# PARENTAL UNION DISSOLUTION AND SUBSEQUENT CHILD WELL-BEING

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# ABSTRACT

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I use the first three waves of the Fragile Families Study (N = 1,692) to explore whether the dissolution of two-biological parent cohabitation is associated with multiple domains of child well-being (aggressive behavior, withdrawn behavior, anxious/depressive behavior, and health) in the same way as two-biological parent divorce. In this thesis, I evaluate whether children who experience unstable two-biological-parent cohabitation fare worse than children who experience unstable two-biological-parent marriage. I also consider whether economic and parenting resources reduce the effect of parental union type on child well-being. Children who experience the dissolution of parental cohabitation fare better than their counterparts who experience parental divorce in terms of health, but are not different than their counterparts on behavioral outcomes. Children living with unstably cohabiting parents exhibit similar levels of aggressive behavior, withdrawn behavior, and anxious/depressive behaviors their counterparts whose parents divorced. However, children living with unstably cohabiting parents had higher odds having excellent health, on average, than their counterparts living with divorced parents. When comparing stable parental unions, living with cohabiting parents was associated with higher levels of child aggressive and anxious/depressive behavior. The current study suggests that the legal status of two-biological-parent union dissolution is an important predictor of child health, but not behavioral outcomes.

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# INTRODUCTION

Cohabitation continues to rise as a family form in the United States and it is perhaps no coincidence that the rate of unmarried births has increased simultaneously as both are characteristics of the "Second Demographic Transition" in the U.S. (Lesthaeghe & Neidert, 2006). During the period from 1980-84 to 1990-94 births to cohabiting mothers as a proportion of all unmarried mothers increased from 29% to 39% meaning 11% of all births were to cohabiting mothers (Bumpass & Lu, 2000). Today, births to cohabiting parents exceed 20% of all births and account for one half of unmarried births (Kennedy & Bumpass, 2011). As a result of these trends, nearly 3.9 million children were living in cohabiting parent families in 2004 (Kreider, 2008). Fields (2001) and Kreider (2008) found that nearly half of children living in cohabiting households live with two biological parents.

Research has shown that cohabiting parents often have relatively unstable relationships, suggesting that children living with cohabiting parents are likely to experience the dissolution of their parents' relationship. Osborne and McLanahan (2007) find that 13% of children born to married mothers versus 50% of children born to cohabiting mothers will experience a family transition by age three. In fact, multiple studies have found that over half of cohabiting unions will end within two years; some transition to marriage while others dissolve (Bumpass & Lu, 2000; Kennedy & Bumpass, 2008). Recently, the trend is for cohabitation to end through dissolution rather than lead to marriage, particularly among African American women (Raley & Bumpass, 2003). Similarly, over the past two decades around half of marriages have ended in divorce (Raley & Bumpass, 2003; Schoen & Standish, 2001). A major difference in these two dissolution types is the proportion of children that experience each transition. Around 1 in 5 children born to married parents will experience parental divorce by the age of 9 (Kennedy &

Bumpass, 2008). Comparatively, children born to cohabiting parents disproportionately experience union transitions (Osborne et al, 2007; Osborne & McLanahan, 2007; Raley & Wildsmith, 2004; Demo & Acock, 1988; Morrison & Cherlin, 1985). A majority of these children will experience the dissolution of their parent's cohabiting union by the age of five (Graefe & Lichter, 1999), which is consistent with the finding that those under age 6 account for 85% of children living with two biological cohabiting parents (Brown, 2002).

The effects of parental divorce on child well-being are well-known (e.g. Demo & Acock, 1988; Morrison & Cherlin, 1995; Peterson, 1996; Booth & Amato, 2005; Hanson, 1999; Hines, 1997; Lamb, 1977; Mechanic & Hansell, 1989), but little research examines specifically how the dissolution of two-biological parent cohabitation is linked to child well-being (although see Heiland & Liu, 2006; Schmeer, 2011). Rather, previous research on two-biological parent cohabiting relationships has focused on child well-being within intact families (e.g. Artis, 2007; Brown, 2004; Manning & Brown, 2006; Osborne, McLanahan, & Brooks-Gunn, 2004). Two studies have compared the effect of the dissolution of two-biological-parent cohabitation to stable parental cohabitation on child well-being, but both exclusively examined health outcomes and the results were not consistent (Heiland & Liu, 2006; Schmeer, 2011). To my knowledge, no study has directly compared the outcomes of children who experience the dissolution of their two biological parents' cohabiting versus marital union. Thus, it is unclear whether the breakup of cohabiting parents is detrimental to child well-being. Given the high levels of instability among cohabitors, it is important to decipher how cohabitation dissolution is linked to a range of child outcomes. Parents contribute time and money to provide their children with food, shelter, clothing, high quality schools and neighborhoods, and developmental opportunities (Thomson et al, 1994). The dissolution of two-biological parent cohabiting unions may reduce a parent's

ability to provide time, money, and other goods and services for their children, consequently diminishing child well-being.

To extend prior research, the current study focuses on the dissolution of two-biological-parent cohabiting unions and subsequent child well-being. Using data from the Fragile Families and Child Well Being Study, I investigate multiple domains of child well-being for 3-year-old children. I add to prior research by examining child aggressive behavior, withdrawn behavior, anxious/depressive behavior, and health following the dissolution of two-biological-parent cohabitation at a young age. Divorce has been shown to be more harmful for younger children than for adolescents (Hines, 1997) and to have negative outcomes for children that persist into later life stages (Amato & Booth, 1991). In the current study, I explore whether unstable two-biological parent cohabitation is associated with child well-being in the same way as unstable marriage. Comparisons based on parental union type will help determine whether the legal status of the unstable parental relationship is significantly associated with child well-being. Guided by social stress theory, this study examines the potential mediating effects of economic and parenting resources on child well-being.

# BACKGROUND

## Child Well-being: Marriage versus Cohabitation of Two Biological Parents

Previous research suggests that marriage confers special benefits for parents and children that are not available to cohabiting families, regardless of biological status (Waite, 1995; 2000). Benefits for children living in two-biological-parent married families span multiple domains of well-being (Brown, 2010). Artis (2007) finds that cognitive achievement among kindergarteners is significantly higher for children living in married two-biological-parent families than those children living in cohabiting two-biological-parent families. Using NSAF data, Brown (2004) and Teachman (2008) find differences in child outcomes when comparing children living with two married biological parent families to their counterparts living in two-biological-parent cohabiting families. Children living with two biological cohabiting parents experience lower levels of well-being, more behavioral problems (Brown, 2004), lower levels of school engagement, and participate less in extracurricular activities than their counterparts living with two biological married parents (Teachman, 2008). In comparison to children living with married biological parents, children in all other family types tend to experience more externalizing and internalizing behavioral problems with the internalizing behavior findings being slightly weaker (Hofferth, 2006). When studying children's achievement, Hofferth (2006) finds that the biological relationship of the father matters more than the marital relationship. However, when considering children's behavioral outcomes she finds marital status to be more important. This suggests that children living with biological parents may experience different behavioral outcomes according to the stability and type (married versus cohabiting) of parental union.

Indeed, Heiland and Liu (2006) find using Fragile Families data that among children born to cohabiting parents, those whose parents dissolve their cohabiting union by age one are more likely to have asthma than their counterparts living with stably cohabiting parents. However,

research by Schmeer (2011) uses the same dataset to compare the age 5 health outcomes of children born to cohabiting parents and finds children whose parents dissolved a cohabiting relationship were no worse off than their counterparts living with stably cohabiting parents in terms of health.

**Dissolution of Marriage versus Cohabitation**

Kamp Dush and Adkins (2009) identify two key differences between the dissolution of marital versus cohabiting relationships: differences in relationship-specific capital and the presence/absence of legal constraints. According to the economic theory of investment, individuals make more relationship-specific investments if they expect the relationship to last (Becker et al, 1977). These investments are often tangible and include large purchases such as houses and cars. Children represent a major relationship-specific investment. The instability characterizing cohabitation suggests that marital unions generate more relationship-specific capital than cohabiting unions; however it is difficult to know if these differences are due to selection. Morrison and Cherlin (1995) identify divorce as a process with a pre-disruption stage, the event of divorce, and the crisis period following the divorce. Parents and children may experience stress during any or all of the divorce process. Children who experience the highest levels of stress during divorce experience higher psychological distress and greater marital instability and divorce during adulthood compared to their "low-stress" divorce counterparts (Amato & Booth, 1991). Children may experience prolonged family conflict prior to divorce (Morrison & Cherlin, 1995), whereas children whose parents end a cohabiting relationship might not experience this prolonged conflict as the dissolution of cohabitation has no legal aspect. Further, divorce is accompanied by stigma for parents and children (Demo & Acock, 1988), which might not be mirrored with the dissolution of cohabiting unions. This is not to say that children do not experience stress as the result of their parents ending a cohabiting relationship,

rather they may experience reduced stress. Since the dissolution of cohabiting unions is free of legal processes, the individuals who end such unions are forced to decide on post dissolution matters (i.e. child custody and support) themselves. Alternatively, the incomplete institutionalization of cohabitation and resulting incomplete institutionalization of the dissolution of cohabitation (Nock, 1995; Cherlin, 2004) could make the dissolution of cohabiting unions more stressful than divorce in some cases.

**Repartnering Following Divorce or Cohabitation Dissolution**

Following the dissolution of a two-biological parent union (marriage or cohabitation), many children will experience another family transition when their parent repartners. Research finds the negative effects of parental marital transitions accumulate with each additional marriage or divorce (Cavanagh & Huston, 2008; Fomby & Cherlin, 2007; Wu & Thomson, 2001). When parental relationships dissolve or form, all members of the family must assume different roles. Although remarriage generally brings economic benefits, the emotional stress due to negotiating family roles usually offsets the benefits (Stewart, 2007). Less is known about cohabiting transitions, but some evidence suggests they operate differently than marital transitions (Brown, 2010). For example, children in cohabiting stepfamilies tend to fare worse than their peers in married stepfamilies and single-mother families across multiple domains including children's misbehavior (Hao & Xie, 2002) and marijuana use (Cavanagh, 2008). Since cohabiting unions are highly unstable and behavioral problems increase with each cohabiting transition (Osborne & McLanahan, 2007), it is important to consider transitions following a cohabitation dissolution (Raley & Wildsmith; 2004).

**Theoretical Framework**

Numerous studies (e.g. Artis, 2007; Brown, 2004; Carlson & Corcoran, 2001; McLanahan & Sandefur, 1994; Thomson et al, 1994) have found economic and parenting resources to be the mechanisms through which family structure (and transitions) is related to child well-being. In line with social stress theory, children experience stress as a result of changes in family organization, family conflict, and/or changes in residence or school (Elder, 1974; Hill et al, 2001). Following the dissolution of two-biological-parent marriage or cohabitation, children are likely to experience stress for one or all of these reasons, resulting in lower levels of child well-being.

**Economic Resources**

Research has shown that children are typically worse off economically when living in cohabiting parent families than in married families (Acs & Nelson, 2002; Carlson & Danziger, 1999; Lerman, 2002; Manning & Lichter, 1996). Compared to single-mother families, children in cohabiting families may benefit from the additional income of a cohabiting partner and the cohabiting partner's social network (Manning & Brown, 2006). However, when compared to children in married parent families, the economic disadvantage these children experience may be related to union instability (Manning, Smock, & Majumdar, 2004) and the decreased ability of cohabiting parents to activate social networks in times of need (Eggebeen, 2005; Hao, 1996; Marks & McLanahan, 1993; Nock, 1995). Children living with married parents benefit from an average male parental income that is double the mean income of their counterparts living with cohabiting parents (Manning & Lichter, 1996). In fact, children are worse off financially when living in any family form other than the two-biological married parent family (McLanahan & Sandefur, 1994).

The economic deprivation hypothesis posits that children who experience divorce or parental separation experience a decline in economic resources that is related to children's developmental opportunities (McLanahan, 1985). This is confounded by the fact that parents do not distribute economic resources evenly when they live apart (McLanahan & Sandefur, 1994), to the detriment of maternal and child economic well-being (Peterson, 1996; Duncan, 1992). The decline in economic circumstances following parental divorce is linked to greater behavior problems among children (Morrison & Cherlin, 1995). Carlson and Corcoran (2001) found using NLSY79 data that income is strongly and negatively associated with child behavioral problems. Moreover, the effect of family structure is mediated through economic status; controlling for income reduces the association between family structure and children's behavioral outcomes to non-significance. Others have found that even when controlling for economic and parenting resources, children living in cohabiting households have higher levels of behavioral problems than those living in married households (Thomson et al, 1994).

Dissolution of a cohabiting relationship typically results in a moderate decline in economic well-being for men but a severe decline in economic well-being for women and children, often resulting in poverty. The poverty rates among intact cohabiting couples are between 18% - 22%. Men experience similar poverty rates post-dissolution at around 20% while women's poverty rates are around 30%. For Black and Hispanic women, post-dissolution poverty rates are around 50% (Avellar & Smock, 2005). Post-dissolution (of cohabitation) poverty rates follow a similar trend as poverty rates post-divorce. One difference is that men typically experience an increase in economic well-being following divorce (Smock, 1994). After the dissolution of marriage or cohabitation, women tend to end up at similar income and poverty levels, meaning previously married women typically experience a more dramatic change in

economic well-being. The existing data on all cohabiting couples suggest that children whose parents divorce will fall further economically than children whose parents end a cohabiting relationship. Other research finds, however, that children whose parents dissolve a cohabiting union are often exempt from child support claims, making them severely economically disadvantaged compared to children who experience parental divorce (Graefe & Lichter, 1999).

Living together, as in two-biological-parent cohabitation, does not necessitate the combining or sharing of any or all income (Kenney, 2002; Oropesa et al, 2003). Data from the Fragile Families Study does, however, show that cohabiting fathers make their income available to their partner and children, but in a different way than married fathers. Married fathers tend to put their money in a "common pot" while cohabiting fathers are more likely to keep their finances separate and split household expenses 50-50 with the mother (Kenney, 2004). This difference is important when calculating poverty because sharing expenses 50-50 does not necessarily mean all of both parents' incomes are available to the family.

Official poverty is calculated using family income where family is defined by the government as two or more persons related by blood, marriage, or adoption who reside together. Therefore, the income of a cohabiting partner (or father) is not included. A social definition of poverty has been recommended by the National Academy of Sciences (NAS) which includes a cohabiting partner's income in family poverty calculations (Citro & Michael, 1995). Using a social definition of poverty, 40% of children are moved out of poverty while very few enter the poverty category (Carlson & Danzinger, 1999; Manning & Lichter, 1996). Similarly, Manning and Brown (2006) found that around 40% of children living with two-biological cohabiting parents were lifted out of poverty when including the cohabiting partner's income.

**Parenting resources**

Parents must monitor, supervise, and provide emotional support for their children – tasks which are notably easier when shared between two parents rather than being performed by one parent. Ram and Hou (2003) find that deterioration in parenting resources, rather than economic resources, mediates the effect of family structure on children's behavioral outcomes. Ineffective parenting and parental depression are the most important in explaining this relationship. A loss of socioeconomic and health resources following divorce are associated with increased maternal stress and inconsistent parenting (Peterson, 1996; Bradbury & Katz, 2002). Consistent with social stress theory, entering the workforce or increasing hours worked following divorce are associated with maternal stress levels (Bradbury & Katz, 2002), and the ability to parent effectively.

Using data from the Fragile Families Study, Cooper and colleagues (2009) find that mothers living with the biological father of the focal child report less parenting stress. However, mothers who experience the dissolution of a cohabiting relationship report higher levels of parenting stress than mothers in stable relationships. Mother's education has a moderating effect on the relationship between the dissolution of cohabitation and parenting stress with higher levels of education reducing parenting stress following dissolution. Kamp Dush and Adkins (2009) use data from the Fragile Families to study mental health outcomes for parents experiencing the dissolution of marital or cohabiting unions and find similar results for both groups. Economic stress seems to be connected with the mental health of mothers and fathers following the dissolution of marital or cohabiting unions. Mother's mental health, specifically depression, is associated with more child behavioral problems (Carlson & Corcoran, 2001) and is important to consider when studying the effects of the dissolution of two-biological-parent cohabitation on child well-being. Biological fathers spend more time per week engaged with

children than other fathers, but married biological fathers are more involved with their children than cohabiting biological fathers (15 and 12 hours, respectively) (Hofferth, 2006). A similar relationship was observed for mother engagement. Changes in parental involvement following the dissolution of parental cohabitation are likely to result in lower levels of child well-being and higher levels of behavioral problems.

Berger and colleagues (2008) find that parenting cooperation is lower among cohabiting biological fathers than married biological fathers. They also find that mothers are more trusting of married partners than cohabiting partners, in terms of child care, regardless of the partner's biological relationship to the child. Cohabiting mothers also report lower levels of support than married mothers (Thomson et al, 1994). Parental conflict has been shown to decrease parenting resources and lead to lower well-being among children living in these environments (Mechanic & Hansell, 1989). Children living in households with high parental conflict often experience many of the same problems as children whose parents have divorced and may even benefit from divorce in that they are not living in constant conflict (Mechanic & Hansell, 1989; Peterson & Zill, 1986). However, in low-conflict marriages which represent the majority, the effects of divorce are detrimental to child well-being (Amato & Booth, 1997; Booth & Amato, 2001; Hanson, 1999).

## CURRENT STUDY AND RESEARCH QUESTIONS

Since cohabiting relationships (which are highly unstable) are becoming more prevalent and are now a common relationship context in which to have children, it is important to understand whether or not unstable two-biological parent cohabitation is significantly related to multiple domains of subsequent child well-being. Consistent with prior research, I examine aggressive behavior, withdrawn behavior, anxious/depressive behavior, and health (Osborne & Berger, 2008; Osborne, McLanahan, & Brooks-Gunn, 2004; Heiland & Liu, 2006; Schmeer, 2011) of three-year-old children following the dissolution of two-biological-parent cohabitation. The limited research on the dissolution of two-biological-parent cohabitation suggests that children in this parental union type may fare worse, on average, than their counterparts living with married, stably cohabiting, or divorced parents (Heiland & Liu, 2006; Schmeer, 2011).

In the current study I address four questions. First, do children who experience unstable two-biological-parent cohabitation fare worse than children who experience unstable two-biological-parent marriage? Examining multiple domains, I anticipate that children living with unstably cohabiting parents will fare worse than their counterparts whose parents have separated or divorced.

Second, do economic resources account for some of the association between parental union type and child well-being? Cohabiting biological parents have significantly lower earnings than married biological parents and do not necessarily distribute economic resources in the same manner (Manning & Brown, 2006). This leads me to hypothesize that the significant change in economic resources experienced by children whose biological parents have an unstable marriage will not be experienced to the same degree by children whose biological parents have an unstable cohabitation. Although children may experience stress from the incomplete

institutionalization of unstable cohabitation, I anticipate that economic resources will partially mediate the relationship between parental union type and child well-being.

Third, do parenting resources account for some of the association between parental union type and child well-being? Since there are legal processes and expenses that keep married couples from dissolving their marriage immediately, it is likely that parental conflict will build during the interim and once the marriage has actually dissolved, living in an environment free of parental conflict will be beneficial to child well-being. However, mothers who experience the dissolution of a cohabiting relationship often report higher levels of parenting stress than mothers in stable relationships (Copper et al, 2009). Thus, I anticipate that parenting resources will partially mediate the relationship between parental union type and child well-being.

Lastly, do economic and parenting resources together reduce the effect of parental union type on child well-being? I anticipate that economic and parenting resources together will minimize differences in child well-being between children who experience unstable two-biological-parent cohabitation and children who experience unstable two-biological-parent marriage.

# METHODS

*Data*

The Fragile Families and Child Well Being Study is a longitudinal birth cohort study representative of births to unmarried parents in large (population of 200,000+) U.S. cities. Original data were collected from approximately 3,800 unmarried and 1,100 married mothers while still in the hospital following the birth of their child (N = 4,898). I include mothers who were interviewed at Baseline, 1-year follow-up and 3-year follow-up; Baseline data were collected at birth (1998 - 2000), 1-year follow-up data were collected at 1 year of age (1999 – 2001) and 3-year follow-up data were collected at 3 years of age (2001 - 2003). For the current study I include only mothers who were married (n = 727) or cohabiting (n = 965) with the child's biological father at the time of birth (N = 1,692). This excludes 1,729 mothers who were neither married nor cohabiting at the time of birth, 888 mothers who did not participate in all three waves, and 32 mothers for whom the child's father died. By 3-year follow-up around 5% of couples that were married at the time of birth had dissolved (n = 84), about 22 % of couples that were cohabiting at the time of birth had dissolved (n = 376), and around 4% of couples that were cohabiting at the time of birth had repartnered (n=69).

Dissolution of a parent's cohabiting relationship precipitates subsequent family transitions for a significant portion of children (Graefe & Lichter, 1999). For this reason I use data from Baseline to 3-year follow-up (child is age 3) to maximize the number of children in the sample experiencing the dissolution of two-biological parent marriage or cohabitation yet minimize the possibility (or number of) subsequent family transitions.

*Dependent Variables*

I examine four domains of child well-being (measured as mothers' reports at 3-year follow-up) in the current study: aggressive behavior, withdrawn behavior, anxious/depressive behavior, and child health. Given the age of the children in the study is around 3 years, these are appropriate measures of well-being. *Aggressive behavior* is a scale using the mean of 15 items (Cronbach's alpha = .86) that indicate whether each of the following characteristics is not true (0), sometimes or somewhat true (1), or very true or often true (2) of the child: defiant, demands must be met immediately, disobedient, easily frustrated, fights often, hits others, has angry moods, punishment does not change his or her behavior, screams a lot, selfish or will not share, temper tantrums, easily jealous, moody, unusually loud, and whiny. *Withdrawn behavior* is a scale constructed using the mean of 14 items (Cronbach's alpha = .69) that indicate whether each of the following characteristics describes the child: acts too young for age, avoids eye contact, does not answer people, refuses to play games, unresponsive to affection, shows little affection, shows little interest in things, withdrawn/does not get involved, underactive/slow moving, does not get along with others, does not know how to have fun, lacks guilt after misbehaving, stubborn/sullen/irritable, and uncooperative. Similarly, *anxious/depressive behavior* is a scale using the mean of 10 items (Cronbach's alpha = .62) that indicate whether the following characteristics describe the child: clings to adults/dependent, feelings easily hurt, looks unhappy, self- conscious/embarrassed, too fearful or anxious, unhappy/sad/depressed, upset by separation from parents, overtired, shy/timid, and wants attention (Achenbach, 1992; Osborne & Berger, 2008; Osborne, McLanahan, & Brooks-Gunn, 2004).

*Excellent health* is the mother's report at 3-year follow-up of the child indicating fair, poor, good, very good, or excellent health. This measure of health is heavily skewed, so the

measure is converted to a dichotomous variable with excellent health coded as 1 to indicate the best health and very good, good, fair, or poor health coded as 0.

*Independent Variables*

*Parental Union Type.* The main independent variable is the mother's self-reported relationship status at 3-year follow-up. Response categories are stable marriage (those married at all three waves), stable cohabitation(those living with the child's biological father most or all of the time at all three waves, including parents that were cohabiting at birth and then married the biological father), unstable marriage (those married at Baseline, but reporting a different relationship status at either of the other waves), and unstable cohabitation (those cohabiting at Baseline, but reporting a different relationship status (excludes those transitioning to marriage) at either of the other waves). A small number of children (n=25) had inconsistent reports of parental union type: children whose parents were married at baseline, cohabiting at 1-year follow-up, and then married at 3-year follow-up were coded as stably married. Similarly, children whose parents were cohabiting at baseline, married at 1-year follow-up, and then cohabiting at 3-year follow-up were coded as stably cohabiting.

*Parent characteristics.* I include a measure of relationship duration measured at Baseline indicating how long the mother and father knew each other before becoming pregnant. Relationship duration of 0-1 years (reference) is coded (1) for parents who knew each other 0-1 years at the time of pregnancy and (0) otherwise. Relationship duration of 2-5 years is coded (1) for parents who knew each other 2-5 years at the time of pregnancy and (0) otherwise. Relationship duration of 6 or more years is coded (1) for parents who knew each other for 6 or more years at the time of pregnancy and (0) otherwise.

I include a variable to control for parents' other children at birth using a series of dummy variables: *neither parent has prior children* (reference), *mother only has prior children*, *father only has prior children*, or *mom and dad have prior children*.

*Mother's age* (in years) and *father's age* (in years) at the time of the child's birth are both included as continuous variables.

*Child characteristics.* The *gender* of the child is coded as a dichotomous variable with boys coded as 1 and girls coded as 0. *Child's race/ethnicity* is categorized as a series of dummy variables: Non-Hispanic White (reference), Non-Hispanic Black, Non-Hispanic Other, or Hispanic. A control was included for whether or not the child had a *low birth weight* (less than 2500 grams); coded (1) for children born with a low weight and (0) otherwise.

*Economic resources*. A measure of change between Baseline and 3-year follow-up in household income as a percentage of poverty is included to account for transitions into and out of poverty over time. Four dummy variables indicating change in poverty between Baseline and 3-year follow-up are used: *Never in poverty* (reference) is coded (1) for those who are above poverty level at both waves and (0) for others, *always in poverty* is coded (1) for those who are in poverty at both waves and (0) for others, *enter poverty* is coded (1) for those who enter into poverty and (0) for others, and *exit poverty* is coded (1) for those exiting poverty and (0) for others. Parent's education is also an indicator of the economic resources available to children as it partially determines job opportunities available to their parents. Since mother's education and father's education are highly correlated, only mother's education is included in the models. *Mother's education* is coded into four categories: less than high school, high school degree or GED (reference), some college, and college degree or more.

*Parenting resources.* Similar to child's health, *mother's health* data is taken from Baseline and is recoded as a dichotomous variable to indicate excellent health (1 = excellent) versus good health (0 = very good, good, fair, or poor). A measure of *mother depression* is constructed using the major depression and general anxiety self-assessment which mothers responded to at 3-year follow-up. Questions follow the Depressive Episode and Generalized Anxiety Disorder portion of the Composite International Diagnostic Interview – Short Form which was developed as a tool for epidemiological research (CIDI-SF; v 1.0 November 1998; Nelson, Kessler, & Mroczek, 1998; Osborne, McLanahan, & Brooks-Gunn, 2004). Using a measure of mother's psychological well-being at 3-year follow-up is potentially problematic because it could be influenced by the child and/or relationship changes (e.g. mother's psychological well-being could significantly increase or decrease with the dissolution of marriage or cohabitation depending on the relationship context) but the information was not collected at Baseline. A measure of *mother parental aggravation* (at 3-year follow up) is constructed using four questions adapted from the Parenting Stress Index (PSI) to indicate parental aggravation and stress. Responses ranged from strongly disagree (0) to strongly agree (4) for questions indicating whether the mother thought it was harder to be a parent than she expected, whether she felt trapped by her responsibilities as a parent, whether she found that taking care of her children was more work than pleasure, and if she often felt tired, worn-out, or exhausted from parenting (Bronte-Tinkew, Horowitz, & Carrano, 2010). *Father's engagement* with the child is measured at 3-year follow-up using the mean number of days (0-7) the father was involved in any of the following activities with the child: singing songs or nursery rhymes, hugging or showing physical affection to child, telling child he loves him/her, helping child with household chores, playing imaginary games with child, reading stories, telling stories, playing

inside with toys, telling the child he appreciated something the child did, taking child to visit relatives, going to a restaurant/out to eat, assisting child with eating, and putting the child to bed. Scores ranged from 0 – 7 with larger numbers indicating higher levels of father involvement (Berger et al, 2008; Bronte-Tinkew, Horowitz, & Carrano, 2010). *Mother's engagement* with the child is measured in the same manner. The number of hours worked (*mother full-time employment* and *father full-time employment*) by each parent at 3-year follow-up is also included as a measure of the time the parent must be away from the child. Response categories are dichotomized into full-time (35+ hours) and less than full-time (less than 35 hours) coded 1 and 0, respectively.

**Analysis Strategy**

I begin by briefly discussing descriptive statistics for the total sample and by parental union status. Then, I turn to multivariate analyses using ordinary least squares regression to model children's aggressive behavior, withdrawn behavior, and anxious/depressive behavior, which are continuous variables, and logistic regression to model children's health, which is a categorical variable. The current study also allows for multiple comparisons of child well-being based on parental union type: (a) married versus cohabiting, (b) dissolved marriage versus dissolved cohabitation, (c) married versus dissolved marriage, (d) cohabiting versus dissolved cohabitation, and (e) dissolved cohabitation versus repartnered. Among children whose parents dissolved a cohabiting relationship, repartnering (versus dissolved cohabitation without repartnering) was not significantly associated with any domain of well-being (results not shown), so these children are not differentiated in the analyses presented below.

I estimate five models for each of the child well-being outcomes. The first model examines the associations between the parental union type and child's well-being. The second

model includes measures of parent and child characteristics to observe the net associations between parental union type and child well-being. The third model adds measures of economic resources to determine whether the associations between parental union type and child well-being are a function of socioeconomic differences. The fourth model includes measures of parenting resources to examine the relationship between parental union type and child well-being. The fifth model includes all variables to examine the relationship between parental union type and child well-being net of controls and potential mediators.

Since the dependent variables were drawn from the 3-years follow-up, all results presented have been adjusted using the Fragile Families 3-year mother national sampling weights so that the findings are representative of large cities in the U.S. (population over 200,000).

# RESULTS

*Descriptive*

Table 1 shows the weighted means/percentages and standard errors for all variables used in the analysis. Descriptive statistics are shown for the total analytic sample and separately for each of the four parental union types. Children who were living with unstably cohabiting parents represented 22% of the sample, while their counterparts whose parents had divorced represented just 5% of the sample. Around 35% of children were living with stably cohabiting parents while another 38% were living with stably married parents. Cohabiting unions were less stable than marital unions; between baseline (birth) and 3 years old, around 40% of children whose parents were cohabiting at birth experienced the dissolution of parental cohabitation, while only 10% of children whose parents were married at baseline experienced parental divorce (result not shown).

**Child Outcomes**

The average child had an aggressive behavior score of 8.63 out of 30, a withdrawn behavior score of 3.86 out of 28, and an anxious/depressive behavior score of 4.26 out of 20. As anticipated, children whose parents were cohabiting (stably or unstably) tended to exhibit lower levels of well-being. Specifically, they had higher scores, on average, for aggressive behavior, withdrawn behavior, and anxious/depressive behavior than their counterparts whose parents were married or divorced. However, children whose parents were divorced were much less likely to have excellent health than their counterparts living with married, cohabiting, or dissolved cohabitation parents.

**Parent Characteristics**

In the full analytic sample, more than half of children lived with parents who knew each other for 6 or more years at the time of pregnancy. In general, parents who were cohabiting at

birth knew each other for a shorter duration at the time of pregnancy than parents who were married at the time of birth. Among children whose parents were unstably cohabiting, 40% of parents only knew each other for 0-1 years at the time of pregnancy, while only 4% of their counterparts' parents who were unstably married knew each other for less than 1 year at the time of pregnancy. Around 70% of stably cohabiting parents knew each other less than 6 years at the time of pregnancy, while only 34% of stably married parents knew each other less than 6 years at the time of pregnancy. Nearly one-third of children in the analytic sample were the first child of both their parents, while the majority (55%) were not the first child for either parent. Among children whose parents had dissolved their relationship by the 3-year follow-up, only the mother had a prior child at birth for 27% of divorced parents, compared to 13% of unstably cohabiting parents. However, in 12% of unstably cohabiting couples only the father had a prior child at birth, compared to 1% of divorced couples. On average, married parents were older than cohabiting parents, with unstably cohabiting parents being the youngest.

**Child Characteristics**

The analytic sample included more male children (55%) than female children (45%). Forty percent of children in the sample were non-Hispanic white, 13% were non-Hispanic black, 30% were Hispanic, and 18% were another race/ethnicity. Minority children represented the majority of children living in each parental union type. Among children whose parents were unstably cohabiting, roughly 28% were non-Hispanic white, 28% were non-Hispanic black, and 28% were Hispanic. However, among children whose parents were divorced, 37% were non-Hispanic white, 37% were non-Hispanic black, and only 12% were Hispanic. Only 6% of children whose parents were stably married were non-Hispanic black. The average percentage of children with a low birth weight for married stable, married unstable, and cohabiting stable

parents were 3, 6, and 4, respectively. A slightly higher percentage (9) of children whose parents were unstably cohabiting were born with a low weight.

**Economic Resources**

One third of children were never poor and roughly half of children were always poor from birth to 3 years old. More children who were living with divorced parents had always lived above poverty than their counterparts who were living with unstably cohabiting parents (11% and 3%, respectively). More children who were living with unstably cohabiting parents had always lived in poverty than their counterparts whose parents had divorced (83% and 75%, respectively). Sixty percent of children who were living with married parents had experienced poverty while around 90% of children who were living in all other family types had experienced poverty for some period of time. Just over half (53%) of children in the analytic sample were living with mothers who had a high school education or less. Over one-third of children who were in married families had mothers with a college education or higher. A majority of children whose parents had divorced were living with a mother who had less than a high school education, compared to 43% of their counterparts who were living with unstably cohabiting parents. However, 18% of children whose parents had divorced were living with a mother who had a college degree or higher, compared to only 2% of their counterparts who were living with unstably cohabiting parents.

**Parenting Resources**

A majority of children in the sample had mothers who reported having excellent health at 3-year follow-up. Surprisingly, a greater percentage of children who were living with stably married parents had a mother who reported less than excellent health (37%) than their counterparts who were living in any other parental union type (ranging from 20% - 27%). At 3-

year follow-up less than one-fifth of children in the sample had a depressed mother. However, more than half of children whose parents had divorced were living with depressed mothers compared to 18% for mothers of children who were in unstably cohabiting families. Average mother parenting aggravation was 2.72 out of 4 and was only slightly higher for children whose parents were cohabiting at the time of birth than their counterparts whose parents were married at the time of birth. The mean father engagement was 3.56 out of 7 for all children in the sample. As expected, average father engagement for children whose parents had an unstable marriage (.97) or unstable cohabitation (1.58) was considerably lower than for children whose parents were in a stable marriage (3.56) or stable cohabitation (4.03). Average mother engagement was 4.95 out of 7 for all children in the sample. Mother engagement was slightly higher, on average, for children whose parents were unstably cohabiting (5.17) than for children whose parents were divorced (4.8). More than 90% of children in the sample had fathers who were employed full-time and this did not vary by parental union type. Slightly more than 70% of children had mothers who were employed full-time, which differed by parental union type. On average, a greater percentage of children who were living in the two unstable parental union types had mothers who were employed full-time than their counterparts who were living in either of the two stable parental union types.

*Bivariate & Multivariate Analyses.*

A summary of all bivariate and multivariate analyses can be found in Table 6.

*Aggressive Behavior.*

Table 2 shows the unstandardized regression coefficients for child aggressive behavior. The zero-order analysis in Model 1 reveals that children whose biological parents experienced cohabitation dissolution were not significantly different from children whose biological parents

stably cohabit or children whose biological parents have divorced in terms of aggressive behavior. However, children whose biological parents cohabit (stably, as indicated by the superscript *a*, or unstably) exhibited significantly greater levels of aggressive behavior, on average, than their counterparts living with stably married biological parents.

The significant parental union type differences in aggressive behavior in the bivariate analysis were all reduced to non-significance with the inclusion of the parental and child characteristics in Model 2. Children whose fathers only had prior children at the time of birth had significantly higher reports of aggressive behavior, on average, than their counterparts who were the first child for both parents. None of the other parent or child characteristics was significant.

The insignificant association between aggressive behavior and parental union type held with the addition of economic resources to the model, as shown in Model 3. Always being poor was associated with more aggressive behavior, on average, than never being poor, net of parental union status and parent and child characteristics. The remaining economic resources were insignificantly related to aggressive behavior.

Examining parenting resources, which were introduced in Model 4, suggested a suppression effect: the significant differences observed in the bivariate analysis reappeared and the magnitudes of the coefficients were larger (Model 4). In the zero-order model (Model 1) children living with stably married parents had an aggressive behavior score that was 1.67 points lower, on average, than for their counterparts living with unstably cohabiting parents, while aggressive behavior was 3.03 points lower, on average, in the model with parenting resources (Model 4). Father engagement was associated with significantly higher levels of aggressive behavior, and mother parenting aggravation was associated with significantly lower levels

aggressive behavior, on average. The other parenting resources were not significantly associated with aggressive behavior.

In the final model with all of the covariates (Model 5), the significant relationship between child aggressive behavior and parental union type shown in Model 4 held, suggesting that economic resources and parenting resources were operating independently. While economic resources alone explained the differences in child well-being, the inclusion of parenting resources, specifically mother parenting aggravation and father involvement, revealed a suppression effect. Children whose biological parents have experienced cohabitation dissolution were not significantly different from children whose biological parents stably cohabit or children whose biological parents have divorced in terms of aggressive behavior, controlling for parent and child characteristics, economic resources, and parenting resources. However, children whose biological parents cohabit (stably, as indicated by the superscript *a*, or unstably) exhibited significantly greater levels of aggressive behavior, on average, than their counterparts living with married biological parents when controlling for parent and child characteristics, economic resources, and parenting resources.

Having parents who knew each other for 6 years or more at the time of pregnancy was associated with more aggressive behavior compared to children whose parents knew each other for 1 year or less at the time of pregnancy. Children whose fathers only had prior children at the time of birth had significantly higher reports of aggressive behavior than their counterparts for which neither parent had prior children at the time of birth Children who always lived in poverty tended to have higher levels of aggressive behavior than their counterparts who never lived in poverty Mother parenting aggravation was associated with significantly lower levels aggressive

behavior, while father engagement was associated with significantly higher levels of aggressive behavior. The remaining covariates were insignificantly tied to aggression.

Thus, the two types (marital versus cohabiting) of instability do not significantly differ from each other. Yet, the two types of stable family forms—cohabiting and marital—do differ, with those in cohabiting stable families typically exhibiting more aggressive behavior than children in married stable families.

*Withdrawn Behavior.*

The unstandardized regression coefficients for child's withdrawn behavior are shown in Table 3. Children's withdrawn behavior did not vary by parental union type. Children whose parents unstably cohabit had similar levels of withdrawn behavior as their counterparts whose parents are divorced (Model 1). The same is true when comparing children living with two married biological parents to their counterparts living any other parental union type (result not shown).

The second model introduced parent and child characteristics. The relationship between parental union type and withdrawn behavior was still insignificant. Boys tended to have higher levels of withdrawn behavior than girls, on average. The other parent and child characteristics were not significant.

Economic resources were included, along with parent and child characteristics, in Model 3. Again, parental union type was not significantly associated with child withdrawn behavior. Always being poor is associated with higher levels of withdrawn behavior compared to never being poor. Other covariates in the model were insignificantly related to child's withdrawn behavior.

In Model 4, parenting resources were included in the model. The insignificant relationship between parental union type and withdrawn behavior held with the inclusion of parenting resources. As with *aggressive behavior*, mother parenting aggravation was negatively associated with child withdrawn behavior, on average, controlling for parent and child characteristics. Full-time employment of the father was associated with higher levels of child withdrawn behavior, on average. The other variables were not significantly associated with child withdrawn behavior.

The final model (Model 5) included parent and child characteristics, economic resources, and parenting resources. Child's withdrawn behavior did not significantly differ across the four parental union types. Being male, poor, and having a father employed full-time were all significantly associated with higher levels of withdrawn behavior. As in Model 4, mother parenting aggravation was associated with significantly lower levels of child withdrawn behavior. The remaining covariates were not significantly tied to withdrawn behavior.

*Anxious/Depressive Behavior.*

Table 4 shows the unstandardized regression coefficients for children's anxious/depressive behavior. Model 1 showed that children whose parents had unstable unions (marital or cohabiting) were not significantly different in terms of anxious/depressive behavior. Compared to children who were living with unstably cohabiting parents, children living with stably married parents tended to have lower levels of anxious/depressive behavior, on average, in the zero-order analysis. Living with parents who were stably cohabiting was associated with higher levels of child anxious/depressive behavior, on average, compared to living with parents who were stably married, as indicated by the superscript *a* in the table (Model 1). Further, Model 1 revealed that the anxious/depressive behavior of children living with stably cohabiting

biological parents was not significantly different from those living with unstably cohabiting biological parents.

Controlling for parent and child characteristics did not appreciably attenuate the relationship between parental union type and child anxious/depressive behavior observed in the bivariate analysis (Model 2), nor were any of the parent and child characteristics significantly associated with anxious/depressive behavior.

With the inclusion of economic resources in Model 3 the bivariate relationship between child anxious/depressive behavior and parental union type held. None of the covariates was significantly associated with anxious/depressive behavior.

The fourth model introduced parenting resources to the model, along with parent and child characteristics. The zero-order relationship held with the inclusion of the parenting resource variables. Again, the remaining covariates were not significantly associated with anxious/depressive behavior.

Parent and child characteristics, economic resources, and parenting resources were all included in the final model (Model 5). Children living with stably cohabiting and unstably cohabiting parents had significantly lower levels of anxious/depressive behavior, on average, than their counterparts living with married parents. None of the covariates were significantly associated with anxious/depressive behavior in the full model.

*Excellent Health.*

The unstandardized regression coefficients for children's excellent health are shown in Table 5. Contrary to my expectations, the zero-order analysis (Model 1) revealed that the odds of having excellent health are 77% lower for children whose parents have divorced compared to children whose parents have experienced the dissolution of parental cohabitation. The odds of

having excellent health were also significantly lower, on average, for children whose parents divorced compared to children whose parents were stably married, as indicated by the superscript *a* in the table. Again, it appeared that parental union type mattered for unstable families, with parental divorce having a more detrimental effect on child health than parental cohabitation dissolution. Among cohabiting families, stability was not associated with a higher likelihood of excellent child health compared to instability. In contrast, marital stability appeared to have benefits for children; children who were living with married parents were more likely to be in excellent health than their counterparts who were living with divorced parents.

Parent and child characteristics are introduced in the second model. As shown in Model 2, the odds of having excellent health were 82% lower for children whose parents divorced compared to children who experienced parental cohabitation dissolution, controlling for parent and child characteristics. However, the difference in the odds of having excellent health between children whose parents are married and children whose parents divorced was reduced to non-significance when parent and child characteristics were added to the model. Compared to children who are the first child for both parents, all other children had significantly lower odds of excellent health. Hispanic children had 73% lower odds of having excellent health than their non-Hispanic white counterparts. As would be expected, the odds of having excellent health were 84% lower for children with a low weight at birth. The remaining parent and child characteristics were not significantly related to children's excellent health.

Model 3 included economic resources along with parent and child characteristics. Controlling for economic resources, children whose parents were unstably married still had significantly lower odds of having excellent health than children whose parents were unstably cohabiting. Children whose mothers had less than a high school education had 66% lower odds

of having excellent health than their counterparts whose mothers had a high school education. The other covariates in the model were not significantly associated with excellent health.

When examining parenting resources in Model 4, the odds of having excellent health remained significantly lower for children whose parents are unstably married versus children whose parents unstably cohabit. Having a mother who was in excellent health was associated with 167% increase in the odds of the child having excellent health compared to having a mother who was not in excellent health. Children whose mothers were depressed had 49% lower odds of having excellent health than their counterparts whose mothers are not depressed. Similarly, children whose fathers were employed full-time had 72% lower odds of having excellent health than children whose fathers were employed less than full-time. The other parenting resources in the model were not significantly related to children's excellent health.

The full model (Model 5) includes parent and child characteristics, economic resources, and parenting resources. The difference in the odds of having excellent health between children whose parents divorced and children whose parents dissolved their cohabitation were not appreciably attenuated in the full model. Children whose mother only had prior children at the time of pregnancy and whose father only had prior children at the time of pregnancy had significantly lower odds of having excellent health (65% and 73%, respectively) than their counterparts for whom neither parent had a prior child at the time of pregnancy. Hispanic children had 53% lower odds of having excellent health than their non-Hispanic white counterparts. The odds of having excellent health were 65% lower for children whose mothers have less than a high school education compared to their counterparts whose mothers have a high school education. Children whose mothers were in excellent health had 129% higher odds of having excellent health than their counterparts whose mothers were not in excellent health. The

odds of having excellent health were significantly lower (47%) with each unit increase in mother parenting aggravation. Children whose fathers were employed full-time had 78% lower odds of having excellent health than their counterparts whose fathers were not employed full-time. The other covariates in the model were not significantly associated with children's excellent health.

# DISCUSSION

This study extends prior research on two-biological-parent cohabiting unions and child well-being by using data from the first three waves of the Fragile Families and Child Well Being study to examine how parental cohabitation dissolution versus marital dissolution is related to child aggressive behavior, withdrawn behavior, anxious/depressive behavior, and health at age 3. As more children are born to cohabiting parents, it is important to consider how the dissolution of these unions is associated with child outcomes, particularly since cohabitation is a relatively unstable family form for children (Osborne & McLanahan, 2007; Raley & Wildsmith, 2004).

The results of the current study show that parental union status is significantly related to relatively few domains of child well-being. Children whose parents dissolved a cohabiting union had aggressive behavior, withdrawn behavior, and anxious/depressive behavior similar to children whose parents divorced. Contrary to my hypothesis, children living with unstably cohabiting parents had higher odds having excellent health, on average, than their counterparts living with divorced parents. Even with the inclusion of several controls, the current study suggests that the legal status of parental union dissolution is linked to child health outcomes, but not behavioral outcomes.

Prior research has identified parental union stability among cohabiting parents as a contributor to positive child health outcomes at age one (Heiland & Liu, 2006), while other research has shown no health benefits at age five (Schmeer, 2011). The current study finds no health or behavioral benefit of parental union stability at age three among children born to cohabiting parents. However, the current study shows that it is important to distinguish between the legal statuses of stable two-biological-parent unions (stable marriage versus stable cohabitation). Children living with stable cohabiting parents had significantly higher levels of

aggressive and anxious/depressive behavior than their counterparts living with stable married parents.

It is clear from the analyses that multiple domains of child well-being should be considered when examining differences between parental union types. Looking at a single child well-being outcome masks the diversity of the experiences of children in each of the parental union types. While children living with unstably cohabiting parents experience worse outcomes than their counterparts on some domains of child well-being, they fare no worse or even better on others. Thus, it is important that future research continue to investigate the differential effects of cohabitation versus marital dissolution on a range of children's outcomes.

As expected, economic and parenting resources are related to child well-being. Economic resources partially mediated the relationship between parental union type and child well-being for some of the domains. The impact of including parenting resources in the model when examining the effect of parental union type also varied by child well-being outcome. Notably, a suppression of the effect of parental union type on child aggressive behavior was revealed when parenting resources were included in the model. The impact of parental resources on the relationship between parental union type and child well-being should be examined more closely in future research. These findings suggest the importance of considering economic and parenting resources separately and jointly as mediators of the relationship between parental union type and child well- being.

There are several limitations to the current study. Selection into marriage versus cohabitation by children's parents likely plays a role in child well-being differences, but data limitations do not allow for the examination of selection effects. Because the parents' relationship status is only captured at the time of the interview some relationship transitions that

occur between waves may be missed. However, the data do allow for the identification of unions with the child's biological father versus another partner. I examined several economic and parenting resources as mediators of the effect of parental union type on child well-being in the current study, but the causal order of these mediators is not clear. Indicators of parental relationship supportiveness and disagreement, which could impact parental union type and child well-being, were not included in the current investigation because these questions were not asked of the individuals in the selected analytic sample. The measure of prior children used in the current study is not ideal; children for whom both parents reported having prior children are all in the same group, regardless of the biological relationship of the children to the focal child. Children whose parents had shared biological children were grouped with children whose parents both had children with another partner. The race/ethnicity variable used is also flawed: no direct question was asked about the child's race/ethnicity, so the measure was constructed using the reported race/ethnicity of the mother and the father.

The current investigation reveals that parental union stability and legal status are both important to consider when examining differences in child well-being. Future research should incorporate multiple age-appropriate measures of child well-being to avoid masking differences in child outcomes. Further, economic and parenting factors should be examined both separately and jointly as mediators of the relationship between parental union type and child well-being.

This study extends prior research on family instability by comparing two-biological-parent cohabitation dissolution to two-biological-parent divorce across multiple domains of subsequent child well-being. The results of the current study show that parental union status is significantly related to some domains of child well-being, but not others. Specifically, children living with unstably cohabiting parents had higher odds having excellent health, on average, than

their counterparts living with divorced parents. However, there were no differences in behavioral outcomes when comparing children living in the two unstable parental union types. When comparing stable parental unions, living with married parents was associated with lower levels of child aggressive and anxious/depressive behavior. In sum, the legal status of parental union dissolution is an important predictor of subsequent child health outcomes.

# TABLES

Table 1. Weighted Means/Percentages and Standard Errors of the Variables

| | Total | | Cohab Unstable | | Married Stable | | Married Unstable | | Cohab Stable | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE |
| **Child Outcomes** | | | | | | | | | | |
| Aggressive behavior | 8.63 | 0.33 | 9.90 | 0.57 | 8.23 | 0.45 | 8.76 | 0.77 | 9.65 | 0.58 |
| Withdrawn behavior | 3.86 | 0.24 | 3.85 | 0.27 | 3.75 | 0.33 | 3.76 | 0.41 | 4.38 | 0.33 |
| Anxious/depressive behavior | 4.26 | 0.18 | 5.49 | 0.28 | 3.93 | 0.23 | 4.06 | 0.87 | 5.20 | 0.26 |
| Excellent health | 60.77 | | 65.01 | | 63.80 | | 30.27 | | 59.17 | |
| (< Excellent health) | 39.23 | | 34.99 | | 36.20 | | 69.73 | | 40.83 | |
| **Parental Union Type** | | | | | | | | | | |
| Married Stable | 38.01 | | | | | | | | | |
| Married Unstable | 4.96 | | | | | | | | | |
| Cohab Stable | 34.81 | | | | | | | | | |
| Cohab Unstable | 22.22 | | | | | | | | | |
| **Parent Characteristics** | | | | | | | | | | |
| Parental relationship duration: | | | | | | | | | | |
| (Relationship duration 0-1 years) | 14.53 | | 39.50 | | 9.48 | | 4.07 | | 28.91 | |
| Relationship duration 2-5 years | 29.44 | | 31.67 | | 24.55 | | 50.32 | | 40.30 | |
| Relationship duration 6+ years | 56.03 | | 28.83 | | 65.97 | | 45.62 | | 30.79 | |
| Prior children: | | | | | | | | | | |
| (No parent has prior children) | 30.97 | | 30.10 | | 31.60 | | 24.27 | | 31.71 | |
| Mother only has prior children | 10.55 | | 12.87 | | 6.55 | | 26.80 | | 19.60 | |
| Father only has prior children | 3.97 | | 11.51 | | 2.32 | | 0.81 | | 8.84 | |
| Mother and Father have prior children | 54.51 | | 45.52 | | 59.54 | | 48.12 | | 39.85 | |
| Mother's age | 27.95 | 0.36 | 24.05 | 0.56 | 29.26 | 0.47 | 26.24 | 1.64 | 24.96 | 0.53 |
| Father's age | 30.04 | 0.39 | 26.18 | 0.72 | 31.29 | 0.49 | 27.71 | 1.84 | 27.54 | 0.52 |

Table 1. Continued

| | Total | | Cohab Unstable | | Married Stable | | Married Unstable | | Cohab Stable | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE |
| **Child Characteristics** | | | | | | | | | | |
| (Child is female) | 45.04 | | 54.98 | | 44.91 | | 37.59 | | 43.96 | |
| Child is male | 54.96 | | 45.02 | | 55.09 | | 62.41 | | 56.04 | |
| Child race/ethnicity: | | | | | | | | | | |
| (Non-Hispanic White) | 39.61 | | 28.84 | | 45.79 | | 37.02 | | 19.03 | |
| Non-Hispanic Black | 13.23 | | 28.50 | | 6.18 | | 37.48 | | 25.49 | |
| Hispanic | 29.58 | | 27.77 | | 30.05 | | 11.84 | | 36.49 | |
| Other | 17.58 | | 14.89 | | 17.98 | | 13.66 | | 18.99 | |
| (Child non-low birth weight) | 95.84 | | 90.61 | | 96.61 | | 94.35 | | 95.80 | |
| Child low birth weight | 4.16 | | 9.39 | | 3.39 | | 5.65 | | 4.20 | |
| | | | | | | | | | | |
| **Economic Resources** | | | | | | | | | | |
| Change in poverty: | | | | | | | | | | |
| (Never in poverty) | 32.37 | | 2.74 | | 42.92 | | 11.13 | | 10.62 | |
| Always in poverty | 50.57 | | 82.59 | | 38.23 | | 74.87 | | 77.62 | |
| Enter poverty | 12.52 | | 9.29 | | 13.72 | | 11.62 | | 9.30 | |
| Exit poverty | 4.54 | | 5.38 | | 5.14 | | 2.38 | | 2.46 | |
| Mother's education: | | | | | | | | | | |
| (Mother high school or GED) | 29.86 | | 43.29 | | 23.13 | | 53.83 | | 41.84 | |
| Mother < high school | 23.59 | | 36.53 | | 19.78 | | 13.38 | | 38.42 | |
| Mother some college | 19.71 | | 17.90 | | 20.76 | | 14.89 | | 18.16 | |
| Mother ≥ college | 26.84 | | 2.28 | | 36.34 | | 17.90 | | 1.59 | |

Table 1. Continued

| | Total | | Cohab Unstable | | Married Stable | | Married Unstable | | Cohab Stable | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE | Mean/% | SE |
| **Parenting Resources** | | | | | | | | | | |
| (Mother < excellent health) | 67.23 | | 77.65 | | 63.35 | | 80.40 | | 73.01 | |
| Mother excellent health | 32.78 | | 22.35 | | 36.65 | | 19.60 | | 26.99 | |
| (Mother not depressed) | 82.74 | | 82.17 | | 86.63 | | 48.03 | | 81.63 | |
| Mother depressed | 17.26 | | 17.83 | | 13.37 | | 51.97 | | 18.37 | |
| Mother parenting aggravation | 2.72 | 0.04 | 2.83 | 0.07 | 2.67 | 0.05 | 2.71 | 0.23 | 2.87 | 0.07 |
| Father engagement | 3.56 | 0.11 | 1.58 | 0.21 | 3.95 | 0.10 | 0.97 | 0.38 | 4.03 | 0.10 |
| Mother engagement | 4.95 | 0.07 | 5.17 | 0.11 | 4.96 | 0.09 | 4.80 | 0.29 | 4.89 | 0.07 |
| (Father < full-time employment) | 7.17 | | 5.53 | | 7.79 | | 2.40 | | 7.44 | 7.79 |
| Father full-time employment | 92.83 | | 94.47 | | 92.21 | | 97.60 | | 92.56 | 92.21 |
| (Mother < full-time employment) | 28.68 | | 23.31 | | 29.63 | | 20.18 | | 31.03 | 29.63 |
| Mother full-time employment | 71.32 | | 76.69 | | 70.37 | | 79.82 | | 68.97 | 70.37 |
| *N* | 1,692 | | 376 | | 643 | | 84 | | 589 | 643 |

Table 2. Unstandardized Coefficients for the Dependent Variable: **Aggressive Behavior**

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Parental Union Type** | | | | | |
| (Cohab Unstable) | | | | | |
| Married Stable | -1.67* | -1.53 | -1.25 | -3.03** | -2.85** |
| Married Unstable | -1.14 | -1.217 | -1.54 | -1.65 | -1.879 |
| Cohab Stable | -0.252[a] | -0.188 | -0.096 | -1.323[a] | -1.302[a] |
| | | | | | |
| **Parent Characteristics** | | | | | |
| Parental relationship duration: | | | | | |
| (Relationship duration 0-1 years) | | | | | |
| Relationship duration 2-5 years | | 1.053 | 1.181 | 1.575 | 1.645 |
| Relationship duration 6+ years | | 1.531 | 1.63 | 1.771 | 1.809* |
| Prior children: | | | | | |
| (No parent has prior kids) | | | | | |
| Mother only has prior kids | | 0.005 | 0.012 | -0.245 | -0.177 |
| Father only has prior kids | | 3.387* | 3.000* | 3.282* | 2.910* |
| Mother and Father have prior kids | | 0.590 | 0.411 | 0.706 | 0.529 |
| Mother's age | | -0.079 | -0.110 | -0.099 | -0.127 |
| Father's age | | -0.044 | -0.015 | -0.006 | 0.025 |
| | | | | | |
| **Child Characteristics** | | | | | |
| Child is male | | 0.956 | 0.875 | 0.581 | 0.523 |
| Child race/ethnicity: | | | | | |
| (Non-Hispanic White) | | | | | |
| Non-Hispanic Black | | -0.680 | -0.880 | -1.086 | -1.364 |
| Hispanic | | -0.961 | -1.034 | -1.035 | -1.043 |
| Other | | 1.610 | 1.485 | 1.092 | 0.982 |
| Child low birth weight | | 0.742 | 0.389 | 1.415 | 1.024 |

Table 2. Continued

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Economic Resources** | | | | | |
| Change in poverty: | | | | | |
| (Never in poverty) | | | | | |
| Always in poverty | | | 2.250* | | 1.832* |
| Enter poverty | | | 0.324 | | 0.418 |
| Exit poverty | | | 0.017 | | 0.316 |
| Mother's education: | | | | | |
| (Mother high school or GED) | | | | | |
| Mother < high school | | | -1.306 | | -1.572 |
| Mother some college | | | 1.03 | | 0.858 |
| Mother ≥ college | | | 1.104 | | 0.454 |
| | | | | | |
| **Parenting Resources** | | | | | |
| Mother excellent health | | | | -0.861 | -0.786 |
| Mother depressed | | | | 1.634 | 1.374 |
| Mother parenting aggravation | | | | -1.801*** | -1.864*** |
| Father involvement | | | | 0.529* | 0.548* |
| Mother involvement | | | | 0.17 | 0.123 |
| Father full-time employment | | | | 0.552 | 0.519 |
| Mother full-time employment | | | | -0.32 | -0.136 |
| | | | | | |
| Intercept | 9.903*** | 11.246*** | 9.825*** | 13.811*** | 13.085*** |
| | | | | | |
| $R^2$ | 0.015 | 0.077 | 0.107 | 0.152 | 0.177 |

$p < .05$. * $p < .01$. ** $p < .001$. ***

[a]Significantly different from married stable, $p<.05$.

Analyses were weighted using the mother national weights from the 3-year follow-up.

Table 3. Unstandardized Coefficients for the Dependent Variable: **Withdrawn Behavior**

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Parental Union Type** | | | | | |
| (Cohab Unstable) | | | | | |
| Married Stable | -0.1 | 0.014 | 0.383 | -0.07 | 0.107 |
| Married Unstable | -0.08 | 0.221 | 0.035 | -0.29 | -0.41 |
| Cohab Stable | 0.538 | 0.469 | 0.571 | 0.511 | 0.51 |
| | | | | | |
| **Parent Characteristics** | | | | | |
| Parental relationship duration: | | | | | |
| (Relationship duration 0-1 years) | | | | | |
| Relationship duration 2-5 years | | 0.189 | 0.261 | 0.423 | 0.465 |
| Relationship duration 6+ years | | 0.662 | 0.747 | 0.675 | 0.718 |
| Prior children: | | | | | |
| (No parent has prior kids) | | | | | |
| Mother only has prior kids | | -0.393 | -0.648 | -0.722 | -0.861 |
| Father only has prior kids | | 1.64 | 1.284 | 1.334 | 1.049 |
| Mother and Father have prior kids | | 0.177 | -0.19 | -0.09 | -0.35 |
| Mother's age | | -0.124 | -0.119 | -0.141* | -0.140 |
| Father's age | | 0.051 | 0.061 | 0.075 | 0.086 |
| | | | | | |
| **Child Characteristics** | | | | | |
| Child is male | | 1.019* | 0.985* | 0.898* | 0.879* |
| Child race/ethnicity: | | | | | |
| (Non-Hispanic White) | | | | | |
| Non-Hispanic Black | | -0.286 | -0.491 | -0.502 | -0.685 |
| Hispanic | | 0.898 | 0.588 | 0.725 | 0.594 |
| Other | | 0.309 | 0.257 | -0.013 | -0.014 |
| Child low birth weight | | 0.993 | 0.837 | 1.321* | 1.141 |

Table 3. Continued

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Economic Resources** | | | | | |
| Change in poverty: | | | | | |
| (Never in poverty) | | | | | |
| Always in poverty | | | 1.693* | | 1.280* |
| Enter poverty | | | 0.337 | | 0.210 |
| Exit poverty | | | 0.662 | | 0.787 |
| Mother's education: | | | | | |
| (Mother high school or GED) | | | | | |
| Mother < high school | | | -0.86 | | -0.999 |
| Mother some college | | | -0.36 | | -0.23 |
| Mother ≥ college | | | 0.271 | | 0.016 |
| | | | | | |
| **Parenting Resources** | | | | | |
| Mother excellent health | | | | -0.717 | -0.595 |
| Mother depressed | | | | 0.735 | 0.611 |
| Mother parenting aggravation | | | | -1.077*** | -1.1*** |
| Father involvement | | | | 0.004 | 0.030 |
| Mother involvement | | | | -0.19 | -0.203 |
| Father full-time employment | | | | 1.682* | 1.539* |
| Mother full-time employment | | | | -0.15 | -0.133 |
| | | | | | |
| Intercept | 3.845*** | 4.245*** | 3.149* | 6.934*** | 6.367** |
| | | | | | |
| $R^2$ | 0.005 | 0.090 | 0.123 | 0.166 | 0.189 |

$p < .05$. * $p < .01$. ** $p < .001$. ***

[a]Significantly different from married stable, $p<.05$.

Analyses were weighted using the mother national weights from the 3-year follow-up.

Table 4. Unstandardized Coefficients for the Dependent Variable: **Anxious/Depressive Behavior**

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Parental Union Type** | | | | | |
| (Cohab Unstable) | | | | | |
| Married Stable | -1.558*** | -1.440*** | -1.147* | -1.998*** | -1.766** |
| Married Unstable | -1.424 | -1.273 | -1.288 | -1.22 | -1.208 |
| Cohab Stable | -0.283[a] | -0.338[a] | -0.321[a] | -0.838[a] | -0.856[a] |
| | | | | | |
| **Parent Characteristics** | | | | | |
| Parental relationship duration: | | | | | |
| (Relationship duration 0-1 years) | | | | | |
| Relationship duration 2-5 years | | 0.062 | 0.059 | 0.147 | 0.126 |
| Relationship duration 6+ years | | 0.309 | 0.359 | 0.391 | 0.403 |
| Prior children: | | | | | |
| (No parent has prior kids) | | | | | |
| Mother only has prior kids | | 0.244 | -0.040 | 0.119 | -0.076 |
| Father only has prior kids | | 0.852 | 0.625 | 0.838 | 0.643 |
| Mother and Father have prior kids | | -0.082 | -0.431 | -0.073 | -0.362 |
| Mother's age | | -0.052 | -0.028 | -0.045 | -0.025 |
| Father's age | | 0.002 | 0.009 | 0.002 | 0.010 |
| | | | | | |
| **Child Characteristics** | | | | | |
| Child is male | | 0.219 | 0.307 | 0.137 | 0.216 |
| Child race/ethnicity: | | | | | |
| (Non-Hispanic White) | | | | | |
| Non-Hispanic Black | | -0.381 | -0.579 | -0.496 | -0.679 |
| Hispanic | | 0.277 | -0.114 | 0.156 | -0.136 |
| Other | | 0.603 | 0.523 | 0.384 | 0.338 |
| Child low birth weight | | -0.105 | -0.177 | 0.042 | -0.043 |

Table 4. Continued

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Economic Resources** | | | | | |
| Change in poverty: | | | | | |
| (Never in poverty) | | | | | |
| Always in poverty | | | 0.788 | | 0.703 |
| Enter poverty | | | -0.247 | | -0.284 |
| Exit poverty | | | -0.072 | | -0.191 |
| Mother's education: | | | | | |
| (Mother high school or GED) | | | | | |
| Mother < high school | | | -0.23 | | -0.339 |
| Mother some college | | | -0.046 | | -0.071 |
| Mother ≥ college | | | -0.549 | | -0.555 |
| | | | | | |
| **Parenting Resources** | | | | | |
| Mother excellent health | | | | -0.627 | -0.516 |
| Mother depressed | | | | -0.064 | -0.134 |
| Mother parenting aggravation | | | | -0.225 | -0.23 |
| Father involvement | | | | 0.215 | 0.227 |
| Mother involvement | | | | -0.11 | -0.089 |
| Father full-time employment | | | | -0.111 | -0.095 |
| Mother full-time employment | | | | -0.045 | 0.024 |
| | | | | | |
| Intercept | 5.488*** | 6.343*** | 5.403*** | 7.419*** | 6.432*** |
| | | | | | |
| $R^2$ | 0.046 | 0.071 | 0.094 | 0.090 | 0.110 |

$p < .05$. * $p < .01$. ** $p < .001$. ***

[a]Significantly different from married stable, $p<.05$.

Analyses were weighted using the mother national weights from the 3-year follow-up.

Table 5. Unstandardized Coefficients for the Dependent Variable: **Excellent Health**

| | **Model 1** | | **Model 2** | | **Model 3** | | **Model 4** | | **Model 5** | |
|---|---|---|---|---|---|---|---|---|---|---|
| Variable | b | Exp(b) | b | Exp(b) | b | Exp(b) | b | Exp(b) | b | Exp(b) |
| **Parental Union Type** | | | | | | | | | | |
| (Cohab Unstable) | | | | | | | | | | |
| Married Stable | -0.05 | 0.95 | -0.26 | 0.77 | -0.51 | 0.60 | -0.36 | 0.70 | -0.52 | 0.59 |
| Married Unstable | -1.45**, [a] | 0.23 | -1.73*** | 0.18 | -1.91*** | 0.15 | -1.38* | 0.25 | -1.57* | 0.21 |
| Cohab Stable | -0.25 | 0.78 | -0.17 | 0.84 | -0.26 | 0.77 | -0.24 | 0.78 | -0.30 | 0.74 |
| | | | | | | | | | | |
| **Parent Characteristics** | | | | | | | | | | |
| Parental relationship duration: | | | | | | | | | | |
| (Relationship duration 0-1 years) | | | | | | | | | | |
| Relationship duration 2-5 years | | | -0.31 | 0.73 | -0.46 | 0.63 | -0.41 | 0.66 | -0.51 | 0.60 |
| Relationship duration 6+ years | | | -0.31 | 0.73 | -0.51 | 0.60 | -0.34 | 0.71 | -0.45 | 0.64 |
| Prior children: | | | | | | | | | | |
| (No parent has prior kids) | | | | | | | | | | |
| Mother only has prior kids | | | -1.47** | 0.23 | -1.24* | 0.29 | -1.23* | 0.29 | -1.05* | 0.35 |
| Father only has prior kids | | | -1.44** | 0.24 | -1.51** | 0.22 | -1.25* | 0.29 | -1.32* | 0.27 |
| Mother and Father have prior kids | | | -0.95** | 0.39 | -0.76* | 0.47 | -0.76* | 0.47 | -0.65 | 0.52 |
| Mother's age | | | 0.04 | 1.04 | 0.01 | 1.01 | 0.05 | 1.05 | 0.02 | 1.02 |
| Father's age | | | -0.02 | 0.98 | -0.01 | 0.99 | -0.04 | 0.96 | -0.02 | 0.98 |
| | | | | | | | | | | |
| **Child Characteristics** | | | | | | | | | | |
| Child is male | | | -0.21 | 0.81 | -0.35 | 0.71 | -0.19 | 0.83 | -0.29 | 0.75 |
| Child race/ethnicity: | | | | | | | | | | |
| (Non-Hispanic White) | | | | | | | | | | |
| Non-Hispanic Black | | | -0.45 | 0.64 | -0.40 | 0.67 | -0.23 | 0.79 | -0.24 | 0.79 |
| Hispanic | | | -1.32** | 0.27 | -0.85* | 0.43 | -1.09** | 0.34 | -0.76* | 0.47 |
| Other | | | -0.74 | 0.48 | -0.64 | 0.53 | -0.54 | 0.58 | -0.47 | 0.62 |
| Child low birth weight | | | -1.83** | 0.16 | -1.92*** | 0.15 | -2.11*** | 0.12 | -2.19 | 0.11 |

Table 5. Continued

| | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | b | Exp(b) | b | Exp(b) | b | Exp(b) | b | Exp(b) | b | Exp(b) |
| **Economic Resources** | | | | | | | | | | |
| Change in poverty: | | | | | | | | | | |
| (Never in poverty) | | | | | | | | | | |
| Always in poverty | | | | | -0.78 | 0.46 | | | -0.49 | 0.61 |
| Enter poverty | | | | | -0.07 | 0.94 | | | 0.13 | 1.14 |
| Exit poverty | | | | | -1.28 | 0.28 | | | -1.08 | 0.34 |
| Mother's education: | | | | | | | | | | |
| (Mother high school or GED) | | | | | | | | | | |
| Mother < high school | | | | | -1.08** | 0.34 | | | -1.04** | 0.35 |
| Mother some college | | | | | -0.22 | 0.80 | | | -0.30 | 0.74 |
| Mother ≥ college | | | | | -0.55 | 0.57 | | | -0.47 | 0.63 |
| **Parenting Resources** | | | | | | | | | | |
| Mother excellent health | | | | | | | 0.98** | 2.67 | 0.83** | 2.29 |
| Mother depressed | | | | | | | -0.67* | 0.51 | -0.64* | 0.53 |
| Mother parenting aggravation | | | | | | | 0.27 | 1.30 | 0.23 | 1.26 |
| Father involvement | | | | | | | 0.03 | 1.03 | 0.02 | 1.02 |
| Mother involvement | | | | | | | 0.28 | 1.32 | 0.26 | 1.29 |
| Father full-time employment | | | | | | | -1.28* | 0.28 | -1.50* | 0.22 |
| Mother full-time employment | | | | | | | -0.15 | 0.86 | -0.18 | 0.83 |
| Intercept | 0.62** | 1.86 | 2.36** | 10.56 | 3.80 | 44.66 | 1.21 | 3.36 | 2.86 | 17.51 |
| $X^2$ | 6.57 | | 46.57*** | | 67.40*** | | 59.06*** | | 81.72*** | |

$p < .05$. * $p < .01$. ** $p < .001$. ***

[a]Significantly different from married stable, $p<.05$.

Analyses were weighted using the mother national weights from the 3-year follow-up.

Table 6. Summary Table

| | **Aggressive Behavior** | | **Withdrawn Behavior** | | **Anxious/Depressive Behavior** | | **Excellent Health** | |
|---|---|---|---|---|---|---|---|---|
| | Zero Order Model | Full Model | Zero Order Model | Full Model | Zero Order Model | Full Model | Zero Order Model | Full Model |
| **Cohab Unstable vs Married Unstable** | ns | ns | ns | ns | ns | ns | - | - |
| **Cohab Unstable vs Cohab Stable** | ns | ns | ns | ns | ns | ns | ns | ns |
| **Cohab Unstable vs Married Stable** | - | - | ns | ns | - | - | ns | ns |
| **Married Stable vs Married Unstable** | ns | ns | ns | ns | ns | ns | - | ns |
| **Married Stable vs Cohabiting Stable** | + | + | ns | ns | + | + | ns | ns |

# REFERENCES


Ackerman, B. P., Brown, E. D., D'Eramo, K. S., & Izard, C. E. (2002). Mother relationship instability and the school behavior of children from disadvantaged families. *Developmental Psychology*,*38*, 694 – 704.

Achenbach, T.M. (1992). Manual for the child behavior checklist/ 2-3 and 1992 profile Burlington VT: University of Vermont Department of Psychiatry.

Acs, G., & Nelson, S. (2001). Honey, I'm home. Changes in the living arrangements in the late 1990s. Assessing the New Federalism Policy Brief B-38. Washington, DC: The Urban Institute.

Amato, P. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *Future of Children, 15*, 75 - 96.

Amato, P., & Booth, A. (1997). A generation at risk: growing up in an era of family upheaval. Harvard University Press.

Amato, P. & Keith, B. (1991). Separation from a parent during childhood and adult socioeconomic attainment. *Social Forces, 70*, 187 – 206.

Amato, P. R., Loomis, L. S., & Booth, A. (1995). Parental divorce, marital conflict, and offspring wellbeing in early adulthood. *Social Forces, 73,* 895 – 916.

Amato, P. and J. Sobolewski. (2001). The effects of divorce and marital discord on adult children's psychological well-being. *American Sociological Review, 66*, 900 – 921

Artis, J. E. (2007). Mother cohabitation and child well-being among kindergarten children. *Journal of Marriage and Family*, *69*, 222 - 236.

Avellar, S. & Smock, P. (2005). The economic consequences of the dissolution of cohabiting unions. *Journal of Marriage and Family, 67*, 315 - 327.

Bandura, A., & Walters, R.H. (1963). Social learning and personality development. New York: Holt, Rinehart, and Winston.

Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital instability. *Journal of Political Economy*, *85*, 1141 - 1187.

Berger, L., Carlson, M., Bzostek, S., & Osborne, C. (2008). Parenting practices of resident fathers: The role of marital and biological ties. *Journal of Marriage and Family, 70(3)*, 625 - 639.

Booth, A., & Amato, P. (2001). Parental predivorce relations and offspring postdivorce well being. *Journal of Marriage and Family*, *63*, 197 - 212.

Bradbury, K., & Katz, J. (2002). Women's labor market involvement and family income mobility when marriages end. *New England Economic Review*, 41 – 74.

Bronte-Tinkew, J., Horowitz, A., & Carrano, J. (2010). Aggravation and stress in parenting: associations with coparenting and Father Engagement Among Resident Fathers. *Journal of Family Issues*, *31(4)*, 525 - 555.

Brown, S.L. (2002). Child well-being in cohabiting families. In A. Booth & A. C. Crouter (Eds.), Just living together: Implications of cohabitation for children, families, and social policy (pp. 173-187). Mahwah, NJ: Erlbaum.

Brown, S. L. (2004). Family structure and child well-being: The significance of parental cohabitation. *Journal of Marriage and Family*, *66*, 351 - 367.

Brown, S. L. (2010). Marriage and child well-being: Research and policy perspectives. *Journal of Marriage and Family*, *72*, 1059 - 1077.

Bumpass, L., & Lu, H.H. (2000). Trends in cohabitation and implications for children's family contexts in the United States. *Population Studies*, *54*, 29 - 41.

Carlson, M. & Corcoran, M. (2001). Family structure and children's behavioral and cognitive outcomes. *Journal of Marriage and Family, 63*, 779 - 792.

Carlson, M. and Danziger, S. (1999). Cohabitation and the measurement of child poverty. Review of Income and Wealth, *45*, 179 – 191.

Cavanaugh, S. E. (2008). Family structure history and adolescent adjustment. Journal of Family Issues, *29*, 944 – 980.

Cavanagh, S. E., & Huston, A. C. (2006). Family instability and children's early problem behavior. *Social Forces*, *85*, 551 – 580.

Cherlin, A. J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family*, *66*, 848 – 861.

Cherlin, A. J., Chase-Lansdale, P.L., & McRae, C. (1998). Effects of divorce on mental health throughout the Life Course. *American Sociological Review, 63*, 239 – 249.

Citro, C. F. and R. T. Michael. 1995. Measuring poverty: A new approach. Washington, D.C.: National Academy Press.

Cooper, C., McLanahan, S., Meadows, S., & Brooks-Gunn, J. (2009). Family structure transitions and mother parenting stress. *Journal of Marriage and Family, 71*, 558 - 574.

Demo, D. H. & Acock, A.C. (1988). The impact of divorce on children. *Journal of Marriage and Family*, *50(3)*, 619 - 648.

Duncan, G. (1992). The economic environment of childhood. In A. Houston (Ed.), *Children in poverty: Child development and public policy* (pp. 23-50). New York: Cambridge University Press.

Eggebeen, D. (2005). Cohabitation and exchanges of support. *Social Forces*, *83*, 1097 - 1110.

Elder, G.H. (1974). *Children of the Great Depression: Social change in life experience*. Chicago: University of Chicago Press.

Fields, J. (2001). Living arrangements of children. *Current Population Reports* P70-74. Washington, DC: U.S. Census Bureau.

Fields, J., & Casper, L. (2002). America's families and living arrangements. Current Population Report P20-537. Washington, DC: U.S. Census Bureau.

Graefe, D. R., & Lichter, D. (1999). Life course transitions of American children: Parental cohabitation, marriage, and single parenthood. *Demography, 36*, 205 - 217.

Hanson, T. (1999). Does parental conflict explain why divorce is negatively associated with child welfare? *Social Forces*, *77*, 1283 - 1316.

Hao, L.X. (1996). Family structure, private transfers, and the economic well-being of families with children. *Social Forces*, *75*, 269 - 292.

Hao, L., & Xie, G. (2002). The complexity and endogeneity of family structure in explaining children's misbehavior. Social Science Research*, 31*, 1 – 28.

Heard, H. E. (2007). The family structure trajectory and adolescent school performance: Differential effects by race and ethnicity. *Journal of Family Issues*, *28*, 319 – 354.

Heiland, F., & Liu, S.H. (2006). Family structure and wellbeing of out-of-wedlock children: The significance of the biological parents' relationship. *Demographic Research, 15(4),* 61 104.

Hill, M.S., Yeung, W., & Duncan, G.J. (2001). Childhood family structure and young adult behaviors. *Journal of Population Economics*, *14(2)*, 271 - 299.

Hines, A.M. (1997). Divorce-related transitions, adolescent developments, and the role of the parent-child relationship: A review of the literature. *Journal of Marriage and Family*, *59*, 375 - 388.

Hofferth, S. L. (2006). Residential father family type and child well-being: Investment versus selection. *Demography*, *43*, 53 - 77.

Kamp Dush, C. M., & Adkins, K. S. (2009) The mental health of mothers and fathers before and after cohabitation and marital dissolution. Center for Research on Child Wellbeing Working Paper #2009-03-FF.

Kennedy, S. & Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*, *19*: 1663 - 1692.

Kennedy, S., & Bumpass, L. (2011). Cohabitation and trends in the structure and stability of children's family lives. Paper presented at the annual meeting of the Population Association of America, Washington, D.C.

Kenney, C. (2002). Household economies: Money management and resource allocation among married and cohabiting parents. Dissertation, Princeton University, Princeton, NJ.

Kenney, C. (2004). Cohabiting couple, filing jointly? Resource pooling and U.S. poverty policies. *Family Relations*. *53(2)*, 237 - 247.

Lamb, M. E. (1977). The effects of divorce on children's personality development. *Journal of Divorce*, *1*, 163 - 174.

Lerman, R. (2002). How do marriage, cohabitation, and single parenthood affect the material hardships of families with children? *Urban Institute Working Paper.* Washington, DC: The Urban Institute.

Lesthaeghe, R. J., & Neidert, L. (2006). The 'second demographic transition' in the US: Exception or textbook example? *Population and Development Review*, *32*, 669 - 698.

Maccoby, E. (1998). *The two sexes: Growing up apart, coming together.* Cambridge, MA: Belknap Press.

Manning, W. D., & Brown, S. L. (2006). Children's economic well-being in married and cohabiting parent families. *Journal of Marriage and Family, 68(2)*, 345 - 362.

Manning, W. D., & Lamb, K. A. (2003). Adolescent well-being in cohabiting, married, and single parent families. *Journal of Marriage and Family*, *65*, 876 – 893.

Manning, W., & Lichter, D. (1996). Parental cohabitation and children's economic well-being. *Journal of Marriage and Family*, *58*, 998 - 1010.

Manning, W., Smock, P., & Majumdar, D. (2004). The relative stability of cohabiting and marital unions for children. *Population Research and Policy Review*, *23*, 135 - 159.

Marks, N.F., & McLanahan, S. (1993). Gender, family-structure, and social support among parents. *Journal of Marriage and the Family*, *55*, 481 - 493.

McLanahan, S. (1985). Family structure and the reproduction of poverty. *American Journal of Sociology*, *90*, 873 - 901.

McLanahan, S., & Sandefur, G. (1994). Growing up with a single parent: What hurts, what helps. Cambridge, MA: Harvard University.

Mechanic, D., & Hansell, S. (1989). Divorce, family conflict, and adolescents' well-being. *Journal of Health and Social Behavior*, *30*, 105 - 116.

Morrison, D.R. & Cherlin, A.J. (1995). The divorce process and young children's well-being: A prospective analysis. *Journal of Marriage and Family, 57(3)*, 800 - 812.

Nelson, C.B., Kessler, R.C., & Mroczek, D. (1998). Scoring the World Health Organization's composit international diagnostic interview short form (CIDI-SF; v. 1.0 Nov 98). Unpublished manuscript, Epidemiology, Classification and Assessment Group, World Health Organization, Geneva, Switzerland.

Nock, S.L. (1995). A comparison of marriages and cohabiting relationships. *Journal of Family Issues*, *16*, 53 - 76.

Oropesa, R.S., Landale, N., & Kenkre, T. (2003). Income allocation in marital and cohabiting unions: The case of mainland Puerto Ricans. *Journal of Marriage and Family*, *65*, 14 - 26.

Osborne, C., & Berger, L. M. (2008). Parental substance abuse and child well-being: A consideration of parents' gender and coresidence. *Journal of Family Issues*, *30*, 341 - 370.

Osborne, C., McLanahan, S., & Brooks-Gunn, J. (2004). Young children's behavioral problems in married and cohabiting families. Working Paper 2003-09-FF

Osborne, C., Manning, W., & Smock, P. (2004). Instability in fragile families: The role of race/ethnicity, economies, and relationship quality. Paper presented at the annual meeting of the American Sociological Association, San Francisco, CA.

Peterson, J., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and Family*, *49*, 295 - 307.

Peterson, R. (1996). A re-evaluation of the economic consequences of divorce. *American Sociological Review*, *61*, 528 - 536.

Raley, R. K. & Bumpass, L. L. (2003). The topography of the divorce plateau: Levels and trends in union stability in the United States after 1980. *Demographic Research, 8*, 245 - 259.

Ram, B. & Hou, F. (2003). Changes in family structure and child outcomes: Roles of economic and familial resources. *The Policy Studies Journal, 31*, 309 – 330.

Schoen, R. & Standish, N. (2001). The retrenchment of marriage in the US. *Population and Development Revie*w, *27(3)*, 553 - 563.

Schmeer, K. K. (2011). The child health disadvantage of parental cohabitation. *Journal of Marriage and Family, 73,* 181-193.

Smock, P. J. (1994). Gender and short-run economic consequences of marital disruption*. Social Forces, 73, 243 – 262.*

Sun, Y. & Li, Y. (2002). Children's well-being during parents' marital disruption process: A pooled time-series analysis. *Journal of Marriage and Family, 64*, 472 - 488.

Teachman, J. D. (2008). The living arrangements of children and their educational well-being. J*ournal of Family Issues*, *29*, 734 – 761.

Thomson, E., Hanson, T.L., & McLanahan, S. (1994). Family structure and child well-being: Economic resources versus parental behaviors. *Social Forces*, *73(1)*, 221 - 242.

Waite, L. (1995). Does marriage matter? *Demography*, *32*, 483 - 507.

Waite, L. (2000). Trends in men's and women's wellbeing in marriage. In L. Waite (Ed.), The ties that bind: Perspectives on marriage and cohabitation (pp. 368-392). New York: Aldine de Gruyter.