Relationship Characteristics Predicting Unintended Pregnancies Reported in an Online Weekly Survey: Preliminary Results

Jennifer S. Barber, Yasamin Kusunoki, Heather Gatny, and Jennifer Yarger

Although the United States experienced declines in unintended childbearing in the 1970s and early 1980s, levels have recently risen, and the most recent national estimates indicate that approximately 35% of live births from 1997-2002 were unintended at the time of conception (Chandra et al. 2005). Unintended childbearing is associated with a wide range of negative health statuses for children and mothers (Brown and Eisenberg 1995), including delayed prenatal care, depression, poor birth outcomes, divorce, developmental delay, and even child abuse. In fact, the combination of these negative health statuses and rising levels of unintended childbearing led the U.S. Department of Health and Human Services (in its National Health Promotion and Disease Prevention Objectives) to target a substantial reduction in unintended childbearing in its objectives for both 2000 (formulated in 1990) and 2010 (formulated in 2000). According to data available from the most recent national estimates of unintended childbearing, the goal for 2000 was not met, and the goal for 2010 will not be met either. Research that has addressed the social consequences of unintended childbearing suggests that they may be severe, may permeate multiple aspects of social life, and may persist for the very long term (Axinn et al. 1998; Barber et al. 1999; Baydar 1995; Brown and Eisenberg 1995).

The issue of relating context and strategic behavior, or macro-micro linkage (Alexander 1988), has been a central concern in social demography since the early 1980s (Smith 1989). Since that time, a growing body of empirical work has demonstrated important influences of context on individual preferences and behaviors, particularly those related to fertility (Barber 2001a; Billy et al. 1994; Brewster 1994a, 1994b; Crane 1991; Grady et al. 1993; Jencks & Mayer 1990; Lloyd & South 1996; South & Crowder 1999, 2000; Sucoff & Upchurch 1998). This research has demonstrated that community context affects women's sexual and contraceptive behavior and the resulting risk of pregnancy (Grady et al. 1993). Building on this research, we focus on context at a more local level, where individuals act and react to day-to-day activities: young women's romantic relationships.

Theoretical Framework

The formation, dissolution, and character of heterosexual romantic relationships are key determinants of unintended childbearing that are understudied (Brown et al. 1999). Most existing research on relationships as a context for unintended, premarital, or early pregnancy has focused on the intensity of relationships. Demographers have focused on relationship characteristics like age at first intercourse (sexual debut), dating/"going steady" at a young age, and cohabiting behavior, finding that intense relationships are linked to unintended childbearing. Edin and Kefalas' (2005) found that once a relationship has reached "the next level" (i.e., sexually exclusive and identity as a "couple") contraception may stop, with the woman figuring "If I get pregnant, I get pregnant." (p. 38). Intensity is clearly an important determinant of pregnancy.

Others have focused on instability in relationships suggesting that the ambiguities during transitions – juggling multiple partners, breaking up and getting back together, conflict, etc. – produce less predictable sexual behavior, less effective contraceptive use, and higher unintended pregnancy rates (Miller 1973). Elijah Anderson (1989) describes a "game" in which young men have multiple sexual partners, fight against identity as a couple, and engage in a great deal of conflict with their partners. It is precisely this type of instability and these transition points that may increase the risk of an unintended birth (Miller 1973; Schoen et al. 1999).

We will not attempt to adjudicate between these types of hypotheses; rather, we expect these processes to work in tandem, explaining the overall relatively high risk of an unintended birth, particularly among less educated, lower income, young women.

We propose a multidimensional and dynamic approach to measuring relationships. The Add Health study has revolutionized measurement of relationship dynamics by providing multidimensional measurement among those categorized by other studies as "single" (Bearman et al. 2004; Bruckner and Bearman 2003; Udry and Bearman 1998). Measurement of multiple dimensions of relationships, including number of partners, time spent together, couple identity, conflict, living arrangements, engagement plans, sex and other physical intimacy, are all needed to measure the relationship context. Further, the multidimensional nature of relationships makes categorical relationship status difficult to define. For example, Carver and her colleagues (2003) point out that it is difficult for many adolescents to give a date – even a year – to the start of their

relationships, largely because relationship-building is a dynamic process that often begins with friendship. There may be no defining "event" to mark categorical changes in status. However, because ambiguities during these relationship transitions are a particularly important context for unintended pregnancy, frequent measures of relationships are necessary to monitor relationship dynamics.

Obstacles to Studying Unintended Pregnancy

One of the major obstacles to scientific research on unintended pregnancy is the *measurement* of unintended pregnancy. Most study designs, such as that used in the National Survey of Family Growth (NSFG), feature a single cross-sectional interview with lifetime retrospective reporting. As a result, measures of unintended childbearing are based on retrospective reporting of intention, contraception, happiness, and relationship status for pregnancies that occurred sometime before the interview, often years before the interview. Each of these important dimensions is subject to somewhat different levels of retrospective reporting error, but methodological research on surveys suggests that these errors will be substantial and significant (Groves et al. 2001; Schwarz and Sudman 1994; Sudman et al. 1996). Of greatest concern is that individuals alter their feelings to become more consistent with behavior (Festinger 1957; Williams et al. 1999), which may produce substantial underestimates of the true level of unintended childbearing. A second, closely related concern is that retrospective reporting severely limits the extent to which these studies can measure temporal dynamics in intentions/attitudes, relationship characteristics, or contraceptive use. In other words, existing measures of intentions, relationships, and contraception are limited to a single referent time point per pregnancy and do not measure how relationships may change directly before or after a pregnancy.

Longitudinal studies, which interview the same young women multiple times, address some potential shortcomings of the cross-sectional measures. The National Longitudinal Study of Adolescent Health (Add Health), the National Longitudinal Survey of Youth (NLSY), and the National Survey of Families and Households (NSFH) are all important alternatives to the cross-sectional measures of unintended pregnancy. Multiple interviews with the same young women at multiple times allow measurement of intentions, contraception, happiness about pregnancy, and relationship characteristics at one time point, followed by

subsequent measurement of pregnancy. This design greatly reduces the risk of retrospective reporting error. Unfortunately, even in these designs, lengthy gaps between interviews greatly increase the chance of changes in the immediate context of pregnancy and retrospective reporting errors about that context. Without very frequent re-interviews, it is impossible to fully capture the temporal dynamics in relationships that may lead to unintended pregnancy. The costs of face-to-face interviews prohibit frequent re-interviewing – an alternative strategy is a high scientific priority.

To address the critical limitations in existing measures of unintended pregnancy, we are conducting a study that intensively measures these key processes. Specifically, we are collecting weekly, electronic journal-based attitudinal and behavioral measures of pregnancy, relationships, and contraceptive use. These measures reduce the retrospective reporting period to one week, and capture the dynamics in attitudinal and behavioral aspects of relationships and contraceptive use during the early adult years, when both relationship instability and the risk of unintended pregnancy are at their peak. An electronic data collection journal also provides the flexibility to add contingent measures, based on specific events. So, for example, as a new relationship begins and changes, we measure the different relevant dimensions of that relationship, including physical intimacy and contraceptive use, time spent together, commitment, conflict, and exclusivity.

We believe that weekly measurement is the correct periodicity for several reasons. First, very frequent measurement is important to ensure accurate recall of coitus-specific methods, such as condoms. Second, NSFG Cycle 6 (2002) data suggest that more than 12% of women aged 18 to 22 years of age use multiple contraceptive methods per month, indicating high levels of instability and change. Third, previous diary studies suggest that high response rates are, in part, because the diary becomes part of the respondent's routine and is thus less likely to be forgotten (Halpern et al. 1994; Jaccard et al. 2004; Searles et al. 1995). Overall, a weekly measurement strategy balances the need for a routine with the costs of minimizing measurement error while not being overly-burdensome to respondents.

To advance our understanding of the processes leading to unintended pregnancy during the transition to adulthood, this paper investigates the *types of relationships* that increase the hazard of pregnancy. We begin our

investigation by exploring models predicting the risk of first pregnancy. Because our data are still preliminary, and we do not yet have the full 2.5 years of data on each individual, the respondents have still experienced relatively few pregnancies. Thus, in this preliminary paper, we use *any pregnancy* as our dependent variable. We plan to decompose pregnancies into intended and unintended in a future version of the paper. However, it is important to note that over 95% of the pregnancies experienced by our respondents thus far are *unintended*.

Data and Methods

Sample

Our sample consists of young women, ages 18-19, residing in a Michigan county. Their names and contact information have been obtained from public records. To be eligible in the recruitment phase of the study, the young women were no younger than 18 and no older than 19 at the time of the sample.

Study Design

An initial 60-minute face-to-face survey interview was conducted to assess important aspects of their family background; demographic information; key attitudes, values, and beliefs; current and past friendship and romantic relationships; education; and career trajectories. Once the in-person baseline interview was completed, all respondents were invited to participate in the weekly journal-based study. The journal is a weekly mixed mode (Internet and phone) survey. Each week respondents can choose to complete the survey either by logging into the study's secure website, or by calling a toll free number and completing the survey with a live interviewer. The survey period for each respondent is approximately 2.5 years, and during that time each respondent can potentially complete up to 183 surveys (if they complete a new survey every 5 days). Respondents are paid $1 per weekly survey with $5 bonuses for on-time completion of five weekly surveys in a row. Automated email and text messages are sent to respondents weekly to remind them to complete the surveys. If a respondent becomes late on her next survey, study staff first attempt to contact her by phone, and later by email and letter in attempt to regain her participation. Respondents who become 60 or more days late are offered an increased incentive for completing the next survey. Small gifts (e.g., pen, chapstick, compact, pencil) are also given to respondents to award continued participation.

We have completed the baseline data collection in all four replicate samples and have 1003 baseline interviews and 23,252 weekly surveys (between one and seventy five per woman, depending on the baseline interview date). Our experience indicates that our incentive scheme, coupled with the cooperative nature of this age group and their interest in the subject matter has resulted in extremely high cooperation rates. We have an 83% response rate and a 94% cooperation rate for the baseline interviews and over 99% of respondents who completed a baseline interview enrolled in the weekly survey portion of the study (N=992). Furthermore, weekly survey participation rates have thus far been high. To date, almost 67% of respondents have completed a survey in the past 30 days.

Variable Description and Measurement

Pregnancy. We operationalize a pregnancy as the report of a positive pregnancy test. A respondent is coded 1 at the first survey where she reports a new pregnancy after the baseline interview and 0 otherwise. For example, a respondent whose first report of a pregnancy occurred at the tenth survey would be coded 0 for all surveys prior to the tenth and 1 for the tenth survey. All later surveys are censored from the analysis. A respondent who has not yet reported a pregnancy would be coded 0 at all surveys and thus censored at the last survey she completed to date.

Baseline Controls. Several sociodemographic characteristics measured at the baseline interview are included as controls in the current analysis. Age is coded in years and ranges from 18 to 20 years; the reference category is 18 years old. Race is included as a dichotomous indicator for African American versus non-African American. School enrollment is created using information about the type of school the respondent is enrolled in and highest grade completed and includes the following categories: 1) dropped out of high school, 2) graduated from high school, 3) enrolled in high school, 4) enrolled in two year college/vocational/technical/other, and 5) enrolled in four year college. Four year college is the reference category. A respondent is coded as receiving public assistance if she identified receiving at least one of the following: 1) WIC, 2) FIP, 3) cash welfare, or 4) food stamps. Importance of religion is included as a continuous measure ranging from not important (1) to more important than anything else (4). A dichotomous measure indicating whether the respondent is currently living

with a romantic partner is also included (1/0). Mother's age at first birth is included as a dichotomous measure indicating that the respondent's mother had her first child when she was younger than 20. Family structure is based on information about who the respondent lived with while growing up and includes the following three categories: 1) both biological parents or biological parent and step-parent, 2) single biological parent only, and 3) other situations. Two-parent family (biological or biological and step) is the reference category. Mother's education is coded as a dichotomous indicator for less than high school or otherwise. Low parental income is operationalized as $14,999 or less; a dummy for don't know or refused is also included.

Sexual, contraceptive, and pregnancy experiences. Sexual, contraceptive, and pregnancy experiences as of the baseline interview are also included as controls. Indicators for early sexual debut (less than or equal to 14) and average sexual debut (15 or 16 years old) are included as dummy variables in the regression models. Lifetime number of sexual partners is continuous. Respondents who have ever had sex without using birth control are coded 1 and 0 otherwise. Prior pregnancy experience is included as a three category variable: 1) no prior pregnancies, 2) one prior pregnancy, and 3) two or more prior pregnancies. The category for no prior pregnancies is the reference.

Relationship Measures

During each weekly survey, which we refer to as a journal, respondents are asked questions about the relationship they are in at that time. If they are in more than one relationship, they are asked to choose the one that is the most serious or the one they have been with most recently. All information reported at that journal is based on the time between the current journal and the last journal. For instance, at the sixth journal, respondents would be talking about events that occurred between the fifth and the sixth journals. We create several journal-varying measures about respondents' relationship experiences, with a particular focus in the current paper on the seriousness and instability of respondents' relationships.

Seriousness. Relationship seriousness is operationalized as time spent together, exclusivity, and sexual activity. Respondents are asked whether they and their partner spent a lot of time together since the last journal.

Respondents who answered affirmatively to this question are coded as having spent a lot time with their partner and 0 otherwise. Respondents who are not married or engaged to their partner or who are not cohabiting with their partner are asked whether they and their partner have agreed to only have a special romantic relationship with each other and no one else. Respondents who answered affirmatively to this question are coded as being in an exclusive relationship at that journal and 0 otherwise. Respondents who are married, engaged, or cohabiting are recoded to 1 (i.e., considered exclusive). Respondents are also asked whether they had sexual intercourse with their partner since the last journal. Those who answered affirmatively are coded as having been sexually active with their partner between journals. We create two types of measures for each of the three seriousness variables. The first is based on the relationship reported two journals prior to the most recently completed journal (j_{n-2}); we will refer to this as "current". The second type of measure is based on information reported in the "current" journal and all prior journals (j_{n-2+}); we will refer to this as "cumulative." For example, the "current" measure for time spent together would indicate whether or not the respondent spent a lot of time with the partner she talked about two journals prior to the most recent journal whereas the "cumulative" measure for time spent together would indicate the proportion of all journals prior to and including the "current" journal in which the respondent spent time with a partner. We chose two journals prior to the most recent journal to use measures collected closer to the time the pregnancy actually occurred, rather than the time the respondent reported the pregnancy.

Instability. Relationship instability is operationalized as conflict and concurrency. Respondents are asked whether they and their partner fought or had any arguments since the last journal. Respondents who answered affirmatively to this question are coded as having had conflict and 0 otherwise. Two questions are used to create the concurrency measure. Respondents are first asked whether they had sexual intercourse with anyone other than the partner since the last journal. They are then asked whether they think that their partner has had sexual intercourse with anyone other than the respondent since the last journal. Respondents' relationships are coded as being concurrent if the respondent answered yes to either of these questions and 0 otherwise. Comparable "current" and "cumulative" measures are created for each of the two instability measures.

Analytic Strategy

We begin by describing the sociodemographic characteristics of the sample of young women as well as their sexual, contraceptive, and pregnancy experiences as of the baseline interview. We then use discrete-time hazard models to estimate the risk of becoming pregnant during the study period thus far as a function of the seriousness and instability of respondents' relationships. Because each respondent's surveys can be considered discrete time units, we estimate a logistic regression model predicting whether a pregnancy did or did not occur in each survey. Control variables are fixed as of the baseline interview whereas relationship measures are allowed to vary across surveys. We first present the results from models that include each and then all of the current relationship measures. We then present the results of models that include each and then all of the current relationship measures net of the control variables. Finally, we present the results of models that include each and all of the cumulative relationship measures net of the control variables. Results from these models are presented in the form of log-odds. All analyses are conducted using Stata/SE 10.0.

Results

Table 1. Descriptive Statistics of Measures Used in the Analyses

	Mean	Std. Dev.	Minimum	Maximum
Pregnancy (N=890 individuals)	0.08		0	1
Relationship Measures (N=18,666 observations)				
Seriousness				
Spent a lot of time together during past week	0.42		0	1
Proportion of weeks spent a lot of time together	0.43	0.38	0.00	1.00
Relationship was exclusive during past week	0.52		0	1
Proportion of weeks relationship was exclusive	0.54	0.43	0.00	1.00
Had sex during past week	0.33		0	1
Proportion of weeks had sex	0.34	0.38	0.00	1.00
Instability				
Fought during past week	0.17		0	1
Proportion of weeks fought	0.21	0.27	0.00	1.00
Self or partner had multiple sex partners during past week	0.03		0	1
Proportion of weeks partner/self had multiple partners	0.04	0.12	0.00	1.00
Baseline Control Measures (N=890 individuals)				
Sociodemographic Characteristics				
Age				
18 years old	0.42		0	1
19 years old	0.50		0	1
20 years old	0.08		0	1
African American	0.33		0	1
School enrollment and type				
Dropped out of high school	0.08		0	1
Not enrolled (graduated from HS)	0.21		0	1
High school	0.14		0	1
2 year college/vocational/technical/other	0.29		0	1
4 year college	0.29		0	1
Receiving public assistance	0.24		0	1
Religious importance	2.69	0.92	1	4
Living with romantic partner	0.14		0	1
Biological mother less than 20 years old at first birth	0.36		0	1
Family Structure				
Biological parents/biological and step parent	0.54		0	1
One biological parent only	0.23		0	1
Other	0.23		0	1
Mother's education less than high school graduate	0.08			
Parent's income				
$14,999 or less	0.14		0	1
$15,000 or greater	0.67		0	1
Don't know/Refused	0.19		0	1
Sexual, Contraceptive, and Pregnancy Experiences				
Age at first sex				

14 years or less	0.16		0	1
15-16 years	0.35		0	1
17 years or greater/never had sex	0.50		0	1
Lifetime number of sexual partners	3.28	4.84	0	57
Ever had sex without birth control	0.46		0	1
Prior pregnancies				
0 prior pregnancies	0.79		0	1
1 prior pregnancy	0.14		0	1
2 or more prior pregnancies	0.07		0	1

Table 2. Logistic Regression Estimates of Effects of Relationship Seriousness and Instability on Hazard of Pregnancy (N = 890 individuals, 18,666 observations)

	1	2	3	4	5	6
Seriousness						
Spent a lot of time together during past week	1.29***					.52†
	(.29)					(.37)
Relationship was exclusive during past week		1.35***				.57†
		(.34)				(.42)
Had sex during past week			1.36***			.72*
			(.28)			(.33)
Instability						
Fought during past week				.89***		.34
				(.28)		(.29)
Self or partner had multiple sex partners during past week					.67†	.63
					(.52)	(.54)
Baseline Hazard Controls						
# weeks in journal	.02	.02	.02	.03	.02	.03
	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)
(# weeks in journal)^2	-.001	-.001†	-.001	-.001†	-.001	-.001†
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Log likelihood	-381.30	-382.14	-379.46	-387.80	-391.73	-374.66

Coefficients are effects on log-odds. Standard errors in parentheses. All model X^2 values are statistically significant at the .001 level.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (one-tailed tests)

Table 3. Logistic Regression Estimates of Effects of Relationship Seriousness and Instability on Hazard of Pregnancy, net of Controls (N = 890 individuals, 18,666 observations)

	1	2	3	4	5	6
Seriousness						
Spent a lot of time together during past week	1.05***					.45
	(.32)					(.38)
Relationship was exclusive during past week		1.17***				.59†
		(.36)				(.43)
Had sex during past week			1.00***			.48†
			(.29)			(.34)
Instability						
Fought during past week				.68**		.34
				(.29)		(.30)
Self or partner had multiple sex partners during past week					.14	.11
					(.54)	(.55)
Baseline Control Measures						
Sociodemographic Characteristics						
Age						
18 years old	reference	reference	reference	reference	reference	reference
19 years old	.46†	.53*	.52*	.49†	.46†	.52*
	(.31)	(.31)	(.31)	(.31)	(.31)	(.31)
20 years old	-.59	-.62	-.50	-.58	-.60	-.53
	(.77)	(.77)	(.77)	(.77)	(.77)	(.77)
African American	.22	.18	.18	.10	.06	.26
	(.37)	(.36)	(.37)	(.37)	(.37)	(.37)
School enrollment and type						
Dropped out of high school	-.81	-.75	-.70	-.77	-.74	-.74
	(.67)	(.67)	(.67)	(.68)	.67)	(.67)
Not enrolled (graduated from HS)	.26	.32	.26	-.75	.27	.24
	(.45)	(.45)	(.44)	(.68)	(.45)	(.45)
Enrolled in High school	.48	.53	.49	.49	.48	.52
	(.51)	(.51)	(.51)	(.51)	(.51)	(.51)
Enrolled in 2 year college/vocational/technical/other	-.34	-.35	-.36	-.35	-.34	-.36
	(.45)	(.45)	(.45)	(.45)	(.45)	(.45)
Enrolled in 4 year college	reference	reference	reference	reference	reference	reference
Receiving public assistance	.14	.14	.07	.08	.08	.12
	(.34)	(.34)	(.34)	(.34)	(.34)	(.34)
Religious importance	.07	.06	.12	.08	.08	.08
	(.17)	(.17)	(.17)	(.17)	(.17)	(.17)
Living with romantic partner	.48†	.47	.61*	.72*	.78**	.43
	(.34)	(.34)	(.34)	(.34)	(.34)	(.34)
Biological mother less than 20 years old at first birth	.49*	.50*	.56*	.51*	.52*	.52*
	(.29)	(.29)	(.29)	(.29)	(.29)	(.29)
Family Structure						
Biological parents/biological and step parent	reference	reference	reference	reference	reference	reference
One biological parent only	.65*	.71*	.69*	.67*	.64*	.71*
	(.36)	(.36)	(.36)	(.36)	(.36)	(.36)
Other	.82*	.87**	.85**	.82*	.81*	.87**

	(.36)	(.36)	(.36)	(.36)	(.37)	(.36)
Mother's education less than high school graduate	.10	-.52	-.46	-.50	-.49	-.50
	(.40)	(.50)	(.50)	-0.5	(.50)	(.50)
Parent's income						
$14,999 or less	.10	.12	0.04	0.17	.13	.08
	(.40)	(.40)	(.40)	(.40)	(.40)	(.41)
$15,000 or greater	reference	reference	reference	reference	reference	reference
Don't know/Refused	.26	.22	0.18	.13	.10	.27
	(.36)	(.36)	(.35)	(.36)	(.36)	(.36)
Sexual, Contraceptive, and Pregnancy Experiences						
Age at first sex						
14 years or less	.87*	.91*	.82†	.92*	.99*	.79†
	(.51)	(.50)	(.51)	(.51)	(.52)	(.50)
15-16 years	1.21**	1.22**	1.20**	1.26**	1.28**	1.18**
	(.43)	(.43)	(.43)	(.43)	(.44)	(.42)
17 years or greater/never had sex	reference	reference	reference	reference	reference	reference
Lifetime number of sexual partners	.02†	.02	0.02	.02	.02	.02
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)
Ever had sex without birth control	.40	.37	.40	.42	.46	.35
	(.36)	(.36)	(.36)	(.36)	(.36)	(.36)
Prior pregnancies						
0 prior pregnancies	reference	reference	reference	reference	reference	reference
1 prior pregnancy	.82**	.83**	.81*	.85**	.79*	.87**
	(.35)	(.35)	(.35)	(.36)	(.35)	(.35)
2 or more prior pregnancies	.72†	.77†	0.79	.74†	.70†	.81†
	(.49)	(.49)	(.49)	(.49)	(.49)	(.49)
Baseline Hazard Controls						
# weeks in journal	.06†	.06†	.06†	.06†	.05	.07†
	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)
(# weeks in journal)^2	-.002*	-.002*	-.002†	-.002*	-.001†	-.002*
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Log likelihood	-338.12	-337.74	-337.94	-341.40	-344.02	-334.15
Observations	18,666	18,666	18,666	18,666	18,666	18,666

Coefficients are effects on log-odds. Standard errors in parentheses. All model X2 values are statistically significant at the .001 level.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (one-tailed tests)

Table 4. Logistic Regression Estimates of Effects of Relationship History on Hazard of Pregnancy (N = 890 individuals, 18,666 observations)

	1	2	3	4	5	6	7
Seriousness							
Proportion of weeks spent a lot of time together	1.07**					0.13	
	(.43)					(.59)	
Proportion of weeks relationship was exclusive		1.14**				0.63	
		(.43)				(.57)	
Proportion of weeks had sex			1.23**			.85*	
			(.41)			(.49)	
Instability							
Proportion of weeks fought				.89*			.83*
				(.42)			(.44)
Proportion of weeks partner/self had multiple partners					.72		0.37
					(.67)		(.70)
Baseline Hazard Controls							
# weeks in journal	.06†	.06†	.06†	.07†	.05	0.07†	0.07†
	(.04)	(.04)	(.04)	(.05)	(.04)	(.04)	(.05)
(# weeks in journal)^2	-.002†	-.002*	-.002*	-.002*	-.002†	-.002*	-.002*
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Log likelihood	-340.86	-340.18	-339.2	-341.95	-343.53	-338.18	-341.82

Coefficients are effects on log-odds. Standard errors in parentheses. All model X^2 values are statistically significant at the .001 level.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (one-tailed tests)