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What a (Young) Woman Wants: Concurrent Effects of Desire to Avoid Pregnancy and Desire for Sex on Sexual Intercourse and Contraceptive Use

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ABSTRACT Of all pregnancies among young women in the United States, more than 60% are undesired, yet explanations for this phenomenon remain elusive. While research has investigated how pregnancy desires and intentions shape pregnancy-related behavior, only recently have scholars noted that desire for sex influences these same behaviors. Many young women simultaneously experience strong desires for sex alongside a strong desire to avoid pregnancy, but few studies have considered the extent to which young women adapt their reproductive behaviors in response to these potentially competing desires. Using novel weekly panel data, this analysis assesses how desires for sex may moderate the effect of the desire to avoid pregnancy on a young woman's sexual behavior and contraceptive use. Findings suggest that when a woman strongly wants to avoid pregnancy, she is less likely to have sex and more likely to use hormonal or coital contraceptives. As her desire for sex increases, however, she is instead more likely to have sex and use hormonal contraceptives. If she does not use hormonal methods, she is less likely to use coital contraceptives when she has intercourse. These findings highlight the importance of recognizing the desire for sex as a behavioral modifier for avoiding undesired pregnancy in the transition to adulthood.

KEYWORDS Pregnancy desires • Desire for sex • Contraception • Transition to adulthood • Sex and sexuality

Introduction

Most pregnancies among young women in the United States are undesired, accounting for 76% of pregnancies for ages 15–19 and 59% of pregnancies for ages 20–24 (Finer and Zolna 2016).[1] Despite research to identify the mechanisms that put women at risk of undesired pregnancy, including lack of access to preferred contraceptive methods (Burke et al. 2020; Field 2020), low contraceptive self-efficacy (England

[1] I use the terms "women," "woman," and "she" throughout this study to be consistent with the data source in the study, which recruited only women participants. I recognize, however, that this language ignores people who are capable of becoming pregnant and do not identify as a woman.

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et al. 2016), and perceived subfecundity (Gemmill 2018), this phenomenon persists. Recent work shows that most young women want to avoid pregnancy during the transition to adulthood (Barber et al. 2021; Weitzman et al. 2017) and prioritize educational and career advancement before childbearing (Arnett 2016; Hamilton and Armstrong 2009). However, focusing solely on pregnancy desires or intentions to predict reproductive outcomes ignores how women's lived experiences can conflict with pregnancy desires and alter behavior (Barber 2011).[2]

Less well-known are specific mechanisms that could modify a young woman's desire to avoid pregnancy, henceforth referred to as *pregnancy disinclination*, a desire they often maintain for extended periods during a highly dynamic phase of the life course (Arnett 2016; Fennell 2011). The behavioral enactment of pregnancy disinclination largely falls to women, whose partners often consider them the arbiters of both intercourse and contraception (Fennell 2011; Littlejohn 2013). One particular factor that may moderate the relationship between pregnancy disinclination and reproductive behaviors is a desire for sex, which intensifies throughout the transition to adulthood as sexual activity becomes increasingly socially accepted and as women enter new sexual relationships (Weitzman 2020). In contrast to the many studies of pregnancy desires, desire for sex has only recently been captured in demographic research (Weitzman 2020). However, the literature on sexuality studies argues that desire for sex results from interactions with the social environment (Levine 2003; Prekatsounaki et al. 2022), encompassing a young woman's perception of herself as a sexual person and her desire to enact this persona (Weitzman 2020), as well as hormonal development and sexual drive (Levine 2003; Udry 1988).

Qualitative research has implicitly shown how the effect of pregnancy disinclination on sexual behaviors may vary by a young woman's desire for sex (Mollborn 2017). Some young women respond to their desire for sex when they want to avoid pregnancy by obtaining and using contraceptive methods ahead of time, while others ignore the possibility of sex, instead saying sex "just happened" in the moment (Mollborn 2017). Contraceptive method choice also hinges on sexual reasoning, such as not inhibiting libido or interrupting sex (Higgins et al. 2020), reasons that could play a prominent role for women who more strongly want to have sex and also avoid pregnancy. Above all, though, conflicting social scripts that simultaneously encourage sexuality yet disapprove of and slut-shame women who embrace their sexuality remain pervasive and do not allow women to experience desire for sex in a respectable way (Armstrong et al. 2014; Tolman 2002; Tolman and McClelland 2011). Such scripts likely lead some young women to hide their desire, potentially reducing their self-efficacy and contributing to undesired pregnancies.

Demographers' reluctance to recognize desire for sex as a legitimate experience and possible behavioral modifier of one's pregnancy desires may also contribute to inaccurate explanations of undesired pregnancy. Few studies have investigated whether and how the relationship between pregnancy disinclination and reproductive behaviors is moderated by a desire for sex, largely because few demographic surveys measure this desire. Complicating matters further, most surveys capturing pregnancy

[2] I refer to pregnancy desires and undesired pregnancies instead of pregnancy intentions and unintended pregnancies to be consistent with the measures in the study, which ask women how much they *want* to avoid pregnancy.

desires are limited in their measurement, encompassing either cross-sectional data or data collected across wide time intervals, resulting in *retrospective* measures of pregnancy desires or disinclination (Field 2020; Harris and Udry 2018). Specifically regarding sex, contraceptive use, and pregnancy desires, respondents often recall their behaviors for several years preceding the interview (Barber et al. 2011; Schwarz and Sudman 1994), potentially leading to recall bias. Moreover, retrospective pregnancy intentions and desires are subject to *ex post* rationalization if a woman feels uncomfortable reporting a pregnancy that was undesired at conception (Casterline and El-Zeini 2007). Beyond recall bias, analysis of cross-sectional measures of attitudes and behaviors can lead to reverse causality between these factors. Together, measurement limitations and a myopic focus on pregnancy desires as a focal predictor of undesired pregnancy mask the important role of desire for sex in contributing to undesired pregnancy among young women.

In leveraging novel panel data with prospective measures of both pregnancy disinclination and desire for sex, this research seeks to uncover whether and how young women's desire for sex operates as a meaningful behavioral modifier between pregnancy desires and behaviors. Specifically, this study makes three noteworthy contributions. First, the analysis offers rare empirical plots of how pregnancy disinclination and desire for sex coevolve during the transition to adulthood. Second, it tests whether and how desire for sex modifies the effects of pregnancy disinclination on sexual and contraceptive behaviors, offering an explanation for inconsistent sexual and contraceptive behaviors even when women do not want to become pregnant. Moreover, this study adopts a stringent modeling approach with person fixed effects that enables an assessment of how behavior changes in response to the coevolution of pregnancy disinclination and desire for sex, net of all fixed characteristics of women, such as their childhood upbringing. By determining how a woman's pregnancy disinclination and desire for sex simultaneously affect her sexual activity and contraceptive use in real time, this work offers new insights for addressing undesired pregnancy during a critical life course phase.

Background

Dynamics of Pregnancy Disinclination and Desire for Sex

The transition to adulthood is filled with social environmental shifts, from graduating high school and leaving the natal home, to transitioning to higher education or the workforce, to interacting with new friends and romantic partners (Arnett 2016). In response to these changes, young adults develop their priorities and desires for the future, which may encompass educational and career attainment, romantic relationships, and family formation (Horne and Mollborn 2020). Situated in this dynamic life course phase, one important set of desires pertains to sex and pregnancy and how the two operate in tandem.

Desires for pregnancy are informed by myriad factors, including family and friend fertility (Allison 2016; Balbo and Barban 2014), race (Barber et al. 2021), family resources and educational attainment (Amato et al. 2008), and romantic relationship context (Barber et al. 2019; Weitzman et al. 2017), among others, which may leave

young women wanting a pregnancy or wanting to avoid pregnancy. At the same time, women's desire for sex may increase as they experience pervasive and encouraging sexuality norms from sexually active friends (Prinstein et al. 2003; Wade 2017), romantic partners who are interested in sex (Gomez et al. 2021; Impett and Peplau 2003), and their own sexual experiences, which also likely reinforce and increase their desire for further sexual activity (Olmstead 2020; Weitzman 2020). Because young women's social trajectories are in flux, over time their desires for sex and pregnancy may align or come into conflict in response to these shifting trajectories (Eilers and Weitzman 2019; Horne and Mollborn 2020).

Some women may prioritize romantic partnerships and family formation during the transition to adulthood, which could translate into desiring both sex and pregnancy. Young women with friends or relatives who became pregnant at young ages may desire a similar pregnancy timeline (Compernolle 2017; Weitzman et al. 2017), perhaps to fulfill a desired status as a mother or because they see fewer social and financial barriers to early parenthood (Edin and Kefalas 2005; Gomez et al. 2021). These women may additionally long for a committed relationship, seek romantic partners who prioritize childbearing, or crave intimacy with their romantic partner (Impett and Peplau 2003; Schachner and Shaver 2004), leading to increased desire for sex (Weitzman 2020). Indeed, women often select romantic partners with similar demographic characteristics and attitudes toward sex and pregnancy, reflecting a form of homophily that reinforces their own desires (Goodreau et al. 2009). For other young women, however, desire for sex may occur alongside a desire to *avoid* pregnancy.

For young women who prioritize education and career before a serious romantic relationship (Amato et al. 2008; Hamilton and Armstrong 2009), having a romantic partner, and even more so a pregnancy, could upend their self-development (Hamilton and Armstrong 2009). Young women may want to avoid pregnancy in order to achieve other goals and avoid potential negative sanctioning of an undesired pregnancy or abortion. At the same time, desire for sex is notably common on college campuses and beyond, as young adults enter a dominant hookup culture in which available partners are similarly averse to pregnancy (Goodreau et al. 2009; Olmstead et al. 2019; Wade 2017). This, coupled with media narratives suggesting that successful young women have it all, including access to sexual relationships (Prinstein et al. 2003), may lead individuals to desire sex despite wanting to avoid pregnancy.

Although studies have considered how fertility intentions and pregnancy desires predict sexual and contraceptive behaviors (Higgins 2017; Moreau et al. 2013), less is known about whether desire for sex moderates the effect of pregnancy disinclination on reproductive behaviors or vice versa. Assessing these desires together is important to illustrate how young women concurrently navigate multiple, potentially competing desires that may affect their pregnancy-related behaviors in sometimes contradictory ways.

Behavioral Implications of Pregnancy Disinclination and Desire for Sex

Individuals often profess contradictory attitudes and behaviors, which is commonly captured in studies of undesired pregnancy, abortion seeking among professed

pro-life individuals, and premarital virginity loss among people opposed to premarital sex (Bearman and Brückner 2001; Vaisey 2009). This is especially likely during the transition to adulthood, when young people navigate new and complex social environments that may contradict their childhood experiences and value systems. As young women encounter their own desires toward sexuality and pregnancy, or what they *want* to happen, they may rely on their affective associations with these desires to make decisions about their sexual and reproductive health.

Affect is a measure of positive or negative feelings attached to a particular concept or stimulus (Lawler 2001; Slovic et al. 2007), and affective responses vary based on how individuals experience scenarios in their social environment (Lizardo 2017). For example, a young woman who has a negative sexual experience may develop a negative association with sex. Likewise, students may form negative affect toward early pregnancy if a young, pregnant student is ostracized in their school (Mollborn 2017). To the contrary, positive media portrayals of sexuality or friends' recollections of enjoyable sexual experiences may create positive affective associations with sex.

If a young woman strongly wants to *avoid* pregnancy, her best insurance against it is to abstain from sex. Alternatively, she can employ contraceptives, either a longer-acting method that requires planning and use before sexual activity but less coital-specific maintenance, or a coital method, such as condoms and withdrawal, which offer protection from pregnancy when she has sex (Hatcher et al. 2011). Negative affect toward pregnancy may motivate her to obtain contraceptives once she becomes sexually active until she feels ready to become pregnant. Indeed, the average woman becomes sexually active around age 17 and has her first child around age 27, suggesting that women avoid first birth for about a decade (Mathews and Hamilton 2016).

At the same time, desire for sex has important behavioral implications. A young woman who wants to avoid pregnancy and desires sex may feel motivated to use hormonal contraceptives, protecting herself from unwanted pregnancy while allowing herself to not worry about contraceptives in the moment (Higgins et al. 2020; Weitzman 2020). Women who are especially keen to avoid pregnancy and repeated exposure to side effects that can result from starting and stopping a method between partners may instead choose to continuously use hormonal methods, regardless of their current level of sexual activity. Other women who feel strong desire for sex may instead rely on coital methods, perhaps because they dislike hormonal methods or lack the health care access necessary to obtain them (Jackson et al. 2016; Littlejohn 2013). For these women, their affective responses to desires for sex may shape their contraceptive behaviors because they must decide to use contraception in a short time frame. Qualitative research suggests that young women who do not plan for intercourse often describe it as just happening, resulting in unprotected sex (Mollborn 2017; Wade 2017). Moreover, women may underestimate their fecundity or practice wishful thinking and not expect a pregnancy to result from unprotected sex (Gemmill 2018).

While the behavioral implications of pregnancy disinclination and desire for sex each considered on their own are clear, what happens when these two desires are strongly felt in tandem? To decide whether to have sex or use contraception, young women may rely on affective associations with each desire, based on repeated

exposure to them (Lawler 2001; Slovic et al. 2007). Individuals often prioritize the desire that feels more salient, defined as the more important factor when facing a decision between two distinct identities or choices, rather than prioritizing a longer term goal, such as avoiding pregnancy (Kahneman 2011; Slovic et al. 2007). In the case of pregnancy disinclination and desiring sex, several scenarios may arise. A young woman's strong aversion to pregnancy may suppress her desire for sex as she prioritizes avoiding pregnancy. Alternatively, she may be more influenced by her desire for sex, which could lead to a pleasurable outcome in the moment, and less so by her commitment to avoid pregnancy, which is more abstract, especially since the risk of pregnancy is low each time she has sex (Foster et al. 2012; Slovic et al. 2007). Regarding contraception, she may use hormonal methods to satisfy both her pregnancy disinclination and her desire for sex, requiring less planning at intercourse but also requiring health care access and the ability to cover prescription costs, and leading to potentially unwanted changes to her body (Field 2020; Littlejohn 2012). If she does not use a hormonal method, whether she uses coital contraceptives at intercourse may instead be trumped by her desire for sex, potentially reducing her likelihood of using any contraceptive (Kahneman 2011; Slovic et al. 2007).

Study Context

To understand how pregnancy disinclination and desire for sex coevolve, this study goes beyond prior research by relying on prospective measures of both desires and related behaviors that are updated weekly. Other surveys of pregnancy attitudes and behaviors often rely on cross-sectional interviews or collect measures of a woman's sexual frequency and contraceptive use over longer periods of time, either in the past year, during her lifetime, or at last reported penile–vaginal intercourse (Harris and Udry 2018; National Center for Health Statistics 2020).

This study instead harnesses repeated, prospective measures of women's desires and sexual and contraceptive behaviors, addressing concerns of recall bias and reverse causality. Moreover, it includes continuous measures of pregnancy disinclination and desire for sex, capturing the complexity of women's experiences with desires and sexual and contraceptive behaviors, and using more nuanced measures of pregnancy disinclination than those used in the National Survey of Family Growth or the Demographic and Health Surveys (Aiken et al. 2015; Huber et al. 2017; Weitzman et al. 2017). Finally, while pregnancy desires are commonly collected, desire for sex is largely absent from these large-scale surveys, limiting our understanding of its role in predicting sexual and contraceptive behaviors.

The Relationship Dynamics and Social Life (RDSL) study (Barber, Kusunoki, and Gatny 2016)—a weekly panel data set collected among a population-representative sample of women ages 18–22—is the first to demonstrate the dynamic coevolution of pregnancy disinclination and desire for sex and show how both simultaneously contribute to subsequent behavior, as well as to show whether and how desire for sex modifies pregnancy disinclination's influence on sexual and contraceptive behaviors and vice versa. The data also offer a wide breadth of time-varying measures of relationship context. RDSL participants were randomly selected from the Michigan Drivers' License and Personal Identification Card Database and were invited to join

the study between 2008 and 2009. Young women aged 18 or 19 who were residents of Genesee County at baseline were eligible to participate.[3,4,5]

While not nationally representative, the RDSL sample is similar to nationally representative samples in the same age-group by childhood family structure, educational attainment, and employment (Clark 2018; Ela and Budnick 2017). Beyond this, Michigan has comparable rates of cohabitation and marriage, nonmarital and teen childbearing, and mean age at first birth as the United States (Lesthaeghe and Neidert 2006). However, two important differences exist between this sample and nationally representative samples: Hispanic women are half as represented and Black women are twice as represented in the RDSL (Clark 2018).

At baseline, participants completed a 50-minute, in-person survey about their childhood social environment, sociodemographic background, perceived norms and attitudes, and prior sexual behavior, contraceptive use, and pregnancies. Following the survey, participants were invited to complete weekly surveys (called "journals"), online or by telephone, for up to 2.5 years. In the weekly journals, women reported sexual activity and contraceptive use, and their desire to avoid pregnancy, relationship status, and pregnancy status. Every 12 weeks, they indicated their desire for sex. More than 75% of participants continued participating for at least 1.5 years, completing journals on average every eight days (Barber, Kusunoki, Gatny et al. 2016).[6] A randomized experiment conducted alongside the RDSL provided little indication that repeatedly answering attitudinal and behavioral questions about sex influenced women's ideation or behavior (Barber, Kusunoki, Gatny et al. 2016).

Data and Methods

Sample

Given this study's focus on whether the relationship between pregnancy disinclination and sexual and contraceptive behaviors varies by a woman's desire for sex, I limit all analyses to women in the RDSL who completed at least three journals and to weeks in which women were not pregnant.[7] As a result, I exclude 78 weeks from 61 women who completed fewer than three journals, and exclude 2,765 weeks from

[3] Eighty-eight women turned 20 by the time they enrolled in the study; as a result, some participants were at least 22 years old toward the end of the study.

[4] Women temporarily residing outside the county for school or work were also eligible.

[5] The RDSL had an overall response rate of 84%; the response rate was 94% for women who were successfully located (Barber, Kusunoki, and Gatny 2016).

[6] However, attrition differed by race and education: Black women and women who had not attended college, respectively, completed 11 and 12 fewer journals, on average, than did White respondents and respondents who had at least some college education.

[7] The analytic sample includes heterosexual, bisexual, and lesbian/queer women because sexual orientation was identified only in a supplemental survey ($n=529$) conducted midway through data collection and that excluded women who had already completed the study. Refitting models with heterosexual- or bisexual-identifying women from the supplemental survey showed substantively similar results in terms of magnitude, direction, and significance.

238 women who were pregnant. This results in a final sample of 54,872 weeks from 924 women.[8] Women's time-varying demographic characteristics are shown in Table 1.

Outcome Measures

Intercourse was assessed weekly and is defined as having vaginal intercourse ("when a man puts his penis in a woman's vagina").[9]

Hormonal contraceptive use was assessed weekly by asking women whether they used oral contraceptive pills, vaginal rings (i.e., Nuvaring), injectable contraceptives, transdermal patches, implants, or IUDs that week, regardless of sexual activity. I coded hormonal contraceptive use as 1 when a woman reported using any of these methods and as 0 otherwise.

Coital contraceptive use was assessed weekly by asking women who reported sex that week whether they used male condoms, female condoms, spermicide, the female sponge, or withdrawal.[10] I coded coital contraceptive use as 1 when a woman reported using any of these methods in sexually active weeks in which she did not use hormonal methods and as 0 otherwise.

Independent Variable Measures

To measure *pregnancy disinclination*, every week women were asked "How much do you want to avoid getting pregnant in the next month?" Possible responses ranged from "do not want to avoid at all" (0) to "really want to avoid" (5).

To measure *desire for sex*, every 12 weeks women were asked "How much do you want to have sex in the next year?" Possible responses ranged from "not at all" (0) to "extremely" (5). Although desire for sex was assessed with respect to a wide time horizon, prior research indicates that it captures elements of women's sexual appetite, reflecting desire for sex in a more immediate sense, as well as ideationally, capturing young women's enjoyment at the prospect of being a sexual person (Graham et al. 2006; Levine 2003; Weitzman 2020).[11]

[8] Women who did not meet the inclusion criteria were removed from the sample using listwise deletion. Missing data are rare in the RDSL and I find little evidence that women were systematically missing information (the same women did not repeatedly skip the same question week to week, nor did they typically skip multiple questions in the same week).

[9] The RDSL did not collect information about oral or anal sex.

[10] I exclude emergency contraception (Plan B) because this method is used after sex and does not necessarily involve one's partner. Though it could be a woman's preferred method, it is more frequently used following unsafe sex (Daniels et al. 2013). Women reported Plan B use in just 1.5% of sexually active weeks.

[11] To confirm that desire for sex does not merely reflect anticipation of sex, I refit all models with a measure of anticipating sex instead of desire for sex. Findings suggest that anticipating sex more strongly predicts intercourse and hormonal use than does desire for sex, and it positively predicts coital use, an effect in the opposite direction as desire for sex (findings available upon request).

Table 1 Time-varying descriptive statistics for 924 women, Relationship Dynamics and Social Life study

Variable	Mean/%	SD
Sex and Contraceptive Use		
Had penile–vaginal intercourse	33	
Used hormonal contraceptives	33	
Used coital contraceptives (if had sex and did not use a hormonal method)	73	
Pregnancy Disinclination and Desire for Sex		
Desire to avoid pregnancy in the next month (range, 0–5)	4.77	0.87
Desire for sex in the next year (range, 0–5)	2.77	1.80
Relationship Context and Partner Characteristics		
Relationship status		
No relationship or casual sexual relationship	45	
Special romantic relationship, engaged, or married	55	
Mean relationship duration (years)	0.96	1.46
Perceived partner desire to avoid pregnancy in the next month (range, 0–5)	4.65	1.09
Couple fought this week	14	
Partner perpetrated verbal IPV this week	5	
Partner threatened violence this week	1	
Partner perpetrated physical IPV this week	1	
Relationship decision-making		
Respondent primarily decides	3	
Partner primarily decides	2	
Couple decides together	95	
Partner education level		
Less than high school	11	
Graduated high school, no longer enrolled	34	
Enrolled or graduated from postsecondary	55	
Partner race: Black (ref. = White or other race)	27	
Partner age	22.41	3.69
Demographic Characteristics and Birth Control Attitudes		
Education level		
Less than high school	7	
Graduated high school, no longer enrolled	20	
Enrolled or graduated from postsecondary	73	
Perceived parental approval of sex (range, 0–5)	1.84	1.35
Perceived friends' approval of sex (range, 0–5)	2.89	1.31
Perceived proportion of sexually active friends (range, 0–4)	3.10	1.13
Birth control interferes with sexual enjoyment	9	
Birth control makes respondent feel sick	26	
Sexual Experience, Parity, and Age		
Experienced sexual debut	75	
Parity	0.15	0.42
Age	20.30	0.93

Notes: N = 54,872 weeks. IPV = intimate partner violence.

Relationship Characteristics

Multivariable models control for 11 time-varying measures of romantic relationships, including relationship status, duration, partner characteristics, and relationship context.

Relationship status was updated weekly in the RDSL by asking respondents a series of questions about whether they were married or engaged; if not, whether they

were in a "special" romantic relationship; and if not, whether they were in a casual sexual relationship, for example, "any type of relationship [that is not engaged or special] that involves physical or emotional contact." To account for heterogeneous effects across relationship status on sexual and contraceptive behaviors, I create a dichotomous indicator of whether women were in a special romantic relationship, engaged, or married (1) or in a casual sexual relationship or no relationship that week (0) (Kusunoki and Barber 2020).[12]

Relationship duration was updated weekly by asking respondents how long they had been with their current partner at baseline if they had a partner and whether they had begun a new partnership or were still with the same partner each week. Time in that relationship was cumulated in days and restarted at zero when a new partner was mentioned. Because coital use often declines over time in relationships, whereas hormonal use increases, relationship duration is included as both a linear and a quadratic term in all models (Kusunoki and Barber 2020).

Partner characteristics were specified by asking respondents about their partner's pregnancy disinclination, education level, age (in years), and race (Black or White/other).

Relationship context was assessed via five measures, all specified weekly when respondents reported a partner, and reflects relationship power dynamics, imbalances of which can lead to increased sexual activity and inconsistent contraceptive use (Barber et al. 2018).[13] *Relationship decision-making* was measured by asking respondents "Who decides what to do or where to go when you go out? Would you say you do, [partner] does, or do you both decide?" *Fighting* was assessed by asking respondents whether they fought with their partner that week. *IPV victimization* was measured by asking respondents three questions: Did your partner "swear at you, call you names, insult you, or treat you disrespectfully?"; "threaten you with violence?"; or "push you, hit you, or throw something at you that could hurt?"

Demographic Characteristics

All models control for six time-varying demographic characteristics shown to be associated with women's pregnancy disinclination, desire for sex, and behaviors (Tillman et al. 2019).[14] All measures were reassessed every 12 weeks.

Educational attainment was defined as less than high school; high school graduate, not enrolled in postsecondary; and enrolled in or graduated from postsecondary. *Family context* was captured with a measure of perceived parental approval of sex by

[12] Casual sexual relationship and no relationship are combined into one category because the RDSL assessed sexual activity only in weeks when women reported having contact with someone with whom they could be sexually involved. If they indicated they had not met anyone with whom they may be intimate, they were not asked about intercourse that week. Therefore, isolating women in the "no relationship" category would perfectly predict no sexual activity and cannot be used to estimate sex when treated as a stand-alone category. Modeling all relationship types as ordered categories leads to substantively similar conclusions (findings available upon request).

[13] Women not in relationships in a given week were coded to "no relationship" for relationship context measures and included in all models.

[14] Relationship and partner characteristics are all time-varying because I fit regression models with person fixed effects.

asking respondents "How would your parents react if you had sexual intercourse?" Potential responses ranged from "not at all positively" (0) to "extremely positively" (5). *Friend context* was operationalized with an identical measure of perceived approval of sex among friends and a measure of the perceived proportion of friends who were sexually active, each ranging from "none" (0) to "almost all" (4). *Attitudes toward birth control* were determined by asking respondents whether birth control interferes with sexual enjoyment and whether it makes respondents feel sick.

Sexual Experience, Parity, and Age

Sexual debut was measured at baseline, and for women who reported no sex, it was captured the first week she reported intercourse. *Parity* was measured at baseline and weekly thereafter. *Age and age squared* were mean-centered and updated weekly.

Analytic Strategy

This analysis addresses two questions: First, how closely do women's desires to avoid pregnancy align with their desires for sex during the transition to adulthood? Second, does desire for sex moderate the effect of pregnancy disinclination on sexual behavior, particularly sexual intercourse and hormonal and coital contraceptive use? To answer the first question, I assess how the average pregnancy disinclination and desire for sex vary during the transition to adulthood using a kernel-weighted local polynomial smoothing plot (Stata command *lowess*) (Cox 2005). I then determine the Pearson's linear correlation between pregnancy disinclination and desire for sex (Stata command *correlate*).

Then, to capture the behavioral implications of pregnancy disinclination and desire for sex on a woman's subsequent probability of sexual intercourse, hormonal contraceptive use, and coital contraceptive use in a given week, I fit a series of linear regressions with person fixed effects (Stata command *xtreg, fe*), also called linear probability models. I opt for linear regressions instead of logistic regressions for binary outcomes to retain all women in the models.[15] Logistic regression models with person fixed effects include only those who vary on the outcome measure, omitting women who never or always report the outcome (Allison 2009).[16] This approach may bias the effects of pregnancy disinclination and desire for sex because it omits women who never have intercourse or never use contraceptive methods, which could be informed by their desires.[17] For contraceptive use, I fit linear regressions with

[15] This approach is also advantageous because the expected probabilities fall within a range in which the linear function compares to a logistic function.

[16] There are 13,807 weeks from 225 women whose reports of sex do not vary; 20,085 weeks from 382 women whose reports do not vary on hormonal use; and 3,758 weeks from 382 women with unvaried coital use in sexually active weeks with no hormonal contraceptive use.

[17] Limitations to linear probability models are (1) the true relationship between the predictors and a binary outcome is not linear and (2) linear models with person fixed effects include all respondents, even those whose outcome reports do not vary over time (i.e., a homogeneous outcome). To estimate the effects for everyone, the models produce marginal estimates that average a zero value for women with a homogeneous outcome with the coefficient of women whose response changes over time, a heterogeneous

person fixed effects separately for hormonal and coital methods because hormonal use requires advanced planning and access to health care whereas coital methods do not (Field 2020). For all models, I limit the sample to women who completed three or more surveys and to survey weeks in which women were not pregnant. For hormonal methods, I include all eligible weeks, regardless of sexual activity, and control for intercourse the week prior because women are more likely to use hormonal methods when they have recently been sexually active.[18] For coital methods, I limit the sample to weeks in which women were sexually active and not using a hormonal method.

For all three outcomes, I first fit an additive model with pregnancy disinclination and desire for sex. This is followed by a second model with an interaction term to determine whether desire for sex moderates the relationship between pregnancy disinclination and intercourse or contraceptive use and vice versa.[19] I then transform the results of the interaction models into predicted probabilities with all covariates held at their mean.

I rely on regressions with person fixed effects to show how an average young woman's behaviors vary as a function of her evolving pregnancy disinclination and desire for sex, net of her evolving social environmental contexts.[20] This approach also enables me to account for all time-invariant demographic factors that contribute to a woman's desires or behaviors, including respondent race, religiosity, and maternal education.[21,22] Whereas the first question describes women's desires in the aggregate, the results of regressions with person fixed effects yield *within*-woman estimates. I therefore discuss coefficients of time-varying characteristics in terms of an average woman rather than across women.

Results

Dynamics of Pregnancy Disinclination and Desire for Sex

To illustrate how women's pregnancy disinclination and desire for sex coevolve throughout the transition to adulthood, Figure 1 shows a kernel-weighted local

outcome (Beck 2020; Deke 2014). Given this concern, I reestimate the marginal effects of all behavioral models for women with heterogeneous outcomes. These models reveal similar results in terms of direction and magnitude (findings available upon request).

[18] Including all survey weeks regardless of sexual activity may downwardly bias the estimate of hormonal use. To check for this, I reestimate models predicting hormonal use in sexually active weeks. I find a similar relationship between pregnancy disinclination, desire for sex, and hormonal use. As expected, in sexually active weeks, predicted probabilities of hormonal use are slightly higher at all levels of pregnancy disinclination and desire for sex (findings available upon request).

[19] I also conducted a multilevel mediation analysis (user-written Stata command *ml_mediation*) to see whether desire for sex mediated the effect of pregnancy disinclination on intercourse and contraceptive use (Krull and MacKinnon 2001). Results suggest that little mediation occurs (findings available upon request).

[20] In addition to predicting sex and contraceptive use, I find minimal evidence that pregnancy disinclination and desire for sex affect one another. Stronger desire for sex predicts slightly lower pregnancy disinclination, but pregnancy disinclination is not associated with subsequent desire for sex.

[21] While religiosity may vary over time, the RDSL captures religiosity only at baseline and therefore is perfectly collinear with the person fixed effects in the models.

[22] Postestimation Hausman tests indicate that this approach is better suited to these data than are models with random effects (Allison 2009).

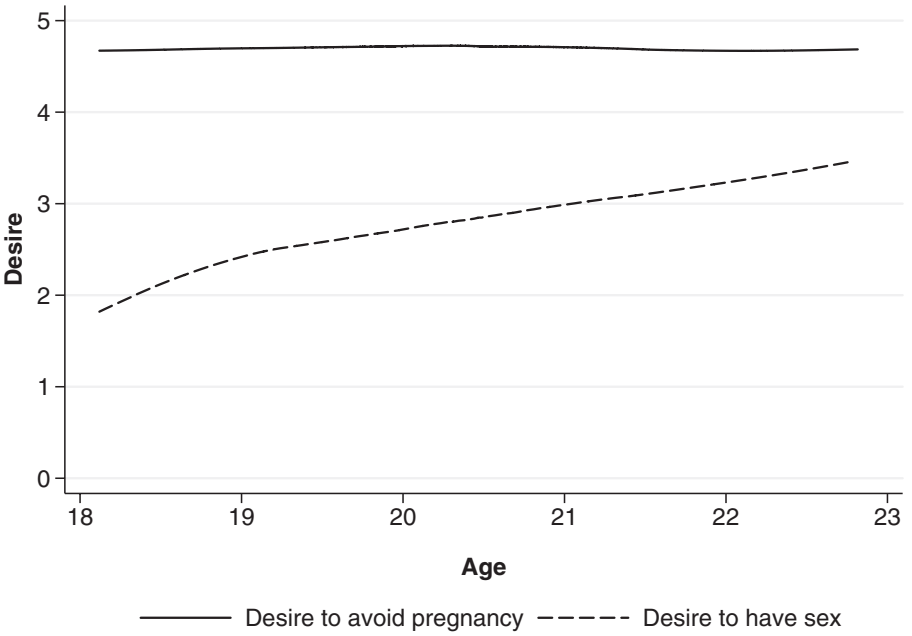

Fig. 1 Desire to avoid pregnancy in the next month and desire for sex in the next year, by age (in years)

polynomial smoothed graph by age. Pregnancy disinclination follows a highly stable pattern between ages 18 and 22, with women reporting an average of 4.75 on a 0–5 scale. In contrast, young women's desire for sex notably increases, from 1.8 out of five at age 18 to 3.4 by age 22.5, almost doubling in this short time frame. Moreover, pregnancy disinclination and desire for sex are poorly correlated, with a correlation coefficient of −0.06 (findings available upon request). These two desires are thus not well aligned in the transition to adulthood.

Behavioral Effects of Pregnancy Disinclination and Desire for Sex

Turning to behavioral effects, I assess the simultaneous effects of pregnancy disinclination and desire for sex on sexual intercourse, hormonal contraceptive use, and coital contraceptive use in Table 2, using standardized measures of pregnancy disinclination and desire for sex to make them comparable in terms of standard deviations from the mean. First, considering whether a woman reports intercourse in a given week, Model 1 shows that each standard deviation increase in a young woman's pregnancy disinclination is associated with a 1% decline in her probability of having sex. Meanwhile, the relationship between desire for sex and intercourse operates in the opposite direction and at more than twice the magnitude, with a 3% increased probability of having sex with each standard deviation increase in desire for sex.

I next consider whether desire for sex moderates the relationship between pregnancy disinclination and intercourse and vice versa. Model 2 does not indicate moderation; instead, as desire for sex increases, the probability of sex increases at all

Table 2 Multivariable linear regression with fixed effects predicting sexual intercourse and hormonal and coital contraceptive use, with standardized predictors of desire to avoid pregnancy and desire for sex

	Had Sex This Week		Used Hormonal Method		If Had Sex Used Coital Method	
	(1)	(2)	(3)	(4)	(5)	(6)
Desire to Avoid Pregnancy[a]	−0.01***	−0.01***	0.02***	0.02***	0.05***	0.04***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)
Desire for Sex in the Next Year[a]	0.03***	0.03***	0.02***	0.01***	−0.03***	−0.02***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.01)	(0.01)
Desire to Avoid Pregnancy × Desire for Sex	—	0.003	—	0.01***	—	0.01***
		(0.002)		(0.002)		(0.003)
Constant	1.01	1.02	−5.36***	−5.28***	0.14	0.23
	(0.63)	(0.63)	(0.57)	(0.57)	(1.70)	(1.70)
Number of Observations	54,872	54,872	54,069	54,069	9,345	9,345
Number of Respondents	924	924	923	923	636	636

Notes: Models control for all time-varying and time-invariant demographic background and social environmental characteristics. Models predicting coital contraceptive use include women who were not using a hormonal contraceptive method. Standard errors are shown in parentheses.

[a] Measured on a scale of 0–5 in increasing desire and standardized to make coefficients comparable in terms of standard deviations.

***$p < .001$ (two-tailed tests)

levels of pregnancy disinclination. To better illustrate this relationship, I plot the marginal effects of this model to show predicted probabilities of intercourse in Figure 2 (left panel). This graph suggests that at low pregnancy disinclination, a woman with low desire for sex has a 33% probability of intercourse, yet as her desire for sex increases, her probability increases by 9 percentage points up to 42%. At high pregnancy disinclination, a woman with no desire for sex has a 28% probability of intercourse, which increases to 37% if she strongly desires sex.

The next set of models considers the effect of pregnancy disinclination and desire for sex on hormonal contraceptive use (Table 2). For an average young woman, each standard deviation increase in disclination and desire for sex increases her probability of hormonal use by 2%, controlling for all demographic and social environmental characteristics.

Turning to whether desire for sex moderates the relationship between pregnancy disinclination and hormonal use and vice versa, Model 4 indeed shows that desire for sex conditions the effect of pregnancy disinclination on hormonal use, as shown by the significant and positive interaction coefficient. Predicted probabilities in Figure 2 (middle panel) reveal that a woman with no desire for sex has a 30% probability of hormonal use, regardless of how much she wants to avoid pregnancy. However, hormonal use becomes increasingly diffuse with stronger desire for sex. For a woman reporting low pregnancy disinclination (bottom line) yet strong desire for sex, her

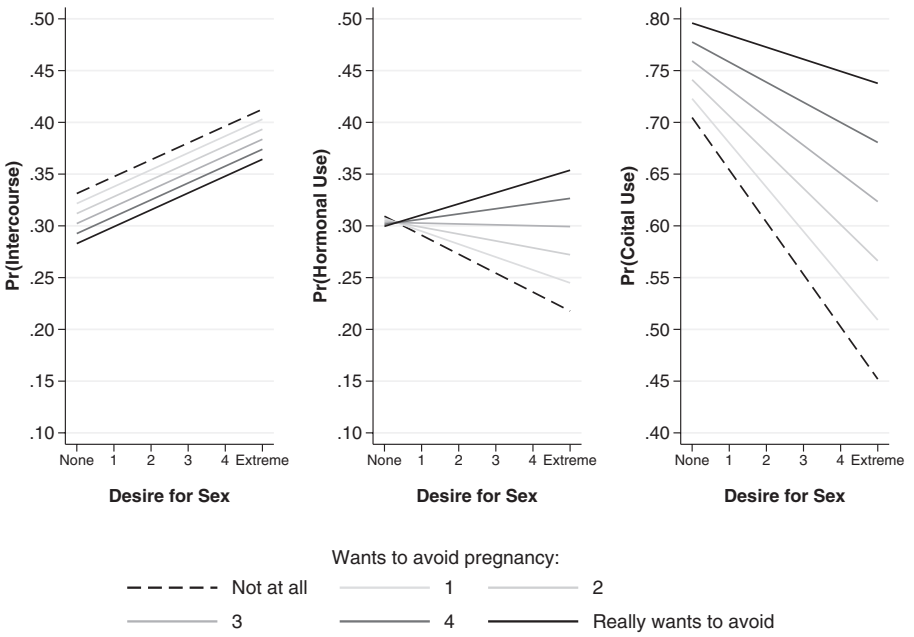

Fig. 2 Predicted probabilities of sexual intercourse, hormonal contraceptive use, and coital contraceptive use, by desire to avoid pregnancy and desire for sex. Note different scales on the *y*-axes.

likelihood of hormonal use falls to 22%. The opposite happens for a woman with strong pregnancy disinclination (top line): her stronger desire for sex increases her probability of hormonal use by 5 percentage points, to 35% if she really wants to avoid pregnancy, compared with a woman with strong disinclination and no desire for sex.

The last set of models assesses the role of pregnancy disinclination and desire for sex on coital contraceptive use, among women who reported intercourse that week but did not use a hormonal method (Table 2). Model 5 shows that pregnancy disinclination positively predicts coital contraceptive use, with a 5% higher probability of coital use. Desire for sex, however, has an opposite effect on coital use and at half the magnitude, in which each standard deviation increase in desire for sex is associated with a 3% decline in using a coital method.

In considering whether the strong relationship between pregnancy disinclination and coital contraceptive use varies by one's desire for sex and vice versa, Model 6 shows that pregnancy disinclination is in fact modified by a woman's desire for sex. Predicted probabilities suggest that the stronger a woman's pregnancy disinclination, the more likely overall she is to use a coital method (Figure 2, right panel). However, her probability of coital use declines as her desire for sex increases. For a woman who most wants to avoid pregnancy, if she has low desire for sex, she has an 80% probability of using coital methods when she has sex. This falls to 74% when she reports extreme desire for sex. Stated differently, a woman has a 26% probability of using no contraceptives any week she has intercourse, does not use a hormonal method, and both really wants to avoid pregnancy and desires sex.

To tie these findings together, pregnancy disinclination reduces the probability of intercourse while desire for sex increases this probability, yet the effect of disinclination on sexual activity does not vary by a woman's desire for sex or vice versa. To the contrary, a woman's desire for sex importantly moderates the role of pregnancy disinclination on both her hormonal and coital contraceptive use. Regarding hormonal use, a distinct pattern emerges: both pregnancy disinclination and desire for sex positively predict hormonal use, and stronger desire for sex is associated with diffuse effects on hormonal use across the spectrum of pregnancy disinclination. For a woman with low disinclination, higher desire for sex reduces the likelihood she will use a hormonal method, but with high disinclination, stronger desire for sex increases her probability of hormonal use. Finally, for a woman not using hormonal contraceptives at intercourse, the effect of pregnancy disinclination on coital contraceptive use also varies by her desire for sex. Although disinclination positively predicts coital use at intercourse, desire for sex has the opposite effect, and at each level of disinclination, her probability of coital use declines the more strongly she desires sex. A woman experiencing the strongest pregnancy disinclination and desire for sex has a 26% probability of using no contraceptive method in weeks she follows through on her desire for sex.

Supplementary Analyses

To assess the robustness of these results, I reestimate the behavioral models using random effects instead of fixed effects (online appendix Table A1). Because the effects of pregnancy disinclination and desire for sex likely occur both within-woman over time, as shown in the models with person fixed effects, as well as between women, refitting all models with random effects offers a test of the preferred modeling approach. If coefficients with random effects were much different than in fixed-effects models, this would suggest important unmeasured, time-invariant confounding that is captured by the fixed effects. Instead, these models show a similar patterning of intercourse, hormonal use, and coital use, confirming that the bulk of the effects occur within-woman over time and supporting the use of person fixed effects in the main analysis (Table A1).

Further, to verify the decision to model all women with person fixed effects rather than limiting to women who vary on the outcome over time, as required by logistic regressions with person fixed effects, I refit each model with linear regressions limited to women with heterogeneous outcomes (online appendix Table A2 and Figure A1). This exercise reveals similar effects across outcomes in terms of direction, magnitude, and significance, with two exceptions. First, among women with heterogeneous outcomes, desire for sex acts as a moderator between pregnancy disinclination and intercourse and vice versa (Figure A1). Second, limiting to women with heterogeneous outcomes results in higher probabilities of sex and hormonal use and lower probabilities of coital use. These models likely omit women who never report sex or hormonal use because of their strong disinclination or low desire for sex, as well as women who always use coital methods. Also, because time-invariant demographic characteristics such as race may shape a woman's desires, I reestimate all behavioral models separately for Black women (Table A3)

and White women (Table A4).[23] Results suggest similar effects of pregnancy disinclination and desire for sex in terms of direction, magnitude, and significance, though desire for sex moderates the relationship between pregnancy disinclination and contraceptive use only for White women. Finally, women and their partners make decisions about sex and contraceptive use jointly, which I account for by estimating multinomial logistic regressions predicting sex and contraceptive type together (Table A5). To more easily interpret the results, I refit the model five times, varying the baseline category. Compared with reporting no sex (top panel), higher pregnancy disinclination increases women's likelihood of sex with hormonal or coital methods, whereas stronger desire for sex increases the likelihood of sex with or without contraceptives. Stated differently, women's higher disinclination consistently predicts abstinence or sex with contraceptives (second panel). However, with stronger desire for sex, women are less likely to abstain or have sex with a coital contraceptive method than with no method, and their probability of hormonal or dual use is indistinguishable from using no method.

Discussion and Conclusion

Sexual activity is a central component of the transition to adulthood as young people concurrently navigate consequential decisions about educational attainment, career aspirations, and potential romantic partnerships (Arnett 2016; Olmstead 2020). Young women overwhelmingly and persistently want to avoid pregnancy, enabling them to focus on other important life aspirations (Arnett 2016; Hamilton and Armstrong 2009). Figure 1 shows that women also feel increasing desire for sex during this period, approaching the intensity with which they want to avoid pregnancy, as they enjoy positive sexual experiences, form romantic partnerships, and enact a sexually desiring and desirable persona. This figure and the Pearson's correlation coefficient between these desires also demonstrate that a young woman's desire for sex is not tempered by strong pregnancy disinclination. Women do not necessarily consider disinclination in conjunction with desire for sex, possibly because pregnancy disinclination is a long-term goal that is cognitively difficult to prioritize each time a woman contemplates intercourse or contraceptive use (Kahneman 2011).

Results from the behavioral models echo these patterns as well. For sexual intercourse, a young woman's pregnancy disinclination reduces her probability of sex in a given week, yet her desire for sex has the opposite effect at three times the magnitude, increasing her probability of intercourse across all levels of disinclination.[24] While no moderation occurs, these patterns illustrate the uniform salience of desire for sex on

[23] More than 97% of the sample is composed of White and Black women, thus allowing comparisons only between these women. Black and White women represent 25% and 72% of the sample, respectively.

[24] Strong pregnancy disinclination may preclude women from entering a romantic relationship, while desire for sex increases this probability. To assess this possibility, I fit ordinal logistic regressions with person fixed effects comparing the relative odds of entering a romantic relationship, engagement, or marriage, compared to no or a casual relationship. Results suggest that higher pregnancy disinclination reduces the probability of entering a relationship, engagement, or marriage by 1.5%, while stronger desire for sex increases the probability by 3% (findings available upon request).

intercourse. However, the assessment of pregnancy disinclination and desire for sex together reveals a bifurcation in the contraceptive practices that result.

Two distinct but illustrative patterns emerge in models predicting contraceptive use. For hormonal methods, stronger pregnancy disinclination and desire for sex both increase a woman's likelihood of hormonal use. In this case, both desires provide behavioral "insurance" and so a woman preemptively protects herself from pregnancy should she have sex. She may have positive affect toward sex in conjunction with negative affect about pregnancy, both of which motivate her to use hormonal methods (Kahneman 2011; Lawler 2001). To the contrary, desire for sex plays a diminishing role on coital use for a woman not using hormonal methods. These findings map onto prior qualitative research on how young women manage their sexual activity in the context of sexual norms, in which two groups of women emerge: those who are extra cautious to avoid pregnancy, relying on hormonal methods that must be deployed at regular intervals, and those for whom desire for sex interrupts any contraceptive use and leaves them particularly at risk for undesired pregnancy (Mollborn 2017). At the time of intercourse, a young woman's desire for sex may feel more salient than does her desire to avoid pregnancy, in which case she may not negotiate coital method use with her partner (Kahneman 2011; Lawler 2001).

This study is not without limitations. First, the RDSL collected data on desire for sex every 12 weeks but updated its measures of pregnancy disinclination, sexual intercourse, and contraceptive use each week. Hence, short-term variations in desire for sex are masked and it is difficult to illustrate whether desire for sex changes in response to behavior. Second, this study omits the important role of avoiding sexually transmitted infections (STIs) in sexual and contraceptive decision-making. Though recent studies indicate low emphasis on STI prevention in young people's sexual and contraceptive behaviors (Bearak 2014; Wade 2017), direct attitudinal measures of STI prevention could isolate its role on sexual behaviors in a population-based sample.[25] Third, these analyses lack men's perspectives, even though they are also involved in decisions to have penile–vaginal intercourse or to use contraceptives and sometimes shape women's desires regarding sex and pregnancy (Barber et al. 2019). The absence of men's perspectives precludes a comparison of the independent and moderating effects of desires, leaving open important questions about whether these processes vary for men and women as well as the interplay between partners' desires. Fourth, fitting models with person fixed effects removes the ability to compare behavioral outcomes across demographic characteristics that affect desires, such as respondent religiosity, which was measured only at baseline. Future research should explore the effect of religiosity over time on women's desires and behaviors. Finally, this research is generalizable only to women aged 18–22, a pivotal life course phase for sexual development, yet it is unable to elucidate patterns among younger or older women who may have distinct desires and behaviors. Future research should incorporate men's and older and younger women's perspectives to improve our understanding of how desire for sex shapes sexual and contraceptive behaviors.

[25] STI risk was assessed in the RDSL by asking "If you were to have unprotected sexual intercourse with someone you just met, what do you think are the chances that you would get HIV or AIDS?" This variable did not change the overall model results in terms of direction, magnitude, or significance (findings available upon request).

Given that desire for sex is an important behavioral indicator of sexual activity and contraceptive use, and also modifies women's pregnancy disinclination, women's desire for sex offers a mechanism to understand why pregnancy desires often inconsistently predict undesired pregnancy. Building on recent work showing that women's pregnancy disinclination is consistently high for both White and Black women (Barber et al. 2021), this study finds that desire for sex increases the probability of sex at all levels of disinclination and acts as a behavioral modifier on pregnancy disinclination and contraceptive use. Although strong desire for sex increases women's hormonal use, women expressing the strongest disinclination and desire for sex report using hormonal methods in just one third of study weeks. Further, women are less likely to use a coital method at intercourse the more they desire sex and want to avoid pregnancy, meaning they use no method. Despite women's generally high level of pregnancy disinclination, these findings could be signaling a general dissatisfaction with hormonal and coital methods, and intense desire for sex may facilitate a young woman's willingness to forgo contraceptives altogether. This reveals important opportunities for future research and clinical practice.

This study highlights the importance of measuring desires about both sexual intercourse and pregnancy when considering sexual and contraceptive behaviors in demographic research. To date, most research on pregnancy desires focuses on pregnancy as the primary outcome of interest and women's fertility desires as a good predictor of pregnancy (Barber 2011; Barber et al. 2021; Miller 1994; Santelli et al. 2009). However, this approach misses the more proximal role of desire for sex in deciding whether to have sex while avoiding pregnancy. Considering these findings together confirms the central role of young women's desire for sex in shaping sexual and contraceptive behaviors and suggests that women most likely do not directly associate pregnancy with each time they want to have sex (Weitzman 2020).

In the clinical setting, women's desire for sex is often ignored in sexual and reproductive counseling. Women may forgo hormonal methods to avoid side effects or because of medical mistrust (Jackson et al. 2016; Jones et al. 2015), and women not using hormonal methods may additionally oppose coital-specific methods if they impede pleasure and intimacy during intercourse (Higgins et al. 2020; Littlejohn 2013). For these women, discussing the importance of desire for sex and sexuality preferences regarding contraceptive choice could help them better enact their pregnancy preferences and find an appropriate method. This could include more nuanced counseling in which providers acknowledge resistance to hormonal methods yet highlight the pregnancy risks associated with contraceptive nonuse. Ultimately, recognizing the powerful effects of desire for sex in women's sexual and reproductive decision-making will empower women to enact their sexual and reproductive desires in the way that best suits their needs. ■

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References

Aiken, A. R. A., Dillaway, C., & Mevs-Korff, N. (2015). A blessing I can't afford: Factors underlying the paradox of happiness about unintended pregnancy. *Social Science & Medicine, 132,* 149–155.

Allison, P. D. (2009). *Quantitative applications in the social sciences: Vol. 160. Fixed effects regression models*. Thousand Oaks, CA: Sage Publications. https://doi.org/10.4135/9781412993869

Allison, R. (2016). Family influences on hooking up and dating among emerging adults. *Sexuality & Culture, 20,* 446–463.

Amato, P. R., Landale, N. S., Havasevich-Brooks, T. C., Booth, A., Eggebeen, D. J., Schoen, R., & McHale, S. M. (2008). Precursors of young women's family formation pathways. *Journal of Marriage and Family, 70,* 1271–1286.

Armstrong, E. A., Hamilton, L. T., Armstrong, E. M., & Seeley, J. L. (2014). "Good girls": Gender, social class, and slut discourse on campus. *Social Psychology Quarterly, 77,* 100–122.

Arnett, J. J. (Ed.). (2016). *The Oxford handbook of emerging adulthood*. New York, NY: Oxford University Press.

Balbo, N., & Barban, N. (2014). Does fertility behavior spread among friends? *American Sociological Review, 79,* 412–431.

Barber, J. S. (2011). The theory of planned behaviour: Considering drives, proximity and dynamics. *Vienna Yearbook of Population Research, 9,* 31–35.

Barber, J. S., Guzzo, K. B., Budnick, J., Kusunoki, Y., Hayford, S. R., & Miller, W. (2021). Black–White differences in pregnancy desire during the transition to adulthood. *Demography, 58,* 603–630. https://doi.org/10.1215/00703370-8993840

Barber, J. S., Kusunoki, Y., & Gatny, H. H. (2011). Design and implementation of an online weekly journal to study unintended pregnancies. *Vienna Yearbook of Population Research, 9,* 327–334.

Barber, J. S., Kusunoki, Y., & Gatny, H. H. (2016). R*elationship Dynamics and Social Life (RDSL) study [Genesee County, Michigan], 2008–2012* (Version 5) [Public and highly restricted-use data set]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research. https://doi.org/10.3886/ICPSR34626.V5

Barber, J. S., Kusunoki, Y., Gatny, H. H., & Budnick, J. (2018). The dynamics of intimate partner violence and the risk of pregnancy during the transition to adulthood. *American Sociological Review, 83,* 1020–1047.

Barber, J. S., Kusunoki, Y., Gatny, H., & Schulz, P. (2016). Participation in an intensive longitudinal study with weekly web surveys over 2.5 years. *Journal of Medical Internet Research, 18,* e105. https://doi.org/10.2196/jmir.5422

Barber, J. S., Miller, W., Kusunoki, Y., Hayford, S. R., & Guzzo, K. B. (2019). Intimate relationship dynamics and changing desire for pregnancy among young women. *Perspectives on Sexual and Reproductive Health, 51,* 143–152. https://doi.org/10.1363/psrh.12119

Bearak, J. M. (2014). Casual contraception in casual sex: Life-cycle change in undergraduates' sexual behavior in hookups. *Social Forces, 93,* 483–513.

Bearman, P. S., & Brückner, H. (2001). Promising the future: Virginity pledges and first intercourse. *American Journal of Sociology, 106,* 859–912.

Beck, N. (2020). Estimating grouped data models with a binary-dependent variable and fixed effects via a logit versus a linear probability model: The impact of dropped units. *Political Analysis, 28,* 139–145.

Burke, K. L., Potter, J. E., & White, K. (2020). Unsatisfied contraceptive preferences due to cost among women in the United States. *Contraception: X, 2,* 100032. https://doi.org/10.1016/j.conx.2020.100032

Casterline, J. B., & El-Zeini, L. O. (2007). The estimation of unwanted fertility. *Demography, 44,* 729–745.

Clark, A. (2018). The role of residential mobility in reproducing socioeconomic stratification during the transition to adulthood. *Demographic Research, 38,* 169–196. https://doi.org/10.4054/DemRes.2018.38.7

Compernolle, E. L. (2017). Disentangling perceived norms: Predictors of unintended pregnancy during the transition to adulthood. *Journal of Marriage and Family, 79,* 1076–1095.

Cox, N. J. (2005). Speaking Stata: Smoothing in various directions. *Stata Journal, 5,* 574–593.

Daniels, K., Jones, J., & Abma, J. (2013). *Use of emergency contraception among women aged 15–44: United States, 2006–2010* (NCHS Data Brief, No. 112). Hyattsville, MD: National Center for Health Statistics.

Deke, J. (2014). *Using the linear probability model to estimate impacts on binary outcomes in randomized controlled trials* (Evaluation Technical Assistance Brief, No. 6). Washington, DC: U.S. Department of Health & Human Services, Office of Adolescent Health. Retrieved from https://opa.hhs.gov/sites/default/files/2020-07/lpm-tabrief.pdf

Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley: University of California Press.

Eilers, M. A., & Weitzman, A. (2019, April). *Young women's sexual behavior and contraceptive use amidst conflicting beliefs and desires*. Paper presented at the annual meeting of the Population Association of America, Austin, TX.

Ela, E. J., & Budnick, J. (2017). Non-heterosexuality, relationships, and young women's contraceptive behavior. *Demography, 54,* 887–909.

England, P., Caudillo, M. L., Littlejohn, K., Bass, B. C., & Reed, J. (2016). Why do young, unmarried women who do not want to get pregnant contracept inconsistently? Mixed-method evidence for the role of efficacy. *Socius, 2*. https://doi.org/10.1177/2378023116629464

Fennell, J. L. (2011). Men bring condoms, women take pills: Men's and women's roles in contraceptive decision making. *Gender & Society, 25,* 496–521.

Field, E. (2020). Material hardship and contraceptive use during the transition to adulthood. *Demography, 57,* 2057–2084.

Finer, L. B., & Zolna, M. R. (2016). Declines in unintended pregnancy in the United States, 2008–2011. *New England Journal of Medicine, 374,* 843–852.

Foster, D. G., Higgins, J. A., Biggs, M. A., McCain, C., Holtby, S., & Brindis, C. D. (2012). Willingness to have unprotected sex. *Journal of Sex Research, 49,* 61–68.

Gemmill, A. (2018). Perceived subfecundity and contraceptive use among young adult U.S. women. *Perspectives on Sexual and Reproductive Health, 50,* 119–127. https://doi.org/10.1363/psrh.12072

Gomez, A. M., Arteaga, S., & Freihart, B. (2021). Structural inequity and pregnancy desires in emerging adulthood. *Archives of Sexual Behavior, 50,* 2447–2458.

Goodreau, S. M., Kitts, J. A., & Morris, M. (2009). Birds of a feather, or friend of a friend? Using exponential random graph models to investigate adolescent social networks. *Demography, 46,* 103–125.

Graham, C. A., Sanders, S. A., & Milhausen, R. R. (2006). The sexual excitation/sexual inhibition inventory for women: Psychometric properties. *Archives of Sexual Behavior, 35,* 397–409.

Hamilton, L., & Armstrong, E. A. (2009). Gendered sexuality in young adulthood: Double binds and flawed options. *Gender & Society, 23,* 589–616.

Harris, K. M., & Udry, J. R. (2018). *National Longitudinal Study of Adolescent to Adult Health (Add Health), 1994–2008 (Version 21)* [Public-use data set]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research. https://doi.org/10.3886/ICPSR21600.V21

Hatcher, R. A., Trussell, J., Nelson, A. L., Cates, W., Jr., & Kowal, D. (Eds.). (2011). *Contraceptive technology* (20th ed.). New York, NY: Ardent Media.

Higgins, J. A. (2017). Pregnancy ambivalence and long-acting reversible contraceptive (LARC) use among young adult women: A qualitative study. *Perspectives on Sexual and Reproductive Health, 49,* 149–156. https://doi.org/10.1363/psrh.12025

Higgins, J. A., Wright, K. Q., Turok, D. K., & Sanders, J. N. (2020). Beyond safety and efficacy: Sexuality-related priorities and their associations with contraceptive method selection. *Contraception: X, 2,* 100038. https://doi.org/10.1016/j.conx.2020.100038

Horne, C., & Mollborn, S. (2020). Norms: An integrated framework. *Annual Review of Sociology, 46,* 467–487.

Huber, S., Esber, A., Garver, S., Banda, V., & Norris, A. (2017). The relationship between ambivalent and indifferent pregnancy desires and contraceptive use among Malawian women. *International Perspectives on Sexual and Reproductive Health, 43,* 13–19. https://doi.org/10.1363/43e3417

Impett, E. A., & Peplau, L. A. (2003). Sexual compliance: Gender, motivational, and relationship perspectives. *Journal of Sex Research, 40,* 87–100.

Jackson, A. V., Karasek, D., Dehlendorf, C., & Foster, D. G. (2016). Racial and ethnic differences in women's preferences for features of contraceptive methods. *Contraception, 93,* 406–411.

Jones, R. K., Tapales, A., Lindberg, L. D., & Frost, J. (2015). Using longitudinal data to understand changes in consistent contraceptive use. *Perspectives on Sexual and Reproductive Health, 47,* 131–139. https://doi.org/10.1363/47e4615

Kahneman, D. (2011). *Thinking, fast and slow* (1st ed.). New York, NY: Farrar, Straus and Giroux.

Krull, J. L., & MacKinnon, D. P. (2001). Multilevel modeling of individual and group level mediated effects. *Multivariate Behavioral Research, 36,* 249–277.
Kusunoki, Y., & Barber, J. S. (2020). The dynamics of intimate relationships and contraceptive use during early emerging adulthood. *Demography, 57,* 2003–2034.
Lawler, E. J. (2001). An affect theory of social exchange. *American Journal of Sociology, 107,* 321–352.
Lesthaeghe, R. J., & Neidert, L. (2006). The second demographic transition in the United States: Exception or textbook example? *Population and Development Review, 32,* 669–698.
Levine, S. B. (2003). The nature of sexual desire: A clinician's perspective. *Archives of Sexual Behavior, 32,* 279–285.
Littlejohn, K. E. (2012). Hormonal contraceptive use and discontinuation because of dissatisfaction: Differences by race and education. *Demography, 4,* 1433–1452.
Littlejohn, K. E. (2013). "It's those pills that are ruining me": Gender and the social meanings of hormonal contraceptive side effects. *Gender & Society, 27,* 843–863.
Lizardo, O. (2017). Improving cultural analysis: Considering personal culture in its declarative and non-declarative modes. *American Sociological Review, 82,* 88–115.
Mathews, T. J., & Hamilton, B. E. (2016). *Mean age of mothers is on the rise: United States, 2000–2014* (NCHS Data Brief, No. 232). Hyattsville, MD: National Center for Health Statistics.
Miller, W. B. (1994). Childbearing motivations, desires, and intentions: A theoretical framework. *Genetic, Social, and General Psychology Monographs, 120,* 223–258.
Mollborn, S. (2017). *Mixed messages: Norms and social control around teen sex and pregnancy*. New York, NY: Oxford University Press.
Moreau, C., Hall, K. S., Trussell, J., & Barber, J. S. (2013). Effect of prospectively measured pregnancy intentions on the consistency of contraceptive use among young women in Michigan. *Human Reproduction, 28,* 642–650.
National Center for Health Statistics. (2020). *2017–2019 National Survey of Family Growth: Public-use data and documentation* [Data set]. Hyattsville, MD: National Center for Health Statistics. Retrieved from http://www.cdc.gov/nchs/nsfg/nsfg_2017_2019_puf.htm
Olmstead, S. B. (2020). A decade review of sex and partnering in adolescence and young adulthood. *Journal of Marriage and Family, 82,* 769–795.
Olmstead, S. B., Norona, J. C., & Anders, K. M. (2019). How do college experience and gender differentiate the enactment of hookup scripts among emerging adults? *Archives of Sexual Behavior, 48,* 1769–1783.
Prekatsounaki, S., Gijs, L., & Enzlin, P. (2022). Dyadic sexual desire in romantic relationships: The dyadic interactions affecting dyadic sexual desire model. *Archives of Sexual Behavior, 51,* 417–440.
Prinstein, M. J., Meade, C. S., & Cohen, G. L. (2003). Adolescent oral sex, peer popularity, and perceptions of best friends' sexual behavior. *Journal of Pediatric Psychology, 28,* 243–249.
Santelli, J. S., Lindberg, L. D., Orr, M. G., Finer, L. B., & Speizer, I. (2009). Toward a multidimensional measure of pregnancy intentions: Evidence from the United States. *Studies in Family Planning, 40,* 87–100.
Schachner, D. A., & Shaver, P. R. (2004). Attachment dimensions and sexual motives. *Personal Relationships, 11,* 179–195.
Schwarz, N., & Sudman, S. (Eds.). (1994). *Autobiographical memory and the validity of retrospective reports*. New York, NY: Springer-Verlag.
Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2007). The affect heuristic. *European Journal of Operational Research, 177,* 1333–1352.
Tillman, K. H., Brewster, K. L., & Holway, G. V. (2019). Sexual and romantic relationships in young adulthood. *Annual Review of Sociology, 45,* 133–153.
Tolman, D. L. (2002). *Dilemmas of desire: Teenage girls talk about sexuality*. Cambridge, MA: Harvard University Press.
Tolman, D. L., & McClelland, S. I. (2011). Normative sexuality development in adolescence: A decade in review, 2000–2009. *Journal of Research on Adolescence, 21,* 242–255.
Udry, J. R. (1988). Biological predispositions and social control in adolescent sexual behavior. *American Sociological Review, 53,* 709–722.
Vaisey, S. (2009). Motivation and justification: A dual-process model of culture in action. *American Journal of Sociology, 114,* 1675–1715.
Wade, L. (2017). *American hookup: The new culture of sex on campus*. New York, NY: W. W. Norton & Company.

Weitzman, A. (2020). The social production and salience of young women's desire for sex. *Social Forces, 98,* 1370–1401.
Weitzman, A., Barber, J. S., Kusunoki, Y., & England, P. (2017). Desire for and to avoid pregnancy during the transition to adulthood. *Journal of Marriage and Family, 79,* 1060–1075.

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