

## **Transitions in Family Structure and Children's Wellbeing**

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### **SHORT ABSTRACT:**

A considerable body of research explores associations between marital dissolution, single-parent family structure, and child wellbeing. Although about 30 percent of children will spend some time in stepfamilies, the effects of maternal re-partnering on children's wellbeing have received much less scrutiny. We use longitudinal data from the National Longitudinal Survey of Youth and Hierarchical Linear Models (multilevel models) to estimate the effects of family structure transitions, with a specific focus on maternal re-partnering, on children's achievement and behavior trajectories. We consider whether these effects vary by children's ages and assess whether they are transitory or persist over time. Moreover, we focus on whether there are differences in these effects when maternal "re-partnerings" constitute cohabitations or marriages, as well as whether they differ by maternal education level. This research has implications for policies and programs regarding marriage and family formation and those that promote child wellbeing for children in complex families.

## EXTENDED ABSTRACT:

*Overview.* This study uses longitudinal data on about 3,100 children from the National Longitudinal Survey of Youth (NLSY) and Hierarchical Linear Models to examine associations between family structure transitions, with a specific focus on maternal re-partnering, and children's cognitive and behavioral development. Specifically, we: (1) estimate associations between family structure transitions, with an emphasis on maternal re-partnering, and child achievement and problem behavior trajectories; (2) assess whether the effects of family structure transitions on child achievement and behavior vary by child age at the time of transition and by maternal education; (3) explore whether these effects are transitory in nature or persist over time; and (4) examine whether these effects differ by whether mothers marry or cohabit with their new partners. This research has implications for public policies regarding marriage and family formation, as well as for designing programs and policies to promote child wellbeing for children in complex families.

*Background and Significance.* The demise of the traditional two-parent family has been well documented. Most children no longer spend their entire childhood in families that include both of their married biological parents. Current estimates suggest that more than half of children under 18 will spend some time in a single-parent family and that approximately one third will live with a step-parent – most often, a stepfather (Bumpass, Raley, and Sweet, 1995). The probability that children will reside in non-marital families has also increased; Bumpass and Lu (2000) report that 40 percent of children will spend some time in a cohabiting family. Thus, single-parent, step-parent, and non-marital (i.e., cohabiting) families are a large and increasingly common experience for children, particularly low income and racial and ethnic minority children.

A large body of research has found associations between family structure and child wellbeing. In a recent review article, Amato (2005) concluded that children who spend their entire childhoods in stable families consisting of their married, biological parents experience, on average, fewer cognitive, psychological/emotional, and social problems, during both childhood and adulthood, than children who spend all or part of their childhoods in other family types. However, the pathways to non-traditional families are diverse, including both children who are born into non-traditional families as well as those who transition into these family types (or between family types).

How might non-traditional family structures influence children's development? Theoretically, family structure is thought to affect children's development through several intervening mechanisms (Amato, 2005; Thompson et al, 2001). First, family structure is strongly linked to parents' economic resources (McLanahan and Sandefur, 1994). On average, two-parent families have higher household incomes and more assets than other family types. Family income, in turn, is strongly linked to the quality of home environments that parents provide (Votruba-Drzal, 2003). Second, the amount of attention and time that parents' can (or will) invest in their children is likely to vary by family structure, with children in single-parent and step-families receiving less supportive parenting than other children (Hofferth and Anderson, 2003). Finally, parents and children who experience transitions in family structure may experience stress, due to concomitant changes in residence, family roles, and social support, as well as increases in family conflict (Ginther and Pollak, 2004).

A small handful of studies have used longitudinal data to estimate associations

between maternal re-partnering and children's development, several using data from the NLSY Child Supplement. Because there are likely to be important differences between mothers and fathers who select into particular family structures and marital statuses, the most rigorous studies have used child fixed effects methods. This approach reduces bias due to persistent child and family characteristics. Findings from these studies are mixed, but most suggest negative effects of maternal re-partnering on children's behavior and achievement (see, e.g., Aughinbaugh, Pierret, and Rothstein, 2005; Gennettian, 2005; Ginther and Pollak, 2004). Using other datasets, several additional studies have also found negative effects of maternal re-partnering on children's wellbeing (Bachman, Coley, and Chase-Landsdale, 2003; Brown, 2004; Case, Lin, and McLanahan, 2001; Ermisch and Francesconi, 2001; Evenhouse and Reilly, 2004).

The evidence to date, however, has several important limitations. First, few studies differentiate between the effects of cohabitation and marriage in this transition. Second, the reliance on child fixed effects models, which essentially compare "average" outcomes for the same child in different family structure states (e.g., in a single-mother family and in a mother-partner family), does not allow the effects of family structure to be differentiated from the effects of family transitions, despite the fact that these effects may differ. Moreover, few studies have considered whether effects differ depending on children's ages.

To begin to address these gaps in the literature, we use growth trajectory modeling and Hierarchical Linear Models (HLM) to further illuminate associations between family structure transitions and child wellbeing in two ways. First, we distinguish between the effects of family structure *transitions* and family structure *states*. This is important as some research suggests that the effects of family structure transitions may diminish after a period of adjustment. For example, studies find that most children have a difficult time during and shortly after the divorce process, but that longer term residence in a stable single parent or step family is not detrimental to children's wellbeing (Ackerman et al., 2002; Amato, 1993; Amato & Keith, 1991; Hetherington & Stanley-Hogan, 1999; McLanahan, 1997; O'Connor et al., 2000). By explicitly modeling links between family structure transitions (and states) and children's achievement and behavior *trajectories* we will be able to better distinguish between transitory and persisting effects.

Second, HLM allows us to more fully consider whether the effects of family structure transitions (and states) differ according to children's ages or developmental stages. Previous studies suggest that the effects of divorce on achievement are most pronounced for elementary school age children (Amato, 2001). However, it is unclear whether this is also the case for other types of family transitions, particularly maternal re-partnering. Previous studies using fixed effect methods, which pool observations across several waves of data, typically without attention to the age at which the family structure transition occurred, have not addressed this issue. Additionally, because previous research has found that the negative effects of maternal re-partnering on parenting behaviors are larger among families with less educated mothers (see, e.g., Berger, 2005), we will also estimate our models separately for children whose mothers have a high school education or less.

By capitalizing on intra-individual change, HLM methods, like fixed-effects estimators, reduce bias due to unobserved persistent child and family characteristics. This approach also allows us to control for persistent characteristics with time varying effects.

This is particularly important because several maternal characteristics that are associated with selection into various family structures (e.g., race, maternal academic ability) are associated with changes in children's achievement and behavior as they develop (Magnuson, 2005).

*Sample.* We use data from the NLSY, a nationally representative sample of youth in 1979 who were interviewed annually from 1979 to 1994, and biennially thereafter. The NLSY collects detailed information on marriage and family structure, as well as a host of economic, demographic, and other background characteristics. In 1986, the NLSY began a separate biennial survey of children born to women of the original 1979 sample. This supplement collects information about child health, development, and well-being. Our sample consists of approximately 3,100 children between the ages of 5 and 12, pooled across cohorts.

*Child well-being measures.* The mathematics and reading recognition subtests of the Peabody Individual Achievement Test are used to measure children's achievement (PIAT; Dunn and Markwardt, 1970). Behavior problems are assessed by the internalizing and externalizing behavior subscales of the Behavioral Problems Index (BPI; Zill and Peterson, 1986). Both of these instruments have been widely used in prior research.

*Family structure transition measures.* We measure family structure with a set of indicators for a variety of family structure states and transitions that a child may have experienced (between consecutive waves of data). These indicators include: stable mother-father family (omitted group); stable single-mother family; stable mother-partner family; change to single-mother family; change from to mother-partner family; change to mother-father family; About 66 % of the children in our sample do not experience any family structure transitions, while about 34% of sample children experience at least one transition during the observation period. In some analyses, we also distinguish between re-partnerships involving marriage and those involving cohabitation. We model initial levels of achievement and behavior as a function of the cumulative time children have spent in various family structures between birth and age 6 (the age of the first academic and behavioral assessment).

*Control variables.* Control variables include: race, maternal age, income, education, maternal academic aptitude (AFQT score), work hours, number of children in the household, whether focal child was low birth weight, birth order of focal child, child disability, child age, grandparent co-residence in the household, maternal prenatal use of alcohol and drugs and other family background characteristics.

*Methods.* We use piecewise hierarchical linear models (HLM, Bryk & Raudenbush, 1992; Raudenbush, 2001; Singer, 1998) to model children's initial test scores as a function of their history of family structure(s) before age 6 and changes in children's test scores as a function of family structure states and transitions. We estimate these models (separately) with achievement and behavior problems measures as outcomes. We also estimate separate models for children whose mothers have a high school education or less and those with more highly educated mothers.

We identify associations between family structure transitions and children's academic and behavioral trajectories by predicting *changes* in achievement and behavior problems. By predicting changes in children's achievement across specified ages, this method provides separate estimates of the effects of family transitions (and

states) on changes in children's achievement and behavior over each interval. Thus, we are able to compare estimates for children of different ages.

Our analyses not only consider the concurrent effects of family structure changes but also enable us to trace out both lagged and leading effects of family structure transitions. That is, we include family structure indicators as predictors of trajectories not only during the interval in which the transition occurs, but also for preceding and proceeding intervals. For example, for children whose mothers re-partner between ages 6 and 8, we estimate associations between this transition and changes in behavior and achievement over the same interval, as well as in the subsequent intervals (ages 8-10 and 10-12). This approach allows us to essentially estimate initial "adjustment" effects and to trace their course over time. In addition, for those children who experience transitions in the later intervals, we consider whether their trajectories differed before the transition occurred. Thus, the flexibility of this approach enables us to more fully understand how family structure transitions and states are linked to children's developmental trajectories. Finally, by predicting changes in children's achievement, this method also effectively controls for child and family characteristics that have persistent effects on children's outcomes. As such, this method accounts for preexisting differences in children's levels of achievement and behavior.

*Implications for research and policy.* Results from these analyses will provide new evidence on whether and how family structure transitions and, in particular, maternal re-partnering, may affect children's achievement and behavior. They will also provide insight into the extent to which these effects may be transitory or persist over time, as well as whether they may vary by children's ages, family incomes, and whether mothers re-partner into cohabitations or marriages. Given the significant number of children who are likely to experience maternal re-partnering and to spend time in multiple family structures during their childhoods this study may have important policy implications. Current marriage promotion initiatives tend to focus on encouraging marriage among new parents with the goal of supporting children's wellbeing and development. However, many of the mothers who are likely to be affected by these initiatives will inevitably have children from previous relationships, and little is known about how these children are likely to fare when their mothers re-partner. By increasing our understanding of the effects of maternal re-partnering on children who are not biologically related to their mothers' new partners, this study will provide new data to inform the marriage promotion policy debate. It is crucial that we consider the potential effects of re-partnering for *all* children in complex families in order to provide a complete accounting of the costs and benefits of maternal re-partnering, and to more fully inform public policies regarding marriage, family formation, and child wellbeing.

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