Relationship Churning and Parenting Stress among Mothers

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ABSTRACT

Research documents the consequences of relationship instability for mothers' parenting stress, but has given little attention to within-partner relationship instability. In this article, we use data from the Fragile Families and Child Wellbeing Study to estimate the association between within-partner relationship instability (known as churning or on-again/off-again relationships) and mothers' parenting stress. First, we find that by the focal child's fifth birthday about 16% of mothers experience churning with the child's biological father. Second, compared to being in a stable relationship with the child's father, churning is associated with greater parenting stress. But those who experience churning have similar levels of parenting stress as their counterparts who separate from their children's fathers, suggesting that relationship instability, more than a change in partner, is tied to parenting stress. Third, the difference in parenting stress among relationship churners and those in stable relationships is explained almost entirely by relationship status and quality.

Keywords: Fragile Families and Child Wellbeing Study; relationship instability; parenting stress

Relationship Churning and Parenting Stress among Mothers

In a world of unstable family structures, the resources parents have at their disposal to support them in parenting tasks vary as romantic partners enter and exit family life. Recent research documents that relationship transitions among unmarried mothers, as for their married counterparts, are associated with increases in parenting stress, the psychological strain created by the perceived demands of the parenting role exceeding one's capacity to fulfill them (Beck, Cooper, McLanahan, & Brooks-Gunn, 2010; Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009; Meadows, McLanahan, & Brooks-Gunn, 2008; Osborne, Berger, & Magnuson, 2012; Ryan, Tolani, & Brooks-Gunn, 2009). Relationship transitions—ending a cohabiting union with a child's biological parent or moving in with a new partner, for example—may cause tensions in the family system and affect the economic or emotional resources available to residential parents, increasing their parenting stress. Likewise, moving in with a child's biological parent could ease tensions and increase resources, reducing parenting stress.

Previous studies have treated relationship transitions as one-way, one-time events—a couple is either together or not together. This neglects the small but growing research that finds relationship churning—breaking up and getting back together—is relatively common among unmarried couples (Dailey, Pfiester, Jin, Beck, & Clark, 2009; Halpern-Meekin, Manning, Giordano, & Longmore, 2012; Vennum, Lindstrom, Monk, & Adams, 2014). That is, unmarried couples experience both stable and unstable breakups, with some couples remaining separated and others reuniting. Grouping all couples who are in relationships and all who have broken up misses the possibility that within-partner relationship instability—relationship churning—may distinguish the relationship and parenting experiences within and between these groups.

The present study analyzes the association between relationship churning and mothers'

parenting stress using longitudinal data from the Fragile Families and Child Wellbeing Study, an urban cohort of children born to mostly unmarried parents. These data allow us to estimate mothers' parenting stress as a function of relationship churning during the child's first five years, adjusting for baseline characteristics at the focal child's birth. We examine mothers' parenting stress because mothers are typically the primary caregivers of children. We focus on relationship churning during children's early years because family structure transitions during this time are particularly influential for children's development (Cavanaugh & Huston, 2008) and parenting stress is highest when children are young (Crnic & Booth, 1991; Kuczynski & Kochanska, 1990; Neece, Green, & Baker, 2012). Parenting stress is associated with negative outcomes for both mothers and children. For mothers, it is linked to lower life satisfaction and more psychological distress (Crnic & Greenberg, 1990; Thompson, Merritt, Keith, Bennett, & Johndrow, 1993). For children, mothers' parenting stress is negatively associated with socioemotional wellbeing and cognitive development (Crnic, Gaze, & Hoffman, 2005; Magill-Evans & Harrison, 2001).

We make contributions to research on both romantic relationships and parenting in four areas. First, we shed light on how a previously neglected form of relationship instability—within-partner relationship churning—is related to mothers' parenting stress. In doing so, we describe the frequency of relationship churning and the characteristics of churning parents, compared to non-churning parents, to reveal the distinctive nature of this population; previous studies of churning relationships have not focused on parents (Dailey et al., 2009a; Halpern-Meekin et al., 2012; Vennum et al., 2014) or have only focused on cohabiting parents (Cross-Barnett, Cherlin, & Burton, 2011; Nepomnyaschy & Teitler, 2013; Roy, Buckmiller, & McDowell, 2008). Second, we isolate relationship instability from partner transition, as churning partners experience instability within one union, and we can begin to address whether instability

matters over and above a change in partner. Some existing research on the association between relationship transitions and parenting stress focuses exclusively on coresidential relationships (Cooper et al., 2009; Harmon & Perry, 2011; Meadows et al., 2008; Osborne et al., 2012), despite evidence that, regardless of coresidential status, union transitions are associated with mothers' parenting stress (Beck et al., 2010; Ryan et al., 2009). The present study includes both coresidential and non-residential romantic relationships in considering the association between churning and parenting stress. Third, in focusing on three mechanisms—relationship status and quality, economic disadvantage, and mental health—through which relationship churning could influence parenting stress, we begin to explore *how* within-partner relationship instability is linked to mothers' parenting stress. Finally, examining if and how relationship churning is associated with mothers' parenting stress provides an understanding of an important relationship descriptor that future research and parenting interventions should consider.

Understanding Relationship Churning

A small but growing literature documents the prevalence and correlates of relationship churning. Most previous research on relationship churning outside the marital context has relied on convenience samples of college students (e.g., Dailey, Hampel, & Roberts, 2010; Dailey, Jin, Pfiester, & Beck, 2011; Dailey, Middleton, & Green, 2012; Dailey et al., 2009a), strictly limiting its generalizability. There are a few exceptions. Some research uses a sample of unmarried young adults in the Toledo metropolitan area, a less elite sample than the college samples used elsewhere (Halpern-Meekin, et al., 2012; Halpern-Meekin, Manning, Giordano, & Longmore, 2013). Other research uses national data on cohabitors and married couples to examine churning frequency, finding one-third of cohabitors report a history of breaking up and reconciling in their

present relationship (Vennum et al., 2014). Because churning is more common in nonmarital than marital relationships (Vennum et al., 2014), the growth in childrearing outside marriage means that increasing numbers of children likely experience parental relationship churning.

Using the Fragile Families and Child Wellbeing data, Nepomnyaschy and Teitler (2013) present estimates and correlates of "cyclical cohabitation," or churning among cohabitors, for parents with nonmarital births. They find higher levels of material hardship but little reduction in father involvement among churning parents. Additionally, two ethnographic studies focus on churning by cohabiting parents (Cross-Barnett et al., 2011; Roy et al., 2008); results suggest that the bond of shared children may draw these unstable couples back together repeatedly, emphasizing the importance of focusing on churning among parents. Although these studies provide insights into the population of interest, they exclude information about parental churning that occurs outside a coresidential context. Given the large portion of unmarried parents who do not cohabit—approximately half at the focal child's birth—the present study contributes to our existing knowledge about churning among unmarried parents (McLanahan & Beck, 2010).

Linking Relationship Transitions to Parenting Stress

Theoretically, there are reasons to expect that within-partner relationship instability, also known as relationship churning, is associated with greater parenting stress among mothers. Previous studies suggest that relationship status and quality, economic disadvantage, and mental health problems resulting from relationship instability may be pathways through which relationship churning increases mothers' parenting stress (Cooper et al., 2009; Kalil, Ziol-Guest, & Coley, 2005; Meadows et al., 2008; Ryan et al., 2009). We discuss each of these possible pathways in turn.

Relationship status and quality. Given that parental relationship quality accounts, in large part, for the association between relationship transitions and mothers' parenting stress (Cooper et al., 2009), we expect that relationship quality is a mechanism through which relationship churning influences mothers' parenting stress. Churning relationships are often marked by negative characteristics (more arguing, less certainty about the future of the relationship, and less relationship satisfaction) compared to stable unions (Dailey et al., 2009a; Dailey, Rossetto, Pfiester, & Surra, 2009b; Halpern-Meekin et al., 2012; Vennum et al., 2014). Additionally, compared to unions that are stably together or have stably ended (that is, couples have broken up and not reconciled), churning couples report more physical conflict and verbal abuse (Halpern-Meekin et al., 2013). Relatedly, emotional support from fathers and kin, intimacy with fathers, and father involvement in childrearing are inversely associated with mothers' parenting stress (Carlson & McLanahan, 2002; Harmon & Perry, 2011; Mulsow, Caldera, Pursley, Reifman, & Huston, 2002; Nomaguchi, Brown, & Leyman, 2012; Secco & Moffatt, 2003).

As churning may produce more conflicted and less supportive relationships, this may result in higher parenting stress, as mothers' emotional resources for coping with the demands of parenting are drained by their romantic relationships. Indeed, declines in mothers' romantic relationship quality with their children's fathers are tied to increased parenting stress (Florsheim, Sumida, McCann, Winstanley, Fukui, Seefeldt, & Moore, 2003). Further, parents who experience relationship dissolution, compare to those already separated at the child's birth, experience higher parenting stress (Ryan et al., 2009). This suggests that changes in status, rather than the status itself, may be more important, implying that churners face particular challenges, arousing parenting stress, as parents struggle to find their "new normal" in the face of extended relational instability.

Economic disadvantage. In addition, churning may disrupt parents' resource sharing. Having a partner move in and out of the household—as would happen for cohabiting churners—means that the couple no longer benefits from economies of scale through a shared household, at least during those times when they are "off again." Further, there are suggestions that lower relationship quality between parents is associated with lower levels of paternal economic contributions to children (McLanahan, Seltzer, Hanson, & Thomson, 1994), again indicating that churning cycles could create fluctuations in the economic resources mothers have available to raise their children. Economic resources, in turn, are inversely associated with parenting stress (Crnic & Acevedo, 1995; Mulsow et al., 2002; Williford, Calkins, & Keane, 2007).

In their work on churning among cohabiting parents, Nepomnyaschy and Teitler (2013) find that relationship churners report more material hardship than stable cohabitors. They find that, though churning fathers are among the most financially disadvantaged among all men in their sample of parents unmarried at birth, they are among the most involved with their children, even during times when the couple is not living together. Were these findings to hold among all churning parents, beyond the cohabiting population, this could mean that churning families are less affected by the unstable nature of their relationship than they otherwise might be—with fathers contributing less economically, the loss of his income should have less dire consequences, and with continued paternal involvement during breakups, mothers may experience less parenting stress than they do in couples when a breakup limits fathers' time with their children. This remains an empirical question, however. Given the unstable nature of churning relationships, and the resource disruptions such relationship tumult may present, there are also reasons to expect that such experiences may have negative consequences for parenting stress as mothers periodically have to make due with less.

Mental health. The mental health consequences of relationship instability could also be a separate mechanism through which churning increases parenting stress. Previous research finds that relationship transitions are associated with poorer mental health (Meadows et al., 2008), including increased psychological distress and lower life satisfaction, with outcomes more pronounced for those who had cohabited compared to those not in coresidential unions (Rhoades, Kamp Dush, Atkins, Stanley, & Markman, 2011; Sbarra & Emery, 2005; Simon & Barrett, 2010). Churning also potentially disrupts a primary source of social support, as the union temporarily ends; diminished social support is associated with an increased likelihood of psychological distress for parents (Rodgers, 1998), which has implications for parenting stress. Further, maintaining contact following a breakup—which we may expect churners to be more likely to do given that they later reunite—is associated with greater distress (Sbarra & Emery, 2005); this, in turn, has implications for the likelihood of experiencing parenting stress. Further, those who have fewer psychological resources or experience depression report higher levels of parenting stress, on average (Belsky, Crnic, & Woodworth, 1995; Crnic & Acevedo, 1995; Mulsow et al., 2002; Williford et al., 2007).

Other Factors Associated with Relationship Churning and Parenting Stress

A host of additional factors need to be considered when estimating the association between relationship churning and parenting stress. For example, young mothers report more heightened parenting stress than do adult mothers (Passino, Whitman, Borkowski, Schellenbach, Maxwell, Keogh, & Rellinger, 1993). Additionally, Nepomnyaschy and Teitler (2013) find that, compared to stable cohabitors, churning cohabitors are more likely to be black, be under age 21 at the child's birth, and have less than a high school diploma, and are less likely to have worked

in the past week; churners are also more likely to have been raised outside of a two-parent family (Halpern-Meekin et al., 2012). Those in interracial relationships receive less social support (Chito Childs, 2005), raising the likelihood of experiencing parenting stress. Substance use is associated with how vulnerable parents are to stressors (Webster-Stratton, 1990), meaning that those using drugs and alcohol may be more likely to experience heightened parenting stress when in a churning relationship. Mothers of low birth weight babies can experience heightened parenting stress in response to the health and behavioral difficulties associated with a child being born low birth weight (Singer, Salvator, Guo, Collin, Lilien, & Baley, 1999). Less-educated mothers are prone to heightened stress with higher order births (Tach, 2012), meaning the focal child's birth order should be taken into account in predicting parenting stress. Some research suggests that child gender may be predictive of fathers' involvement (Lamb, 2000), which has implications for mothers' experiencing parenting stress. Finally, there is some suggestion that parenting stress may operate differently in native and non-native families (Mistry, Biesanz, Chien, Howes, & Benner, 2008).

METHOD

Fragile Families and Child Wellbeing Study

To estimate the relationship between relationship churning and mothers' parenting stress, we use data from the Fragile Families and Child Wellbeing Study (FFCWB), a cohort of urban children born to mostly unmarried parents in 1998-1999 and followed longitudinally (Reichman, Teitler, Garfinkel, & McLanahan, 2001). Mothers were interviewed in the hospital after giving birth, and fathers were interviewed in person as soon as possible after the birth (mostly, but not always, in the hospital). Both parents were re-interviewed by telephone when their children were

approximately 1, 3, 5, and 9 years old. As described earlier, we use data through the 5-year survey. Response rates were relatively high, with about 86% of sampled mothers participating in the baseline survey and, of these, 90%, 88%, and 87%, completing the 1-, 3-, and 5-year surveys, respectively.

The analytic sample comprises 3,544 of the 4,898 individuals in the baseline FFCWB. We first deleted the 1,265 observations (26%) missing information on relationship status at any wave through the 5-year survey. Nearly all of these observations are missing because of non-participation and not item non-response (1, 542, 672, and 764 were missing information on relationship status at the baseline, 1-, 3-, and 5-year surveys, respectively, with some missing information at multiple waves). We then deleted the additional 28 observations (<1%) missing the dependent variable, parenting stress at the 5-year survey. Finally, to ensure clean comparisons between mothers who experience relationship churning and other mothers, we deleted the 89 observations (2%) that did not fit into one of our four relationship history categories (see below). There were several small, but statistically significant, differences between the baseline and analytic samples. Mothers in the analytic sample, compared to mothers in the baseline sample, were less likely to be Hispanic (25% compared to 27%), foreign-born (14% compared to 17%), separated from the child's biological father at baseline (11% compared to 13%), and without a high school diploma or GED (32% compared to 35%).

Measures

Parenting stress. The dependent variable, parenting stress, is an average of mothers' responses to the following four questions at the 5-year survey (1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*): (1) being a parent is harder than I thought it would be;

(2) I feel trapped by my responsibilities as a parent; (3) I find that taking care of my children is much more work than pleasure; and (4) I often feel tired, worn out, or exhausted from raising a family (α = .62).

Relationship history. The key explanatory variable, relationship history, is measured by a series of mutually exclusive dummy variables: relationship churning (reference category), stably together, stably broken up, and repartnered. *Relationship churning* is measured by a combination of direct and indirect reports of relationship churning. Mothers were asked directly about relationship churning at the baseline, 3-year, and 5-year surveys (but not the 1-year survey; therefore, the prevalence of relationship churning in our study is underestimated). For example, at baseline, mothers were asked to best describe their current relationship with the child's biological father (response categories include: romantically involved on a steady basis; involved in an on-again and off-again relationship; just friends; hardly ever talk to each other; and never talk to each other) and we consider mothers who reported an on-again/off-again relationship to have experienced relationship churning. At the 3- and 5-year surveys, mothers were asked to characterize their relationships with the biological father as steady or on-again/off-again, and we consider mothers who reported an on-again/off-again relationship to have experienced relationship churning. We also considered an indirect measure of churning, coded affirmatively if a mother reported being in any (marital, cohabiting, or non-residential romantic) relationship with the biological father at one survey wave, not in a relationship with him at the following survey wave, and in a relationship with him again at a subsequent survey wave (or similar combinations of between-wave churning).

We compare mothers who report relationship churning to three groups. Mothers are coded as *stably together* if they reported a marital, cohabiting, or non-residential romantic

relationship with the child's biological father at all four survey waves (baseline, 1-year, 3-year, and 5-year surveys) and reported no churning. Mothers are coded as *stably broken up* if they dissolved their relationship with the biological father and reported no repartnering (and no churning). Mothers are coded as *repartnered* if they dissolved their relationship with the biological father and reported repartnering (and no churning). Mothers in the stably broken up and repartnered groups could have separated from the biological father at any point. As noted above, 89 observations do not neatly fit into one of these four categories, and we drop these observations from the analyses.

Control variables. The multivariate analyses adjust for an array of demographic, socioeconomic, and behavioral characteristics. Mothers' race is represented by mutually exclusive dummy variables (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic other race), and a dummy variable indicates the mother and father are a mixed-race couple. Additional demographic characteristics include a dummy variable indicating the mother was born outside the United States, a dummy variable indicating the mother lived with both biological parents at age 15, a continuous variable indicating the mother's age, and a series of mutually exclusive dummy variables indicating the mother's relationship with the child's biological father at baseline (married, cohabiting, non-residential romantic, separated). Socioeconomic control variables include the mother's and father's educational attainment (mutually exclusive dummy variables indicating less than high school, high school diploma or GED, some college, college degree), material hardship (a sum of affirmative responses to 12 questions [e.g., evicted from home or apartment for not paying the rent or mortgage in the past year; borrowed money from friends or family to help pay bills in past year]), and employment (a dummy variable indicating the parent was employed in the past week). In addition, we control

for the mother's and father's cognitive ability (measured by the Weschler Adult Intelligence Scale [Weschler, 1981]), mother's and father's depression (measured by the Composite International Diagnostic Instrument-Short Form [CIDI-SF] [Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998]), mother's smoking during pregnancy, and mother's drinking alcohol or using drugs during pregnancy. Finally, we adjust for three child characteristics (gender, first-born, and born low birth weight [less than 2,500 grams]). To ensure appropriate time ordering between the dependent, explanatory, and control variables (and, especially, to ensure that the control variables are measured at or prior to relationship churning), the control variables are measured at baseline or, when variables are not ascertained at baseline, as close to baseline as possible.

Mechanisms. The multivariate analyses consider three sets of mechanisms measured at the 5-year survey that may explain the association between relationship churning and mothers' parenting stress: relationship mechanisms (relationship status [married, cohabiting, non-residential romantic, separated], mother's and father's reports of relationship quality [1 = *poor* to 5 = *excellent*]), economic mechanisms (mother's and father's material hardship [measurement described above] and employment [a dummy variable indicating the parent worked in the past week]), and mental health mechanisms (mother's and father's depression [measured with the CIDI-SF], binge drinking [having four or more drinks in one sitting in the past month], and substance abuse [using illicit drugs in the past month]). All mechanisms are measured at the 5-year survey to ensure they are measured *after* the explanatory variables.

Analytic Strategy

The analyses occurred in three stages. First, we examined the demographic, socioeconomic, and behavioral characteristics of mothers who reported relationship churning,

compared to mothers in the other three groups (stably together, stably broken up, and repartnered). We tested for statistically significant differences, depending on the distribution of the outcome variable, with chi-square or t-tests. Second, we used ordinary least squares (OLS) regression models to estimate mothers' parenting stress as a function of relationship churning. We first present the unadjusted association and subsequently adjust for all control variables described above. Third, we considered the three possible mechanisms—relationship characteristics, economic characteristics, and mental health characteristics—that may explain the association between relationship churning and mothers' parenting stress. Relatively few covariates were missing data, and we preserved data by imputing 20 data sets and averaging results across imputations (Allison, 2001).

RESULTS

Descriptive Statistics of Relationship Churning

In Table 1, we present the percentages of mothers who reported relationship churning with the focal child's biological father. Relationship churning was most common at baseline, where 9% of mothers directly reported being in an on-again/off-again relationship with the child's biological father. About 2% of mothers directly reported being in an on-again/off-again relationship at either the 3- or 5-year surveys, and 5% reported indirect churning (i.e., between-wave churning) through the 5-year survey. Taken together, about one-sixth (16%) of mothers experienced relationship churning with the focal child's biological father.

[Table 1 about here.]

Comparing Mothers Who Report Relationship Churning to Other Groups of Mothers

In Table 2, we examine the demographic, socioeconomic, and behavioral characteristics of mothers who reported relationship churning, and compare these characteristics to three other groups of mothers with different relationship histories (stably together, stably broken up, and repartnered). Overall, mothers who reported churning were a relatively disadvantaged group. Compared to stably together mothers (those in a stable relationship with the child's biological father throughout the survey waves), relationship churners were less likely to be non-Hispanic White (9% compared to 34%) and more likely to be non-Hispanic Black (64% compared to 32%). They were also less likely to live with both biological parents at age 15 (34% compared to 56%). At baseline, they were less likely to be in marital (2% compared to 51%) or cohabiting (30% compared to 38%) relationships with the child's father and more likely to have non-residential romantic relationships (61% compared to 11%) or no relationships (8% compared to 0%) with the father. They had lower educational attainment (42% of relationship churners, compared to 24% of stably together mothers, had less than a high school diploma at baseline), more material hardship (1.643 compared to 0.788), lower cognitive abilities (6.270 compared to 7.247), and were nearly twice as likely to report depression (21% compared to 11%).

[Table 2 about here.]

Mothers who reported relationship churning are also disadvantaged compared to the remaining two groups of mothers: (a) the stably broken up, those who broke up with the biological father and did not repartner, and (b) the repartnered, those who broke up with the biological father and repartnered. For example, mothers who reported relationship churning, compared to the stably broken up, were less likely to be married (2% compared to 13%) or cohabiting (30% compared to 42%) at the child's birth, were more likely to have less than a high school degree (42% compared to 35%), reported more material hardship (1.643 compared to

1.154), and were less likely to be employed (47% compared to 56%). Mothers who reported relationship churning, compared to the repartnered, were also less likely to be married or cohabiting with the child's biological father (2% compared to 9%) at the child's birth, were more likely to have less than a high school degree (42% compared to 37%), reported more material hardship (1.643 compared to 1.313), and were less likely to be employed (47% compared to 55%).

Estimating Parenting Stress as a Function of Relationship History

Table 3 presents estimates of mothers' parenting stress as a function of relationship history (comparing the stably together, the stably broken up, and the repartnered to mothers who report relationship churning). Model 1, the unadjusted association, shows that mothers in stably together relationships reported less parenting stress than mothers who experienced relationship churning (b = -0.184, $p < .001$). This was also true of stably broken up mothers (b = -0.140, $p < .01$) and repartnered mothers (b = -0.068, $p < .10$). Model 2 shows that—even after adjusting for an array of demographic, socioeconomic, and behavioral characteristics—mothers in stably together relationships reported less parenting stress than their counterparts who experienced relationship churning (b = -0.100, $p < .05$). Model 2 also shows that stably broken up mothers reported marginally significantly less parenting stress than mothers who experienced relationship churning (b = -0.081, $p < .10$). Finally, in Model 2, mothers who experienced relationship churning reported similar levels of parenting stress as repartnered mothers (b = -0.024, *n.s.*).

[Table 3 about here.]

The other covariates, though not the central focus of these analyses, worked as expected. Compared to their counterparts with less than a high school diploma, mothers with a high school

diploma or GED (b = -0.094, p < .01) and mothers with some college (b = -0.127, p < .001) reported less parenting stress. Mothers' material hardship was positively associated with parenting stress (b = 0.030, p < .001), and employed mothers reported less parenting stress than their unemployed counterparts (b = -0.060, p < .05). Mothers' other characteristics were also independently associated with parenting stress. Parenting stress was negatively associated with cognitive ability (b = -0.020, p < .001), positively associated with depression (b = 0.218, p < .001), and positively associated with prenatal alcohol or drug use (b = 0.124, p < .001).

Considering Mechanisms

In Table 4, we consider how relationship characteristics, economic characteristics, and mental health characteristics—all measured at the 5-year survey and, therefore, at or after the measure of relationship history—explain the association between relationship churning and parenting stress. Because the results presented in Table 3 suggest that there was only a statistically significant difference between mothers who reported relationship churning and mothers who reported being stably together with their children's fathers, we focus our discussion on these differences (though we present coefficients for all three comparison groups).

Model 1 presents the covariate-adjusted estimate of the association between relationship churning and parenting stress (the equivalent of Model 2 from Table 3). In Model 2, when we adjusted for relationship characteristics at the 5-year survey (including relationship status and mother's and father's reports of relationship quality), the stably together coefficient fell by 94% and to statistical insignificance (b = -0.006, *n.s.*). Supplemental analyses (not presented) that considered each of these mechanisms separately shows that relationship status independently explained 20% of the association, mother's reports of relationship quality independently

explained 73% of the association, and father's reports of relationship quality independently explained 26% of the association. Mother's reports of relationship quality at the 5-year survey are negatively associated with parenting stress (b = -0.052, p < .001)

[Table 4 about here.]

Next, we adjusted for economic characteristics at the 5-year survey (Model 3), which explained about 16% of the association. Mother's economic characteristics explained more of the association than fathers' economic characteristics (16% and 3%, respectively, when entered separately into the model [not shown]). Finally, we adjusted for mental health characteristics at the 5-year survey (Model 4). Mental health characteristics explain 30% of the association and, again, mother's characteristics explain more of the association than father's characteristics (26% compared to 6%, respectively, when entered separately into the model [not shown]). These findings are confirmed with Sobel-Goodman formal tests of mediation. Taken together, these results suggest relationship characteristics—and, to a lesser extent, mental health—are a primary mechanism through which stably together mothers experience less parenting stress than mothers who have churning relationships.

DISCUSSION

In this article, we use data from the Fragile Families and Child Wellbeing Study (FFCWB), a population-based sample of mostly unmarried parents, to provide the first examination of the association between within-partner relationship instability, or relationship churning, and parenting stress among mothers of young children. The analyses suggest three main conclusions.

First, we find relationship churning is fairly common among parents: More than one in

six mothers report breaking up and getting back together with the focal child's father by the time the child is five years old. This prevalence of relationship churning is lower than that found in previous studies (Halpern-Meekin et al., 2012; Vennum et al., 2014), likely because we exclusively focus on parents (who may be less likely than their non-parent counterparts to experience relationship churning) and because we only measure churning from the child's birth (so we do not capture all churning a couple experienced prior to the pregnancy). Relatedly, we find that relationship churners are a distinctive and disadvantaged population of parents. Compared to their stably together or broken up counterparts, churners are less likely to be non-Hispanic white, have lower educational attainment, and, shortly after the child's birth, report greater material hardship and lower employment rates. These findings about the disadvantaged characteristics of parents who experience relationship churning are in line with those of previous studies of young adult, national, and cohabiting parent samples of churners (Halpern-Meekin, et al., 2012; Nepomnyaschy & Teitler, 2013; Vennum et al., 2014).

Second, after adjusting for an array of covariates, we find that relationship churners experience more parenting stress than those in stable relationships with their children's fathers but similar parenting stress as their counterparts who separate from their children's fathers (whether or not they repartner). Our findings are in line with previous studies, which show that relationship transitions, such as union dissolution, are associated with parenting stress (Beck et al., 2010; Cooper et al., 2009). Some previous work has found transitions out of relationships matter more for parenting stress than transitions into new relationships (Osborne et al., 2012), and our results suggest that partner change may be less important than relationship instability in predicting parenting stress.

Third, in comparing relationship churners to those in stable relationships, we find that relationship characteristics measured proximately to parenting stress—but less so economic disadvantage or mental health measured proximately to parenting stress—explain nearly all of the association between relationship churning and mothers' parenting stress. This suggests that if churning parents were able to continue coming back together and to maintain as high quality a relationship as those in stable relationships, they would experience no greater parenting stress. Because only about one-third of churning relationships survive to the child's fifth birthday and because relationship quality among churners is more akin to the relationship quality of parents who are stably broken up than those who are stably together, such "positive" churning relationships are likely rare. Additional analyses (available upon request) show that the lower average relationship quality among churners is not just driven by those whose relationships have ended: Relationship quality among churners who are still together at year five (3.313) is lower, on average, than relationship quality among those in stable relationships throughout the five years (4.049). Taken together, these findings suggest it is both the personal and relational characteristics of the churners, more so than their proximate economic disadvantage or mental health conditions, which primarily drive the observed differences in parenting stress.

Limitations

It is possible that we underestimate the association between relationship churning and parenting stress for three reasons. First, by the time of the survey, if a substantial amount of time has passed since a couple experienced a relationship disruption, mothers may not report being in an on-again/off-again relationship, or if a couple is surveyed immediately post-breakup, a reconciliation may be coming in the future but is not yet observed during that period. Second,

because proximate transitions are more strongly associated with parenting stress than distal transitions (Beck et al., 2010), and there are long time periods between observations, the association between churning and parenting stress may be diminished for those couples who experienced instability in the more distant past. Third, though our measure of relationship churning is measured between the baseline and 5-year surveys, most relationship churning is reported at baseline and several of our control variables are necessarily measured at the 1-year survey (and, thus, may be part of the pathway linking relationship churning and parenting stress instead of control variables). For example, maternal depression is necessarily first measured at the 1-year survey; if churning is reported at baseline, then maternal depression may be more of a mediator than a control variable. All of these limitations suggest that we likely underestimate the association between relationship churning and parenting stress.

The present study has additional limitations. For example, we do not explicitly compare cohabiting and noncohabiting churners, as these living arrangements may be fluid and ill-defined over the 5-year period observed (Manning & Smock, 2005; Teitler, Reichman, & Koball, 2006); in our sample, 59% of churners report cohabiting at some point during the 5-year period of observation. Supplemental analyses (available upon request) indicate no statistically significant interactions between relationship transitions and coresidential status when predicting maternal parenting stress. However, future research should disentangle the association between churning and parenting stress for those in coresidential versus non-coresidential relationships, especially because the economic mechanisms may vary; this would entail tracking the movement of both relationship status and coresidential status simultaneously (i.e., does a disruption in the relationship change the coresidential status of the couple or not?). In addition, we do not account for the potential association between churning and parenting stress in the latest relationships of

parents who have repartnered; that is, the association between churning and parenting stress of those in relationships with a partner other than the child's biological father is not captured here. Finally, we do not engage the thorny task of disentangling the "his" and "hers" stories of churning—although one partner may view certain relationship events as a break up and reunion, the other might not. Future research should engage with questions of concordance and discordance in parents' reports of their relationship status (Halpern-Meekin & Tach, 2013); it is an empirical question whether fathers' perceptions of churning are associated with mothers' experiences of parenting stress (and vice versa). Such research should also explore how relationship churning may affect fathers' parenting stress. However, in FFCWB the data quality from fathers is more problematic than that from mothers, as it is relatively common to be missing data on father's reported relationship status for at least one wave. A future investigation would require more complete data to fully address this question.

Conclusions

The present study documents the sort of relationship instability among parents that is generally ignored. Relationship churning is not uncommon and is associated with experiencing higher levels of parenting stress. This is consequential, as parenting stress is predictive of more negative outcomes for both parents and children (Crnic et al., 2005; Crnic & Greenberg, 1990; Magill-Evans & Harrison, 2001; Thompson et al., 1993). Although those who broke up only once and then entered a new relationship experienced several relationship transitions, churners also experience several relationship transitions *without a change in partner*. The similarity in parenting stress between churners and those who repartner suggests the possibility that it is relationship instability, rather than partner change, that may exacerbate parenting stress. Both

future research and interventions for parents must attend to the possibility of relationship churning and the potential consequences that coping with such uncertainty and change may bring for parenting behaviors and, ultimately, children's wellbeing.

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Table 1. Descriptive Statistics of Relationship Churning

	Relationship churning
Churning at baseline survey[a]	8.7%
Churning at 3-year survey[a]	2.3%
Churning at 5-year survey[a]	1.6%
Between-wave churning through 5-year survey[b]	5.4%
Any churning through 5-year survey[c]	15.7%
N	3,544

[a] Indicates the mother reports she and the child's biological father were in an "on-again/off-again" relationship.

[b] Indicates the mother reports a relationship with the child's biological father at one wave, no relationship with him at the next wave, and again a relationship with him at the next wave (or similar combinations of between-wave churning).

[c] Indicates the mother reports any churning at the baseline, 3-year, or 5-year surveys or that the mother reports between-wave churning.

Table 2. Descriptive Statistics of All Variables Included in Analyses, by Relationship History

	Entire sample	Relationship history			
		Churning	Stably together	Stably broken up	Repartnered
Control variables					
Mother race (b)					
Non-Hispanic White	22.3%	9.4%	33.9% ***	13.8% *	16.4% ***
Non-Hispanic Black	48.9%	64.1%	31.7% ***	58.7% ^	61.1%
Hispanic	25.3%	24.0%	29.4% *	25.2%	20.0% ^
Non-Hispanic other race	3.5%	2.5%	5.0% *	2.4%	2.4%
Mother and father are mixed-race couple (b)	14.2%	14.6%	12.2%	12.0%	18.0% ^
Mother foreign born (b)	14.1%	7.7%	22.8% ***	10.2%	6.7%
Mother age (b)	25.215	24.211	27.182 ***	25.181 **	22.847 ***
Mother lived with both biological parents at age 15 (b)	42.9%	34.4%	56.0% ***	36.8%	31.3%
Mother and father relationship status at birth (b)					
Married	25.8%	2.2%	50.5% ***	12.8% ***	8.7% ***
Cohabiting	36.0%	29.5%	38.4% ***	41.5% ***	33.1%
Non-residential romantic	26.7%	60.7%	11.0% ***	29.1% ***	30.1% ***
Separated	11.4%	7.6%	0.0% ***	16.5% ***	28.1% ***
Mother educational attainment (b)					
Less than high school	32.0%	42.0%	23.6% ***	35.4% *	37.4% ^
High school diploma or GED	31.1%	34.2%	26.9% **	33.1%	34.5%
Some college	25.4%	21.8%	26.9% *	25.4%	25.1%
College degree	11.5%	2.0%	22.6% ***	6.1% **	3.0%
Father educational attainment (b)					
Less than high school	31.2%	38.7%	25.4% ***	31.1% **	35.9%
High school diploma or GED	36.2%	41.3%	27.9% ***	43.1%	42.3%
Some college	22.0%	18.2%	26.1% ***	20.9%	18.6%
College degree	10.6%	1.8%	20.7% ***	4.9% **	3.2% ^
Mother material hardship (y1)	1.122	1.643	0.788 ***	1.154 ***	1.313 ***
Father material hardship (y1)	0.396	0.722	0.044 ***	0.459 ***	0.711
Mother employed (y1)	53.9%	47.4%	54.8% **	56.1% **	55.0% **
Father employed (y1)	76.9%	65.9%	87.2% ***	73.8% **	71.1%
Mother cognitive ability (y3)	6.793	6.270	7.247 ***	6.410	6.602 *
Father cognitive ability (y3)	6.556	6.232	6.827 ***	6.374	6.425
Mother depression (y1)	15.3%	21.4%	11.0% ***	14.6% **	18.7%
Father depression (y1)	11.1%	15.7%	5.4% ***	12.4%	16.3%
Mother smoked during pregnancy (b)	18.7%	27.0%	13.0% ***	18.1% **	22.8% ^
Mother drank alcohol or used drugs during pregnancy (b)	12.6%	16.8%	10.6% ***	10.0% **	14.4%
Child male (b)	52.4%	50.1%	52.5%	48.6%	55.5% *
Child first-born (b)	38.6%	34.8%	36.8%	40.2% ^	42.7% **
Child born low birth weight (b)	9.3%	12.8%	6.5% ***	9.1% ^	11.8%
Mechanisms					
Mother and father relationship status (y5)					
Married	32.2%	7.9%	73.8% ***	0.0% ***	0.0% ***
Cohabiting	12.3%	16.9%	23.1% **	0.0% ***	0.0% ***
Non-residential romantic	3.1%	11.4%	3.2% ***	0.0% ***	0.0% ***
Separated	52.3%	63.8%	0.0% ***	100.0% ***	100.0% ***
Mother relationship quality (y5)	2.953	2.485	4.050 ***	2.297 *	1.906 ***
Father relationship quality (y5)	3.376	3.027	4.171 ***	2.910	2.619 ***
Mother material hardship (y5)	2.042	2.613	1.438 ***	2.465	2.410
Father material hardship (y5)	1.642	1.979	1.285 ***	1.708 *	1.957
Mother employed (y5)	60.2%	55.9%	59.0%	65.7% **	61.5% *
Father employed (y5)	77.1%	66.7%	87.4% ***	73.6% *	69.2%
Mother depression (y5)	16.7%	23.6%	11.6% ***	18.3% *	19.5% ^
Father depression (y5)	12.1%	13.9%	6.7% ***	15.6%	17.4% ^
Mother binge drinking (y5)	6.9%	8.3%	5.0% **	6.7%	9.0%
Father binge drinking (y5)	19.5%	20.0%	20.1%	16.9%	19.5%
Mother substance abuse (y5)	4.1%	4.5%	3.4%	2.8%	5.6%
Father substance abuse (y5)	9.4%	14.2%	5.3% ***	10.2% *	12.3%
N	3,544	555	1,488	508	993

Notes: Timing of measurement of all variables in parentheses (b = baseline interview, y1 = 1-year interview, y3 = 3-year interview, y5 = 5-year interview). Asterisks compare mothers who report churning to other groups of mothers. ^ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. OLS Regression Models Estimating Parenting Stress as a Function of Relationship History

	Model 1 *Unadjusted relationship*			Model 2 *+ controls*		
Relationship history (reference = churning)						
Stably together	-0.184	(0.034)	***	-0.100	(0.039)	*
Stably broken up	-0.140	(0.042)	**	-0.081	(0.042)	^
Reparterned	-0.068	(0.036)	^	-0.024	(0.037)	
Mother race (reference = non-Hispanic White)						
Non-Hispanic Black				-0.005	(0.034)	
Hispanic				-0.046	(0.039)	
Non-Hispanic other race				0.078	(0.069)	
Mother and father are mixed-race couple				-0.001	(0.035)	
Mother foreign born				-0.019	(0.040)	
Mother age				0.003	(0.002)	
Mother lived with both biological parents at age 15				0.003	(0.025)	
Mother and father relationship status at birth (reference = married)						
Cohabiting				-0.024	(0.035)	
Non-residential romantic				-0.003	(0.041)	
Separated				-0.029	(0.049)	
Mother educational attainment (reference = less than high school)						
High school diploma or GED				-0.094	(0.030)	**
Some college				-0.127	(0.036)	***
College degree				-0.054	(0.056)	
Father educational attainment (reference = less than high school)						
High school diploma or GED				-0.042	(0.029)	
Some college				-0.033	(0.036)	
College degree				0.004	(0.055)	
Mother material hardship				0.030	(0.008)	***
Father material hardship				-0.001	(0.013)	
Mother employed				-0.060	(0.024)	*
Father employed				-0.012	(0.031)	
Mother cognitive ability				-0.020	(0.005)	***
Father cognitive ability				-0.001	(0.005)	
Mother depression				0.218	(0.032)	***
Father depression				0.027	(0.040)	
Mother smoked during pregnancy				0.027	(0.032)	
Mother drank alcohol or used drugs during pregnancy				0.124	(0.036)	***
Child male				0.028	(0.022)	
Child first-born				-0.006	(0.026)	
Child born low birth weight				-0.033	(0.039)	
Intercept	2.300			2.364		
R-squared	0.010			0.060		
N	3,544			3,544		

Notes: ^ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4. OLS Regression Models Estimating Parenting Stress as a Function of Relationship History, with Mechanisms

	Model 1 *Baseline model*		Model 2 *+ relationship characteristics*		Model 3 *+ economic characteristics*		Model 4 *+ mental health characteristics*	
Relationship history (reference = churning)								
Stably together	-0.100	(0.039) *	-0.006	(0.057)	-0.084	(0.039) *	-0.070	(0.039) ^
Stably broken up	-0.081	(0.042) ^	-0.100	(0.047) *	-0.087	(0.042) *	-0.073	(0.042) ^
Repartnered	-0.024	(0.037)	-0.061	(0.043)	-0.021	(0.037)	-0.018	(0.037)
Mother and father relationship status (reference = married)								
Cohabiting			-0.074	(0.044) ^				
Non-residential romantic			0.045	(0.076)				
Separated			-0.002	(0.072)				
Mother relationship quality			-0.052	(0.011) ***				
Father relationship quality			-0.009	(0.013)				
Mother material hardship					0.048	(0.006) ***		
Father material hardship					-0.004	(0.007)		
Mother employed					-0.103	(0.024) ***		
Father employed					-0.016	(0.035)		
Mother depression							0.237	(0.032) ***
Father depression							0.081	(0.043) ^
Mother binge drinking							0.052	(0.045)
Father binge drinking							0.013	(0.033)
Mother substance abuse							0.163	(0.057) **
Father substance abuse							-0.003	(0.043)
Intercept	2.373		2.519		2.326		2.290	
R-squared	0.059		0.070		0.082		0.082	
N	3,544		3,544		3,544		3,544	

Notes: All models adjust for all control variables in Model 2 of Table 3. All mechanisms measured at the 5-year survey. ^ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.