Child well-being within multiple partner fertility

Lisa Crist

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Child Well-Being within Multiple Partner Fertility

by

Lisa Crist

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the

Master of Arts Degree in Sociology

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August 2013
An Abstract of
Child Well-Being within Multiple Partner Fertility
by
Lisa Crist
Submitted to the Graduate Faculty as partial fulfillment of the requirements for the Master of Arts Degree in Sociology
The University of Toledo
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The well-being of children within families that include multiple partner fertility is of importance due to the rising numbers of non-traditional families. Using the subsample of the Nine-Year wave of the Fragile Families and Child Well-Being Study, I examine the relationship between multiple partner fertility and child well-being by measuring the child’s education, behavior, and health at nine years of age. I compare children whose mothers have experienced multiple partner fertility and children whose mothers that have not experienced multiple partner fertility. The findings conclude that the multiple partner fertility negatively affects child well-being in terms of the child’s educational performance and social behavior. However, due to possible limitations of the data, health did not significantly affect child well-being.
I would like to acknowledge and thank those who have supported me throughout graduate school. The professors at The University of Toledo, especially those within the Department of Sociology and Anthropology have greatly assisted me throughout my academic experience. Specifically, I would like to thank my thesis chair, Dr. Barbara Coventry, and the committee, Dr. Barbara Chesney and Dr. Elias Nigem. In addition, I would like to thank my cohort at The University of Toledo: Keri Kovacsiss, Aleiah Jones, Christopher Dennison, and Christopher Thompson Dave. I would also like to thank my family for their support along the way.
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Chapter 1

Introduction

Today’s U.S. families are more than just the traditional household that includes a married couple with their biological children. Families are changing, and it has become common to see single-parent households and cohabiting households as well as traditional households. Family structures are different types of families, such as traditional marriage, cohabitation, or single-parent households. Families are also changing by experiencing multiple partner fertility, which occurs when one person has children with more than one partner (Carlson and Furstenburg 2006; Bronte-Tinkew, Horowitz, and Scott 2009). Multiple partner fertility can include step-siblings. Multiple partner fertility can occur by participating in premarital sex, remarriage, serial intimate partners, and cohabitation. Thus, changes within family structures are likely to affect the well-being of children.

This research hypothesizes that children in family structures with multiple partner fertility have lower well-being than children who are not in a family structure characterized by multiple partner fertility. The assessment of children who are raised within a family consisting of half-siblings must be explored due to the rise in multiple partner fertility. This research compares the family structure at the time the child is nine years of age and determine if the well-being of children in families characterized by
multiple partner fertility differ from other children. By controlling for the family environment, such as socioeconomic status, I am able to better gauge how having half-siblings might affect a child’s well-being.

More specifically, this research examines if child well-being is different by comparing children whose mothers have experienced multiple partner fertility and children whose mothers have not experienced multiple partner fertility. Since a child’s educational performance, social behavior, and health are some of the most important factors in their life (Land, Lamb, and Mustillo 2001), using these factors as measures of child well-being. The objective of this research is to find if multiple partner fertility affects child well-being by viewing educational performance, social behavior, and health:

1. Multiple partner fertility affects the child’s well-being by lowering his or her educational performance when compared to children whose mothers have not experienced multiple partner fertility.

2. Multiple partner fertility affects the child’s well-being because the child has more social behavior problems compared to children whose mothers have not experienced multiple partner fertility.

3. Multiple partner fertility’s effects on a child’s well-being can be assessed by determining if the child’s physical and psychological health is different from children whose mothers have not experienced multiple partner fertility.

By including the child’s educational performance, social behavior, and health as latent variables in regression analyses, I am able to find whether or not multiple partner fertility affects child well-being. Factor analyses and reliability tests are used to create these latent variables.
This research uses the Fragile Families and Child Well-Being Study dataset (Bendheim-Thoman Center for Research on Child Wellbeing 2011). This dataset allows me to examine child well-being within families that have and have not experienced multiple partner fertility. The Fragile Families and Child Well-Being Study consist of 4,898 children who were born between 1998 and 2000. The dataset includes interviews with parents at the time of the child’s birth and at ages one, three, five, and nine years. In addition, a collection of child observations and teacher interviews are utilized from this study. This research uses the data from the most recent wave, when the children were nine years of age. The Fragile Families and Child Well-Being Study includes families that are at a greater risk of being impoverished, since non-traditional families, i.e., families that do not include both biological parents that are married to one another, tend to have lower socioeconomic status. (Bendheim-Thoman Center for Research on Child Wellbeing 2011). Many of these non-traditional families are in a cohabiting relationship or are single parents.

In the next chapter, I discuss recent literature related to multiple partner fertility and child well-being, including educational performance, social behavior, and health in relation to family structure. The third chapter revolves around examining the methods and measurement of multiple partner fertility and child well-being. It also contains definitions of key concepts. The fourth chapter consists of analyzing the data, by using regression models to test the hypotheses and a reporting of the findings. Lastly, the fifth chapter concludes this study by discussing the findings and how they relate to recent literature.
Chapter 2

Literature Review

This chapter reviews studies related to multiple partner fertility and child well-being, including educational performance, social behavior, and health. Cultural changes often affect norms about marriage and the family. People are delaying marriage and are more accepting of cohabitation, just as divorce has become more accepted (Moynihan, Smeeding, and Rainwater 2004; Wu and Wolfe 2001). Marriage is not as important as it once was for transitioning into adulthood (Furstenberg, Kennedy, McLoyd, Rumbaut, and Settersten 2004). Also, according to public opinion polls, people are becoming more accepting of nonmarital behaviors such as cohabitation and multiple partner fertility (Axinn and Thornton 2000). Unmarried parents are more likely to experience multiple partner fertility (Carlson and Furstenberg 2006). Nonmarital births are increasing due to these societal changes, and the fact that women are more likely to have intimate relationships when unwed (Carlson and Furstenberg 2006).

Multiple partner fertility and its effect on child well-being was first investigated in 2009 (Bronte-Tinkew, Horowitz, and Scott 2009). Monte (2011) discusses multiple partner fertility and how it has a negative effect on family stability. She found that if there are more than five years between births, women’s multiple partner fertility affects
subsequent relationship transitions, such as marriage or divorce (Monte 2011). Men’s multiple partner fertility also raises the risk of dissolution (Monte 2011). Therefore, multiple partner fertility can influence stepfamily instability as well as reduce the chance for marriage (Monte 2011). One factor that can affect multiple partner fertility is the family structure. In the following sections of this literature review, I discuss the types of families that might be affected by multiple partner fertility, beginning by discussing why children are affected by multiple partner fertility using the family systems theory and attachment theory.

2.1 Family Systems and Attachment Theories

Family systems theory and attachment theory examine how the child’s behavior is affected by changes in family structure. Attachment theory is essentially a theoretical approach that believes the caregiver and child relationship from infancy throughout childhood explains that child’s behavior (O’Gorman 2012). Karen (1998) states that a child’s well-being is usually determined by the first relationship the child experiences; typically this relationship is with the child’s mother. The attachment theory contends that the relationship between caregiver and child must be understood before the relationship between the child and the entire family (Byng-Hall 1991). Therefore, attachment theory focuses on the relationship between the child and the child’s caregiver. The child’s primary caregiver and their relationship status also determine the child’s immediate family.

Family systems theory focuses on the child’s relationship and behavior with the entire family unit (O’Gorman 2012, Gately, Pike, and Murphy 2006). The entire family unit could possibly include full siblings and/or half-siblings or step-siblings, biological
parent(s), or a biological parent and a step-parent, or a biological parent and the parent’s cohabiting partner. All of these people have some type of relationship with the child and the child’s behavior possibly depends on the type of relationship. Therefore, everything is interconnected within family systems theory (Gately et al. 2006, White and Klein 2002). According to family systems theory, behavior is thought to be “embedded in the family’s network of relationships and serve an important purpose in the family” (Becvar and Becvar 2003: 211). Thus, changes in the family structure can affect the child’s behavior (O’Gorman 2012). A change in one part of the family, such as a change with the child’s behavior, affects other parts of the family, such as relationships between other family members (O’Gorman 2012). Therefore, if the child’s mother experiences multiple partner fertility, it may affect the child’s social behavior due to the changes that have occurred within the home.

White and Klein (2002) argue that there are first-order and second-order levels within the family systems theory. The first-order system refers to the environment and behavior of the individual (White and Klein 2002). Thus, changes in the family environment, such as experiencing multiple partner fertility, can affect the child. The second-order system refers to family hierarchy and how parents have influence and power over their children (Vetere 2001). Therefore, changes in cohabitation or marriage can also influence the child. Ultimately, any changes or additions to the family have the ability to affect the child’s behavior.

Family systems theory and attachment theory have similar themes which have led many researchers to link the two theories (Erdman and Caffery 2003, Marvin and Stewart 1990, Minuchin 1985). Marvin (2003) notes that family systems theory and attachment
theory contend that observing connections between individuals are just as important as
the actual behaviors of each person as well as the entire family. Johnson and Best (2003)
also state that attachment theory and family systems theory have similar characteristics;
both theories use a holistic perspective and view behavioral concerns in the same manner
(Johnson and Best 2003). Thus, child well-being can be affected by changes that occur in
the family structure.

A child’s behavior is an indicator of their well-being and can concern the family.
O’Gorman (2012) explains that the caregiver’s behavior influences the child’s behavior.
A child whose mother experiences multiple partner fertility and/or changes in the
relationship status can have behavioral issues due to the changes within the home.
Therefore, attachment theory and family systems theory examine a child’s well-being.
Further discussion regarding child well-being and the types of families that may
experience multiple partner fertility is below.

2.2 Child Well-Being

As families change and become less traditional, studies on child well-being have
increased. Fernandes, Mendes, and Teixera (2012) review the latest child well-being
indices. While there are multiple reasons why examining child well-being is necessary,
Fernandes et al. (2012) identify the top three reasons:

1. The problem of child well-being is not restricted to the present lives of
children; it has repercussions on their future;

2. Children are still one of the groups most afflicted by poverty;

3. There is still a basic lack of ‘direct’ information on children’s lives
(Fernandes, Mendes, and Teixera 2012: 240).
These reasons are reflected in numerous studies. Several researchers contend that children who experience poverty have lower child well-being which also leads to concerns in their adult lives (Fernandes et al. 2012, Secretary of State for Social Security 1999; Hobcraft 2002; Kiernan 2002; Piachaud and Sutherland 2002; Sparkes and Glennester 2002; Ridge 2004; European Commission 2008). Poverty also affects children more than any other group (Cornia and Danzinger 1997; European Commission 2008) and children have a higher risk for poverty than members in the average population (Tsaklogou and Papadopoulos 2002). Yet, child well-being cannot be measured solely by poverty (Fernandes et al. 2012). There are many indicators that measure child well-being (Fernandes et al. 2012).

These indicators also include objective and subjective measures of child well-being which are imperative to use when determining how children fare (Fernandes et al. 2012). Yet, a clear knowledge of the boundaries of examining child well-being is lacking, and the measurement of well-being varies across different studies. By combining indicators into a single composite index (Fernandes et al. 2012), it is easier to measure the growth and changes within child well-being (Ben-Arieh 2008). Fernandes et al. (2012) explain that the most important aspects of measuring child well-being are:

1. The child should be the unit of analysis;

2. Children’s perspectives on their own well-being should be taken into account;

3. Multidimensionality is a requirement;

4. It is desirable to have summary indexes that can adequately represent the overall well-being of children;

5. When constructing these kinds of indexes it is preferable to assign ‘real’ weights to indicators;
6. Interactions between the different aspects of well-being should also be considered when engaging in such measurement exercise (2012: 242-243).

Social indicators, such as educational performance, social behavior, and health, are also important to the measurement of child well-being; however, they are difficult to assess (Ben-Arieh 2000). In addition to the fact that children are rarely surveyed, parents are usually the respondents since the child’s perspective is often omitted (Fernandes et al. 2012). Research on child well-being measurement indicators, however, is increasing (Fernandes et al. 2012). Ben-Arieh (2000, 2006, 2008) identifies three recent trends: the growing focus on child-centeredness, the importance of combining several single components that are similar in order to create indicators, and using a multidimensional approach of examining child-centeredness (Ben-Arieh 2000, 2006, 2008). These trends examine why many recent studies focus on multiple indicators in order to examine child well-being (Fernandes et al. 2012).

As indicated earlier, there are numerous measurements of child well-being. Land, Lamb, and Mustillo (2001) created the “Index of Child and Youth Well-Being.” Land and associates (2001) wanted to measure how children fare within the United States by studying the quality of life of children and other major factors affecting child well-being. The study by Land and associates (2001) found that there are seven domains of life that are imperative when examining adults, and these domains also apply to children:

- material well-being (e.g., command over material and financial resources and consumption);
- health (e.g., health functioning, personal health);
• safety (e.g., security from violence, personal control);

• productive activity (e.g., employment, job, work, schooling);

• place in community (e.g., socioeconomic (education and job) status, community involvement, self-esteem, and empowerment);

• intimacy (e.g., relationships with family and friends); and

• emotional well-being (e.g., mental health, morale, spiritual well-being) (2001: 245).

Land and associates (2001) also explain that “the main ‘productive activity’ of most children up to age 18 is schooling and education” (247). By clustering 28 indicators of child and youth well-being into the seven domains, Land and associates (2001) constructed the Index of Child and Youth Well-Being. In 2007, Land and associates expanded their study and added 16 new indicators.

Moore, Theokas, Lippman, Bloch, Vandivere, and O’Hare (2008) define the important domains of child well-being in another way. Moore and associates (2008) separated individual child well-being and contextual well-being into separate groups. Individual child well-being included physical health, psychological health, social health, and educational health (Moore, Theokas, Lippman, Bloch, Vandivere, and O’Hare 2008). Contextual well-being included family, community, and socio-demographics (Moore et al. 2008). Nevertheless, multiple researchers have examined child well-being in many different ways. Fernandes and associates (2012) admit that although the study of child well-being is progressing, research on measurement is still developing. In the following section, I examine how different family structures are imperative to the measurement of child well-being.
2.3 Family Structures

There are a growing number of families, such as single-parent households and cohabitations that divert from the traditional nuclear family, i.e., a married couple who share biological children. Socioeconomic status is an important factor associated with family structure. Family structure is related to socioeconomic status and living in a low-income home affects children negatively (Duncan and Brooks-Gunn 1997). If the child’s biological father does not live in the same home as the child, he is typically ordered to pay child support; however, about two-thirds of single mothers never receive that support (Sorensen 1997). Amongst single mothers, 44.8 percent live in poverty compared to only 8.71 percent of married households with children (Baugher and Lamison-White 1996). The stress that occurs from living in poverty may also affect parenting techniques which can, in turn, harm a child’s development (Conger, Conger, Elder, Lorenz, Simons, and Whitbeck 1992; Dodge, Petit, and Bates 1994).

Female-headed households often experience disadvantages. Single mothers who are in unstable relationships are correlated with economic disadvantage (Ackerman, Brown, D’Eramo and Izard 2002). Poor parents are also more likely to have had multiple intimate relationships (O’Connor, Pickering, Dunn, and Golding 1999; Seltzer 2000; White and Rogers 2000). Families living in poverty are often single-parent families and unmarried caregivers, rather than the traditional nuclear family with two biological parents and their children (Amato 2000; Bumpass and Raley 1995; Duncan & Brooks-Gunn 1997; McLoyd 1998). Thus, relationship instability may pose disadvantages for young children (Duncan and Brooks-Gunn 1997; Hetherington, Bridges, and Insabella 1998).
The father-absence hypothesis, which compares families with married biological parents and single-parent families, also suggests that children in female-headed households are negatively affected. The hypothesis suggests that a married father provides “economic resources, paternal discipline and supervision of children, and adult male role models” (Ackerman et al. 2002: 696). Thus, when these qualities are absent, the child is at a greater risk for being disadvantaged (Ackerman et al. 2002). However, it has been argued that parental supervision and socioeconomic status explain the majority of variance in the outcomes for youths in both married and single-parent families (McLanahan 1997; 1999).

Another important family structure is cohabitation since it is becoming more accepted within society. Culturally, cohabiting relationships are defined as when two people in a romantic relationship live together in the same home and take on marital responsibilities without actually being married. Cohabitation is common for disadvantaged families (Bumpass and Raley 1995; Manning and Lichter 1996; South and Crowder 1998) and known for its instability (Burton, Cross-Barnett, and Cherlin 2011). However, there are unmarried parents who never cohabit while raising a child (Ackerman et al. 2002). Nevertheless, changes in family structure or relationship transitions are more likely to occur in non-traditional families when compared to more traditional families (McLoyd 1998; Seccombe 2000; White and Rogers 2000).

Half of all births outside of marriage are to cohabiting parents (Osborne 2005), and 59 percent of women who conceive while cohabiting continue the cohabitation after the child is born (Manning 2001). Rinelli McClain (2011) discusses father involvement and coparenting cohabitations within the first five years of the child’s life. Rinelli
McClain (2011) argues that father involvement and coparenting are deciding factors between cohabiting partners’ transition to marriage or separation. Rinelli McClain concludes that father involvement and coparenting lowers the risk of separation, but does not influence the chance of marriage (2011). However, cohabitation leads to a higher risk of multiple partner fertility because the relationship may not end with marriage, which increases the likelihood of having another partner. Thus, cohabitation influences a child’s well-being due to the child being exposed to a family structure that is associated with indicators of negative well-being, compared to children whose biological parents are married and do not have children from other relationships.

Those who live in a community with other disadvantaged families tend to be more accepting and supportive of cohabitation and nonmarital childbearing when compared to those living in wealthier communities (McLoyd, Cauce, Takeuchi, and Wilson 2000; White and Rogers 2000). These changing cultural norms and behaviors may be due to the absence of marriageable men within poorer communities (Elder, Eccles, Ardelt, and Lord 1995; McLoyd 1998; Seltzer 2000). Approval from the community may also be promoting single-mother families or serial cohabitation (Ackerman et al. 2002). Cohabitation and single parenting can lead to children being exposed to having different men residing in their home throughout childhood; this may cause inconsistent parenting, and may cause multiple father figures to break their bonds with the children (Ackerman et al. 2002). Many cohabiters have poor relationship quality which may also lead to relationship dissolution (Brown and Booth 1996; Hetherington et al. 1998). The stress associated with poor relationships may affect the mothers’ ability to parent. Thus,
cohabiting relationships may be associated with the mother exhibiting poor parenting skills (Ackerman et al. 2002).

2.4 Educational Performance and Family Structure

A child’s educational performance can be a measure of her or his well-being as well. Wu, Costigan, Hou, Kampen, and Schimmele (2010) discuss children’s educational adjustment and family structure. Many people who cohabit have children living with them (Wu, Costigan, Hou, Kampen, and Schimmele 2010). Early education, such as Head Start, is very important and, if successful, leads to further education (Wu et al. 2010). Wu and associates state that as family status changes, so will children’s educational adjustment (Wu et al. 2010). They conclude that children who live in cohabitating households show negative changes in educational achievement when compared to children within married households (Wu et al. 2010). As stated earlier, children who do not live in a traditional family are more likely to be in a family that experiences multiple partner fertility. In addition, children raised within family structures different from two biological, married parents also have lower grade point averages and have lower scores on standardized tests (Carlson and Corcoran 2001). Children raised within single-parent families are more likely to have more difficulties academically compared to children raised in two-parent families (Amato 1994; Dawson 1991; and McLanahan 1997). However, Wu and associates (2010) also conclude that biological and step-cohabiting families have similar educational adjustment (Wu et al. 2010).

Teachman (2008) argues that family structure affects educational attainment because it affects participation in school activities. Students who are positively involved in the social aspects of school tend to have higher grade point averages (Teachman 2008).
When there is family instability, the child’s residence may change multiple times and the child may be required to change schools (Crowder and Teachman 2004; McLanahan and Sandefur 1994; South, Crowder, and Trent 1998). This can result in the child not knowing their teachers and being less involved with their peers at school (Haynie, South and Bose 2006; Pribesh and Downey 1999).

On another dimension, economic resources also affect the child’s education (Teachman 2008). Families that have higher socioeconomic status can help their children prepare for school by providing equipment such as a computer and Internet access (Duncan, Brooks-Gunn, and Klebanov 1994; Morris and Gennetian 2003). Empirical evidence also provides a link between the families’ economic resources and the child’s participation in school activities (Morris and Gennetian 2003).

Head Start is designed to reduce the impact that family socioeconomics has on educational achievement by preparing children of low socioeconomic status for school. Zhai, Brooks-Gunn, and Waldfogel (2011) found that attendance within Head Start improves cognitive ability, social competence, and reduces attention problems; however, it does not reduce behavior problems. Zhai and associates (2011) also found that children who attended Head Start had greater cognitive development than children who received only parental and nonparental care. However, Head Start attendance had no significant difference in terms of cognitive development when compared to programs such as pre-kindergarten. Findings related to children’s social competence and behavior depends on the reference group studied. Head Start usually did increase children’s social competence and behavior compared to parental care and pre-kindergarten (Zhai, Brooks-Gunn, and
A child’s educational experience can also be influenced by the child’s behavior, which I discuss further in the following section.

### 2.5 Social Behavior and Family Structure

Family structure and socioeconomic status appear to affect educational attainment and school behavior differently. In early elementary school, behavior problems are often related to family structure (Ackerman et al. 2002). Relationship instability weakens academic behavior for children (Ackerman et al. 2002). Behavior at school can also fluctuate due to other components of instability (Ackerman et al. 2002). “Potential correlates include reductions in family earned income, changes of residence, maternal education and age, and experience of negative life events such as loss of employment and maternal illness” (Ackerman et al. 2002: 695). Adjustment problems at school for the child can even be expected, due to these experiences (Ackerman 2002; Ackerman, Kogos, Youngstrom, Schoff, and Izard 1999; Eckenrod, Rowe, Laird, and Braithwaite 1995). Children’s behavior often is affected negatively when family structures include serial cohabitation or numerous marital transitions that often produce multiple partner fertility (Ackerman et al. 2002; Ackerman et al. 2001).

Fomby and Osborne (2010) discuss children’s behavior as affected by relationship instability as well. They argue that children who are raised within an unstable family are more likely to have aggressive behavior when compared to children who are raised within a stable family (Fomby and Osborne 2010). Fomby and Osborne (2010) further conclude that children who have been exposed to relationships that are unstable have added stress. Additional stress caused by relationship instability is more likely to create behavior problems for the child in the present, whereas stress caused by union transitions,
such as moving from a single to a cohabiting family structure, may cause behavior problems over time as the child continues to develop (Fomby and Osborne 2010).

Paat (2011) also discusses financial strain between parents and between cohabitators, and how higher levels of interparental discord can affect the behavior of children. When parents have higher interparental discord, children have a higher risk of having antisocial behaviors (Paat 2011). There is evidence that suggests that families who have financial issues have a higher risk for parental relationship problems, and that delinquent children tend to come from families with disruptions in the home (Paat 2011). Paat (2011) suggests that it is important to find the link between these factors. Paat (2011) states that children who come from families with financial issues are at a higher risk of developing behavior problems because of the familial financial issues. Thus, as parents’ exhibit cynical and angry attitudes and behaviors due to financial and marital stress, their children may copy those behaviors and create behavior problems (Paat 2011). Parents also may not be as involved with their children due to financial and marital strains, which can also influence their children’s behavior (Paat 2011). Paat (2011) concludes that if parents have a strong commitment to their relationship and their parenting skills, their children will have a lower risk of learning and acting out antisocial behaviors.

Carlson and Corcoran (2001) found that the behavior of children seven through ten years of age is greatly influenced by factors such as family socioeconomic status, quality of the home environment, and the mother’s psychological functioning. When compared to two-parent families, single-parent families have both economic and interpersonal disadvantages (McLanahan and Sandefur 1994). Children raised within
single-parent families are more likely to have more behavioral problems compared to children raised in two-parent families (Amato 1994; Dawson 1991; and McLanahan 1997).

2.6 Health and Family Structure

Children’s health is also an important factor in their well-being. Bronte-Tinkew and associates viewed behavior and physical health of children at the age of 36 months (Bronte-Tinkew et al. 2009). The findings indicate that there are direct and indirect effects of paternal depression on children’s health (Bronte-Tinkew et al. 2009). Father involvement, or lack thereof, could have an indirect effect on children’s physical health, due to the possibility that the father may be more likely to provide health insurance or pay for the costs of treatment, if he were involved in the child’s life (Bronte-Tinkew et al. 2009). Children raised within single-parent families are also likely to have more psychological and emotional problems compared to children raised in two-parent families (Amato 1994; Dawson 1991; and McLanahan 1997).

Bass and Warehime (2011) discuss how biological parents who are married usually have private health insurance, when compared to parents with other relationship statuses. Only 5 percent of children with health insurance do not have a regular health care source, compared to 30 percent of children without health insurance (Bass and Warehime 2011). Therefore, children without health insurance are more likely to receive less health care attention than children with health insurance. This helps explain how children who live in a married household have better healthcare than children who do not live in married households. Children also tend to have less than excellent health, when their parents are not involved in a romantic relationship with each other or another
partner, or have additional children (Bass and Warehime 2011). Bass and Warehime’s (2011) research concludes that children have better health and healthcare, when they are raised within a married family than when they are born to couples who are not married.

Bzostek and Beck (2011) also discuss the health of children and relationship instability. They measure children’s health at the age of five and how family instability affects the child’s health. Similar to Bass and Warhime’s findings, Bzostek and Beck (2011) suggest that family instability relates to the worsening of children’s health. However, Bzostek and Beck’s findings concluded that while relationship instability is important, healthcare for children are no different for stable single mothers and single mothers who eventually got married or cohabited with a partner compared to married couples (2011). Bzostek and Beck (2011) reference family stress theory when stating that there is evidence that chronic relationship instability usually causes children to have worse health, when compared to children who have no family instability. Limitations in Bzostek and Beck’s research include the fact that the majority of children under the age of five years are generally healthy; also, their health status was reported by their mother (2011). In addition, the mothers also reported their family instability levels (Bzostek and Beck 2011). Thus, these limitations could have influenced and altered the findings (Bzostek and Beck 2011). Nonetheless, health, educational performance, and social behavior, as well as family structure, are important measures of child well-being. In addition, non-traditional family structures that are often associated with multiple partner fertility tend to be negatively related to the key measures of child well-being. In the next chapter, I examine the methods and measurement of child well-being and the variables that may affect these measures of child well-being.
Chapter 3

Methods

This study examines the well-being of children at the time they are nine years of age, comparing children whose mothers have experienced multiple partner fertility to children whose mothers have not experienced multiple partner fertility. The approach is cross-sectional using secondary data from the most recent wave of the Fragile Families and Child Well-Being Study. By using the most recent wave of the Fragile Families and Child Well-Being Study, it allows me to measure if multiple partner fertility has any influence on measures of the child’s well-being.

For this study, there are three measures of child well-being: educational performance, social behavior, and health of the children. As discussed in the literature review, educational performance, social behavior, and health are important measures of child well-being because they are imperative to child development (Land, Lamb, and Mustillo 2001).

The analyses of the data include three models in which educational performance, social behavior, and health are the dependent variables. These dependent variables are measured by using a series of questions from the Fragile Families and Child Well-Being Study. Each of these dependent variables is expected to be affected by family structure,
which includes multiple partner fertility, and the families’ socioeconomic status.

Therefore, I expect family structure to affect educational performance, social behavior, and health. More specifically, I hypothesize:

- Children who come from families with multiple partner fertility are expected to have lower educational performance than children living in other family structures;
- Children who come from families with multiple partner fertility are expected to have more problems with social behavior than children living in other family structures;
- Children who come from families with multiple partner fertility are expected to have more health issues than children living in other family structures.

I also expect socioeconomic status to affect children’s educational performance, social behavior, and health. More specifically, I hypothesize:

- Children whose families have lower socioeconomic status will have lower educational performance than children from other family structures;
- Children whose families have lower socioeconomic status will have more problems with social behavior than children from other family structures;
- Children whose families have lower socioeconomic status will have more health issues than children from other family structures.

These hypotheses can be illustrated in three models. Figure 3-1 shows a structural equation model explaining how educational performance is affected by family structure and socioeconomic status. Figure 3-2 shows another structural equation model explaining how social behavior is affected by family structure and socioeconomic status. Lastly, Figure 3-3 shows a structural equation model explaining how health is affected by family structure and socioeconomic status. Boxes in the model are the observed or measured variables, while the circles are the latent or unmeasured variables.
Figure 3-1 Educational Performance

- Family Structure
  - Child finishes class assignments with time limits
  - Child produces correct schoolwork
  - Child does not follow through on instructions and fails to finish homework
  - Child’s language and literacy skills
  - Child’s science and social studies
  - Child’s mathematical skills
  - It’s hard for me to finish my schoolwork

- Socioeconomic
  - Frequency you felt happy to be at your school
Figure 3-2 Social Behavior

Child controls temper in conflict with peers
Child respects the property rights of others
Child controls temper in conflict with adults
Child expresses own feelings/opinions/ideas without putting down others
Child fights with others
Child threatens or bullies others
Child argues with others
Child disturbs other children
Child makes friends easily
Child cooperates with peers without prompting
I get in trouble for talking and disturbing others
Had a fist fight with another person
In past year, you put child in ‘time out’
In past year, you gave child something else to do instead
In past year, you took away privileges from child

Family Structure

Socioeconomic
The structural equation models in Figure 3-1, 3-2, and 3-3 indicate that two independent variables affect the measures of child well-being—educational performance, social behavior, and health. The independent variable known as family structure is observed, while the other independent variable labeled as socioeconomic status is latent. As previously discussed, the goal of this research is to determine if family structure has an effect on educational performance, social behavior, and health. As discussed in the literature review, although there are many different family structures, I define family structure dichotomously, differentiating between families that have experienced multiple partner fertility and families that have not experienced multiple partner fertility. The other independent variable, socioeconomic status, is measured by variables examining if the mothers have any financial assistance from welfare, food stamps, or any other agency. Socioeconomic status is another concept that is expected to affect a child’s educational performance, social behavior, and health. As stated in the literature review, almost half of single mothers live in poverty (Baugher and Lamison-White 1996). Lower income
families are also more likely to have had multiple intimate relationships (O’Connor, Pickering, Dunn, and Golding 1999; Seltzer 2000; White and Rogers 2000), which can lead to multiple partner fertility.

3.1 Definition of Key Concepts

Multiple partner fertility as well as child well-being, has many different concepts associated with them that may have different definitions, depending on the study. Therefore, I have a set of key concepts and their definitions below, to explain how these terms are used within this current study.

- (Maternal) Multiple Partner Fertility: A woman has children with multiple male partners. I am focusing on maternal multiple partner fertility due the majority of primary caregivers being the child’s mother in The Fragile Families and Child Well-Being Study. When confirming how much time the child lives with the child’s biological mother, 93% of mothers responded with “all or most of the time.” Therefore, out of the entire study, including 4,898 cases, 3,272 mothers responded with the answer above. Thus, the child’s biological mother is most likely the child’s primary caregiver as well and be asked survey questions related to her child’s well being.

- Cohabitation: Two people in a romantic relationship that live together in the same home and take on marital responsibilities without legally being married.

- Nonmarital Behaviors: Intimate behaviors that have become more common in society than they were in previous generations, such as cohabitation and/or multiple partner fertility.

- Nonmarital Births: Births that occur outside of marriage.

- Family Stability/Instability: A family that is stable is characterized as having a lower risk of dissolution. A family that is unstable is characterized as having a lower income and a higher risk of dissolution.

- Relationship and/or Union Transitions: A change in relationship status, such as the transition from being single, to being in a relationship, cohabitation, or marriage, to being single, divorced, or widowed.

- Family Structures: There are different types of families. For example, traditional nuclear families, single-parent families, cohabiting families, step families, step-
cohabiting families, etc. In this study, I separate family structures by having or not having experienced multiple partner fertility.

- Female-headed households: Households that are primarily run by a single female.
- Traditional (Nuclear) Family: A married man and woman who have children together (does not include multiple partner fertility or step-children).
- Relationship Stability/Instability: Relationships outside of marriage being characterized as having a lower or higher risk of dissolution. These do not include children.
- Formal Relationship Transitions: Relationship transitions that include legal documentation, i.e. marriage and divorce.
- Informal Relationship Transitions: Relationship transitions that do not include legal documentation such as marriage, i.e. cohabitation, dating, etc.
- Serial Cohabitation: People who have cohabited multiple times and never married their partner.

3.2 Data

Data from the Nine-Year wave of the Fragile Families and Child Well-Being Study are used to test the models. The Fragile Families and Child Well-Being Study include data of 4,898 children. The study’s goal was to gather information on how children born into fragile families fare and how children and families are influenced by their environment and policies. Therefore, the Fragile Families and Child Well-Being Study focused on families that are not traditional and are more likely to be disadvantaged. For example, 3,600 of the children in the study were born to unmarried parents and 1,100 were born to married parents (Reichman, Teitler, Garfinkel, and McLanahan 2001). The sample was collected from 20 US cities with populations greater than 200,000 (Reichman et al. 2001). The baseline data was collected from 75 different hospitals throughout the United States (Reichman et al. 2001). The data contains information for children at the age of nine years from interviews with the biological mother and father, primary
caregiver, in-home assessment of the child, and teacher surveys (Fragile Families and Child Well-Being Study). This study uses data from the interviews with the child, the child’s biological mother, and the child’s teacher.

In order to complete this study, I compare the data from interviews that included children whose mothers have experienced multiple partner fertility as well as mothers who have not experienced multiple partner fertility. This research explores if multiple partner fertility influences child well-being by measuring educational performance, social behavior, and health.

3.3 Dependent Variables

The Fragile Families and Child Well-Being Study is appropriate for the hypotheses, since the study collected data about the children’s development. As Figures 3-1, 3-2, and 3-3 shows, the dependent variables are educational performance, social behavior, and health. I was able to explore if educational performance, social behavior, or health differ between family structures that have experienced multiple partner fertility and family structures that have not experienced multiple partner fertility.

Educational Performance. I measured the child’s educational achievement by conducting a factor analysis and reliability test using SPSS, in order to determine if there are multiple educational factors and if the variables loading on each factor are compatible or if any of them need to be eliminated. Then I compared the child’s educational performance to children whose mothers who have and have not experienced multiple partner fertility. Below are the initial variables and how they were originally coded before running the factor analysis and reliability test in SPSS:
Educational Performance:

- Questions Answered by Teacher:
  - Child finishes class assignments with time limits
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very Often
  - Child produces correct schoolwork
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very Often
  - Child does not follow through on instructions and fails to finish homework
    - Coded as: (0) Not true, (1) Just a little true, (2) Pretty much true, (3) Very much true
  - Child’s language and literacy skills
    - Coded as: (1) Far below average, (2) Below average, (3) Average, (4) Above average, (5) Far above average
  - Child’s science and social studies
    - Coded as: (1) Far below average, (2) Below average, (3) Average, (4) Above average, (5) Far above average
  - Child’s mathematical skills
    - Coded as: (1) Far below average, (2) Below average, (3) Average, (4) Above average, (5) Far above average
- Questions Answered by Child:
  - It’s hard for me to finish my schoolwork
    - Coded as: (0) Not at all true, (1) A little bit true, (3) Mostly true, (4) Very True
  - Frequency you felt happy to be at your school
    - Coded as: (0) Not once in past month, (1) 1-2 times in past month, (2) Once a week, (3) Several times per week, (4) Every day

Social Behavior. I measured social behavior by conducting a factor analysis and reliability test in SPSS, in order to determine if there are multiple social behavioral factors and if the variables loading on each factor are compatible or if any of them need to be eliminated. Then, I compared the child’s social behavior to children whose mothers who have and have not experienced multiple partner fertility. Below are the initial variables and how they were originally coded before running the factor analysis and reliability test in SPSS:
Social Behavior:

- Questions Answered by Teacher:
  - Child controls temper in conflict with peers
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child respects the property rights of others
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child controls temper in conflict with adults
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child expresses own feelings/opinions/ideas without putting down others
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child fights with others
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child threatens or bullies others
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child argues with others
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child disturbs other children
    - Coded as: (0) Not true, (1) Just a little true, (2) Pretty much true, (3) Very much true
  - Child makes friends easily
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often
  - Child cooperates with peers without prompting
    - Coded as: (1) Never, (2) Sometimes, (3) Often, (4) Very often

- Questions Answered by Child:
  - I get in trouble for talking and disturbing others
    - Coded as: (0) Not at all true, (1) A little bit true, (2) Mostly true, (3) Very true
  - Had a fist fight with another person
    - Coded as: (1) Yes, (2) No

- Questions Answered by Mother:
  - In past year, you put child in ‘time out’
    - Coded as: (1) Once, (2) Twice, (3) 3-5 times, (4) 6-10 times, (5) 11-20 times, (6) More than 20 times, (7) Yes but not in the past year, (8) This has never happened
In past year, you gave child something else to do instead
- Coded as: (1) Once, (2) Twice, (3) 3-5 times, (4) 6-10 times, (5) 11-20 times, (6) More than 20 times, (7) Yes but not in the past year, (8) This has never happened

In past year, you took away privileges from child
- Coded as: (1) Once, (2) Twice, (3) 3-5 times, (4) 6-10 times, (5) 11-20 times, (6) More than 20 times, (7) Yes but not in the past year, (8) This has never happened

Health. I measured health by conducting the factor analysis and reliability test in SPSS, in order to determine if there are multiple health factors and if the variables loading on each factor are compatible or if any of them need to be eliminated. Then, I compared the child’s health to children whose mothers who have and have not experienced multiple partner fertility. Below are the initial variables and how they were originally coded before running a reliability test in SPSS:

Health:
- Questions Answered by Teacher:
  - Child received occupational therapy services
    - Coded as: (1) Yes, (2) No
  - Child received physical therapy services
    - Coded as: (1) Yes, (2) No
  - Child received counseling or psychological services
    - Coded as: (1) Yes, (2) No
  - Child received health services
    - Coded as: (1) Yes, (2) No
  - Child fell two or more weeks behind because of health problems
    - Coded as: (1) Yes, (2) No
- Question Answered by Child:
  - Condition of health in general
    - Coded as: (1) Excellent, (2) Very good, (3) Good, (4) Fair, (5) Poor
3.4 Observed and Latent Independent Variables

The independent variables are family socioeconomic status and if the child’s family structure includes multiple partner fertility or not. Next, I explain how these independent variables are measured in this research.

*Family Structure.* Multiple partner fertility is measured by reviewing a set of ten questions answered by the child’s mother. The mother was asked up to ten times to list the name(s) of the fathers of their children. This study considers a mother to have experienced multiple partner fertility if the mother listed more than one father’s name, when asked to name the father(s) of her children. Mothers who only listed one father’s name are considered to be mothers that have not experienced multiple partner fertility. Therefore, family structures that have not experienced multiple partner fertility are coded as zero and family structures that have experienced multiple partner fertility are coded as one.

*Family Socioeconomic Status.* Family socioeconomic status is measured by conducting a factor analysis and reliability test using SPSS, in order to determine if there are multiple socioeconomic factors and if the variables loading on each factor are compatible or if any of them need to be eliminated. Below are the initial variables and how they were originally coded before the factor analysis and reliability test in SPSS is performed:

**Socioeconomic Status:**

- **Questions Answered by Mother:**
  - Received income from welfare/TANF in last 12 months
    - Coded as: (1) Yes, (2) No
  - Received income from food stamps/EBT in last 12 months
    - Coded as: (1) Yes, (2) No
  - Received help from any other agency in past 12 months
3.5 Analysis

In order to test the hypotheses, I conducted a series of regressions. First, I performed a principal components factor analyses using varimax rotation on the data to determine the multiple factors affecting educational performance, social behavior and health. Eigenvalues of 1 or greater are used to determine the number of factors. By definition, an eigenvalue is “the total amount of variation across a sample that can attributed to a component” (Case and Coventry 2012). Next, by running reliability tests, I determined the deletion of any variables that would increase the variables reliability. Based on the results of the reliability tests, I created indices based on the remaining variables. After the indices are computed, I analyzed the models using regression models.

A reliability index shows how compatible each index is by measuring internal consistency through Cronbach’s Alpha. The higher the Cronbach’s Alpha indicates greater compatibility for the index. For example, of the indices used in the analyses, the self-control index has the highest final Cronbach’s Alpha at .934 (Table 3.1); therefore this index has the most consistency. The SES index has the lowest final Cronbach’s Alpha at .550; therefore this index has the least consistency among all indices in this study.
Table 3.1 Index Reliabilities

<table>
<thead>
<tr>
<th></th>
<th>Index</th>
<th>Initial Cronbach’s Alpha</th>
<th>Final Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Socioeconomics</td>
<td>SES</td>
<td>.430</td>
<td>.550</td>
</tr>
<tr>
<td>Educational Performance</td>
<td>Educational Skills</td>
<td>.655</td>
<td>.903</td>
</tr>
<tr>
<td></td>
<td>Educational Difficulty</td>
<td>.650</td>
<td>.650</td>
</tr>
<tr>
<td>Social Behavior</td>
<td>Self-Control</td>
<td>-.275</td>
<td>.934</td>
</tr>
<tr>
<td></td>
<td>Peers</td>
<td>.587</td>
<td>.795</td>
</tr>
<tr>
<td>Health</td>
<td>Therapy</td>
<td>.245</td>
<td>.689</td>
</tr>
</tbody>
</table>

*Family Socioeconomic Status.* Family socioeconomic variables are all measured by ‘yes’ or ‘no’ answers. Thus, no changes were necessary. The factor analysis on family socioeconomic status extracted one factor. I was able to run a reliability test to determine the compatibility of the element in the index. As seen in Table 3.1, the initial three variables produced a Cronbach’s Alpha of .430 with the reliability test; however after extracting the incompatible variable, the reliability test produces a Cronbach’s Alpha of .550. This creates more consistency among index items. Below are the items in the SES index that I used when I running the regression models to test the hypothesis:

*Socioeconomic Status:*

SES Index: Received income from welfare/TANF in last 12 months  
Received income from food stamps/EBT in last 12 months

*Educational Performance.* Most educational performance variables were measured the same way. The factor analysis of the educational performance variables
produced two factors that I labeled educational skills and educational difficulty. The educational skills index has a Cronbach’s Alpha of .903, while the educational difficulty index has a Cronbach’s Alpha of .650 (Table 3.1). The ‘child produces correct schoolwork’ variable, that was coded as: (1) Never, (2) Sometimes, (3) Often, or (4) Very Often, was measured differently than the other variables included in the educational skills index. The other variables in the educational skills index were coded as: (1) Far below average, (2) Below average, (3) Average, (4) Above average, or (5) Far above average. In order to standardize the measurement of the items that were included in the index, z-scores for the variables were created. The variables included in the educational difficulty index were measured the same and the responses included, (0) not at all true, (1) a little bit true, (2) mostly true, or (3) very true. Below are the elements in the educational performance indices that I used, when I ran the regression models to test the hypotheses:

**Educational Performance:**

Educational Skills Index:  
- Child produces correct schoolwork  
- Child’s language and literacy skills  
- Child’s science and social studies  
- Child’s mathematical skills  

Educational Difficulty Index:  
- It’s hard for me to pay attention  
- It’s hard for me to finish my schoolwork

**Social Behavior.** One of the social behavior variables was measured differently. The majority of the variables were coded as (1) Never, (2) Sometimes, (3) Often, or (4) Very often. However, the ‘child disturbs other children’ variable was originally coded as: (0) Not true, (1) Just a little true, (2) Pretty much true, or (3) Very much true, but was recoded as (1) Never, (2) Sometimes, (3) Often, (4) Very often, to produce similar four-point scales. The factor analysis of the social behavior variables produced three factors—self-control, peer interactions, and fighting. Some of the variables were recoded to
reverse their scales, so that all items measure the presence of self-control, not the lack of self-control. The self-control index has a Cronbach’s Alpha of .934, while the peer interactions index has a Cronbach’s Alpha of .795 (Table 3.1). Below are the elements in the social behavior indices that I used, when I ran the regression models to test the hypotheses:

**Social Behavior:**

**Self-Control Index:**
- Child controls temper in conflict with peers
- Child respects the property rights of others
- Child controls temper in conflict with adults
- Child gets along with people who are different
- Child expresses own feelings/opinions/ideas without putting down others
- Child fights with others
- Child threatens or bullies others
- Child argues with others
- Child disturbs other children

**Peers Index:**
- Child makes friends easily
- Child cooperates with peers without prompting

**Single Variable:**
- Had a fist fight with another person

**Health.** The health variables were all measured the same way, coded as (1) yes or (2) no response. Therefore, no changes were necessary. The factor analysis of the health variables identified three factors—therapy, counseling, and health. The therapy index has a Cronbach’s Alpha of .689 (Table 3.1). Below are the elements in the health index that I used when I ran the regression models to test the hypotheses:

**Health:**

**Therapy Index:**
- Child received occupational therapy services
- Child received physical therapy services

**Single Variables:**
- Child received counseling or psychological services
- Child received health services

Therefore, before running regression models, I organized the data and created indices based on the factor analyses and reliability tests. The factor analyses allowed me
to determine if there were multiple factors of educational performance, social behavior, or health. By running reliability tests, I was able to determine if the deletion of any variables would increase the indices’ reliability. Based on the factor analyses and reliability test results, I created the indices. In the next chapter, I analyze the data using regression models to test the hypotheses and discuss the findings.
Chapter 4

Findings

In this chapter, I analyze the data using regression models to test the hypotheses and report the findings. The majority of the findings support the hypotheses; however, the regressions for health tended to reject the hypotheses. As seen below, the three tables explain each set of regressions according to educational performance, social behavior, and health, which I discuss below as well.

Table 4.1 contains the regressions of the two educational performance indices: educational difficulty and educational skills. The first regression shown includes the dependent variable as educational difficulty and independent variables, family structure and SES. Both family structure and socioeconomic status have significant effects on educational difficulty. The positive beta for family structure is in the hypothesized direction, thus supporting the hypothesis. Children whose mothers have experienced multiple partner fertility have experienced more educational difficulties than children whose mothers have not experienced multiple partner fertility. In addition, the higher the SES of the family leads to less educational difficulty for the child, thus supporting the hypothesis.
Table 4.1 Regression of Educational Performance Indices on Family Structure and Socioeconomic Status

<table>
<thead>
<tr>
<th></th>
<th>Educational Difficulty</th>
<th>Educational Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Family Structure</td>
<td>.041*</td>
<td>.032</td>
</tr>
<tr>
<td>SES</td>
<td>-.068***</td>
<td>.045</td>
</tr>
<tr>
<td>Educational Difficulty</td>
<td>-.256***</td>
<td>.021</td>
</tr>
<tr>
<td>R²</td>
<td>.008</td>
<td>.126</td>
</tr>
</tbody>
</table>

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

The next regression with the dependent variable, educational skills, and independent variables, family structure, SES, and educational difficulty are discussed (Table 4.1). Family structure, as well as socioeconomic status and educational difficulty, have significant effects on educational skills. Children whose mothers have experienced multiple partner fertility have fewer educational skills than children whose mothers have not experienced multiple partner fertility, therefore supporting the hypothesis. Children whose families have a higher SES, have better educational skills than children whose families have a lower SES, thus supporting the hypothesis. Also, children who have a higher educational difficulty, have lower educational skills, hence supporting the hypothesis.

The regressions of the social behavioral indices are shown in Table 4.2. The first regression includes the dependent variable, self-control, and independent variables, family structure and SES. Both family structure and socioeconomic status have significant effects on self-control. The negative beta is in the hypothesized direction; children whose mothers have experienced multiple partner fertility have experienced less
self-control than children whose mothers have not experienced multiple partner fertility, thus supporting the hypothesis. Also, children whose families have a higher SES have more self-control than children whose families have a lower socioeconomic status, therefore supporting the hypothesis.

**Table 4.2 Regression of Social Behavior Indices on Family Structure and Socioeconomic Status**

<table>
<thead>
<tr>
<th></th>
<th>Self-Control</th>
<th>Peers</th>
<th>Fighting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Family Structure</td>
<td>-.094***</td>
<td>.029</td>
<td>.034*</td>
</tr>
<tr>
<td>SES</td>
<td>.187***</td>
<td>.043</td>
<td>.029*</td>
</tr>
<tr>
<td>Self-Control</td>
<td>.772***</td>
<td>.016</td>
<td>.255***</td>
</tr>
<tr>
<td>Peers</td>
<td></td>
<td></td>
<td>-.020</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.052</td>
<td>.600</td>
<td>.085</td>
</tr>
</tbody>
</table>

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

The next regression has a dependent variable, index of the child’s relationship with peers, and independent variables, family structure, SES, and self-control (Table 4.2). Family structure has a significant effect on the child’s relationships with peers. I found that children whose mothers have experienced multiple partner fertility have experienced poorer relationships with their peers than children whose mothers have not experienced multiple partner fertility, thus supporting the hypothesis. Similar to the self-control findings, children whose families have a higher SES have better relationships with their peers than children whose families have a lower SES. Therefore, the data supports the hypothesis about family structure and the child’s interactions with their peers. Children
who have more self-control also have better relationships with their peers than children who have lower self-control, thus supporting the hypothesis.

The last social behavior regression includes fighting with another person as the dependent variable and family structure, SES, self-control, and relationships with peers as the independent variables (Table 4.2). Family structure, as well as socioeconomic status and self-control, have significant effects on fighting with another person. Interactions with peers do not significantly affect the likelihood that the child fought with another person. The negative beta for family structure is in the hypothesized direction, hence supporting the hypothesis. Children whose mothers have experienced multiple partner fertility are more likely to have had a fist fight with another person than children whose mothers have not experienced multiple partner fertility. Also, children whose families have a higher SES are less likely to have had a fist fight with another person than children whose families have a lower socioeconomic status, thus supporting the hypothesis. Lastly, children who have more self-control are less likely to have had a fist fight with another person than children who have less self-control.

Table 4.3 shows the regressions of the three health related indices. The first regression includes therapy as the dependent variable and family structure and SES as independent variables. The findings for the health regressions are quite different from the educational performance and social behavior regressions. I found that neither family structure nor socioeconomic status have significant effects on the child receiving therapy. Regarding having received physical or occupational therapy, children whose mothers have experienced multiple partner fertility do not significantly differ from children whose mothers have not experienced multiple partner fertility. Thus, the data does not support
the hypothesis. The SES of the family also does not seem to affect the child attending therapy. Thus the data does not support the hypothesis.

Table 4.3 Regression of Health Indices on Family Structure and Socioeconomic Status

<table>
<thead>
<tr>
<th></th>
<th>Therapy</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Family</td>
<td>-.002</td>
<td>.039</td>
<td>-.026</td>
<td>.044</td>
<td>-.013</td>
<td>.044</td>
</tr>
<tr>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>-.024</td>
<td>.056</td>
<td>-.002</td>
<td>.063</td>
<td>.085</td>
<td>.064</td>
</tr>
<tr>
<td>R²</td>
<td>.001</td>
<td>.001</td>
<td>.008</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*  $p \leq .05$

**  $p \leq .01$

***  $p \leq .001$

The next regression has a dependent variable, titled health services, and independent variables, family structure, and SES (Table 4.3). Neither family structure nor socioeconomic status have a significant effect on the child receiving health services. The negative beta is not in the hypothesized direction, thus the data does not support the hypothesis. Family structure does not appear to affect the likelihood that children receive health services. The SES of the family also does not seem to affect the child receiving health services. Thus the data does not support the hypothesis.

The last regression has a dependent variable, titled counseling services, and independent variables, family structure and SES (Table 4.3). I found that neither independent variable has a significant effect on the child receiving counseling services. Family structure does not appear to affect the likelihood that children receive counseling or psychological services. Thus the hypothesis was not supported. The SES of the family also does not seem to affect the child receiving counseling or psychological services. Thus the data does not support the hypothesis.
As I analyzed the data using regression models to test the hypotheses and report the findings, there were a few unexpected results. In the next chapter, I conclude by discussing the findings and how they relate to the review of literature.
Chapter 5

Conclusion

Throughout this chapter I discuss the findings and how they relate to recent literature and discuss the limitations to this study. By reviewing the findings it is clear that child well-being is affected by multiple partner fertility, as well as socioeconomic issues. Recent research shows that children who experience poverty have lower child well-being which also leads to concerns in their adult lives (Fernandes et al. 2012, Secretary of State for Social Security 1999; Hobcraft 2002; Kiernan 2002; Piachaud and Sutherland 2002; Sparkes and Glennester 2002; Ridge 2004; European Commission 2008). In addition, families that have experienced multiple partner fertility are more likely than traditional families to experience relationship transitions, which are more likely to cause issues in the home, thus affecting the well-being of the children involved. (McLoyd 1998; Seccombe 2000; White and Rogers 2000). The findings of this study demonstrate the importance of including a measure of multiple partner fertility, as well as socioeconomic status, in the study of child well-being.

Children whose mothers experience multiple partner fertility face more obstacles and difficulties than children whose mothers have not experienced multiple partner fertility. Children raised within family structures other than the traditional nuclear family
have lower grade point averages and lower scores on standardized tests (Carlson and Corcoran 2001). Children raised within single-parent families are also more likely to have more difficulties academically compared to children raised in two-parent families (Amato 1994; Dawson 1991; and McLanahan 1997). The findings of this research show that children whose mothers have experienced multiple partner fertility have experienced more educational difficulties and have fewer educational skills than children whose mothers have not experienced multiple partner fertility. For educational performance, the hypotheses are all supported and the results correspond to the recent literature on the subject. Other recent literature and the findings state that socioeconomic status affects the child’s education (Teachman 2008). For example, families that have higher socioeconomic status can help their children prepare for school by providing equipment such as a computer and Internet access (Duncan, Brooks-Gunn, and Klebanov 1994; Morris and Gennetian 2003) whereas families with lower socioeconomic status may not have the funding to provide the necessary equipment. The findings indicate that children with families that have a higher SES have less educational difficulty and better educational skills than children with families that have a lower socioeconomic status. Therefore, the findings are consistent with previous research.

With respect to the findings, social behavior is similar to previous research results. For example, children whose mothers have experienced multiple partner fertility have experienced less self-control, poorer relationships with their peers, and are more likely to have had a fist fight with another person than children whose mothers have not experienced multiple partner fertility. Similarly, Ackerman and associates (2002) have found that behavior problems are frequently related to family structure throughout early
elementary school. Several marital transitions and serial cohabitation are more likely to produce multiple partner fertility than the traditional nuclear family, which creates a negative affect for children’s behavior (Ackerman et al. 2002; Ackerman et al. 2001). In addition, children who come from families with financial issues are at a higher risk of developing behavior problems due to familial financial issues (Paat 2011). Therefore, if parents have a strong commitment to their relationship and their parenting skills, their children will have a lower risk of learning and acting out antisocial behaviors (Paat 2011). This research shows that children whose families have a higher SES have more self-control, better relationships with their peers, and are less likely to have had a fist fight with another person than children whose families have a lower socioeconomic status. Furthermore, additional stress caused by relationship instability within the family is also more likely to create behavior problems for the child in the present, whereas stress caused by union transitions, such as moving from a single to a cohabiting family structure, may cause behavior problems over time as the child continues to develop (Fomby and Osborne 2010). Behavioral problems may arise from a lack of self-control. The findings indicate that children who have more self-control have better relationships with their peers than children who have lower self-control. Children who also have more self-control are less likely to have had a fist fight with another person than children who have less self-control.

Unlike educational performance and social behavior, the health regressions are rather different because they do not support the hypotheses. The findings show that neither family structure nor socioeconomic status have significant effects on the child receiving therapy, health services, or counseling and psychological services. Therefore, in
terms of the child receiving therapy, health services, or counseling and psychological services, children whose mothers have experienced multiple partner fertility do not significantly differ from children whose mothers have not experienced multiple partner fertility. The SES of the family also does not seem to affect the child attending therapy, receiving health services, or counseling and psychological services.

There are multiple reasons why multiple partner fertility and socioeconomic status did not affect the measures of children’s health. Traditional nuclear families usually also have private health insurance when compared to parents with other relationship statuses (Bass and Warehime 2011). This data does not measure if the child has a regular healthcare source and only 5 percent of children with health insurance do not have a regular health care source, compared to 30 percent of children without health insurance (Bass and Warehime 2011). Children raised within single-parent families are more likely to have psychological and emotional problems compared to children raised in two-parent families (Amato 1994; Dawson 1991; and McLanahan 1997), however this does not mean that children receive the services for these problems. The lack of significance in the health models may be due to other explanations, too. For example, the health questions in this study were answered by the child’s teacher who may or may not be aware of the child receiving any type of healthcare. In addition, only the child was asked about his/her health condition. This study also does not ask the mother these health questions. Furthermore, the Fragile Families and Child Well-Being Study is not a represented sample of American children and their families.

Therefore, educational performance and social behavior are affected by multiple partner fertility and thus, affect child well-being. Because people are simply becoming
more accepting of nonmarital behaviors, such as multiple partner fertility (Axinn and Thornton 2000), it is important to understand the ramifications of multiple partner fertility. This study regarding multiple partner fertility and child well-being helps provide a better understanding of the possible challenges faced by children growing up in a family that is characterized as multiple partner fertility.

This research adds to the study of child well-being by exploring the issue of multiple partner fertility. However, there have been some limitations besides those related to the insignificant effects on the child’s health discussed earlier. Firstly, the Fragile Families and Child Well-Being Study includes missing data; this is due to various reasons, such as not being able to contact people or people not answering every question asked. Out of the sample that was eligible to be interviewed for the Nine-Year wave, there were 4,654 biological mothers and only 3,515, or 76%, completed the interview (Bendheim-Thoman Center for Research on Child Wellbeing 2011). In addition, there were a total of 3,377 interviews with the child that were completed and 2,254 teacher surveys completed in this wave’s data (Bendheim-Thoman Center for Research on Child Wellbeing 2011). The Fragile Families and Child Well-Being Study also brought other limitations to this study. The data did not allow me to include other possible indicators of child well-being. Based on the attachment (O’Gorman 2012) and family systems theories (O’Gorman 2012, Gately, Pike, and Murphy 2006) and Land and associates’ work (2001) it would be useful to include measures of intimacy and safety that were not available in this data. The Fragile Families and Child Well-Being Study is based on families that are more likely to be “fragile,” or have lower economic status and family structures outside of the traditional nuclear family. Therefore, this study is limited to “fragile” families. The
Fragile Families and Child Well-Being also does not allow this study to differentiate between siblings and step-siblings, which future research may want to study.

In today’s society, people are becoming more accepting of changes within our culture. Changes within our culture affect the norms of marriage and family. There are more unwed parents than ever, and unmarried parents are more likely to experience multiple partner fertility (Carlson and Furstenberg 2006). Nonmarital births are increasing due to these societal changes (Carlson and Furstenberg 2006). It is imperative that we understand our culture and the changes within it in order to appreciate our growth as a society. Multiple partner fertility and child well-being are especially important to understand because it affects the development of children, since they grow into adults that must play a successful role in society to continue its growth and improvement. Therefore, the study on multiple partner fertility and child well-being is essential; it states that multiple partner fertility does affect child well-being.
References


