Family Instability, Selection, and Child Well-Being in Middle Childhood

The structure of American families has undergone dramatic change over the past 60 years. Increases in non-marital fertility, divorce and cohabitation coupled with delays and declines in marriage and remarriage have translated into more dynamic relationship histories for adults and more complex living arrangements for their children (Casper and Bianchi 2002). This growing diversity in the structure of families has fueled public debate and policy initiatives, including proposed federal legislation to encourage states to design programs that encourage and support healthy marriage (Ooms, Bouchet, and Parke 2004). A primary motivation for this activity is a belief that <u>not</u> living with twobiological married parents negatively affects children. In this case, ideology is backed by social science research, which suggests that residing in an alternative family (i.e., single parent, stepparent, cohabiting parent family) does pose risks for children in ways that shape their futures. What remains less clear is *why* family structure and instability in the parent generation affects well-being in the child generation. Is it the actual experience of family instability that is responsible for differences in children's life chances, characteristics of the mother that select children into these family structures, or a combination of both?

This paper addresses these questions by examining the interplay of family structure instability and selection in children's adjustment in middle childhood and exploring why these linkages exist. Building on prior work that establishes family instability and child well-being link (Cavanagh and Huston 2006; 2007), this study incorporates indicators of mothers' life circumstances at or near the time of a child's birth (i.e., maternal selection factors) to understand how family instability and selection processes come together and place kids at risk for developing compromised social-emotional adjustment in middle childhood. It will also use the state of the art indicators of the home environment and parenting practices to explain why both family instability and selection processes matter child well-being. To do this, I draw on the NICHD Study of Early Child Care and Youth Development

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(SECCYD), a large-scale study that follows children from birth to early adolescence and has incomparable data on children and their parents, including at least twice yearly reports on household composition and multiple reporter assessments of child well-being and the home environment.

Family Structure, Selection Processes, and Child Well-Being

The first aim of this study is to examine the link between family instability, related selection factors, and children's socio-emotional well-being. An emerging direction in the family structure literature is a consideration of family structure history, a long view of family dynamics that moves beyond family structure at a point in time to one that incorporates the whole of children's family structure experiences, including family structure statuses at key developmental phases as well as the tempo and timing of family structure change (Wu and Martinson 1993; Teachman 2004; Fomby and Cherlin 2007; Cavanagh and Huston 2006, 2007). Together, this research posits a *direct* link between family instability and child well-being. Consistent with the *instability hypothesis*, changes in a parent's marital or romantic histories (e.g., divorce, remarriage, cohabitation) constitute a major stressor in a child's life. The loss or addition of a parent or parent's partner can disrupt a child's sense of security and create ambiguity in household rules, family relationships, and parental expectations about behavior (Amato 2000). It can also create dramatic changes in family income and parents' employment patterns (McLanahan and Sandefur 1994). Importantly, this work emphasizes the potentially cumulative nature of family instability. Although many children never experience a family instability, those who experience one transition are at a greater risk of experiencing subsequent transitions and the concomitant stresses that they involve (Wu and Martinson 1993). Thus, young people who experience multiple family transitions are expected to experience more compromised wellbeing than those who experience no such transitions or only one (Cavanagh and Huston 2006).

On the other hand, the observed link between family instability and child well-being may derive from *selection*, or a set of maternal and/or paternal characteristics that affect both the likelihood that

parents' experience unstable romantic histories and that their children experience compromised wellbeing in childhood (Hao and Xie 2002; Fomby and Cherlin 2007). Selection is recognized as a major issue in studies of family structure. Scholars typically 'control' for different selection factors or, at best, treat them as an alternative explanation for observed differences associated with family structure. In this study, I consider selection processes an integral part of the way parents' shape their children's lives, and thus, pay careful attention to their measurement and role in child well-being. Three sets of selection factors seem most relevant to this linkage: parents' demographic characteristics (e.g., age at first birth, family structure at study child's birth, maternal IQ), socioeconomic characteristics (e.g., educational attainment, poverty status at child's birth), and personal characteristics (maternal depression and maternal cognitive achievement in early childhood). Each is related to family structure and instability (Hao and Xie 2002; Fomby and Cherlin 2007) and each is related to child well-being (Lareau 2003; McLoyd 1998).

Family Environment as Mechanism

An equally compelling question concerns why family instability and selection processes matter to child well-being. Family process theory contends that aspects of parents' lives, be it their unstable romantic histories or their socioeconomic status, shape the way they engage with their children and define the home environment, which, in turn, shapes child adjustment (Amato 2000; Elder et al. 1995; McLoyd 1998). Thus, I posit that the <u>same</u> mechanisms—parenting behaviors and the home environment—explain <u>both</u> linkages. In the case of family instability, the entrance or exit of a parent's romantic partner in the home can set in motion inconsistent and less sensitive parenting behaviors, economic insecurity, changes in a resident parent's work schedule, parental dating, and the introduction of new members into the household. Together, these changes can produce a home environment that is unstructured and chaotic for children and can affect how a parent *parents* her child.

Moreover, these alterations in family processes introduce uncertainty into children's lives, affecting their social adjustment (Amato 2000; McLanahan and Sandefur 1994).

Similarly, family processes are also implicated in the developmental significance of many maternal characteristics. For example, poverty is a life stressor that undermines parents' ability to positively and supportively manage their children's lives (Furstenberg et al. 2000). As another example, one of the most deleterious consequences of maternal depression is its power to interfere with active parenting (e.g., monitoring) and weaken parent-child bonds (EECRN 1999). As so effectively documented by Lareau, better educated mothers have more proactive approaches to establishing a positive environment for their children, giving them advantages over the children of less educated mothers (2003). Thus, whether thinking about family instability or other aspects of mother's lives, risk is channeled through family processes. The second aim of this study, then, is to investigate the extent to which indicators of parenting behaviors and the broader home environment mediate the links between family instability and associated maternal characteristics and children's negative outcomes.

Research Design and Methods

These aims will be addressed using data from NICHD SECCYD, a national longitudinal study of American children (see http://public.rti.org/secc). The original purpose of SECCYD was to explore the developmental significance of childcare. Given the richness of these data, however, it has been widely used to study child development in general. The families who participated were recruited from hospitals located in or near Little Rock, AR; Irvine, CA; Lawrence, KS; Boston, MA; Philadelphia, PA; Pittsburgh, PA; Charlottesville, VA; Morganton, NC; Seattle, WA; and Madison, WI. The families lived in urban, suburban, and rural communities near these hospitals. During selected 24-hour sampling periods during 1991, 8,986 women were visited in the hospital shortly after giving birth. Of these women, 5,265 met the eligibility criteria for the study and agreed to be contacted after their return home from the hospital. Each mother had to be over 18 years of age, healthy, and conversant in English; the infant had to be a singleton and healthy; and the family could not be planning to move within the following year. When infants were one month old, 1,364 families (58% of those contacted) with healthy newborns were enrolled in the study. Although the eligibility criteria eliminated some low-income families, the resulting sample was diverse—24% ethnic minority children, 11% mothers without a high school education, and 24% in alternative parent families. The study consists of three phases: Phase I (1991-1994) followed the children from birth to age 3 years, Phase II (1995-1999) followed them from age 3 through 1st grade, and Phase III (2000-2004) followed them from 2nd through 6th grade. This project will draw on all three waves. The longitudinal sample through Phase III includes 1,077 children and their parents (79% of full sample).

<u>Measures</u>

I will use three measures of adjustment. Children's *externalizing* and *internalizing behaviors* are assessed with maternal and teacher reports. These reports come from the age-appropriate version of the Child Behavior Checklist (CBCL) and Teacher Report Form (TRF), respectively. Mothers reported on 33 externalizing behaviors and teachers reported on 34 externalizing behaviors at each grade. Items included being explosive, swearing, and sudden change in mood or feelings. Mothers and teachers also reported on over 30 internalizing behaviors in each grade, including whether the child was underactive, lonely, and feared doing something wrong. For each item, the reporter was asked how well it described the child in the past two months (0 = Not True; 1 = Sometimes True; 2 = Often True) (Achenbach 1991). Third, maternal and teacher reports of *peer competency* is the sum of 10 items that measure children's responses to peers, including their ability to control their temper in conflict situations and make friends easily (Achenbach 1991). Reports from both mother and teacher are used, as a maternal report of her child can be influenced by her own distress and marital status (Angel and Worobey 1988).

Family instability is based on telephone interviews (at 3, 9, 12, 18, 21, 27, 30, 33, 42, 46, 50, 60, 66 months, fall and spring of Kindergarten, 2nd grade) and home interviews (at 1, 6, 15, 24, 36, 54 months,

1st and 3rd grade) in which the mother (typically) completed a household roster listing each household member and that person's relationship to her and the study child. From these data, family structure was coded into nine mutually exclusive categories: 1) two biological parents (married); 2) two biological parents (cohabiting); 3) biological mother and stepfather (married); 4) biological father/stepmother (married); 5) biological mom and cohabiting partner; 6) biological father/cohabiting partner; 7) biological mother-only; 8) biological father-only; 9) all other family types, at each data point. Next, I constructed a 25-variable array, with each variable reflecting a different data collection point and its value reflecting family structure composition at that time. From this array, a count of family structure change from birth through the end of 3rd grade was constructed. This count increases by one for each transition from one family structure status to another. For example, a child born into a two-biological married parent family who then resided with her single mother at age 5 and then lived with her single father from age 6 through 3rd grade would have a family instability score of 2. Likewise, a child who resided in a mother-only family or a two-biological married parent family up through 3rd grade would each have an instability score of 0 (Cavanagh and Huston 2006).

Three sets of *related maternal characteristics* will be incorporated in these analyses. The first, *demographic characteristics*, includes maternal reports of age at first birth and family structure at birth, drawn from the family structure array described above. The second set, *socioeconomic characteristics*, includes maternal reports of educational attainment, coded into four dummy variables: college graduation or more, some post high school education, or less than high school graduation, with high school graduation as the reference category and poverty status, calculated from maternal reports of her earnings, her partner's earnings, and public assistance or other sources collected during home interviews at 6 months. Low income is defined as income-to-needs < 2.0. Finally, *maternal personal characteristics* include maternal reports of mental health, assessed at 6 months using the CES-D (Radloff 1977; alpha =.91), and cognitive ability, assessed using the PPVT at 36 months.

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Two sets of intra-family dynamics will also be investigated. Parent-child interaction at third grade is comprised of two tasks, a discussion task and a shared problem-solving activity, that provided a context for assessing the age-appropriate qualities of parental behavior and dyadic relationship between parent and child. I will use two indicators from these observations. First, the *maternal (or primary caregiver) sensitivity* score represents a composite of three seven-point ratings on supportive presence, respect for the child's autonomy and reflected hostility toward the child. Second, the *child/dyadic* score represents a composite of three seven-point ratings of the child's affection towards the parent, reflected child negativity toward the parent, and the dyadic measure of security between the parent and child. Reliability for the maternal sensitivity composite scores is .80 and the child/dyadic is .62 (Egeland and Hiester 1993, Pianta 1994). A total of 1015 observations were completed from 993 mothers and 22 alternative primary caregivers (17 fathers and 5 grandparents). A dummy variable reflecting an alternative caregiver will be included in all analyses.

The second set of intra-family dynamics comes from the *Home Observation for Measurement of the Environment (HOME)* administered during the home visit at 3rd grade. This instrument focuses on the child *in* the family environment, as a recipient of inputs from objects, events, and transactions occurring in connection with the family surroundings (Caldwell and Bradley 1984). The Middle Childhood Inventory consists of 59 items and was administered using both direct observation (19 items) and a semi-structured interview (40 items) with the parent. These items are clustered into seven subscales: (1) parental responsivity (2) encouragement of maturity; (3) acceptance of child; (4) learning materials, (5) enrichment activities; (6) family companionship, (7) physical environment. Each item was scored in binary fashion (yes/no). Cronbach's alphas for the total score was .82.

The key analytic variables are displayed in Table 1.

[Table 1 about here]

Analytical Design

The conceptual model guiding these analyses posits that the key independent variable, family instability, is associated with adjustment in middle childhood and is also predicted by select maternal characteristics, which also predict adjustment. Thus, path analysis is an ideal methodological approach for estimating these linkages. I will use structural equation modeling (SEM) with both observed and latent variables in Mplus 2.14 for these aims (Muthen and Muthen 2001; Bollen 1989). SEM in Mplus is well-suited for this project for three reasons. First, path models can be analyzed within a single model in SEM, allowing the direct and indirect effects of exogenous (e.g., maternal selection characteristics) and endogenous (e.g., family instability, intra-family dynamics) variables on outcomes to be estimated simultaneously. Second, Mplus incorporates a superior method for dealing with missing cases, in which a maximum likelihood estimator imputes data using information from all observations. Given the multiple data points and the multiple reporters reporting on the child and her environment in this study, the opportunity to have missing data is relatively high, leading to the elimination of about 15% of cases with listwise deletion. Third, Mplus offers estimation of associations among constructs free of the effects of measurement unreliability (Bollen 1989). Mplus assumes that all endogenous variables share a similar distribution in its estimation procedures.

The first goal of this paper is to estimate the contributions of family instability and characteristics that select mothers into unstable family trajectories on children's adjustment. I will begin by estimating the focal association between family instability and child well-being. The next step will be to incorporate related maternal characteristics into the model. A key aspect of the conceptual model is the recognition that maternal characteristics that select parents into unstable family trajectories may also predict children's behaviors. Without taking these factors into account, the link between family instability and externalizing behaviors, for example, may be overestimated. Only experimental designs can effectively tease out these two processes. The longitudinal survey data of SECCYD, however,

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provide some leverage for addressing both pathways simultaneously. In short, the multivariate analyses will include a set of measures that capture characteristics of the mother at the time of the child's birth (or soon thereafter) that both predict instability and child adjustment to absorb the impact of potential selection factors. Incorporating these factors in the models then will account for some of the potential spuriousness in the associations among key predictor and outcome variables. With the exception of the outcome, all variables in these models are measured as observed, not latent, factors.

The second goal builds directly on the first, including intra-family dynamic into the models just described. Family and home factors will be measured at 3rd grade and will be included as latent factors. Family instability and related maternal characteristics are expected to predict these factors, which in turn, are associated with adjustment in middle childhood.

Significance of Project

This study contributes to our understanding of the link between family instability and children's adjustment in middle childhood in two key ways. First, instead of relying on static measures of family structure, the prospective measures of family instability used here capture changes in family structure as they are happening. These measures better reflect the lived experiences of a growing proportion of American youth and adults. Second, following Palloni's call in his 2006 Population Association of American presidential address, I consider *selection* as an integral part of the process by which parents shape the well-being of their children. I estimate its effect as well as family instability on child adjustment simultaneously and, using high quality longitudinal data on family processes in SECCYD, seek to understand why both instability and selection affect child adjustment.

Select Literature

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	Percent	Mean	SD
Outcomes at 5th grade			
Internalizing behavior		50.46	(9.48)
Externalizing behavior		50.84	(9.16)
Family Instability			
Number of family transitions from birth through end of 3rd grade			
0	63.31		
1	13.31		
2	10.88		
3	5.31		
4+	7.2		
Selection Processes			
Demographic characteristics			
Maternal age at child's birth		28.11	(5.55)
Family structure at child's birth			
Married, two-biological parents	76.6		
Cohabitating, two-biological parents	7.9		
Cohabitating, stepparents	1		
Single mother	14.5		
Socioeconomic status			
Mother's education at child's birth			
Less than high school	10.30		
High school graduation	21.00		
Some college	33.40		
At least college graduation	35.30		
Income-to-needs ratio at 6 months		3.53	(3.19)
Maternal Personal Characteristics			
Maternal depression at 6 months		8.93	(8.34)
Maternal PVT score at 36 months		153.83	(16.34)

Table 1. Descriptive Statistics for Analysis Variables