Family Instability and Children's Socio-Emotional Development at School Entry

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Abstract

We use data from 4 waves of the Fragile Families Study to determine the association between maternal partnership instability and children's behavioral problems at school entry (5). We use more detailed measures of partnership changes than have been used in prior studies to determine whether any change, the number of changes, or the type of partnership change that a child is exposed to between birth and age 5 has a stronger effect on child behavior. In addition, we use OLS and fixed-effects methods to examine the extent to which co-occurring changes in maternal stress, mothering, health and health behaviors, and economic resources mediate the association between partnership instability and child behavioral problems. Finally, we explore whether the effect of partnership instability is similar across all socioeconomic groups, defined by family structure at child's birth, race/ethnicity, and maternal education level.

Extended Abstract

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The attention of scholars and policy makers has recently begun to focus on preparing children from disadvantage environments for entrance into kindergarten; with the understanding that investments in early childhood are more effective and less costly than in adolescence (Heckman & Krueger, 2004). The substantial socioeconomic and race/ethnic gap in children's academic skills and socio-emotional development at school entry lays the foundation for disparities in subsequent outcomes and determines how schools must spend their limited resources (Rouse, Brooks-Gunn, & McLanahan, 2005).

Contributing to this readiness gap are several factors stemming from a child's home environment including chronic stress, parenting, health and health behaviors, and the economic resources of the household (Rouse, et al., 2005). As children's family lives are becoming increasingly diverse, the readiness gap may widen because the demographic changes in families are disproportionately affecting children from disadvantaged environments and race/ethnic minorities (Ellwood & Jencks, 2004). These children are much more likely to be born into an unmarried parent household, and nonmarital childbearing is associated with high levels of maternal stress, poor quality parenting, poorer health and health behaviors of the mother and child, and significantly fewer economic resources (Amato, 2005).

Nonmarital childbearing is also strongly associated with multiple changes in family structure over the course of a young child's life (Osborne & McLanahan, 2007), and a growing body of research indicates that children exposed to multiple changes in family structure have

poorer outcomes, on average, than children who grow up in stable families. These findings have been replicated for a variety of age groups (early and middle childhood, as well as adolescence) and across a variety of outcomes, including child behavior problems, delinquency, and adolescent pregnancy (e.g. Cavanagh & Huston, 2006; Fomby & Cherlin, 2007, Osborne & McLanahan, 2007; Wu & Thomson, 2001).

Although some of the association between family instability and child outcomes is likely the result of selection – e.g. parents with pre-existing problems are more likely to experience multiple relationship changes and to have children with behavioral problems (Capaldi & Paterson, 1991) – there are good theoretical and empirical reasons to believe that at least part of the effect is causal (Fomby & Cherlin, 2007). Social stress theory suggests that changes in relationships lead to disruptions in resources and routines (George, 1993; Holmes & Rahe, 1967) which interfere with a mother's psychological functioning and interactions with her child and, ultimately, reduce child well-being (George, 1989; Rutter, 1983).

In this study, we will use data from the Fragile Families and Child Well-being Survey, a longitudinal birth cohort study, to address three broad questions: 1) What is the association between maternal partnership changes and children's behavioral problems at school entry (age 5); 2) To what extent is this association mediated by co-occurring changes in maternal stress, parenting, health and health behaviors, and the economic resources of the household; and 3) Is this association moderated by the socioeconomic status of the family, including family structure at birth, race/ethnicity, and maternal education.

This study extends previous research in several ways. First, most prior studies have asserted that it is any change in partnership that matters with regard to children's well-being. We use a more refined approach in terms of counting partnership transitions to determine whether it is any change,

then number of changes, or the type of change in partnership that has the larger effect on children's behavior. Second, we use data from a large, birth cohort study that is following approximately 5,000 children born between 1998 and 2000. The study over-samples nonmarital births so it includes a large number of children who are at risk for experiencing parents' partnership changes. Third, these data include extensive information on parents' characteristics at the child's birth, including prior relationship stability and grandparents' mental health. Thus we are able to control for many of the theoretically important (but often unobserved) characteristics that are likely to be correlated with mothers' future partnership stability as well as child behavior problems. These controls reduce the possibility that the associations I observe between partnership instability and child outcomes are spurious. Fourth, whereas previous studies have primarily focused on older children and adolescents, we focus on children at age 5, prior to school entry. Fifth, these data include questions about changes in economic resources, health and health behaviors, maternal stress, and mothering quality which allows us to examine possible mechanisms through which partnership instability affects child well-being. Finally, the data observe child behavior at age 3 and age 5; thus we can employ fixed-effect methods to better account for unobserved heterogeneity than in prior studies in which child behavior was only observed at age 3 (Osborne & McLanahan, 2007).

Data

This analysis will be based on data from the first four waves of the Fragile Families and Child Wellbeing Study (Fragile Families). The Fragile Families Study is a stratified, multi-stage, probability sample of approximately 5,000 births that occurred between 1998 and 2000. The data are representative of births in US cities with populations of 200,000 or more. The study design called for a large over-sample of nonmarital births and thus these data allow me to distinguish among different types of unmarried mothers, including cohabiting mothers and mothers who are

romantically involved with the child's father but living apart; as well as different types of union transitions, including transitions into and out of cohabiting relationships and transitions into and out of marriage. Mothers were interviewed in the hospital soon after their child's birth. Almost 90% of the mothers in the original sample (N = 4,897) were reinterviewed when the child was approximately 1 year old, and 88% were interviewed when the child was approximately 3 years old; and approximately 82% were interviewed when the child was 5 years old. Both the 1 year, 3 year, and 5 year core surveys were conducted by telephone. In addition, at years three and five, assessments of mothers' parenting and child well-being, including the Child Behavior Checklist (Achenbach, 1992; 2000), were completed for 80% of the mothers who completed the core interview at age three and five. Approximately 64% of the mother-child assessments were completed in their home whereas 36% were completed by telephone.

We limit our sample to mothers who were unmarried to their child's biological father at the child's birth and who completed the year 5 child assessment.

Child outcome measures

We examine two child behavioral problems, aggressive and anxious/depressed behavior, using subscales from the Achenbach 2000 Child Behavior Checklists for 5 year olds. Each mother was read a statement and asked to indicate whether the statement was *not/never true* (0), *somewhat/sometimes true* (1), or *very/often true* (2) of her child. The aggressive behavior scale consists of 15 items (α = .86), including defiant, demands must be met immediately, disobedient, easily frustrated, fights often, hits others, has angry moods, punishment does not change actions, screams a lot, selfish, temper tantrums, easily jealous, moody, unusually loud, and whiny. The anxious/depressed scale consists of 10 items (α = .65), including too dependent, feelings hurt easily, looks unhappy, self-conscious/embarrassed, too fearful, unhappy, upset by separation

from parent, overtired, shy, and wants attention. The child behavior measures are standardized to have a mean of 0 and a standard deviation of 1.

Partnership Transitions

The main independent variable is the number of coresidential partnership transitions a mother experiences between her child's birth and age 5. We operationalize partnership changes in five ways to determine if it is any change, the number of changes, or the type of partnership change that has the largest effect on children's socio-emotional development. First, we determine whether the mother had any coresidential partnership changes versus no changes. Second, we determine the number of "positive" changes a mother experiences (e.g. to cohabitation or to marriage). Third, we determine the number of "negative" changes a mother experiences (separations from cohabitation or dating the biological father at the child's birth). Fourth, we determine the total number or count of partnership changes. And fifth, we determine 6 categories of relationships (stable cohabiting, stable single, cohabiting to married, single to cohabiting/married, cohabiting to single, multiple changes). The transition from cohabitation to marriage (which is not a coresidential change, but could have effects on child behavior) will be included in our counts as a robustness and sensitivity test.

Analytic strategy

To determine the association between maternal partnership changes and children's behavioral problems at school entry we will employ ordinary least squares and multinomial logistic regression techniques and fixed-effects models. To begin, we will use OLS models to determine the effect of any change versus no change on each child behavioral problem. To disentangle the type of change that matters more for child behavioral development, we will use a multinomial logit model to estimate the effect of the number of positive changes and negative

changes versus no change. Further, we will explore the association between various types of relationship statuses that a child may have experienced from birth to age 5 (stable single, cohabiting to marriage, single to cohabiting/married, cohabiting to single, and multiple changes versus stable cohabiting) and child behavioral. Finally, we follow the approach used by many of the prior studies and use OLS models to estimate the effect of the number of maternal partnership changes on children's behavior at age 5. Each of these models will include an extensive set of controls to account for those characteristics of the mother that might be associated with greater instability and more child behavioral problems including, demographic characteristics (race/ethnicity, age, education level), and prior instability (prior romantic relationships, number of other fathers for children, and parents married at age 15). These model will also include two child characteristics (low birth weight and gender).

Building on the last model, using the number of partnership changes as the primary predictor of children's behavioral problems, we will test the extent to which changes in maternal stress, poor quality mothering, health and health behaviors (self-reported health, prenatal smoking, parents' depression), and economic resources (household income) mediate this association. We recognize that these variables may actually act as predictors of partnership instability rather than as mediators as presented in the theoretical model. To determine the direction of the relationship, we will run various sensitivity tests. In addition, we will employ fixed-effects methods to examine changes in child behavior associated with changes in partnership transitions between years 3 and 5. This method holds constant all characteristics of the child and his family that cannot change over this time frame, and isolates the effect of the changes in partnerships.

Finally, we aim to determine whether partnership instability has similar effects on child behavior for all socioeconomic groups. We define socioeconomic status in three ways: family

structure at the child's birth, race/ethnicity, and maternal education level. We will interact partnership instability (defined in the multiple ways noted above) with each of these socioeconomic statuses (in separated models) and conduct Chow tests to determine if running separate models is warranted. Understanding the moderating effect of socioeconomic status is important because children of lower socioeconomic statuses are more likely to experience partnership instability, and if it has a stronger effect on this group than children with more resources, then this will significantly exacerbate the gap in school readiness.