 *** (.02)
<b>Individual Characteristics (time-invariant)</b>							
Demographic Characteristics							
Age	.01 (.01)	.00 (.01)	.00 (.01)	-.02 *** (.01)	.01 (.01)	.00 (.01)	-.02 *** (.01)
African American	-.03 ** (.01)	-.07 *** (.02)	-.06 *** (.02)	-.08 *** (.01)	-.07 *** (.02)	-.05 *** (.02)	-.08 *** (.01)
Highly religious	-.06 *** (.01)	-.02 (.01)	.00 (.01)	.02 (.01)	-.04 ** (.01)	.00 (.01)	.02 (.01)
Family Background							
Mother had a teen birth	.05 *** (.01)	.06 *** (.01)	.06 *** (.01)	.02 (.01)	.04 ** (.01)	.03 * (.01)	.00 (.01)
Mother didn't complete high school	.00 (.03)	.00 (.02)	.01 (.02)	-.01 (.02)	-.02 (.02)	.00 (.02)	-.01 (.02)
Grew up with one parent	.07 *** (.01)	.07 *** (.01)	.07 *** (.01)	.04 ** (.01)	.08 *** (.01)	.07 *** (.01)	.04 *** (.01)
Received public assistance during childhood	.02 (.01)	-.01 (.01)	-.01 (.01)	-.02 (.01)	-.01 (.01)	-.01 (.01)	-.02 (.01)
R <sup>2</sup> (adjusted)		.09	.11	.30	.08	.12	.30

\* p &lt; .05, \*\* p &lt; .01, \*\*\* p &lt; .001; two-tailed t-tests.



**Appendix Table 1** Survey Questions used to Assess Sex Drive/Desire for Sex (n = xxx women who responded to a special supplement to the Relationship Dynamics and Social Life study, July/August 2011)

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1. Just thinking about having sex excites me.
  2. I daydream about sex.
  3. I look forward to having sex.
  4. I have a huge appetite for sex.
  5. I enjoy thinking about sex.
  6. I often desire sex.
  7. I want sex less than most people. (reverse-coded)
  8. I have a strong sex drive.
  9. I think my energy level for sex is too low. (reverse-coded)
  10. Once I am aroused, or turned on, it is extremely difficult to stop myself from having sex.
- 

Notes:

Response options for all questions were true or false.

Questions represent a subset from the Hurlbert Index of Sexual Desire. Some were modified by removing a reference to current partner. (See Hurlbert, 2010.)

Appendix Table 2 Correlation Matrix of Variables in Analyses (n = 2,103 intimate relationships)<sup>a</sup>

<b>Dependent Variables</b>	Time to first sex (in weeks)	Proportion of weeks with sex	<b>Attitudes toward Childbearing</b>				<b>Preferences for Childbearing</b>				<b>Attitudes toward Sex</b>				<b>Experiences with Sex</b>				<b>Individual Characteristics (time-invariant)</b>				<b>Relationship duration (in months)</b>				<b>Variables for Sensitivity Analyses</b>									
			Motherhood is the most fulfilling thing	Alright to be a single mother	Children cause worry and emotional strain	Having a baby improves the relationship	Ideal family size	Ideal age to have a baby	Desire for pregnancy	Desire to avoid pregnancy	Sex before marriage is wrong	Premarital sex is alright	Should have sex with a long-term boyfriend	First sex younger than age 17	Two or more sexual partners	Ever had sex without contraception	Pregnancy/Birth History	Pregnancy (no birth)	No pregnancy or birth	Cohabiting with a partner at baseline interview	Ever had sex with a prior partner	Age	African American	Highly religious	Family Background	Mother had a teen birth	Mother didn't graduate from high school	Grew up without two parents	Received public assistance during childhood	Sexual desire/drive	Willingness to refuse unwanted sex	Willingness to have sex without contraception	Sexual self-control			
<b>Dependent Variables</b>	1.00																																			
Time to first sex (in weeks)	1.00																																			
Proportion of weeks with sex	.75	1.00																																		
<b>Attitudes toward Childbearing</b>			1.00																																	
Motherhood is the most fulfilling thing	-.34	.17	1.00																																	
Alright to be a single mother	-.15	.17	.24	1.00																																
Children cause worry and emotional strain	-.35	.02	.40	.41	1.00																															
Having a baby improves the relationship	-.38	-.12	-.53	-.39	-.55	1.00																														
<b>Preferences for Childbearing</b>							1.00																													
Ideal family size	-.04	-.09	.15	-.13	-.01	-.04	1.00																													
Ideal age to have a baby	-.26	-.17	.15	.19	.41	-.37	-.06	1.00																												
Desire for pregnancy	.00	.08	.12	.09	-.18	.07	.09	-.37	1.00																											
Desire to avoid pregnancy	.22	.28	.11	.11	-.12	-.07	-.02	-.35	.73	1.00																										
<b>Attitudes toward Sex</b>										1.00																										
Sex before marriage is wrong	.00	-.14	-.07	-.63	-.17	.17	.11	-.07	-.15	-.19	1.00																									
Premarital sex is alright	.49	.13	-.68	-.09	-.53	.60	-.10	-.32	.06	.05	-.20	1.00																								
Should have sex with a long-term boyfriend	-.50	.12	-.67	-.25	-.60	.69	-.10	-.39	.11	.16	-.05	.82	1.00																							
<b>Experiences with Sex</b>													1.00																							
First sex younger than age 17	.46	.34	-.19	-.05	-.21	.15	-.03	-.16	.04	.20	-.09	.30	.29	1.00																						
Two or more sexual partners	.53	.40	-.14	.01	-.18	.14	-.07	-.08	.13	.26	-.17	.26	.29	.61	1.00																					
Ever had sex without contraception	.41	.41	-.14	-.04	-.18	.15	-.06	-.17	.20	.31	-.08	.28	.26	.48	.49	1.00																				
<b>Pregnancy/Birth History</b>																1.00																				
Pregnancy (no birth)	.21	.26	-.06	-.06	-.13	.06	.01	-.09	-.04	-.06	.01	.11	.11	.32	.22	.33	1.00																			
No pregnancy or birth	.19	.10	-.02	.01	-.07	.09	-.04	-.08	.22	.23	-.04	.10	.11	.17	.19	.22	-.12	1.00																		
Cohabiting with a partner at baseline interview	.31	.1	-.19	-.11	-.18	.19	-.03	-.11	.	.	.03	.21	.23	.24	.16	.22	.26	.10	1.00																	
Ever had sex with a prior partner	-.41	-.35	-.07	-.32	-.01	.12	.17	-.04	-.08	-.20	.45	-.26	-.28	-.60	-.81	-.61	-.22	-.28	1.00																	
<b>Individual Characteristics (time-invariant)</b>																																				
<b>Demographic Characteristics</b>																																				
Age	.05	-.03	.10	-.10	.01	.05	.00	-.06	-.03	-.07	.12	-.09	-.04	-.08	-.16	-.15	.19	-.11	.21																	
African American	.02	.15	-.04	-.05	-.10	.00	-.06	.03	-.12	.01	.07	.03	.07	.09	.15	.12	.11	.09	-.07	-.22																
Highly religious	-.09	-.01	.05	-.15	-.04	.00	.15	-.03	-.17	-.07	.22	-.13	-.05	-.06	-.06	-.04	.09	-.09	-.14	.13																
<b>Family Background</b>																																				
Mother had a teen birth	.17	.23	-.01	.01	-.12	.02	-.06	-.07	.03	.12	-.04	.10	.11	.17	.25	.16	.13	.05	.02	-.28																
Mother didn't graduate from high school	.06	.10	.00	.01	-.05	.03	-.14	-.05	-.05	.04	-.01	.07	.07	.08	.08	.11	.07	.03	.11	-.04																
Grew up without two parents	.11	.22	-.02	-.01	-.05	-.01	-.09	.06	-.09	-.01	.01	.09	.08	.16	.20	.21	.14	.09	.07	-.13																
Received public assistance during childhood	.11	.14	-.07	-.01	-.05	-.02	-.02	.00	-.07	-.03	.05	.04	.05	.17	.11	.22	.16	.01	.12	.00																
<b>Relationship duration (in months)</b>	.38	.32	-.32	-.18	-.30	-.33	.02	-.18	.01	-.01	.05	.37	.39	.23	.08	.14	.24	.03	.18	-.11																
<b>Variables for Sensitivity Analyses</b>																																				
Sexual desire/drive	.04	.08	-.06	.06	.05	.06	.05	-.07	.09	.10	-.09	.09	.04	.05	.04	.03	-.08	-.09	-.08	-.14																
Willingness to refuse unwanted sex	.45	.06	-.62	-.29	-.60	.58	.00	-.30	-.07	-.04	.07	.69	.73	.27	.22	.18	.12	.06	.21	-.07																
Willingness to have sex without contraception	.30	.12	-.28	-.06	-.30	.35	.01	-.26	.21	.19	-.10	.45	.43	.21	.18	.24	.00	.10	.11	-.17																
Sexual self-control	-.10	.00	.09	.07	.20	-.25	.01	.24	-.18	-.14	-.12	-.18	-.25	-.09	-.09	-.15	-.01	-.09	-.05	.06																

Note: Correlations in bold are statistically different from zero, p < .05.

a Proportion of time spent in an intimate relationship varies at the individual level, not the relationship level; thus, it is not included in this table.

**Appendix Table 3** Description of the Intimate Relationships of Women with an Ongoing Sexual Relationship when the Study Began, who reported no additional partners (n = 256)

	Mean	SD	Min.	Max.
<b>Characteristics of the Relationships</b>				
Age at onset (in years)				
Duration (in months) <sup>a</sup>	20.85	1.87	.50	103.27
Ongoing at the end of the study	.87		0	1
Coresidential at the beginning of the study	.34		0	1
Sexual frequency/regularity during the study	.69	.29	.00	1.00
<b>Characteristics of the Women</b>				
First sex before age 17	.75		0	1
Two or more sexual partners during adolescence	.75		0	1
Ever had sex without contraception	.68		0	1

<sup>a</sup>25th percentile: 6.46; median: 4.27; 75<sup>th</sup> percentile: 32.87