Infertility in Romantic Relationships:
Relationship Quality and Stability among Married and Cohabiting Couples

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Abstract

Over two million American women are infertile, and over seven million more experience impaired fecundity at some point. Though an extensive body of literature documents the deleterious effects of infertility on psychological well-being, less is known about the implications for relationship quality and stability. Employing event history techniques using nationally representative data from the first two waves of the National Survey of Fertility Barriers (NSFB), the present study contributes to understanding of the role of infertility and subfecundity in contemporary romantic relationships. Self- and clinically-identified infertility measures are used to predict relationship quality and stability among both married and cohabiting couples. In addition, we consider the role of social parenthood for individuals who have experienced multiple partnerships. Preliminary results suggest that women's primary and secondary infertility, subfecundity, and fertility treatments are associated with both relationship quality and instability in complex ways.

Background

Demographers estimate that about 7.4% of American women are infertile, and many more experience impaired fecundity at some point (Stephen and Chandra 2006). There is longstanding interest in the causes and consequences of infertility and subfecundity. Within the last decade in particular, attention to infertility has been more focused, and understanding of infertility has consequently increased substantially. Infertility is clearly shown to be associated with multiple negative social and psychological outcomes for men, women, and couples (Greil, Slauson-Blevins, and McQuillan 2010).

Although most research on the effects of infertility focuses on individuals, researchers have also linked infertility with stress that lowers the well-being of couples, especially wives (Andrews, Abbey, and Halman 1991; Peterson, Newton, and Rosen 2003). However, research investigating these processes with nationally representative data are rare, as most extant studies are either quantitative studies of clinical data or qualitative studies (Greil, Slauson-Blevins, and McQuillan 2010). In addition, although cohabitation is increasingly a family structure in which adults have children (Thornton, Axinn, and Xie 2007), there is little research about infertility in cohabitating relationships.

Recent medical and technological advancements have increased the availability and use of infertility services in recent years (Stephen and Chandra 2000). Biomedical and social researchers have made great strides in understanding many possible causes of infertility, including advanced age, biomedical factors, and environmental factors. There is much less recent research on the consequences of infertility, impaired fecundity, and the use of infertility services on women's relationship quality and stability, however. Studies that have considered the influence of infertility on relationship stability, in particular, tend to be outdated, with focus placed on heterosexual married couples (Smith, Walsh, Shindel, Turek, Wing, Pasch, and Katz 2009; Chester 1972; Gibson 1980).

Given the extant focus on purposive clinical samples, the dearth of recent research on the implications of infertility for relationship quality and stability, and the focus solely on marital unions, there is an impetus to revisit and expand upon the relationship between infertility and union instability. The present study employs event history models to analyze the effects of both infertility and impaired fecundity on relationship quality and stability using a longitudinal nationally representative sample of American women and their partners.

The study is unique in that we consider a variety of factors which, though independently modeled in past research, have not (to our knowledge) been considered in tandem. The inclusion of these indicators reflect an interest not in a snapshot of a particular experience with infertility, but rather in understanding how the infertility experience unfolds as an infertility career (Sandelowski 1987). The present study allows for a more nuanced understanding of the role of infertility in contemporary relationship quality and stability.

Research Questions

The present study investigates how 1) self-identified infertility, 2) fertility intentions, 3) medical diagnosis, and 4) infertility treatment are related to relationship quality and stability among married and cohabiting couples. Research suggests that each of these experiences may have unique effects on relationship outcomes, and those effects may differ by relationship type.

Data and Measures

Data for the study come from waves one and two of the National Survey of Fertility Barriers (NSFB), a nationally representative telephone survey of America women (Johnson and White N.D.). Between 2004 and 2007, data was collected from 4,712 female respondents ages 25-45 and their male partners (N=936), and a follow-up survey was administered three years later.

Our primary outcomes of interest for our preliminary analysis are depression, as measured by the Center for Epidemiologic Studies Depression scale (CES-D; Radloff 1977), relationship quality on a 3-point scale ranging from very happy to not too happy with the relationship, sexual satisfaction on the same scale, and a bivariate measure of whether or not the couple has discussed ending the relationship in the past three years. Event history models (to be completed) will explore the survival time of the relationship; thus, relationship duration will be the outcome of interest.

Our focal independent variables in preliminary analyses relate to various aspects of the infertility career. We distinguish between primary (childlessness) and secondary infertility (infertility subsequent to the birth of a child), as childlessness and inability to achieve desired fertility may not have the same psychosocial consequences. Additionally, we include self-identification as infertile and medical diagnosis (where applicable) as male, female, couple, or unexplained factor. We also examine the role of marital status, comparing married and cohabiting women to single women.

We consider a measure of infertility with intent (Greil and McQuillan 2004), as infertility while intending to get pregnant is likely to be more distressing than infertility in the absence of intention. The effect of seeking infertility treatment is also investigated, as prior research has suggested that the treatment process is distressing, particularly for women, given the intimate involvement of their bodies in the process (Greil 1997). Controls include employment status, education, racial/ethnic identification, age, nativity, a scale for the importance placed on childbearing, and whether female respondents think of their partners' children from previous partnerships as their own (as applicable). Planned analyses will consider various measures of infertility in the context of marriage and cohabitation with additional controls.

Analytic strategy

Our preliminary analyses rely on linear and logistic regression models to examine the relationship between our independent variables of interest and the CES-D, marital and sexual satisfaction, and discussions of terminating the relationship. Regressions are run separately for men and women due to non-independence of women and their partners. However, we recognize that this approach limits our ability to consider couple dynamics.

Our next analysis will use discrete-time multilevel hazard models (Barber et al 2000) to predict relationship duration for married and cohabiting couples separately. Following Kenny, Kashy, and Cook (2006), we will account for non-independence within the couple by approaching the dyad from a multilevel framework—that is, individuals nested within couples. Level 1 variables, such as relationship satisfaction and self-identification, will be measured at the individual level; level 2 variables will be those which are unique to the couple, such as medical identification of the infertility factor and whether the couple is married or cohabiting.

Preliminary Results

Preliminary results demonstrating the utility of the measures in the present study are shown in Tables 1 and 2. Table 1, which provides the regression results for women selected for the study, suggests that the experiences of married women are distinct from those of cohabiting women, even after controlling for socio-demographic differences such as employment status and education. Marriage appears to provide a certain amount of protection against depression and potential relationship dissolution; married women report significantly lower CES-D scores, and have almost 70% lower odds of having discussed ending their relationship in the last year when compared to single women; cohabiting women do not appear to differ significantly from single women on these indicators. Likewise, married women report greater relationship satisfaction.

Interestingly, primary infertility appears to be significant only for sexual satisfaction, with childless women reporting somewhat greater satisfaction. Self-identification and fertility intentions are also important: women who self-identify are more distressed and more likely to have discussed ending the relationship than women who do not identify as infertile; being infertile with intent also results in higher depression scores and lower relationship and sexual satisfaction. Finally, among our focal independent variables, women who think of their partner's child as their own actually appear to be somewhat more depressed than women who do not, and they have more than 2 times greater odds of having discussed a break-up.

Results for partners, presented in Table 2, suggest that there are substantial gender differences in the infertility experiences of men and women; while a variety of infertility career factors appear to influence depression, relationship quality, and relationship stability for women, these factors do not appear to matter for most of our outcomes of interest for men. The one exception is relationship stability: married men are substantially more likely to have discussed a break-up than are single men, and men who self-identify have 2.5 times greater odds of having discussed a breakup.

Preliminary Conclusions

Based on preliminary analyses, the infertility career appears to be an important predictor of general depression, relationship quality, and relationship stability. However, the effects of the infertility career appear to vary by both relationship status and gender. Specifically, marriage appears to serve as a protective factor for both men and women—particularly when we consider marital stability. In addition, various aspects of the infertility career appear to be more distressing for women than for men, which has ramifications for relationship quality. We intend to explore these consequences of infertility in marriage and cohabitation more fully using a longitudinal, multilevel approach.

Table 1. Preliminary Analysis (Respondents)

	CES-D		Relationship Satisfaction		Sexual Satisfaction		Discussed Breaking Up	
	B	St. Error	B	St. Error	B	St. Error	exp(B)	St. Error
Married	-1.79 ***	0.21	0.17 **	0.06	0.08	0.06	0.31 ***	0.06
Cohabiting	0.43	0.97	-0.01	0.12	-0.12	0.13	0.80	0.37
Primary Infertility	-0.26	0.32	0.09	0.05	0.13 *	0.06	0.84	0.20
Self-Identify as Infertile	0.96 ***	0.29	-0.04	0.05	0.02	0.06	1.65 *	0.37
Infertile With Intent	1.06 ***	0.29	-0.14 **	0.06	-0.14 *	0.06	1.10	0.25
Had Treatment	0.24	0.59	0.19 ***	0.05	-0.06	0.07	0.65	0.19
Employed Full Time	-1.09 ***	0.20	-0.03	0.03	0.02	0.04	1.33	0.21
College Educated	-1.09 ***	0.22	0.02	0.04	-0.12 **	0.04	0.84	0.14
Think of Partner's Child as Own	0.98 **	0.31	-0.07	0.04	-0.01	0.04	2.04 ***	0.38
Constant	17.50 ***	0.26	2.41 ***	0.07	2.45 ***	0.07	--	--

Notes: *p<.05; **p<.01; ***p<.001

Table 2. Preliminary Analysis (Partners)

	CES-D		Relationship Satisfaction		Sexual Satisfaction		Discussed Breaking Up	
	B	St. Error	B	St. Error	B	St. Error	B	St. Error
Married	-1.12	0.72	0.08	0.10	-0.05	0.12	0.23 ***	0.09
Cohabiting	-0.29	1.21	0.06	0.18	-0.01	0.20	0.34	0.26
Primary Infertility	-0.52	0.56	0.05	0.07	0.04	0.10	0.54	0.21
Self-Identify as Infertile	0.68	0.49	-0.12	0.07	-0.10	0.09	2.52 **	0.86
Infertile With Intent	0.41	0.60	-0.01	0.07	-0.15	0.10	1.21	0.46
Had Treatment	-0.01	0.59	-0.08	0.09	0.09	0.11	0.82	0.36
Employed Full Time	-0.92 **	0.35	-0.03	0.05	0.05	0.06	1.07	0.28
College Educated	-1.05	0.59	0.04	0.06	-0.04	0.09	0.73	0.23
Constant	17.23 ***	0.96	2.56 ***	0.12	2.47 ***	0.15	--	--

Notes: *p<.05; **p<.01; ***p<.001

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