Family Change and Co-parenting in Resident Couples and Children's Behavioral Problems

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Abstract

Using data from the Fragile Families and Child Wellbeing study ($n = 1,553$), the present study examined whether father involvement and co-parenting quality mediated the association between union instability (number of residential romantic partner changes) over the first 5 years of life and children's externalizing problem behaviors (EPB) at 5 years. The results indicate that only co-parenting support mediated the association between union instability and children's EPB, controlling for known covariates of children's EPB. The findings suggest that the union instability associated with romantic partner transitions has a deleterious effect on children's behaviors because the change in union status decreases the quality of the co-parenting relationship.

Keywords

Although children's behavior problems are normative in the early years, children who continue to exhibit behavioral difficulties in childhood are at a higher risk for school failure and later behavioral problems (Campbell, Shaw & Gilliom, 2000). This is of concern because over the last decade the number of children who exhibit behavior problems has increased. Research on American adolescents and school-age children from the mid-1970s to the late 1990s found evidence of increased levels of externalizing problem behaviors (EPB) from low levels in the 1970s (Collishaw, Gardner, Maughan, Scott, & Pickles, 2012). This trend has shed the spotlight on families, which are most influential to children's development (Bates, Bayles, Bennett, Ridge, & Brown, 1991). One aspect of the family that has received attention in recent decades is family structure because over the last 40 years there have been dramatic changes in family composition (Bumpass & Lu, 2000; Kennedy & Bumpass, 2008). For example, in 1970, 11% of infants were born to unmarried mothers (Akerlof, Yellen, & Katz 1996), whereas today 40% of all children are born to unmarried mothers (CDC, 2013). Even more children will live with one parent at some point in their lives (Cherlin, 2010).

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Research on the effects of non-marital family structures on children's outcomes is growing; researchers have found that, in general, compared to children living in married families, children living in other types of families (e.g. cohabiting) exhibit more EPB (Foster & Kalil, 2007). One explanation for this is that non-marital families are more likely to experience union instability (change from one relationship status to another) than married families (Cavanagh & Huston, 2006; Fomby & Cherlin, 2007), which is likely to cause disruption in the family and, consequently, in children's behaviors. And, the effects of union instability in early childhood tend to manifest as EPB, not internally focused problem behaviors (e.g., withdrawn, anxious, depressed behaviors) that emerge developmentally later in childhood (Leve, Kim, & Pears, 2005).

However, the mechanism by which union instability is linked to children's EPB is not well understood. Some scholars have hypothesized that union instability might be disruptive to aspects of family functioning such as co-parenting and father involvement. A study using the Fragile Families and Child Wellbeing (FFCW) dataset found that children living in married and cohabiting families exhibited fewer EPB when their parents reported positive co-parenting (parents' ability to work together to rear their children; Cabrera, Scott, Fagan, Steward-Streng, & Chien, 2012). It is possible that mothers who frequently transition in and out of relationships have more overall conflict in their relationship with their partners resulting in more co-parenting conflict, which can, in turn, create negative and hostile environments that increase children's EPB.

Union instability might also disrupt father involvement, which has been found to be uniquely and independently related to child behavioral outcomes in early childhood (Cabrera, Shannon, & Tamis-LeMonda, 2007). One study found that when mothers repartner (a form of union instability) their child's biological father's involvement with the child decreases (Tach, Mincy, & Edin, 2010). In another study, union instability (measured as fathers' resident status) was negatively linked to father involvement (Carlson, 2006). Thus it is possible that a reduction in father involvement might be another mechanism by which union instability is liked to children's behavior. We know of no study that has examined whether co-parenting or father involvement explains why union instability tends to be related to young children's EPB. We address this gap by seeking answers to the following questions: using the FFCW data, (1) what is the pattern of union instability in early childhood among fragile families (families at risk of breaking up)? (2) How is union instability during early childhood related to children's EPB at 5 years? And, (3) do co-parenting support and father involvement mediate the association between union instability in early childhood and children's EPB at 5 years?

Theoretical background

We frame our study using Feinberg's model of co-parenting that characteristics of the parents and the home environment (e.g., the stability of their relationships) influence the child through the co-parental relationship (Feinberg, 2003). Feinberg's model of co-parenting is based on family systems theory that co-parenting is at the center of all family interactions (e.g., parent-child). That is, each member of the family cannot be understood outside of the context of the family, with co-parenting at the center as a mechanism that

influences the child. Individuals' functioning and adjustment are influenced by a set of interrelated subsystems (e.g., mother-child, mother-father) such that a change in one results in a change in another (Cox & Paley, 1997). When families undergo changes such as a new partner comes into the household or the biological father leaves, other subsystems – such as father-child or mother-father relationship – are also expected to change. Therefore, we expect co-parenting support and father involvement to change in response to union instability.

Family structure and children's behavior problems

A robust body of research has consistently linked family structure to child wellbeing. Specifically, children are thought to thrive in married households because they provide children with predictability, residential stability for a longer period of time, more resources, and expose children to less conflict (Kamp Dush, Cohen, & Amato, 2003; Jose, O'Leary, & Moyer, 2010). In these households children are more likely to feel loved, secure, and have the resources to thrive, and consequently are more likely to be well adjusted (Davies et al., 2002). This evidence has been interpreted as meaning that the converse must also be true. That is, cohabiting families must be unstable and therefore not the ideal environment for children. And, there is some support for this view. Several large-scale studies of children 3 to 18 years old living in cohabiting unions found that they were more likely to exhibit EPB because their mothers were more likely to transition into and out of relationships, have more interparental conflict, and have fewer resources than children whose mothers were married (McLanahan, 2004; Hofferth, 2006; Brown & Booth, 1996). In a study of divorced families (in our coding scheme this would be one type of transition), Fagan (2013) found that toddlers living with their mother who remained single after a divorce (one transition) had higher literacy scores than children living with their mother and her cohabiting partner following a divorce (more than one transition). Similarly, Fomby and Osborne (2010) found that 3-year-olds whose mothers experienced more union instability (reported two residential partner changes) had more aggressive behavioral problems than children whose mothers experienced less union instability (reported only a dissolution, not a re-partnering) or no union instability (Fomby & Osborne, 2010). More recently, a study found that the more union instability (measured as mothers' romantic residential relationship transitions) is worse for children who have lived with both parents – either married or cohabiting – since birth than for children whose single mothers repartner (Lee & McLanahan, 2015). Collectively, these findings offer empirical support for the view that cohabiting in and of itself does not place young children at risk; what is problematic is when the union (cohabiting or marital) is unstable. Cohabiting unions that are stable during the first 5 years of life, which are considered to be foundational for children's development, may be able to provide children the same support and stability of married families. These findings also point to the importance of understanding union instability among *residential* couples and exploring *why* residential union instability is stressful for children.

Mediators

Drawing from family systems theory and Feinberg's co-parenting model, we expect that union instability will disrupt family functioning, in particular the way parents communicate

with one another in their role as parents. Studies consistently show that negative co-parenting (disagreement and conflict over child rearing) predicts child behavioral and emotional problems (Margolin, Gordis, & John, 2001) whereas positive co-parenting (when parents support each other in their role as parents) is associated with child adjustment (Jia, Kotila, & Shoppe-Sullivan, 2012). Research has demonstrated that co-parenting conflict is a better predictor of child adjustment than marital quality and conflict from infancy to adolescence (Feinberg, Kan, & Hetherington, 2007; Frosch, Manglesdorf & McHale, 2000). Moreover, it appears that overall levels of quality of the co-parenting relationship is similar for both cohabiting and married couples (Hohmann-Marriott, 2011), suggesting that the union instability associated with non-marital family structures (cohabitating and romantic nonresident relationships), not family structure per se, may result in a more conflicted co-parenting relationship. This view is supported by findings showing that when couples separate, their co-parenting alliance changes. A review of the literature found that nonresident couples (those who had undergone at least one transition) were, on average, less supportive of each other's parenting than were resident couples (Carlson & Högnas, 2009). Additional support comes from studies showing that mothers' co-parenting support with her child's father declines when she has a new partner (Martin, Riina, & Brooks-Gunn, 2013). Thus, in this paper we test whether co-parenting support explains why union instability is related to children's EPB over time.

Union instability is also expected to disrupt father involvement, which can have negative consequences for children. Father involvement, typically assessed as fathers' ability to be engaged with their children in positive ways and to be responsible for them, is uniquely and independently related to children's behaviors from early childhood to adolescence, over and above the effects of mothers on these behaviors (Cabrera et al., 2007; Carlson, 2006; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). Thus, potentially, union instability can have negative effects on children because when fathers become nonresident they have less contact and less engagement with their children (Carlson, 2006; Demuth & Brown, 2004; Fagan & Palkovitz, 2011; Tach et al., 2010). However, among nonresident fathers, there is large variability in the amount of time spent with their children (Amato & Gilbreth, 1999). The sources of variability are multiple. One source of variability is whether or not there is a new partner in the household after the father has become nonresident. Findings show that nonresident fathers are less likely to be involved in their child's life when their child's mother re-partners; his own re-partnering does not seem to influence his level of involvement (Tach et al., 2010). Based on this emerging evidence, we expect that union instability will be linked to children's EPB because it reduces father involvement.

Current study and hypotheses

Our study expands the current literature on the association between union instability and children's EPB by examining the mediating pathways by which union instability places children at risk for behavioral problems. Based on family systems theory and on the review of the empirical literature, we expect that more union instability (i.e., number of union transitions) will be linked to children's EPB at 5 years because of reduced co-parenting support between parents and reduced father involvement. While studies have examined how union instability is linked to changes in the parent-parent relationship (e.g., co-parenting)

and parent-child relationship (e.g., father involvement), it remains to be tested whether these family processes *explain* (mediate) why union instability is deleterious for children's social adjustment. In this study we focus on early childhood – from birth through age 5 – because it is a time of rapid development and when parental inputs matter the most for children's growth and development (e.g., Campbell et al., 2000).

Method

Data

Data were drawn from the FFCW study, a national data set that follows a cohort of 4,898 children born between 1998 and 2000 in 20 U.S. cities with populations of 200,000 or more. Mothers and fathers were interviewed at the time of the child's birth, and again when the child was 1, 3, 5 and 9 years old. Questions about the biological parent's relationship, mental health, work history, social support, and other relationships were asked at each wave. Measures of child behavior were available starting at year 3. These data are ideal for the current study, because each biological parent was interviewed at each wave and was asked questions about other partners and other children. Family functioning variables, such as co-parenting support and marital quality, were asked for the child's other parent as well as for the interviewee's current partner (McLanahan & Garfinkel, 2000).

Our analytic sample includes 1,553 children who had behavioral outcome data at ages 3 and 5 and who lived with their biological mothers and fathers at birth. Of the total sample of $N =$ 4,898, $n = 2,225$ were excluded because they did not have behavioral data at ages 3 and 5. An additional 1,115 children were excluded because their parents were not living together at their birth. Lastly, 5 children were excluded because they did not live with their biological mothers at least some of the time from birth to age 5. We restricted our sample to resident couples so that the type of instability (either a break up or a repartnering) corresponded to the same code on our union instability variable for all couples. That is, for all couples in our sample, a *1* on the union instability variable means the mother and father broke up. A *2* means the mother repartnered and so on. Our analytic sample of 1,553 represents mothers who lived with their child from birth to age 5, were in a residential relationship at birth with their baby's biological father, and reported on their child's behavior at 3 and 5 years.

Measures

Dependent variable—All child outcome measures were taken from the third and fourth waves of data when the focal child was 3 and 5 years old, respectively. Children's *Externalizing Behavior Problems* was measured with the Child Behavior Checklist (CBCL; Achenbach, 1992) externalizing subscale. Mothers completed the CBCL when the child was 36- and 60-months old to provide age-appropriate indicators of externalizing, internalizing, hyperactive, and prosocial behaviors. Mothers rated 30 items from 0 to 2 (0 = not true; 2 = very true). The externalizing subscale includes questions about aggressive and delinquent behaviors ($\alpha = .86$). Examples of aggressive behaviors include "Child argues a lot," "Child is cruel, bullying, or mean to others," and "(He/she gets in many fights." To control for earlier behaviors we subtracted children's year 5 CBCL score from their year 3 score (created a *change score*). Positive scores indicate improvements in behavior, which is

expected developmentally. Negative scores indicate more EPB at 5 years than at 3 years, which is not expected developmentally and is problematic for long-term developmental outcomes.

Independent variable—*Union instability* was calculated based on the method outlined in Lee and McLanahan's (2015) study. Mother reports of residential relationship changes were used because the children in the analytic sample lived with their mothers, so measuring mother reports of union instability also assessed the union instability that the child experienced. The FFCW collected information from mothers regarding the other biological parent and any current partner who was not the biological father of the focal child. Questions included with whom the mother is living, if she has a new partner since the last wave, and her marital status since the last wave. These questions were used to calculate whether a residential romantic relationship dissolved or if a new residential relationship started at each wave.

We measured union instability between 0 (baseline) and when the child was 5 years old, and created one variable to measure union instability in the infancy and toddler years (between 0 and 3 years) and another for the early childhood years (between 3 and 5 years).[1] This enabled us to determine whether the timing of union instability during the first 5 years of life is linked with children's behaviors. There is evidence to suggest that the temporal proximity of an environmental stressor (e.g., union instability) is important for the size of the effect it will have on the child (e.g., Foster, Garber, & Durlak, 2008). In our sample, the most union instability mothers can report from 0 to 3 years is four changes: a break up from the child's biological father (one change), a new cohabiting or marital union (two changes), a break up from the new cohabiting or marital partner (three changes), and another, new cohabiting or marital union (four changes). From 3 to 5 years, the most mothers can report is an additional two transitions, totaling up to six transitions (living with their third romantic partner) which might underestimate the amount of union instability a child has experienced from birth to 5. Union instability was only coded if the *residential* relationship (cohabiting or marriage) dissolved or a new residential relationship (partner moves in) was begun. Because of the variables were highly skewed, the union instability variables (0 to 3 years, 3 to 5 years) were transformed using the natural log before conducting analyses.[2]

Mediating variables—All mediating variables were measured at 5 years because the independent variable was measured over an earlier period from 0 to 5 years. We model the mediating variables temporally *after* mothers' union instability (between 0 and 5 years) to determine whether union instability predicts poor family functioning, which in turn is associated with children's EPB. This temporal modeling is supported in the literature (e.g.,

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[1]Although the year 3 questionnaire is used to construct both union instability variables, there is no overlap in the union changes measured with each variable because we are measuring changes *between* the waves. For example, a change in romantic, residential status when the child was 3 years old would be captured in the union instability between 0 and 3 variable, but would not be captured in the union instability between 3 and 5 years unless mothers reported another change in romantic, residential status when the child was 5 years old.

[2]Models were run using untransformed and transformed union instability variables. The same variables were significant in each model.

MacKinnon, 2015) but because of the timing of the mediating variables and the outcome variables causality cannot be determined.

Co-parenting support was compiled from six questions that asked the mother at 5 years if the child's biological father (1) always, (2) sometimes, (3) rarely, or (4) never "Acts like the father you want," for example. The six questions addressed the mothers' trust that the child will be cared for, if the father respects and supports the decisions the mother makes regarding the child, and about the communication about raising a child. Mothers were asked these questions of the biological father even if they were not currently in a romantic relationship. Maternal report was used based on missing data. Cronbach's alpha for maternal report of co-parenting support is .89.

Father involvement, assessed at 5 years, was compiled from eight questions that ask the mother how many days per week (0–7) the father plays games, sings songs, tells or reads stories, takes child to visit relative, puts child to bed, or shows physical affection. The eight questions gather information on play, cognitive stimulating activities, and care giving. Maternal report of father involvement was used because there was more than 50% missing data using father reports, which was a source of bias in our estimates. Mother's reports of father involvement, while not ideal, had less missing data (18%) and there is some evidence that mothers and fathers' report of involvement is comparable among two-parent couples (Coley & Morris, 2002). The eight items were added to provide a score that was then used as continuous variable with higher scores indicating more involvement. Alpha for this scale is .76.

Control variables—To isolate the effect of union instability on children's EPB, we controlled for two sets of variables: demographic, child, and family level. *Demographic controls* include mother ethnicity, education, marital status, and age at the child's birth; poverty status (dummy coded 1=meets criteria for poverty) and number of children in the household when the focal child is 5 years old. These variables are related to children's EPB (Cabrera, Fagan, Wight & Schadler, 2011; Tach, Mincy, & Edin, 2010). *Child controls* include gender because boys on average have more EPB than girls (Campbell et al., 2000). *Family level control variables* included maternal involvement and maternal depressive symptoms when the child is 5 years old because both have been linked to EPB (Cabrera et al., 2012; Fomby & Osborne, 2010; Rinaldi & Howe, 2010). *Maternal involvement* was measured with eight questions about play, cognitive stimulating activities, and care giving activities. The eight items were added to provide a score that was then used as continuous variable with higher scores indicating more involvement (α = .80). *Maternal depression* was measured with a dummy variable coded by the FFCW researchers (1 = meets criteria for clinical depression).

Missing data

Forty percent of all cases had missing data on at least one variable. Missing data on each variable ranged from 0% to 20% (on father involvement). We assessed the assumption that the data were missing at random with the analyze patterns function in SPSS. Our data met this assumption, so we used multiple imputation to compute the missing values of our

predictor, mediator, and control variables. Multiple imputation is preferable to list wise deletion (Schafer, 1997). The following results are based on data after 5 multiple imputations (the default number; Royston, 2004) have been implemented.

Results

Descriptive statistics

To address our first research question, we conducted descriptive statistics and cross-tabulations (see Table 1). In our sample of residential couples at birth, the patterns of union instability by the time the children were 5 years of age are shown in Table 1. At birth, 40% of our sample was married ($n = 620$) and 60% were cohabiting ($n = 933$). Over the child's first 5 years of life, 28% of the full sample of mothers remained in a relationship with the child's father; 52% of the full sample of mothers experienced one break up. At 5 years, 14% ($n = 199$) of mothers were still married to their child's father; another 32% ($n = 498$) had divorced and remarried between when their child was born and was 5 years old. Another 14% ($n = 194$) were still cohabiting with their child's father at 5 years old. Thus, in this sample, cohabiting parents were not more likely to break up with the child's father than their married counterparts. However, of the 20% of mothers in the analytic sample who reported at least one new residential partner by 5 years (not the biological father), the majority (83%) was cohabiting with the biological father at birth, suggesting that cohabiting parents experienced more instability than their married counterparts.

The analytic sample of residential parents at birth ($n = 1,553$) was more economically advantaged (23% lived in poverty and 73% graduated high school) than the full Fragile Families sample ($n = 4,898$; 26% lived in poverty and 65% graduated high school), and had a different racial composition (more mothers were White in our sample compared to the full - 30% vs. 21% - and fewer mothers were Black - 40% vs. 48%). This is because the married couples, who were not selected for participation based on risk factors but as a comparison to the unmarried families, comprise nearly half the sample.

Table 2 shows the bivariate correlations among all study variables. Union instability (between 3 and 5 years) among residential couples was significantly negatively correlated with children's EPB at age 5 ($r = -0.10$, $p < .001$; negative EPB scores indicate more EPB at age 5 than age 3, thus a negative correlation indicates union instability is linked with more EPB) and negatively correlated with co-parenting support ($r = -.26$, $p < .001$) and father involvement ($r = -.29$, $p < .001$). Over same period, co-parenting support and father involvement were negatively associated with EPB at age 5 ($r = -.19$, and $r = -.13$, respectively, $p < .001$). Union instability from 0 to 3 years was not associated with children's EPB at 5 years. Maternal race and involvement with her child were not correlated with our dependent variable.

Regression analyses

The next three research questions examining the mediating effects of co-parenting support and father involvement on the association between union instability and EPB were addressed with ordinary least-squares (OLS) regression, the assumptions of which were first tested. In

model 1, EPB were regressed on our measures of union instability (between ages 0–3 and 3–5). In model 2, EPB was regressed on union instability, co-parenting support, and father involvement using Baron and Kenny's method of mediation (1986). In model 3, the control variables were added to the model to determine whether the associations we report in models 1 and 2 are maintained after accounting for known covariates.

The results of model 1 (Table 3) show that union instability between 0 and 3 years was not associated with children's EPB at age 5, controlling for earlier EPB ($\beta = 0.01$, $t(2, 1550) = 0.33$, $p = .74$) but that union instability between 3 and 5 years was negatively associated with children's EPB ($\beta = -0.06$, $t(2, 1550) = -2.21$, $p = .03$), although the effect size is small. We conducted sensitivity analyses to determine whether more overall union instability is associated with children's EPB at age 5, or whether union instability is deleterious for children only when it results in a breakup. Our results revealed that a break up alone was not associated with children's EPB ($\beta = .04$, $t(1, 1551) = 1.24$, $p = .22$). Only when a break up was accompanied by a repartnering, children had a significant increase in EPB ($\beta = -.08$, $t(1, 1551) = -2.42$, $p = .02$; results not shown), but again the effect size was small.

Model 2 tested the mediational effect of maternal report of co-parenting support and father involvement. We included union instability from 0 to 3 years as a control in models 2 and 3 because it was not a significant predictor of EPB in model 1 and therefore could not be mediated. The assumptions of Baron and Kenny's (1986) method were tested before the covariates were included in the model (results not shown): union instability from 3 to 5 years was significantly and negatively associated with co-parenting support ($\beta = -0.29$, $p < .001$), and co-parenting support was significantly and positively associated with externalizing behaviors between 3 and 5 years ($\beta = 0.10$, $p < .001$, indicating more co-parenting support is associated with a decline in EPB between 3 and 5 years). Union instability from 0 to 3 years and 3 to 5 years was significantly and negatively associated with father involvement ($\beta = -0.18$, $p < .01$, $\beta = -0.30$, $p < .001$, respectively), but father involvement at 5 years was not associated with externalizing behaviors between 3 and 5 years ($\beta = 0.02$, $p = 0.53$). Thus, only co-parenting support met Baron and Kenny's assumptions for mediation and was the only mediator included in the model. Father involvement was included as a control.

Table 3 shows our results; consistent with a full mediation (Baron & Kenny, 1986), co-parenting support at 5 years ($\beta = 0.11$, $t(3, 1549) = 3.45$, $p < .01$) reduced the union instability coefficient from −.06 to −.05 and to non-significance ($p = 0.10$; a 17% reduction in the coefficient). Using Sobel's (1988) procedure, the t-test for mediation was significant ($t = -3.34$, $p < .001$). Together these coefficients suggest that more union instability is associated with more EPB at age 5, but that this association is fully explained by co-parenting support at age 5; when parents can maintain positive co-parenting following union instability, their children have fewer EPB at age 5.

We conducted post hoc analyses to explore why father involvement was not associated with children's EPB at age 5 given the literature suggesting how important father involvement is for children's social development. We tested two post hoc hypotheses. The first is that when highly involved fathers become less involved following a change in family structure, the reduction in their involvement will be associated with their children's behaviors more than

their involvement at any point in time. While the data we have cannot assess this hypothesis fully because of temporal limitations (a change in fathers' involvement between 3 and 5 years old may not occur after union instability reported during the same period), our post hoc analyses can suggest possible explanations for why we found null results. Our second post hoc hypothesis is that children will have more behavioral problems when fathers' involvement is reduced to no contact than when father involvement is reduced but not completely.

Neither post hoc hypothesis was supported (results not shown). For our first post hoc test, a reduction in the frequency of father involvement from 3 to 5 years (with positive values indicating less involvement at age 5) was marginally associated with children's EPB at age 5 ($\beta = .07$, $p = .07$). Although this hypothesis was not supported, we cannot determine whether father involvement changed before or after the reported union instability and thus the results should be interpreted with caution and warrant further research, especially given the marginal significance. For our second post hoc test we regressed a variable that indicated whether fathers were involved at 3 years and were no longer involved at all at 5 years (1 = any involvement) on children's EPB at age 5. Having at least some father involvement was not associated with children's EPB at age 5 ($\beta = -.06$, $p = .21$). Thus, our post hoc analysis does not support our hypothesis that the effect of union instability on children's EPB operates through decreased frequency of father involvement to no contact at all.

Co-parenting support remained a significant mediator in model 3, indicating that when accounting for known covariates, co-parenting support is still a significant mechanism that accounts for the association between union instability and children's EPB. The full model explained 21% of the variance in children's EPB (Table 3).

Discussion

The primary goal of this study was to examine the mechanism by which union instability (measured as the number of residential romantic partnership transitions) that children experience in early childhood predicts their EPB at school entry. This is an important issue because over the last decade researchers, educators, and policymakers have attributed the increased rates in children's EPB to the dramatic changes in family composition, especially among fragile families (Cabrera, 2010). Given that 60% of mothers in our sample are in cohabiting unions with the biological father at birth, and that these unions are at the greatest risk of dissolving, the need to look at whether union instability is in some way responsible for the increase in EPB is heightened. It should be noted that our sample represents mothers who are less socioeconomically disadvantaged than the overall FFCW sample.

Our first goal was to examine the variability in union instability experienced by residential mothers who participated in the FFCW study. Our analysis was based on a subsample of mothers who were living with their child's father at birth, limiting generalizability to all types of families. We focused on this sample for a couple of reasons. First understanding the stability of cohabiting unions is an important policy issue as the number of families cohabiting has increased exponentially and there's a concern that children in these families are at risk because their parents are not married. Moreover, union instability among

residential families may be more stressful for children than union instability among nonresidential families (Lee & McLanahan, 2015). Pragmatically, selecting residential families means that union instability for each couple had the same meaning (i.e., a 1 always meant a breakup, a 2 always meant a re-partnering, and so on). Our findings show that nearly 30% of mothers who were living with their child's father at birth reported no change in relationship status or no union instability from the time their child was 0 to the time their child was 5 years of age. About half reported one transition and 20% reported two transitions or more. In others words, 80% of the sample reported between no transitions or one transition, which suggests that most of these families are fairly stable during this time. Not surprisingly, cohabiters reported more transitions than (originally) married parents. Interestingly, the mothers who reported no union instability between 0 and 5 years were most likely to be Latina (results not presented). Other scholars have found that Latino parents have high rates of cohabitation, but their cohabitation is more stable than White or Black parents (Castro Martin, 2002). Much of the research until this point has explored union instability as a phenomena inherent of all cohabiting unions (e.g., Bumpass & Lu, 2000; Brown, 2004). However, our results suggest that there is variability in the stability of cohabiting families, that variability may be driven by ethnic or cultural factors as well as demographics.

The second goal of our study was to examine the mechanisms operating in the association between union instability and children's EPB. Consistent with our hypothesis, we found that mothers who reported more union instability also reported having children with more EPB at age 5 than at age 3, although the effect size was small. Our results expand the literature by showing that this association was fully mediated by maternal reports of co-parenting support, even after known covariates were included in the model. That is, union instability is associated with greater EPB because parent's co-parenting support declined by age 5. This finding is consistent with family systems theory (Feinberg, 2003). When mothers transition in and out of relationships, their ability to work with their partners together to raise their children is compromised resulting in hostile and unpredictable situations, which in turn, deplete children's ability to cope and increase acting out behavior.

We did not find support for our hypothesis that father involvement mediated the association between union instability and EPB. This does not necessarily mean that father involvement is not important; rather it may reflect other issues, including measurement. In this study, we could not measure how much father involvement changed as a result of union instability because we cannot know with certainty when the union instability mothers report took place over the two-year period. If father involvement was low before union instability (or of poor quality) it may have remained so afterwards and thus would have had no effect on children's behaviors. It is also possible that that father involvement is not really affected by father residency. If fathers are attached and bonded with their children, they may continue to find ways to stay involved with their children after the couple union dissolves. However, we attempted to address these possible measurement concerns with ad hoc analyses, which revealed that a change in father involvement between 3 and 5 years was not associated with a children's EPB at age 5. Similarly, a change in father's involvement from any involvement to no involvement was not associated with children's EPB at 5 years. But given the temporal limitations mentioned, our post hoc analyses cannot address measurement problems may be

at play, nor can they address questions about the quality of father involvement vs. the quantity. There is some evidence that a change in father involvement is a more important indicator of children's wellbeing than father involvement at one point in time (Cabrera et al., 2004). Moreover, fathers who are prenatally involved are more likely to stay involved 3 years out (Cabrera, Fagan, & Farrie, 2008). These past studies did not including co-parenting, which may have confounded the findings. In our study co-parenting and parenting were correlated, yet our results suggest that co-parenting explained the association between union instability and children's EPB, not parenting. As co-parenting is associated with many other family processes and dynamics, excluding it from studies of the family system may obscure what is really driving change in children's behaviors.

However, our results do not suggest that co-parenting is the only aspect of family functioning and the family system that changes when children are exposed to union instability. Future studies should examine other measures of family functioning. In the context of union instability, the child is also adjusting to a new home environment and potentially altered parental characteristics. Additionally, children's own characteristics may buffer or exacerbate the influence of environment stress on their own social adjustment. Future studies should include more child characteristics in determining what explains the association between union instability and child behavior.

There are several limitations to this study. The FFCW data on partnership union instability does not ask the parents about partnership transitions that do not include the biological father or current partner. So if a mother separated from the biological father, re-coupled, separated and then re-coupled again within a 2-year period, the data miss everything that happens between her first separation and last re-partnering. Additionally, co-parenting support is only one facet of the co-parenting alliance. The FFCW data does not measure co-parenting conflict, shared decision-making or co-parenting communication. These different factors of the co-parenting alliance predict differentially to family functioning and child outcomes. For example, Cabrera and colleagues (2012) found that co-parenting conflict was negatively associated with children's cognitive ability and social skills at kindergarten. It is possible that couples with positive co-parenting support have reduced co-parenting conflict, but this is not something that is disentangled in the literature. Another potential limitation is that all the data are reported by mothers, thus shared variance and reporter bias might be a problem. We also cannot speak to causality in our analyses, although we find evidence of longitudinal associations between union instability and children's EPB. Moreover, the effect sizes reported in the paper are small; although family union instability through early childhood is significantly associated with a change in children's EPB when entering school, there are other family and child characteristics that account for a larger proportion of the variation in children's behaviors. Yet, we examined change scores, thus the expected effect sizes are smaller than studies measuring EPB at any one point in time. Lastly, the child assessments are limited in this data set. Researchers have identified the importance of regulatory behaviors in shaping parent-child interactions and children's outcomes. For instance, emotion regulation has been identified as an important mediating variable explaining the association between maternal depression and child internalizing behaviors (Silk, Shaw, Forbes, Lane, & Kovacs, 2006). There are no measures of regulatory behavior available from the FFCW data when children are 3 or 5 years old.

Despite these limitations, this study makes significant contributions. First, it is one of the few studies to examine the pathways by which union instability is channeled to children in a sample of two-parent families. Second, we found support for the hypothesis that the co-parenting relationship is most important (more so than father involvement in our study) for children's wellbeing when families undergo change. Parents who are unable to work together to raise their children either when they are living together and especially when they are not are not able to provide a stable and secure environment for their children. In such environments, children may feel insecure, anxious, and aggressive resulting in more behavior problems. Third, union instability may not really disrupt the father-child relationship, as some believe. This could mean that the father-child relationship might be independent from the mother-father relationship. There is support for this view in the attachment literature (Williams & Kelly, 2005); parents who develop secure attachment with their children are more likely to stay involved than those who do not. Collectively, these findings have clear implications for programs and policies. Building and supporting the co-parenting relationship should be a priority in making sure that family dissolution, all too common in today's society, does not jeopardize children's social adjustment.

Acknowledgments

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Table 1

Descriptive Statistics (N = 1,553)

Variable			
	n	*%*	*M(SD)*
Mother instability *(0–5)			1.04(.96)
0	435	28	
1	808	52	
2	225	15	
3	32	2	
4	45	3	
5	1	0	
6	7	1	
Co-parenting (5)			3.56(.63)
Father involvement (5)			2.67(1.90)
EPB **(5)			−2.97(6.13)
Mother Father married (0)		40	
Mother Father relationship (5)			
Continuously married		14	
Continuously cohabiting		14	
Children in HH (5)			2.68(1.32)
Mother poverty (5)		23	
Mother involvement (5)			4.63(1.15)
Mother age (0)			26.31(6.09)
Mother depressed (5)		11	
Child gender			
Male	786	51	
Female	767	49	
Mother years of school			
< HS degree	415	26.7	
HS degree	443	28.5	
Some college	437	28.1	
College degree	258	16.6	
Mother race			
Black	617	40.0	
Latina	413	26.5	
White	466	30.0	
Other	57	3.5	

Note. Child age indicated in ().

*
The raw (untransformed) values are shown.

**
Controlling for EPB at age 3.

Involvement is in days per week mother engages in activities with her child. Num other child = number of other children in the household. < HS degree = Did not complete high school.

Table 2

Intercorrelations of model variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Instability (0–3)	1													
2. Instability (3–5)	.15**	1												
3. Co-parenting (5)	–.02	–.26**	1											
4. F involvement (5)	–.02	–.29**	.42**	1										
5. EPB	.02	–.10**	–.19**	–.13**	1									
6. C boy	.01	–.01	.02	.02	.06*	1								
7. M ed	–.11**	–.13**	.08**	.14**	–.16**	.01	1							
8. M age	.06**	–.18**	.13**	.13**	–.13**	.00	.39**	1						
9. M race	–.08**	.01	.01	.02	.01	–.01	–.21**	.08**	1					
10. M HH poverty	–.06**	.08**	–.13**	–.20**	.13**	–.01	–.29**	.16**	.07**	1				
11. M Marital status	.35**	–.24**	.19**	.28**	–.15**	.01	.40**	.38**	–.12**	.22**	1			
12. Children in HH	.08	.01	.03	–.01	.07**	.00	.19**	.22**	.01	.05	.11	1		
13. M depression	.01	.07**	–.10**	–.09**	.17**	–.01	–.02	–.02	.04	.06*	.05**	.05*	1	
14. M involve	.02	.02	.04*	.17**	–.01	–.01	.01	–.07**	–.08**	.02	.03*	–.03	.02	1

*
$p < .05$

**
$p < .01$

Table 3

Multiple regression model predicting child externalizing behaviors (n = 1,553)

	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Instability (0–3)	0.20	0.50	0.01	0.25	0.51	0.02	0.23	0.60	0.01
Instability (3–5)	−1.11	0.50	−0.06*	−0.87	0.53	−0.05	−0.78	0.56	−0.04
Co-parenting (5)				1.08	0.35	0.11**	0.99	0.36	0.10**
F involvement (5)				−0.15	0.11	0.05	−0.17	0.12	−0.05
Child boy							−0.37	0.35	−0.03
M marital status (0)							−0.11	0.49	−0.01
M race							0.16	0.21	0.02
M age (0)							0.00	0.04	0.00
M education (0)							0.15	0.22	0.03
M HHP (5)							−0.94	0.46	−0.06*
Children in HH (5)							0.00	0.14	0.00
M involvement (5)							−0.11	0.16	−0.02
M depression (5)							−0.69	0.57	−0.04

*
$p < .05$

**
$p < .01$

Note: Age is indicated in (). M = maternal. F = paternal. C = couple. Co-parenting = co-parenting quality. HHP = household poverty. *F* change scores were significant at the $<.05$ level for models 1, 2, and 3.

Sobel test for co-parenting support = −3.34 (p < .001).

[1] $R^2 = .06$, $F(2, 1550) = 2.47$, $p = 0.08$.

[2] $R^2 = .17$, $F(2, 1550) = 11.15$, $p < .001$.

[3] $R^2 = .21$, $F(11, 1541) = 45.52$, $p < .001$.