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Original Research Article

Intimate relationship dynamics and women's expected control over sex and contraception ☆

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ABSTRACT

Objective: We examined whether women's experiences across and within their intimate relationships affect their expected level of control over sex and contraceptive use.
Study design: We used data from 648 women ages 18–20 in the Relationship Dynamics and Social Life (RDSL) study, which interviewed a random, population-based sample in a Michigan county. We used ordered logistic regression with fixed-effects to control for individual- and relationship-level characteristics.
Results: We found a u-shaped relationship between intimacy/commitment and expected control, with the lowest expected control in the least intimate/committed *and* the most intimate/committed relationships, and the highest expected control in the intermediate relationships. Women expected more control in their long-term compared to short-term relationships, and expected control increases over time in a specific relationship. Women also expected less control in their conflictual and/or asymmetric relationships – those with older and/or violent partners, and expected control decreases after experiencing violence or a partner's non-monogamy.
Conclusions: Our results are consistent with cross-sectional research suggesting that women in violent relationships experience more reproductive coercion than women in non-violent relationships, but we also found that other aspects of intimate relationships are important determinants of expected control over sex and contraception.
Implications: Intervention strategies should consider a wider range of intimate relationship characteristics – beyond violence – to improve women's control of their reproductive behaviors.

1. Introduction

Reproductive coercion – interference with autonomous reproductive decision-making – is associated with increased risk of undesired pregnancy [1–3]. Most research on reproductive coercion is descriptive, cross-sectional, based on small samples, and/or on samples from clinics or domestic violence shelters [3–9]. Although the current body of literature on reproductive coercion contributes extensively to our understanding of how intimate partners can diminish women's reproductive control, past research has mainly focused on violence rather than a broad set of relationship characteristics, has been limited by non-random samples, and/or has been unable to disentangle the sequencing of intimate relationship experiences and reproductive coercion.

In this article, we examine young women's expected control over two proximate behavioral determinants of pregnancy – sex and contraception. We analyze how changes in multiple characteristics of intimate relationships lead to changes in expected control over sex and contraception. We use intensive longitudinal data – many interviews with the same women over time – to estimate fixed-effects models that compare a woman's expected control across her multiple relationships, or across time within a specific relationship.

Using the Traits-Desires-Intentions-Behavior (TDIB) framework (see Fig. 1), we conceptualize *control* as the ability to translate desires for something into the corresponding behaviors to achieve it [10]. Individuals translate (or not) the *desire* to avoid sex without contraception into an *intention*/decision to avoid sex without contraception, and then translate (or not) the *intention* into the *behavior* of actually avoiding sex without contraception. The framework explicates the internal regulators of this process,

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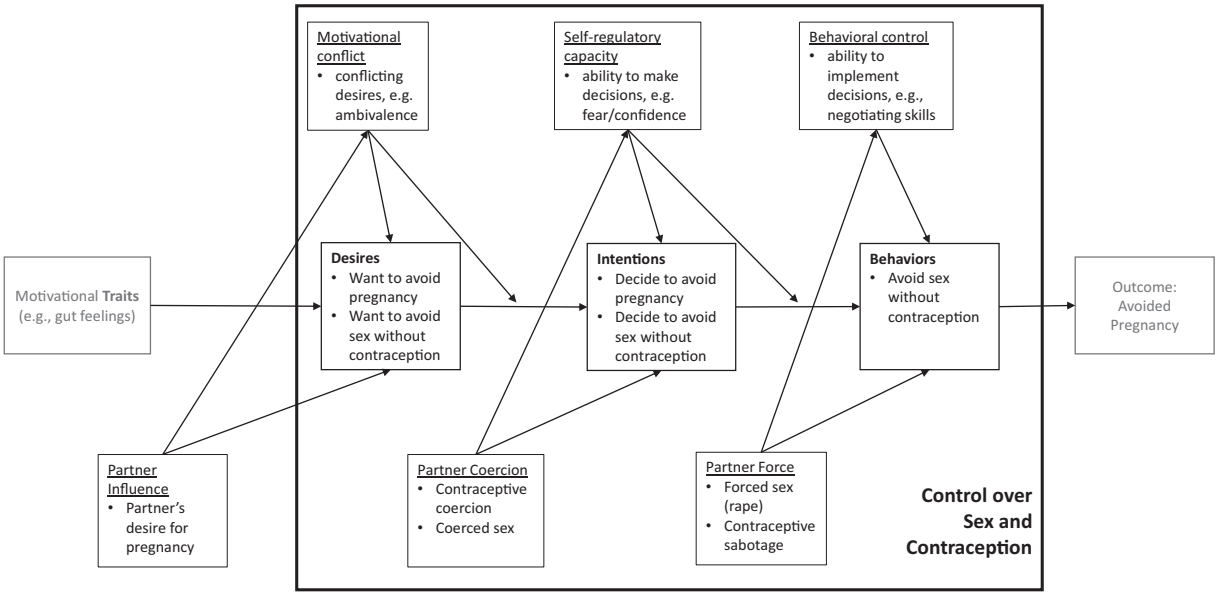

Fig. 1. The Traits-Desires-Intentions-Behavior (TDIB) Framework.

including motivational conflict (other desires that conflict with the focal desire, e.g., ambivalence), self-regulatory capacity (ability to make decisions, e.g., confidence [11]), and behavioral control (ability to implement decisions, e.g., negotiate condom use [12]).

We add partners to this framework, positing several junctures where they affect desires, intentions, and behaviors. First, although partners influence women's desires, for example by bargaining or compromising, this does not affect *whether women get what they want*. Second, partners can coerce women to agree to have sex and/or not use contraception – that is, influence their intentions/decisions regardless of their desires [13,14]. Finally, partners can force women to have unwanted sex (rape) or sabotage their contraceptive use. Of course, partners can also agree with women's desires and/or intentions, and can help women facilitate their desires and intentions via shared behaviors; partnerships are not necessarily conflictual.

Based on existing research, we consider two aspects of intimate relationships: (1) the level of intimacy (e.g., shared time, sex) and commitment (agreement to be monogamous) [15–19], and (2) the extent of conflict/asymmetry [16,19–21]. We have two contrasting hypotheses about intimacy and commitment. First, women in the least intimate and committed relationships – e.g., non-monogamous dating – may be least likely to *voluntarily allow* their partners to share control over their sex and contraception behaviors. If so, these women may expect a relatively high level of individual control. Further buttressing this hypothesis, desire to avoid pregnancy is likely strongest in the least intimate and committed relationships [16,22,23], which may reduce internal motivational conflict and increase self-regulation. Thus, we hypothesize that greater intimacy and commitment may be associated with *less* expected control over sex and contraception.

Second, on the other hand, partners who disagree about whether they want to delay or avoid pregnancy may remain less intimate and committed. Similarly, women may exit relationships with disagreeable, coercive, or forceful partners. Thus, relationships that endure and become serious – e.g., from casual or uncommitted dating to monogamous dating – may selectively include more agreement about sex and contraception, which may reduce coercion or force. Thus, we also hypothesize that greater intimacy and commitment, including increasing duration, may be associated with *more* expected control over sex and contraception.

Regardless of the level of intimacy and commitment, we expect that women in conflictual or asymmetric relationships, including those that are violent, will expect less control over sex and contraception. This is in part because, by definition, older, controlling, and/or violent men have a greater capacity to coerce or force behavior in general. Violent men also tend to want their partners pregnant [2] and they use reproductive coercion to implement that desire [2,24,25]. For example, women in violent relationships fear abuse if they request condom use [12,26,27]. A vast literature has demonstrated the association between intimate partner violence, reproductive coercion, and decreased contraceptive use (for recent systematic reviews, see [11,12,28,29]).

2. Methods

We use survey data from the Relationship Dynamics and Social Life (RDSL) study for a random, population-representative sample of 1003 young women ages 18–19, residing in a Michigan county [30,31] and selected from driver's license and personal identification card databases. Professional researchers from the University of Michigan's Survey Research Center conducted 60-minute face-to-face baseline survey interviews, at a time and location of each respondent's choosing, between March 2008 and July 2009. Women then participated in a 2.5-year follow-up study consisting of brief weekly online or telephone surveys. The follow-up study concluded in January 2012, and yielded 58,594 weekly interviews.

Every weekly survey measured intimate relationship characteristics, contraceptive use, and pregnancy. Additional measures assessed concepts likely to vary less frequently, such as the hypothetical questions about expected control over future reproductive behaviors used in this analysis. These additional measures were asked approximately every 14 weeks (about quarterly), beginning with week 8 or 9. Of the 992 women in the follow-up study, 829 (84%) answered these questions at least once.

The response rate for the baseline interview was 84%, 99% of baseline respondents entered the follow-up study, and 75% participated for at least 18 months [32].

The University of Michigan's Institutional Review Board approved the study. Women provided written informed consent to participate in the baseline interviews, assent for web-based

Table 1
Coding for measure of relationship type.

Relationship type	Based on these survey questions	
Married or engaged	"Are you currently married?" "Are you currently engaged to be married?"	
Cohabiting	"Do you have a place you live that is separate from where your partner lives?"	
Stayovers	"How many nights did you spend all night sleeping in the same bed as __?" (≥3 of the past 7 nights)	
	"Have you and ___ agreed to have a special romantic relationship with each other, and no one else?"	"Did you and ___ spend a lot of time together?"
Committed dating	Yes	Yes
Long-distance dating	Yes	No
Uncommitted dating	No	Yes
Casual	No	No

interviews, and oral consent for telephone interviews. The study mailed all sampled women a letter describing the study (regardless of participation) that included $5, and paid respondents $35 for the baseline interview, $5 each for the first four weekly interviews and $1 per week thereafter, and $5 bonuses for completing five weekly interviews in a row within the 14 day "on-time" response window.

We analyze expected control over sex and contraception among partnered women who *want* to use contraception, identified by a response of 3, 4, or 5 to the following survey question: "If you do have sexual intercourse in the next year, how much would you want to use some type of birth control?"[1] Women responded with 0 (not at all) through 5 (extremely). Thus, we analyze 2232 quarterly interviews with 648 women in 975 intimate relationships.

2.1. Dependent variable: Expected control over sex and contraception

Our dependent variable is based on two survey questions:

1. Willingness: Imagine being with a partner who wants to have sexual intercourse, and you want to have sex, but you have no birth control available. How willing would you be to have sex without any birth control? (0 = not at all; 5 = extremely)
2. 3 Expectation: What are the chances that you will have sexual intercourse without birth control during the next year? (0 through 100)

We coded both questions as low or high, based on the median, to situate a woman's response to these questions relative to her peers' responses.

We use an ordinal three-category variable that represents level of expected control among women who want to avoid sex without contraception: (1) *unwilling* to have sex without contraception and *do not expect* to do so (low willingness + low expectation = high control) (2) *unwilling* to have sex without birth control, but *expect to do so* anyway (low willingness + high expectation = medium control), and 3) want to use birth control, but *willing* to have sex without birth control (high willingness = low control; reference category).

3.1. Independent variables

3.1.1. Intimate relationship characteristics

Each week, RDSL ascertained whether each woman had a partner of any kind during the prior week. Respondents who had more than one partner during the prior week identified the most important or most serious, and discussed one partner in detail each week. Women identified multiple partners in only 1% of weeks [33].

Intimacy & commitment. Most research on intimate relationships uses the type of relationship (e.g., casual, dating, cohabiting) as a shorthand for differing levels of intimacy (i.e., shared living space, time spent together [15]) and commitment to monogamy [16–18]. Sexual intercourse is an additional indicator of intimacy [15,19]. We combined answers to multiple survey questions to create a weekly time-varying categorical measure of relationship type: married or engaged, cohabiting, "stayover" [34], committed dating, long-distance dating, uncommitted dating, and casual (sexual or non-sexual). See Table 1 for questions and coding.

Previous research also differentiates between short-term and long-term relationships [21,35]. In our models, time-varying relationship duration is the total weeks spent with the current partner, including time spent together before and after breakups, coded in exact years. We also include a squared term in the models.

Conflict & asymmetry. Consistent with previous research, we use five measures of conflict and asymmetry, which are inter-related [20,35]. Age difference between respondent and partner is coded in exact years (positive values signify an older partner) [15,21,35,36]. Four time-varying measures are coded 0 before they occurred in a relationship, and 1 after they occurred: churning (broke up and reconciled) [20,37], non-monogamous partner [17], partner-dominated decision-making (partner made decisions about going out) [19,21], and threats or physical assault (threatened with violence or pushed/hit or threw something) [19,21].

3.1.2. Intimate relationship control variables

We code a three-category variable to assess the couple's shared childbearing: (i) no pregnancy or birth (reference category), (ii) pregnancy but no birth, and (iii) birth. Two dichotomous variables – woman had a prior birth, partner had a prior birth – indicate pre-relationship history. We convert partner's education, which was reported categorically, to years as follows: 11th grade or less (11), 12th grade (12), 1–2 years of college (14), and 3 or more years of college (16).

3.1.3. Age

We code time-varying age in exact years at the time of each interview.

3.1.4. Time-invariant respondent characteristics

Although fixed-effects models cannot include these characteristics, random-effects models are in the Appendix. They include indicators of demographic characteristics, childhood socioeconomic disadvantage, and adolescent experiences with sex and pregnancy, all measured in the baseline interview. (See [2] for a description of these measures.)

3.2. Data analysis

First, we calculated the mean and standard deviation (continuous variables) or the proportion (dichotomous variables). Next, we

[1] The RDSL study frequently used the phrase "birth control" to refer to contraceptive use. We recognize this limitation.

used Stata SE v. 14.2 to estimate ordered logistic regression models (command *xtologit)*, because the dependent variable has three ordinal categories. Odds ratios represent the average multiplicative effect on the odds of being in the next higher category of expected control (high vs. medium or medium vs. low). The fixed-effects models estimate the average difference in the odds across one woman's different relationships (woman-level model) or across interviews within a relationship (relationship-level model). Because fixed-effects models estimate the association between the "exposure" and the outcome within clusters (i.e., women or relationships), they control for *all* confounders – even those that are unknown or difficult to measure – that are constant across the cluster.

4. Descriptive results

Table 2 shows that overall, women had moderate expectations for control over sex and contraception: low in 34% of interviews, medium in 16%, and high in 50%. The mean is 2.16 when low = 1, medium = 2, and high = 3.

Women spent little time in casual and uncommitted dating relationships and more time in serious and long-lasting (mean = 1.22years) relationships. (Note that some relationships were ongoing at the conclusion of the study.) Partners were on average 2.18years older. Twenty-six percent of the relationships included churning, 17% included partner non-monogamy, 12% included partner-dominated decision-making, and 12% included physical assault or threats.

5. Multivariate results (Table 3)

5.1. Intimacy & commitment

Overall, women expect less control in their more intimate and committed relationships than in their less intimate and committed relationships (model 1), and expected control decreases as relationships become more intimate/committed (model 2). However, as we show in Fig. 2 (a graph of the odds ratios for each category), the pattern is u-shaped: women expect the least control while they are engaged or married and the most control while they are dating (uncommitted, long-distance, or committed). They also expect less control in their casual relationships (but not as little as while cohabiting, engaged, or married).

Women expect more control in their longer-term compared to their shorter-term relationships (model 1), and as their relationships endure, expected control increases (model 2). The significant odds ratio for squared duration, however, indicates that when a relationship has endured a long time, expected control decreases (Table 3).

5.2. Conflict & asymmetry

Women expect significantly less control over sex and contraception in their relationships with older partners (model 1). Although women do not expect more control with their monogamous versus non-monogamous partners in general (model 1), expected control *decreases* after a partner is non-monogamous compared to before he was non-monogamous (model 2). And finally, women expect less control in their violent vs. non-violent relationships (model 1), and their expected level of control declines after experiencing violence in their relationship.

6. Discussion

We found that a broad range of intimate relationship characteristics shape young women's expectations for making autonomous decisions about their reproductive behavior. Consistent with both hypotheses about intimacy/commitment, we found a u-shaped relationship between intimacy/commitment and expected control over sex and contraception, with the lowest levels in the least intimate/committed *and* the most intimate/committed relationships, and higher levels in the intermediate dating relationships. Consistent with our hypothesis, net of relationship type, duration increases expected control. And consistent with our hypothesis about asymmetry and conflict, regardless of intimacy and commitment, women with older, non-monogamous, and/or violent partners expect less control over sex and contraception than women in more egalitarian, monogamous, non-violent relationships.

Our results are consistent with research showing that violence and reproductive coercion often go hand-in-hand [3,24,25], that conflict and asymmetry reduce effective contraceptive use [15,21,35,36], and that contraceptive use declines with increasing intimacy/commitment even among women who want to avoid pregnancy [15]. Our results extend these patterns to reveal that a broader set of intimate relationship characteristics – beyond violent versus non-violent – is likely to influence reproductive coercion. Consistent with some of the earliest work on reproductive coercion, showing that many women experience reproductive coercion even in the absence of physical or sexual violence [25], we provide more evidence that the absence of violence does not necessarily equate to high levels of expected control and that reproductive coercion can occur in subtle ways.

The RDSL dataset has several weaknesses, including limited generalizability beyond the county in Michigan, few Hispanic/Latina women, and use of the word "birth control" to refer to a wide range of contraceptive methods. Our specific analyses also have several limitations. For example, we do not explore whether women's expected reproductive control depends on their specific contraceptive method. We also do not explore how the effects of the intimate relationship context fit into the broader social context that determines women's expected control, or how control over sex and contraception fit into women's overall control of their lives.

Many interventions attempt to increase women's control over their sexual behavior and contraceptive use by focusing on intimate relationships. For example, ARCHES is an intervention to reduce intimate partner violence, reproductive coercion, and unintended pregnancy among family planning patients by providing education and resources to help women navigate unhealthy intimate relationships, recognize signs of reproductive coercion, and be safer in potentially harmful relationships, particularly as it relates to contraception [38]. Our analyses inform this and other similar interventions in two key ways.

First, our fixed-effects analyses support a causal interpretation of the link between intimate relationship characteristics and women's expectations about control over sex and contraception. Thus, it is likely that ARCHES and other interventions that are designed to increase knowledge about reproductive coercion and improve self-efficacy within intimate relationships can change women's control over their sexual behavior and contraceptive use. Contraceptive decision aids, such as Bedsider.org or MyBirthControlApp.org, might benefit from a more explicit assessment of experiences with reproductive coercion. MyBirthControlApp.org asks, 'How would other people who are important to you feel about you using <method> ?' and Bedsider.org ranks methods in terms of how easy they are to hide. However, given that the young women in RDSL who wanted to use contraception expected to or were willing to have sex without it, a more explicit question might be useful, focusing on what might block their ability to use the contraception they choose with the help of these aids. Further, anyone providing counseling about contraception should address how a partner (or potential partner) might influence

Table 2
Descriptive statistics for variables used in analyses (n = 2232 interviews with n = 648 women across n = 975 relationships).

	N = 2232 weekly interviews				N = 975 relationships				N = 648 women			
	Mean/%	SD	Min	Max	Mean/%	SD	Min	Max	Mean/%	SD	Min	Max
Expected Control over Sex and Contraception (among women who want to use contraception)												
Low: Willing to have sex without contraception	34%		0	1								
Medium: Unwilling to have sex without birth control, but expect to have sex without contraception	16%		0	1								
High: Unwilling to have sex without birth control, and don't expect to have sex without contraception	50%		0	1								
Expected Control over Sex and Contraception (low = 1, medium = 2, high = 3)	2.16	0.90	1	3								
Intimate Relationship Characteristics												
Level of Intimacy and Commitment												
Relationship Type												
Casual (non-sexual)	3%		0	1	7%		0	1				
Casual (sexual)	5%		0	1	11%		0	1				
Uncommitted dating (no agreement to be exclusive)	5%		0	1	11%		0	1				
Long-distance dating	18%		0	1	27%		0	1				
Committed dating (with agreement to be exclusive)	21%		0	1	29%		0	1				
Stayovers	13%		0	1	20%		0	1				
Cohabiting	17%		0	1	19%		0	1				
Engaged/Married	17%		0	1	17%		0	1				
Duration (in years)[a]					1.22	1.28	0.01	3.99				
Conflict & Asymmetry												
Age difference (in years, partner's age - respondent's age)	(does not vary within relationship)				2.18	3.60	−3.60	33.24				
Churning (broke up and reconciled)	22%		0	1	26%		0	1				
Non-monogamous partner	12%		0	1	17%		0	1				
Partner-dominated decision-making	12%		0	1	12%		0	1				
Threats or physical assault	12%		0	1	12%		0	1				
Intimate Relationship Control Variables												
Shared Childbearing with Partner												
No pregnancy or birth (reference)	90%		0	1	93%		0	1				
Shared pregnancy (but no birth)	3%		0	1	4%		0	1				
Shared Birth	7%		0	1	8%		0	1				
Woman had prior birth	(does not vary within relationship)				13%							
Partner had birth with a prior partner	(does not vary within relationship)				11%							
Partner's education (in years)	(does not vary within relationship)				12.45	1.11	10	14				
Age (in exact years)[b]	(does not vary within relationship)				(does not vary across relationships)				19.19	0.58	18.12	20.34
Time-Invariant Respondent Characteristics												
African American	(does not vary within relationship)				(does not vary across relationships)				30%		0	1
Highly religious	(does not vary within relationship)				(does not vary across relationships)				57%		0	1
Childhood disadvantage index (sum of grew up without two parents, mother had teen birth, mother had less than HS education, and received public assistance)	(does not vary within relationship)				(does not vary across relationships)				1.20	1.05	0	4
High school GPA	(does not vary within relationship)				(does not vary across relationships)				3.18		0	4.17
Receiving public assistance	(does not vary within relationship)				(does not vary across relationships)				23%		0	1
Age at first sex ≤16	(does not vary within relationship)				(does not vary across relationships)				51%		0	1
More than two sex partners	(does not vary within relationship)				(does not vary across relationships)				59%		0	1
Ever had sex without birth control	(does not vary within relationship)				(does not vary across relationships)				47%		0	1
Adolescent pregnancy	(does not vary within relationship)				(does not vary across relationships)				24%		0	1
Total Number of Weekly Surveys	(does not vary within relationship)				(does not vary across relationships)				72.71	38.12	9	165

[a] Although duration is time-varying in the models, we present total duration (at the end of the relationship or the end of the study period) in this table, for ease in interpretation.
[b] Although age is time-varying in the models, we present age at the baseline interview in this table, for ease in interpretation.

women's motivation or ability to use their chosen contraceptive method.

Second, the finding that even women in serious, long-term relationships that are not violent are at risk of reproductive coercion supports the need for universal interventions that consider a broad range of intimate relationship characteristics, in addition to whether they are violent, when considering how to increase young women's reproductive control. In 2011, the Institute of Medicine

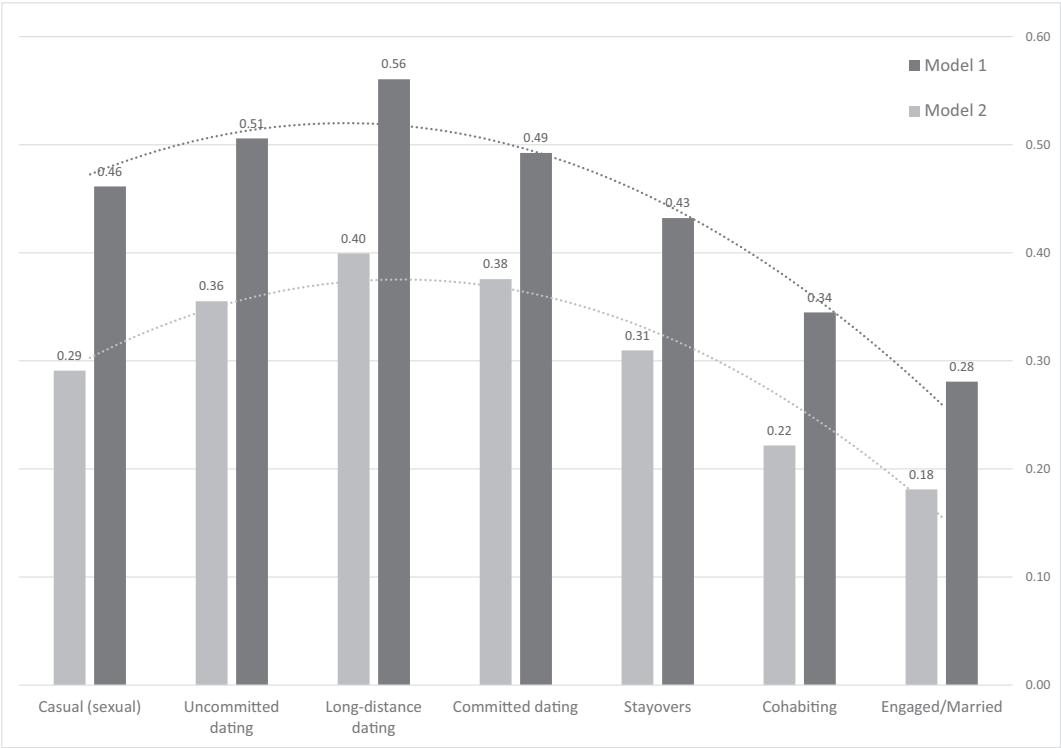

Fig. 2. The Traits-Desires-Intentions-Behavior (TDIB) Framework.

Table 3
Fixed-effects ordered logistic regression models of the effects of intimate relationship characteristics on expected control over sex and contraception.

	Model 1: Woman-Level Fixed Effects (compare across a women's different relationships)			**Model 2: Relationship-Level Fixed Effects** (compare across time within a relationship)		
	OR	*p*-value	95% CI	OR	*p*-value	95% CI
Intimate Relationship Characteristics						
Level of Intimacy & Commitment (ref = casual, non-sexual)						
Casual (sexual)	0.46	0.053	(0.21 - 1.01)	0.29	**0.004**	(0.12 - 0.68)
Uncommitted dating	0.51	0.075	(0.24 - 1.07)	0.36	**0.015**	(0.15 - 0.82)
Long-distance dating	0.56	0.102	(0.28 - 1.12)	0.40	**0.017**	(0.19 - 0.85)
Committed dating	0.49	**0.044**	(0.25 - 0.98)	0.38	**0.011**	(0.18 - 0.80)
Stayovers	0.43	**0.021**	(0.21 - 0.88)	0.31	**0.003**	(0.14 - 0.67)
Cohabiting	0.34	**0.004**	(0.17 - 0.72)	0.22	**0.000**	(0.10 - 0.49)
Engaged/Married	0.28	**0.001**	(0.13 - 0.60)	0.18	**0.000**	(0.08 - 0.40)
Duration (in years)	1.62	**0.011**	(1.12 - 2.35)	1.74	**0.004**	(1.19 - 2.54)
Duration^2	0.89	**0.019**	(0.82 - 0.98)	0.87	**0.005**	(0.79 - 0.96)
Conflict & Asymmetry						
Age difference (in years)	0.99	**0.003**	(0.99 - 1.00)	(does not vary within relationship)		
Churning (broke up and reconciled)	1.04	0.798	(0.75 - 1.45)	1.16	0.410	(0.82 - 1.63)
Non-monogamous partner	0.70	0.076	(0.47 - 1.04)	0.59	**0.013**	(0.39 - 0.89)
Partner-dominated decision-making	0.86	0.481	(0.56 - 1.31)	0.72	0.135	(0.46 - 1.11)
Threats or physical assault	0.49	**0.001**	(0.32 - 0.74)	0.49	**0.001**	(0.31 - 0.75)
Intimate Relationship Control Variables						
Shared Childbearing with Partner (ref = no pregnancy or birth)						
Shared pregnancy (no birth)	0.41	**0.019**	(0.20 - 0.86)	0.40	**0.019**	(0.18 - 0.86)
Shared birth	1.59	0.089	(0.93 - 2.73)	1.46	0.177	(0.84 - 2.53)
Woman had prior birth	0.80	0.375	(0.48 - 1.32)	(does not vary within relationship)		
Partner had birth with a prior partner	0.83	0.470	(0.51 - 1.37)	(does not vary within relationship)		
Partner's education, in years	1.26	**0.002**	(1.09 - 1.46)	(does not vary within relationship)		
Age (in exact years)	0.78	**0.001**	(0.68 - 0.90)	0.84	**0.015**	(0.73 - 0.97)
Chi-squared	95.98			75.67		
N (observations)	2232			2232		
N (women)	648					
N (relationships)				975		

put forth recommendations for universal screening for intimate partner violence within women's preventive health services [39]. Although several screening interventions developed for the health-care setting are effective [40], few interventions focus on the link between intimate partner violence and sexual and reproductive health and only one intervention includes reproductive coercion as a primary outcome. Interventions such as ARCHES that go beyond these recommendations to recognize that all women,

regardless of experiences with violence and regardless of the character of their intimate relationships, could benefit from education about reproductive coercion and its reproductive health consequences are necessary.

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Appendix

Random-effects ordered logistic regression models of the association between intimate relationship characteristics on expected control over sex and contraception

	OR	*p*-value	95% CI		
Intimate Relationship Characteristics					
Level of Intimacy & Commitment					
Relationship Type (ref = casual, non-sexual)					
Casual (sexual)	0.56	0.15	(0.26	-	1.23)
Uncommitted dating	0.58	0.15	(0.27	-	1.22)
Long-distance dating	0.59	0.13	(0.29	-	1.17)
Committed dating	0.52	0.06	(0.26	-	1.04)
Stayovers	0.51	0.07	(0.25	-	1.05)
Cohabiting	0.45	**0.03**	(0.22	-	0.93)
Engaged/Married	0.34	**0.01**	(0.16	-	0.72)
Duration (in years)	1.57	**0.02**	(1.09	-	2.26)
Duration^2	0.90	**0.02**	(0.82	-	0.99)
Conflict & Asymmetry					
Age difference (in years)	1.00	0.07	(0.99	-	1.00)
Churning	1.01	0.93	(0.73	-	1.40)
Non-monogamous partner	0.72	0.11	(0.49	-	1.07)
Partner-dominated decision-making	0.80	0.28	(0.53	-	1.20)
Threats or physical assault	0.54	**0.00**	(0.36	-	0.82)
Intimate Relationship Control Variables					
Shared Childbearing with Partner (ref = no shared pregnancy or birth)					
Shared pregnancy (but no birth)	0.51	0.07	(0.25	-	1.06)
Shared Birth	2.29	**0.00**	(1.30	-	4.03)
Partner's education (in years)	1.13	0.10	(0.98	-	1.30)
Woman had birth with other partner	1.40	0.30	(0.74	-	2.67)
Partner had birth with other woman	0.88	0.60	(0.54	-	1.43)
Age (in exact years)	0.74	**0.00**	(0.64	-	0.85)
Time-Invariant Respondent Characteristics					
African American	1.14	0.54	(0.75	-	1.75)
Highly religious	1.12	0.53	(0.79	-	1.59)
Childhood sociodemographic disadvantage (index)	0.85	0.08	(0.71	-	1.02)
High school GPA	1.26	0.12	(0.94	-	1.70)
Receiving public assistance	1.21	0.46	(0.73	-	2.02)
Age at first sex $\leq$ 16	0.86	0.48	(0.56	-	1.31)
More than two sex partners	0.72	0.13	(0.47	-	1.10)
Ever had sex without birth control	0.35	**0.00**	(0.24	-	0.51)
Adolescent pregnancy	0.91	0.74	(0.53	-	1.56)
Total Number of Weekly Surveys	1.00	0.40	(1.00	-	1.01)
Chi-squared	160.81				
N (observations)	2232				
N (women)	648				
cut points					
sigma2_u					

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