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Parent-child relationship quality and individual well-being in adulthood: the differential effects of childhood family structure

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Parent-child relationship quality and individual well-being in adulthood:
The differential effects of childhood family structure

by

Kristin Yagla Mack

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of Requirements for the Degree of DOCTOR OF PHILOSOPHY

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For the Graduate College

Iowa State University
Ames, Iowa

1995
In memory of James H. Yagla
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER ONE</th>
<th>INTRODUCTION</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER TWO</td>
<td>LITERATURE REVIEW</td>
<td>7</td>
</tr>
<tr>
<td>CHAPTER THREE</td>
<td>METHODS</td>
<td>56</td>
</tr>
<tr>
<td>CHAPTER FOUR</td>
<td>RESULTS</td>
<td>71</td>
</tr>
<tr>
<td>CHAPTER FIVE</td>
<td>DISCUSSION</td>
<td>103</td>
</tr>
<tr>
<td>REFERENCES</td>
<td></td>
<td>116</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td></td>
<td>131</td>
</tr>
<tr>
<td>APPENDIX</td>
<td></td>
<td>132</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1  Frequency Distributions for Respondents Whose First Disruption Was Parental Divorce or Parental Death 63
Table 2  Frequency Distributions of Demographic Characteristics by Total NSFH Sample and Study Sample 64
Table 3  Means and Standard Deviations for Study Variables by Intact, Divorced Mother Custody, and Widowed Mother Custody Childhood Family Structure 72
Table 4  Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Divorced Mother Custody Versus Intact Childhood Family Structure 75
Table 5  Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Mother Custody Versus Intact Childhood Family Structure 79
Table 6  Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Mother Custody Versus Divorced Mother Custody Childhood Family Structure 83
Table 7  Means and Standard Deviations for Study Variables by Intact, Divorced Father Custody, and Widowed Father Custody Childhood Family Structure 88
Table 8  Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Divorced Father Custody Versus Intact Childhood Family Structure 91
Table 9  Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Father Custody Versus Intact Childhood Family Structure 94
Table 10 Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Father Custody Versus Divorced Father Custody Childhood Family Structure 100
LIST OF FIGURES

Figure 1 The Conceptual Model 49
CHAPTER ONE

INTRODUCTION

The children who grow up in the 1990s are much more likely to live with a single
parent than the children who grew up 25 years ago. The number of single-parent families in
the United States more than doubled from the early 1970s to the mid 1990s. In 1970, 11.9
percent of American families with children under 18 years of age were headed by single
parents (U.S. Bureau of the Census, 1994a). This figure increased to over 26 percent by
1993 (U. S. Bureau of the Census, 1994a), and if recent demographic trends continue, it is
estimated that up to 60 percent of all children will spend at least some time living in a
single-parent household before reaching the age of 18 (Bianchi, 1990; Norton & Glick,
1986). Some researchers have also suggested that while living with a single parent used to
be a transition phase between first and second two-parent families, the majority of children
today will live in a single-parent family situation for the remainder of their childhood
(Bumpass & Sweet, 1989). In response to these demographic trends, there has been
increasing concern over how changes in family structure may affect a child throughout his
or her lifetime.

The Single-Parent Family Research Tradition

Over the years, empirical research on single-parent families has been dominated by a
concern for the problematic or negative consequences of growing up in the absence of a
biological parent. During the 1950s and 1960s, the prevailing view was that divorce was indicative of pathology on the part of the married couple, and any children that resulted from these unions were likely to be pathological as well (Gongla & Thompson, 1987; Raschke, 1987). The underlying assumption of the resulting research was that the intact, two-parent family was the "normal" family form and any departure from it was deviant and harmful to those involved. Although researchers were able to demonstrate that children who had spent time in single-parent family situations manifested high levels of delinquent behavior (e.g., Dorpat, Jackson, & Ripley, 1965), most of these studies were based on selective samples of children who were already at risk for problem behaviors, such as those in treatment facilities or those who were part of the juvenile correction system.

Research attention during the 1970s shifted toward a focus on the strengths of single-parent families. The literature at this time emphasized how single-parent families successfully coped with their relatively disadvantaged position. In a review of the research on children in fatherless families, Herzog and Sudia (1973) concluded that while father absence had some negative effects on children, the overall consequences were not as dramatic or permanent as some researchers had suggested. They identified the pervasive methodological flaws of early research on family structure and indicated that many behavioral differences between children from single-parent families and children from two-parent families could actually be explained by socioeconomic factors.

Although there is a striking difference between single and two-parent families in terms of economic well-being (Eggebeen & Lichter, 1991; Holden & Smock, 1991;
McLanahan & Booth, 1989), a growing body of research points to several negative consequences of family disruption that cannot be explained by socioeconomic factors alone. Since the early 1980s, several studies based on large, nationally representative samples have indicated that children who grow up in single-parent families are disadvantaged, not only immediately following a disruption, but in adulthood as well (Downey, 1994; Flewelling & Bauman, 1990; McLanahan & Bumpass, 1988; Miller & Bingham, 1989). The general conclusion from more recent studies is that income can account for some, but not all, of the negative effects associated with growing up in a single-parent family. Consequently, researchers have examined how other explanations such as differential socialization (McLanahan, 1985; McLanahan & Bumpass, 1988), interparental conflict (Demo & Acock, 1988; Furstenberg & Teitler, 1994), and stressful life changes (Wallerstein & Kelly, 1980), or some combination of these (Amato, 1993), may be linked with economic hardship to account for the effects of single-parent family structure on child outcomes.

In addition to the substantial progress that has been made in research on single-parent families, there are several problems which have been prevalent in the literature. The first is that the overwhelming majority of research in this area has grouped all single-parent families together, with little or no regard for distinguishing between specific types of parental absence (Amato & Keith, 1991; Blechman, 1982; Shinn, 1978; Seltzer, 1994). According to Gongla and Thompson (1987), typical studies have divided children into only two groups (one-parent and two-parent), and then attributed the differences that existed between the children to the presence or absence of the parents. The result is a body of
literature which was largely based on the assumption that all single-parent families are the same. This suggests that parental absence by itself provides a sufficient explanation for the differences found among children who grow up in various family structures. The problem is that separation, divorce, death, or the birth of a child to an unmarried mother are diverse experiences which are likely to affect children, parents, and family interactions in distinct ways. By grouping all single-parent families together, researchers have failed to examine or attempt to explain the differential effects of family disruptions. As Sprey (1967) noted almost 30 years ago, "The traditional research design in which one parent families—often of different nature—are compared with intact ones is methodologically irrelevant and will easily lead to misleading generalizations" (p. 31).

Another problem with the research on single-parent families is that most studies have focused on the short-term effects of family structure, with little consideration of how children are affected over time. Directing the majority of their attention to the first two years following a divorce, researchers have demonstrated that children of all ages face physical and emotional problems in the immediate aftermath of parental separation (Hetherington, 1979; Wallerstein & Kelly, 1980). These studies have typically found that by two years after a divorce, most children have made significant adjustments and some even seem to have made a full recovery. Much less attention, however, has been given to how these children fare over longer periods of time. There is some evidence that behavior problems can persist for as long as six years after a divorce or may reappear during adolescence (Hetherington, Cox, & Cox, 1985; Wallerstein & Blakeslee, 1989), but few
studies have examined whether the effects of childhood family structure persist into adulthood. In response, Chase-Lansdale and Hetherington (1990) have suggested that there is a significant gap in the literature due to an "extraordinary lack of studies" on the long-term effects of family disruption.

This study addresses the limitations of previous research on single-parent families by using data from the first wave of the National Survey of Families and Households to examine the long-term consequences of parental divorce and parental death as two specific types of childhood family disruptions. There are three basic questions which are considered in the present study. The first issue concerns whether being raised by a divorced parent is associated with more negative adult outcomes than being raised by both biological parents. The second issue examined is whether being raised by a widowed parent is related to poorer outcomes in adulthood than being raised in an intact family. The final issue is whether being raised by a widowed parent is associated with more positive or more negative adult outcomes than being raised by a divorced parent. These comparisons are made within the context of a conceptual framework which is based on the life course perspective and incorporates aspects of both attribution theory and social learning theory to explain the differential effects of growing up within specific family structures.

Examining these issues from this theoretical perspective should contribute to the existing literature in a number of ways. First, it should provide a more thorough analysis of single-parent families than most prior studies have attempted or achieved. Rather than starting with the assumption that single-parent families are a homogenous group because
they share a similar structure, adults who experienced specific types of disruptions during childhood are treated as separate groups. This allows for the likely possibility that different experiences result in distinct outcomes. The present study also differs from previous research because it acknowledges that some of the effects of childhood family disruption may persist or even be delayed until later in adulthood. This is important because as Chase-Lansdale and Hetherington (1990) have observed, the literature “is not extensive enough to justify conclusions regarding long-term effects” of family structure, “nor to identify and explain the broad variety that is evident in development over the lifetime” (p. 141).
CHAPTER TWO

LITERATURE REVIEW

Demographic Profile of Single-Parent Families

Several demographers have noted that one of the most dramatic changes in American society over the past three decades has been the significant growth in the number of single-parent families (Bumpass, 1990; Norton & Glick, 1986). Data from the U.S. Bureau of the Census (1994a) have shown that the number of families with at least one child under the age of 18 headed by a single parent increased from 1 out of 10 families in 1970 to one out of four in 1993. This substantial growth in single-parent families has occurred in spite of the fact that the number of all families with children under the age of 18 increased by only 16 percent and the number of two-parent families actually declined by three percent during this same time period (U.S. Bureau of the Census, 1994b).

Over the last few decades, the vast majority of children in single-parent families have lived with their mother. In 1970, almost 9 out of every 10 single-parent families (89.7%) were maintained by a female. This proportion dropped only slightly by 1993, when 85.7 percent of all single-parent families were headed by a mother. The corresponding numbers for male-headed families indicate that there has been a slight increase in the proportion of children in single-parent families that live with their father. In 1993, 14.3 percent of children under the age of 18 in a one-parent situation lived in a male-headed household,
which represented an increase of four percentage points from 1970 (U.S. Bureau of the Census, 1994b). There are some notable differences in the composition of single-parent families when age and gender of the child are taken into account. Norton and Glick (1986) found that as the age of a child increased, there was a greater likelihood that the single-parent family was maintained by a father. These researchers also found that compared to girls, boys were much more likely to live with their single fathers.

Another important way that single parent families differ by gender is in terms of their economic status. In 1991, single-parent families headed by women constituted the largest proportion of all family types with children under the age of 18 who lived in poverty, as 60.5 percent of African American and 39.6 percent of White mother-child families had incomes which fell below the official United States poverty line. The corresponding proportion of father-child families was significantly smaller, as 31.7 percent of African American and 16.5 percent of White single-parent families maintained by fathers had incomes below the poverty line (U.S. Bureau of the Census, 1993). One implication of these findings is that a substantial number of mother-only families must at some time depend on public assistance for a major proportion of their income (Wojtkiewicz, McLanahan, & Garfinkel, 1990; Garfinkel & McLanahan, 1986). Because single-parent families headed by fathers typically maintain a higher standard of living, welfare dependence is much more common among mother-child families. This is usually attributed to the fact that men have higher levels of educational attainment, a greater likelihood of being in the labor force, and a higher average income than women (Bianchi, 1990; Holden & Smock, 1991; McLanahan
When considering the factors that have influenced the dramatic growth of single-parent families over the past three decades, demographers generally identify the rising divorce rate as one of the major determinants (Bumpass, 1990; Norton & Glick, 1986; Wojtkiewicz et al., 1990). With the exception of slight fluctuations during times of economic depression, recession, and growth, and times when the nation was involved in war, there has been a steady increase in the American divorce rate for well over 120 years. During the 1860s only seven percent of all marriages ended in divorce, but by the late 1980s almost two-thirds of first marriages were expected to end this way (Bumpass, 1990; Martin & Bumpass, 1989). There was a substantial rise in the divorce rate during the 1960s and 1970s, and as Raschke (1987) has noted, a record high was reached in the late 1970s and early 1980s with a crude rate of 5.3 divorces per 1,000 people in the total American population. More recent data indicate that the divorce rate has currently stabilized and several demographers have suggested that the number of divorces in the United States has most likely reached its peak (Martin & Bumpass, 1989; Norton & Moorman, 1987). Whether or not the prevalence of divorce continues to increase, it is clear that the diversity it has created in regard to family structure has become an important part of modern family life.

A direct consequence of this particular demographic pattern is that divorce has replaced widowhood as the major cause of single-parent family structure in American society. Uhlenberg (1980) used data from the U.S. Public Health Service to examine how
the probability of losing a parent to death during childhood has changed over the past century. He found that 24 percent of children born in 1900 lost at least one parent before reaching the age of 15. Of these children, 1 out of every 62 experienced the death of both parents before reaching young adulthood. Dramatic declines in mortality over the last 100 years, however, have significantly reduced the probability that a child born today will lose a parent through death. Uhlenberg (1980) found that by 1976, only five percent of all children experienced parental death and only about 1 out of 1,800 children lost both parents by age 15. These changes in mortality have had a direct effect on how most single-parent families are formed. Gordon and McLanahan (1991) examined the Public Use Sample from the 1900 U.S. Census and found that the overwhelming majority of children at the turn of the century lived in single-parent homes as the result of parental death. At this same time, only two percent of all children who lived with either a single mother or a single father were children of divorced parents. By 1993, 38.4 percent of all single-parent families were created by divorce, compared to only 4.6 percent which were the result of a parental death (U.S. Bureau of the Census, 1994b). The other major determinants of single-parent family structure in 1993 were births to unmarried couples (36.3 %) and married couples with children who were not living together (20.7 %).

Divorce and Adults

The shift from widowhood to divorce as the most common pathway to single-parent family structure has had a profound influence, not only on American family life, but also on the researchers who study it. Recent literature has almost exclusively focused on the
determinants and consequences of divorce, with much less consideration of parental death as a cause of single-parent family status. As a result, there is a growing body of empirical evidence which has documented the demographic and life course outcomes of divorce (White, 1990).

Adults who divorce are found to experience several different types of consequences. Often the most immediate and severe involve a change in the financial position of the individual. In a review of the economic impact of marital dissolution, Holden and Smock (1991) indicated that there is remarkable consensus in the literature that divorce has a "negative and prolonged" effect on the financial well-being of women. This is not the case for most men, however, who often experience an improved standard of living after divorce. Holden and Smock (1991) concluded that the economic hardship experienced by many women who divorce is the result of multiple factors, including division of labor during marriage which assigns women primary responsibility for housework and child care, low wages paid to many women both during and after marriage, and a lack of adequate economic transfers to women following marital dissolution.

Other researchers agree that contemporary divorce laws have had the unanticipated consequence of making post-divorce adjustment particularly difficult for women. Weitzman (1985) has observed that the no-fault divorce laws, which were first passed in the 1970s, tried to eliminate the adversarial nature of divorce by removing the requirement of fault as a basis for marital dissolution. These laws granted a divorce upon the claim that “irreconcilable differences” had caused the immediate break down of the marriage. This
modification eliminated fault as a basis for financial award and created a system where alimony and property settlements were based on the equal treatment of men and women. Weitzman (1985) argued that equal treatment under the law has had negative consequences for women because it ignores the fact that men and women do not share the same economic opportunities. For example, while women have a lower earning potential both before and after marriage, they are still much more likely than men to be awarded custody of their children. According to Weitzman (1985), the disproportionate costs of parenthood may place the wife at extreme economic disadvantage and make post-divorce adjustment especially challenging for women.

Divorce also has physical and mental health consequences for the adults who experience it. Researchers have consistently demonstrated that separated and divorced individuals have more physical problems than individuals in almost all other marital status groups. Several studies have found that divorced adults exhibit higher rates of disease morbidity, alcoholism, suicide, homicide, and disease mortality when compared to married, single, and some widowed persons (Kitson & Morgan, 1990; Raschke, 1987). Although the reasons for these findings are not completely clear, some researchers are beginning to link physiological outcomes with psychological determinants. Ader, Cohen, and Felten (1990), for example, have argued that divorce may increase the risk of illness for an individual because stressful life events or conditions tend to suppress immunological functioning. Umberson and Williams (1993) have also suggested that the poor physical health of divorced individuals may be the result of stress associated with noncustodial
parenting. They maintain that high levels of role strain result from conflicts over visitation and child support, the continuing relationship with their ex-spouse, and perceived loss of control over their family situation. These studies underscore the importance of understanding both the physiological and psychological aspects of divorce.

One of the most well-established findings in the research on mental health is the relationship between marital status and psychological well-being (Mastekaasa, 1992). Studies have consistently shown that just as separated and divorced adults have more physical health problems than people in other marital status groups, they also have more mental health problems. An example of the research in this area is provided by Kurdek (1991), who used data from the National Survey of Families and Households to examine the relationship between reported well-being, divorce history, and the availability of a proximate adult. He found that individuals who had experienced at least one divorce reported less happiness and more frequent depression than individuals with no history of divorce. Cohabiting partners were also found to report greater well-being than individuals who lived alone, but they reported lower well-being than married individuals. Kurdek (1991) used these findings to conclude that there is something about marriage, other than the availability of a proximate adult, which improves subjective well-being. One of the implications of this study is that there may also be something about the process of divorce which damages the mental health of the individual.

There are two explanations which have typically been used to explain the relationship between divorce and negative mental health outcomes among adults
(Mastekaasa, 1992; Raschke, 1987). The first explanation is based on the idea of social causation and suggests that marriage itself has a positive effect on psychological well-being. Proponents of this argument maintain that marriage is beneficial because the type of interaction which occurs between married couples is based on a very direct and deep concern for the individual (Gove, Style, & Hughes, 1990). Within this context, divorce is expected to have a negative effect on mental health because the opportunity for meaningful interaction is restricted. The opposite position is taken in the social selection argument which maintains that psychological well-being has a positive effect on marital status. This approach suggests that healthier and happier people are more likely to be selected into to marriage than unhealthy and unhappy people. In support of this explanation, Mastekaasa (1992) found that measures of subjective well-being and overall life satisfaction taken at one point in time were significant predictors of transition into marriage by a second point in time. Together with the social selection argument, these findings imply that individuals with poor mental health are not only more unlikely to marry, but they are also more likely to divorce, than individuals who report a higher level of subjective well-being. Because there is some support for both arguments, researchers disagree over which position provides the best explanation of the association between marital status and psychological well-being among adults (Raschke, 1987).

Although less well-documented than economic or physical and mental health outcomes, researchers have also examined the social consequences of divorce. For example, Kitson and Roach (1989) found that divorced individuals have difficulty
performing many social roles and often find adjustment to changes in their social position troublesome. Divorced individuals typically find that their social life is adversely affected in the immediate aftermath of marital separation because old friends are often lost, especially if they are married, and developing new networks is often difficult (Furstenberg & Spanier, 1984). The disruption of social networks is also related to residential mobility as one or both spouses typically move to a new residential location after divorce. These new living conditions and neighborhoods often involve a change or loss of friends and less contact with kin. Raschke (1987) has indicated that one implication of changes in social networks and environments is disorganization in household routines and activities. This is important to the current discussion because consistent discipline and a predictable routine are thought to be essential in helping children cope with the distress associated with parental divorce (Furstenberg & Cherlin, 1991; Wallerstein & Blakeslee, 1989). As parents attend to their own problems and difficulties in adjusting to divorce, they may be less available to their children and less able to provide a stable home environment. Consequently, the developmental and emotional needs of their children may be placed on hold. Several studies have suggested that the most important predictors of child well-being following a divorce are the mental health and parenting capacity of the custodial parent (Demo, 1992; Furstenberg & Cherlin, 1991).

**Divorce and Children**

While divorce is a difficult experience for most adults, it is almost always more devastating for children than it is for their parents (Wallerstein & Blakeslee, 1989).
Therefore, the question of how marital separation and divorce affect children has been of
ever greater concern than the consequences experienced by the adults who end their
marriages. Most of the early research on children and divorce assumed that marital
separation and dissolution represented a deviant form of the “normal” family (Levitin,
1979). Consequently, researchers focused on the relationship between family disruption
and juvenile delinquency and found that divorce was related to a variety of deviant child
behaviors. On closer examination, however, researchers found wide variability in the
quality and intensity of response among children (Hetherington, 1979). Some exhibited
severe or sustained disruptions in development, while other children seemed to have little
trouble and emerged as competent adults. This inconsistent pattern of findings was
problematic for those who had assumed that all the consequences of divorce for children
were negative.

Research that began in the 1970s provided a more scientific approach to the study of
children and divorce. Wallerstein and Kelly (1976, 1980) conducted one classic study that
was first established during this time. They launched the California Children of Divorce
project in 1971 by interviewing 131 children from 60 recently divorced families. The
children were contacted again 18 months after the original interviews. Wallerstein and
Kelly (1976) found that the initial impact of divorce was similar for most children. Nearly
all of them were extremely upset when they learned about the divorce and experienced it as
an unwelcome shock. Even in families where the parents were openly quarreling and
hostile, most children seemed surprised by the separation. As a result, almost all children
found the divorce painful and experienced a wide range of symptomatic behaviors, including sleep disturbances, fear of abandonment and impending disaster, disinterest and underachievement in school, and poor peer relationships (Wallerstein, 1985). Wallerstein and Kelly (1980) also found that once the initial shock diminished, short-term reactions to the divorce often varied according to age. Younger children, who had a limited ability to understand the situation, tended to be frightened and bewildered so they often pretended that their families were not breaking up. Older children, who had a better understanding of the circumstances, tended to react with shame and anger. They seemed to be embarrassed that their parents were separating and often blamed either their mother or their father for the break up of the family.

Wallerstein and Kelly had originally thought that these short-term reactions and responses to the divorce would disappear within the first year after the separation. At the five year follow-up, many of the 131 children did seem to have come through the experience fairly well. Almost 63 percent were either in excellent or reasonably good psychological health. The other 37 percent of the sample, however, were not coping well and still suffered from depressive symptoms (Wallerstein, 1985). Many of the children also experienced problems in school, encountered difficulties with their peers, had bouts of explosive anger, and tended to be preoccupied with the divorce. There was also some evidence that the long-term effects of divorce were moderated by gender of the child. Disturbances in social and emotional development among girls had largely disappeared as early as two years after the divorce. Boys from divorced families, however, showed high
rates of behavior problems and trouble with interpersonal relationships at both home and in school beyond the first few years following the divorce (Wallerstein, 1985).

The picture of these children that emerged 10 years after the divorce was even more discouraging. Men, who were now between the ages of 19 and 29, were generally unhappy and had developed few lasting relationships with members of the opposite sex. Although males typically had a harder time over the early years after divorce than females, suffering a wide range of difficulties with school, peer relationships, and the handling of aggression, this difference in overall adjustment eventually disappeared. Wallerstein and Blakeslee (1989) found what they called a “sleeper effect” among the young women in the study. Many of the girls who had done well initially after the divorce and appeared to be emotionally adjusted at the five year follow-up, reported high levels of depression and fear of betrayal in young adulthood. Most were overcome by anxiety at the prospect of making an emotional commitment to a man, and consequently, were involved in multiple relationships and impulse marriages that often ended in early divorce. Wallerstein and Blakeslee (1989) concluded that the general picture this studied presented was one of loss. Children lost fathers who became disinterested and detached, they lost mothers who were overwhelmed by the tasks of supporting the family and managing the household alone, and they lost a part of their childhood and adolescence because it was overshadowed by the experience of divorce.

Although the research conducted by Wallerstein and her colleagues provides one of the most comprehensive studies on the consequences of divorce for children, it has several
serious limitations. For example, the generalizability of the findings to larger populations of children has been questioned by several researchers (Cherlin, 1981; Demo & Acock, 1988). Rather than being random and representative, the sample was referred by attorneys, school psychologists, court officials, and other professionals, there was no matched comparison or control group, and many of the parents who divorced had been in treatment for mental health problems of their own. Another limitation of the study is that the sample was entirely comprised of white, middle-class subjects. Several researchers find this problematic because they maintain that the effects of divorce on children may be directly linked to the socioeconomic status of the family (Acock & Kiecolt, 1989; Amato & Keith, 1991; Herzog & Sudia, 1973). Demo and Acock (1988), for example, have argued that it may be the loss of income and benefits that is detrimental to children of divorce, not necessarily the loss or absence of a parent. According to this argument, studies that fail to consider the influence of socioeconomic factors such as family income and education level of the parents are likely to overestimate the direct impact of parental divorce.

In support of the conclusions drawn by Wallerstein and her colleagues, the findings from several recent national surveys have suggested that there are some long-term effects of divorce on children that cannot be completely explained by socioeconomic factors. When compared to children who were raised by both biological parents, children whose parents divorced have been found to fare worse on intellectual performance (Downey, 1994; Smith, 1990), educational attainment (Astone & McLanahan, 1991; Krein & Beller, 1988; McLanahan, 1985), and exhibit higher rates of delinquent behavior, including drug and
alcohol use (Needle, Su, & Doherty, 1990; Flewelling & Bauman, 1990). Other researchers have demonstrated that divorce is consistently related to early timing of sexual activity (Miller & Bingham, 1989; Newcomer & Udry, 1987), nonmarital childbearing (Wu & Martinson, 1993), and marital instability and divorce (Bumpass, Martin, & Sweet, 1991; McLanahan & Bumpass, 1988). Consequently, children whose parents divorced when they were young are at greater risk of becoming single-parents themselves, either through nonmarital childbearing or divorce, than children who grew up in intact families. Although on average the effect is not large, researchers have also found that divorce has a persistent negative impact on socioeconomic attainment in adulthood (Amato & Keith, 1991; McLanahan, 1985). For example, Li and Wojtkiewicz (1992) found that while divorce had the largest influence on educational attainment, it also had a direct negative effect on later achievements such as occupational status and personal income.

Although researchers have documented the negative effects of divorce for both parents and children, much less attention has been given to how marital separation affects the nature of relationships within the family. There is some evidence that the affective ties between children and their noncustodial parent suffer, and in some cases, may even be terminated after divorce (Aquilino, 1994; Cooney & Uhlenberg, 1990; White, Brinkerhoff, & Booth, 1985). Furstenberg, Nord, Peterson, and Zill (1983) found that only 16 percent of children age 11 to 16 with divorced parents saw their nonresidential father at least once a week. Less than one-half of the children in the study had seen their father in the previous year and almost 4 out of 10 did not know where their father was living. There is additional
evidence that these negative effects of divorce on parent-child contact tend to persist into adulthood. Cooney and Uhlenberg (1990) found that while 90 percent of never-divorced fathers had weekly contact with at least one adult child, less than 50 percent of ever-divorced men maintained this same frequency of interaction. They also found that while over one-third of ever-divorced men essentially lost contact with at least one adult child, this same situation was almost nonexistent among never-divorced men. Although Cooney and Uhlenberg (1990) concluded that mothers were responsible for the high levels of contact between never-divorced fathers and their children, it is noteworthy that the absence of a mother within the context of divorce appears to have negative implications for father-child relationships in adulthood.

Negative effects of divorce on the parent-child relationship are not limited to the noncustodial parent. As White (1994) has observed, to the extent that children feel angry and betrayed by the decision of their parents to divorce, the affective ties between custodial parents and children may be damaged as well. Several studies have found that when compared to families that had never experienced a divorce, marital separation during childhood resulted in greater geographic distance and less instrumental, economic, and emotional support exchange between parents and their adult children (Bumpass & Sweet, 1991; Cooney & Uhlenberg, 1992, Eggebeen, 1992). White (1994) has also found that divorce and single parenting damage several dimensions of family solidarity in later life. Using data from the first wave of the National Survey of Families and Households, she found that individuals who grew up in divorced single-parent families reported significantly
lower quality relationships with their custodial parent than individuals who grew up in intact or remarried families. Other researchers have found similar long-term negative effects of early divorce on parent-child relationship quality in adulthood (Aquilino, 1994; Cooney & Uhlenberg, 1990; Lye, Klepinger, Hyle, & Nelson, 1995; Zill, Morrison, & Coiro, 1993).

Several researchers have emphasized that not all of the effects of divorce are negative (Bianchi, 1990; Demo & Keith, 1988). For example, studies have found that children whose parents had divorced displayed more androgynous behavior than children whose parents had not separated (Mott, 1994; Wallerstein & Kelly, 1980). One explanation for these findings is that divorce may broaden the skills and definitions of gender-appropriate behavior because both the child and the custodial parent must assume a variety of domestic responsibilities to compensate for the absent parent. Weiss (1979) has also found that single-parent families are characterized by more open boundaries, greater equity, more frequent interaction, and a heightened sense of cohesion than two-parent families. As a result, children from divorced families tend to be more mature, assume responsibility at an earlier age, and have a stronger sense of personal efficacy and internal control than children from intact families (Bianchi, 1990).

Regardless of these more positive outcomes, the majority of empirical evidence has indicated that children who grew up with both biological parents are better off as adults than children who lived with a divorced parent (Chase-Lansdale & Hetherington, 1990; McLanahan & Booth, 1989; Seltzer, 1994). For example, Amato and Booth (1991) found that individuals who experienced parental divorce in childhood exhibited lower levels of
psychological well-being as adults than individuals who were raised by both parents. This finding was consistent when both life satisfaction and psychological distress were examined as dependent variables. In a meta-analytic review of the literature, Amato and Keith (1991) also concluded that "individuals who experienced parental divorce as children, compared with those whose parents were continuously married, have lower quality of life as adults" (p. 56). They examined data from over 81,000 respondents in 37 different studies and found that, among other things, divorce had a persistent negative effect on psychological well-being in adulthood, as measured by low levels of emotional adjustment and life satisfaction, and high levels of psychological distress and anxiety.

Death and the Family

While it is clear that there is an extensive body of literature which examines the consequences of divorce for both parents and children, much less research attention has been given to how death affects the family. Early research on widowhood focused on describing the adjustments related to the death of a spouse (Lopata, 1973; Streib & Beck, 1980; Troll, 1971). These studies viewed widowhood as a process that began with bereavement, or a period of mourning, and was followed by a gradual adjustment to the loss. Individuals who lost a spouse suddenly and without warning were typically found to have more difficulty adjusting to the loss than those who were able to anticipate the death, as with a long illness (Troll, 1971). The general consensus in the literature was that when the dying process was prolonged, much of the mourning may have preceded the actual loss, so that grieving after the death was less intense. In a study of widows living in a large
urban area, about half of the women interviewed said that they had recovered from the loss of their husband within one year of the death, but over 20 percent said that they had never gotten over it and did not expect to (Lopata, 1973).

More recent research on widowhood has focused on changes in the economic situation, physical and emotional health, and social support networks of the bereaved, both immediately following and several years after the loss of a spouse (Brubaker, 1990). Several studies have indicated that becoming a widow is associated with a substantial decline in economic well-being (Hyman, 1983; Smith & Zick, 1986; Zick & Smith, 1988). Holden and Smock (1991) concluded that the majority of longitudinal studies have demonstrated that the economic consequences of widowhood are no less detrimental to women than those of divorce and separation. The financial situation of the widowed, however, may be more complex than that of the divorced. Based on data from the Panel Study of Income Dynamics, Zick and Smith (1986, 1988) found that age and work experience mediated the relationship between widowhood and income. While all widowed individuals experienced economic difficulties following the death of their spouse, younger widows and those with a history of employment suffered less financial decline than older widows and those with limited work experience. In addition, studies on the economic aftermath of death have suggested that there are few apparent differences between widows and widowers (Brubaker, 1990). Both men and women initially experience decline after the death of a spouse, but financial situations tend to stabilize or may even improve during middle-age and for those who remarry.
Several studies have demonstrated that physical and mental health are often affected by the death of a spouse. The observed physical effects of widowhood include increased risk of illness (Stroebe, Stroebe, & Domittner, 1988), utilization of medications and medical services (Parkes, 1964; Thompson, Breckenridge, Gallagher, & Peterson, 1984), and mortality (Helsing, Szklo, & Comstock, 1981; Rees & Lutkins, 1967). Death of a spouse is also consistently associated with low perceptions of physical health status. Fenwick and Barresi (1981) found that widowed individuals perceived that they had more health difficulties over a period of 14 months than individuals who had not lost a spouse, even though they reported fewer days when they were actually confined to bed. Other longitudinal studies have indicated that recently widowed individuals perceived their health as declining more rapidly than those who had been widowed for over four years (Ferraro, 1985; Ferraro, Mutran, & Barresi, 1984). Researchers have found that emotional reactions to widowhood often include responses such as anger, guilt, sadness, anxiety, and preoccupation with thoughts of death or the dead spouse (Gallagher, Breckenridge, Thompson, & Peterson, 1983; Parkes, 1972; Stroebe et al., 1988). Fenison (1986) observed that recently widowed individuals exhibited many symptoms that were characteristic of depression, such as insomnia, appetite and weight loss, and dissatisfaction with self. The negative responses to the loss of a spouse were typical for both men and women, but they tended to diminish over time as the individual adjusted to widowhood. These findings are consistent with other research which has found that depressive symptoms often last for several years following the death of a spouse (Avis, Brambilla, Vass, &
McKinlay, 1991; Stroebe et al., 1988).

Studies on the social interaction of widowed individuals have generally indicated that patterns established by married couples continue well into widowhood (Kohen, 1983). Morgan (1984) examined interaction patterns of individuals before and after the death of their spouse and found that both widows and widowers experienced consistent levels of social contact, even when the size of their network decreased. This area has received a fair amount of research attention because there is evidence that social support may be an important resource for individuals who experience widowhood. For example, Arens (1982) found that social contacts with friends had positive effects on feelings of well-being among most widows. Other researchers have suggested that an adequate social network can minimize the negative emotional burden associated with losing a spouse, but the relationship may be moderated by several post-death factors. Bankoff (1983) found that the impact of social support on well-being depended on the length of time since the death, the type of support that was received, and who provided the support. While there was no overall effect of social support on the psychological well-being of women who had been widowed for less than 18 months, a positive relationship was found for women who had been widowed for 19 to 35 months. In addition, recent widows reported that parents and other widows were the best providers of support, while women who had been widowed longer indicated that children, friends, and neighbors also provided support that was related to increased feelings of well-being (Bankoff, 1983).
An underlying theme of the research on widowhood involves the characteristics that it shares in common with the experience of divorce. Researchers have commented on the similarities between divorce and widowhood for many years (Waller, 1930; Goode, 1956). Adjusting to marital separation has often been compared to the grief process, as both experiences involve the loss of a spouse and subsequent changes in status and lifestyle. Consequently, the widowed and divorced have often been grouped together in studies examining a wide range of outcomes, including physical and mental health (e.g., Gove, 1972). While a recent review of the research concluded that there are a “surprising number of similarities in adjustment for widowhood and divorce” (Kitson, Babri, Roach, & Placidi, 1989), there are also a number of important differences between these two events. One of the most obvious distinctions between widowhood and divorce is the finality of death. Unlike individuals who have involuntarily lost a spouse to death, individuals who terminate their marriages are often involved in a continuing relationship with their ex-spouse. Wallerstein (1985) has suggested that divorce differs from death and bereavement because it is characterized by on-going patterns of hate and love, blame and rage, and humiliation and jealousy. Because maintaining a conflictual relationship with an ex-spouse is a distinct reality for most couples who decide to end their marriages, researchers have typically assumed that adjusting to divorce is more difficult than adjusting to widowhood. Recent empirical studies, however, have found that widows reported higher levels of physical and psychological distress than divorced individuals (Gove & Shin, 1989; Kitson, Roach, Babri, & Zyzabski, 1988). While there have been few attempts to explain or replicate these
results, it is most likely that the differences are due to the voluntary versus the involuntary nature of the loss, the differing age distributions of the two populations, or the length of time since the separation (Kitson et al., 1989).

Similar to the experience of widowhood for adults, almost every life event scale for children identifies the death of a parent as the most traumatic event a child can experience (Lyon & Vandenberg, 1989). In the Coddington Life Event Scales (Coddington, 1984), for example, parental death is assigned a score that is 20 units higher than the next highest stressor. Bereaved children have been found to experience the same types of physical and emotional symptoms as adults, including loss of appetite, insomnia, nightmares, nausea, and depression (Gray, 1987; Meshot & Leitner, 1993). Parental death is usually thought to involve a loss of security, nurturing, and affection, or the loss of an important source of emotional and psychological support which the child formerly relied upon. Because the parent-child relationship is seldom free from conflict, whether or not it is openly exhibited, the death of a parent may also elicit strong feelings of guilt or remorse (Stroebe, van den Bout, & Schut, 1994). Other researchers have suggested that guilt may result from what a young child imagines to be actions that in some way contributed to the death of their parent (e.g., Klein, 1940). Such feelings are seen as an expression of the responsibility that younger children may assume as they try to comprehend the experience of death.

The literature on bereavement has also identified several long-term negative consequences of early parental death for adult outcomes. Schizophrenia (Wahl, 1956), suicide (Crook & Raskin, 1975), alcoholism (Birtchnell, 1972), social introversion
(Dietrich, 1984), and loss of self-esteem (Dizmang, 1969) have all been reported by adults who experienced a parental death during childhood. Denes-Raj and Ehrlichman (1991) found that college students who had lost at least one parent during childhood predicted a shorter life span for themselves than students with both parents still living. Jacobson and Ryder (1969) also found that adults who experienced early parent death had more difficulty sustaining intimacy and expressing anger than those who did not have a history of parental loss. The vast majority of the research in this area, however, has investigated the relationship between early parental death and different types of adult depression (Birtchnell, 1970; Lloyd, 1980). Primarily using data from clinical case studies, it has been observed that adults who experience parental death in childhood are likely to demonstrate some degree of depression, ranging from introversion to much more extreme withdrawal (Barnes & Prosen, 1985).

Although it is not particularly surprising that bereaved children would have difficulties adjusting to the death of their parent both in childhood and later as adults, several problems have made the conclusions drawn from this literature questionable. A review by Sandler, Gersten, Reynolds, Kallgren, and Ramirez (1988) observed that empirical studies on the effects of parental death on child outcomes are sparse and limited by important methodological flaws. Lyon and Vandenbergh (1989) have also indicated that methodological shortcomings “have marred” the research on childhood bereavement. For example, conclusions have often been based on clinical impressions, rather than on formal or semi-structured assessments, which calls into question the validity and reliability of many
According to Finkelstein (1988), the literature on the long-term effects of early parental death is also very limited and "greatly misunderstood". While the impact of parental death may manifest in the behavior and attitudes of children in expected ways, the effects of premature death on the adult are less theoretically specific. This is further complicated by the fact that there have been few attempts to examine the long-term effects of early parent death among adults who do not exhibit overt psychiatric symptoms (Finkelstein, 1988). Dietrich (1984) has noted that "the amount of research that deals with non-psychiatric, non-patient populations is quite limited and needs to be expanded" (p. 901). The widespread use of small, non-random, clinical samples is particularly problematic because these subjects represent only a small fraction of the bereaved and tend to report more problems than those not seeking treatment. Of the studies that do not use clinical subjects, many are based on data collected from college students. The major difficulty with college samples is that by focusing on individuals who exhibit a high level of functioning, they may exclude those who are more severely affected. College students may also be too young to demonstrate the effects of parental death that emerge later in life. Another problem with the research on the long-term effects of parental death is that researchers have typically failed to include control groups of adults who did not have a parent die during their childhood. As Lyon and Vandenberg (1989) indicate, when they do include comparison groups, researchers often fail to control for other significant childhood losses (e.g., parental divorce).
Problems with the research on bereavement have made it difficult to determine how children who experience the death of a parent compare to children who experience parental divorce. Similar to the literature on adults, researchers have noted that there are striking similarities between the two experiences. Both parental death and divorce have been conceptualized as negative life changes that place the child a risk for a wide range of problems including depression and anxiety, conduct disorders, substance abuse, and suicide (Coddington, 1984; Johnson, 1986). But relatively few attempts have been made to assess the different characteristics of these events or their differential effects on both child and adult outcomes. Rather, researchers have tended to assume that divorce has a more negative effect on children than parental death. In a review of the literature in mother-only families, McLanahan and Booth (1989) concluded that “offspring of widowed mothers do better, on average, than offspring of divorced and separated mothers, at least in some surveys and on some indicators” (p. 565). The nonspecific nature of this conclusion emphasizes the fact that very little work has actually been done to identify the specific qualities of death and divorce that lead to certain outcomes or to theorize why differences in outcomes associated with these two experiences may exist. Consequently, the vast majority of research in this area has given little or no regard for distinguishing between different types of parental absence (Amato & Keith, 1991; Demo & Acock, 1988; Gongla & Thompson, 1987) and many researchers have arrived at the same conclusion as McLanahan and Booth without directly testing for differences between groups.
One important exception in the literature is a study conducted by Felner, Stollberg, and Cowen (1975). They compared 108 children who had experienced parental separation or divorce and 32 children who had experienced parental death to matched control groups of children who had not experienced either event. These comparisons were made in order to determine if children with a history of crisis had different patterns of referral for school problems than those who had not experienced a traumatic event. Among children who were referred for problems in school, children with histories of both parental separation or divorce and parental death demonstrated significantly higher maladjustment scores than children in the control groups. But when they were directly compared to each other, the two crisis groups manifested distinctly different patterns of behavior. While children who had experienced parental death demonstrated elevated levels of shyness, timidity, and withdrawal, children with histories of separation or divorce exhibited heightened levels of acting-out and aggression. To explain these results, Felner et al. (1975) suggested that the child draws on “the predominant behavior modeled for him during a given crisis, and this becomes a guiding framework for his later behavior and coping efforts” (p. 309). They argued that because widowhood is usually associated with anxiety, confusion, and depression among surviving parents, parental death is strongly associated with internalizing behaviors among children (e.g., withdrawal). The divorce process, however, is more often characterized by conflictual relationships between parents, and consequently, parental divorce is more strongly associated with externalizing behaviors among children (e.g., aggression). The findings from this study are consistent with more recent research which
has also demonstrated that separation events such as parental death have specific effects on depressive symptoms, while conflict events such as divorce have specific effects on conduct disorders (Felner, Ginter, Boike, & Cowen, 1981; Sandler, Reynolds, Kliwer, & Ramirez, 1992).

Other studies provide additional support for the idea that conflict events are related to externalizing behaviors in children. In a review of the literature, Emery (1982) concluded that interparental conflict is more strongly related to the development of conduct disorder problems than to difficulties resulting in anxiety or social withdrawal. This is most likely because conflict events contribute to a context in which aggressive behaviors are modeled and reinforced (Patterson, 1976). For example, Cummings (1987) interviewed children regarding their emotional responses to hearing a simulated conflict exchange between two adults. He found that although children responded to background anger with a variety of emotional responses, the most commonly reported feeling was being mad. After exposure to the conflict situation, children also increased their own level of verbal aggression when playing with a friend. Cummings and Cummings (1988) suggested that this pattern of response to angry exchanges between adults may cause interactions with others that lead to increased exchange of aggressive responses and the development of externalized behaviors. Although there is little evidence to suggest that these effects persist over time, the implication of these studies is that children with a history of family conflict and divorce may be more likely to manifest externalized behaviors as adults, while children with a history of parental death may be more likely to demonstrate internalized behaviors in adulthood.
Theoretical Framework

Despite the apparent similarities and differences, it is surprising that there have been relatively few efforts to assess whether divorce and death have differential effects on the individuals who experience these types of losses. While researchers have made some observations about the association between a history of family disruption and adult well-being (Amato & Keith, 1991; Demo & Acock, 1988; McLanahan & Booth, 1989), these findings have not been organized into a clear model that specifies how and why certain types of losses might result in differential long-term effects. The life course perspective together with elements of both attribution theory and social learning theory, provides a theoretical framework for explaining why experiencing parental divorce or parental death in childhood may affect adult outcomes in different ways.

The life course perspective was developed in the 1970s as a framework to systematically examine change within the family. It was offered as a direct challenge to family development theory, which was viewed as inadequate by life course theorists because it neglected family variations associated with the differential timing, spacing, and duration of specific events (Aldous, 1990; Elder, 1978). The life course perspective grew as an interdisciplinary approach to the study of families by combining elements from life-span psychology, family history, demography, and social ecology. The result is a process-oriented perspective on the family that focuses on how different events and their timing in the lives of individuals affect families in particular historical contexts (Elder, 1985).
According to Clausen (1986), the life course perspective links three different dimensions of time. Individual time refers to chronological age and age-stratification, or the meanings and behavioral expectations associated with particular stages of life (Riley, Johnson, & Foner, 1972). This dimension of time provides the individual with information about the cultural norms and expectations of behavior for persons who are a particular age. For example, the legal drinking age, the age that young men must register for the draft, and the age that young people are able to vote all provide the individual with certain information about appropriate behaviors in a societal context. Social time refers to family event sequences which are directly linked to age markers (Clausen, 1986). Based on a set of cultural norms that indicate when certain life transitions are expected to occur in a society, this dimension provides the individual with a measure for deciding whether he or she is "on-time" or "off-time" in experiencing family events such as leaving home, marrying, or becoming a parent. Historical time is the third dimension identified by the life course perspective (Clausen, 1986). It refers to the fact that each individual is anchored in a particular sociocultural context. By virtue of being born during a certain time period, individuals in a particular cohort are affected by current societal events at specific ages. For example, World War II threw off customary family stage sequences and their timing by increasing marriage rates prior to and immediately after the conflict, and decreasing marriage rates during the actual time of war (Coontz, 1992). Taken together, these three dimensions of time suggest that the timing of historical events in terms of the chronological age and family location of the individual is critical for understanding behavior and
The concepts of trajectory and transition are also central themes in contemporary studies of life course dynamics. Elder (1985) identifies life trajectory as "a pathway defined by the aging process or by movement across the age structure" (p. 31). Each trajectory, in turn, is marked by a sequence of life events and transitions or "changes in state that are more or less abrupt" (Elder, 1985, pp. 31-32). An important aspect of the life course perspective is that it provides a framework for studying the personal and social consequences of life transitions by focusing on the normative and non-normative changes that individuals experience over time. As George (1993) has noted, the emphasis of this approach "is explication of the processes by which early transitions exert enduring influences on later life patterns" (p. 361).

A primary example of how transitions at one point in time affect subsequent life course outcomes is provided by Elder (1974, 1979) in his classic work on children of the Great Depression. A central theme in Elder's study is that the same historical events can have very different consequences depending on the social position, gender, and age of those experiencing the event. Elder began his investigation by dividing families into two groups according to their relative income loss associated with conditions experienced during the Depression. Families were categorized as deprived if they lost more than 35 percent of their total income and nondeprived if their financial losses were not that severe. He also categorized families as working or middle-class, and found that the association between the Great Depression and outcomes among boys and girls was mediated by the class status and
level of deprivation experienced by the family (Elder, 1974). For example, boys from
deprived middle-class families seemed to be better off because of their experience during the
Depression. As adults they attained educational levels similar to men in nondeprived
middle-class families and actually had higher levels of occupational status and better mental
health by mid-life. Boys from deprived working-class families, however, fared worse than
their nondeprived counterparts, especially in terms of educational attainment. They were
more often kept from higher education than men from nondeprived working-class
backgrounds because their family relied upon their financial support. Elder found that girls
from deprived middle-class families were not as fortunate as the boys from these families.
They married earlier and were less likely to complete a college education than women from
nondeprived middle-class families. Similar to the men, however, women from deprived
middle-class families had better psychological health than their nondeprived counterparts.
Girls from deprived working-class families seemed to fare the worst in terms of outcomes.
They were faced with a set of disadvantages including diminished mental skills and self-
confidence, lower morale, and a greater sense of helplessness than women from
nondeprived working-class families. Elder concluded that middle-class adolescents had
more resources for coping with their stressful situations than their working-class
counterparts. The Depression seemed to increase their emotional resources, vitality, and
self-efficacy because they felt needed at a time when they could make a real contribution to
the welfare of their family (Elder, 1974).
Elder and his colleagues also suggested that the influence of a historical event on the life course is dependent on the age at which an individual experiences the change. They examined two cohorts of children: the Oakland Growth sample who were adolescents during the Depression and the Berkeley Guidance sample who were young children during the Depression. Elder, Caspi, and Van Nguyen (1986) found that the Depression experience was ultimately beneficial for boys in the older cohort and detrimental for boys in the younger cohort. The older Oakland boys were more likely to assume jobs outside of the home in order to provide financial support for their family. This enhanced their social and personal independence and reduced their exposure to conflict and turmoil that existed in the home. The younger Berkeley boys experienced the Great Depression when they were more dependent on their family, and so they were more vulnerable to the strain, conflict, and instability that their family experienced. In contrast to the boys, the older Oakland girls did not fare as well as the younger Berkeley girls. They were pressed into greater role-responsibility at home when their mothers went to work. As a result, they tended to feel deprived and were often subjected to the hostility of their frustrated fathers. The younger Berkeley girls did not have these same added responsibilities and so they tended to develop strong bonds with their mothers (Elder, Downey, & Cross, 1986; Elder & Liker, 1983). In summary, Elder and his colleagues found that the same historical event produced significant differences in outcomes across cohorts, within cohorts, and between boys and girls.

In addition to the study of historical events, the life course perspective provides a framework for examining "the conditions under which events or transitions experienced
earlier in life affect subsequent life course patterns” (George, 1993, p.363). In particular, the life course approach emphasizes that the timing of events is a critical factor in determining the meaning and the ultimate impact of specific life transitions. For example, demographers have demonstrated that some events occur to nearly everyone at certain points in the life course, such as leaving the labor force or moving out of the parental home. As a result, members of a society share common expectations regarding the normal and acceptable time for certain life transitions to occur, or what Clausen (1986) refers to as social time. According to Neugarten (1968), most events are not stressful when they occur on-time, or when they are “anticipated and rehearsed”. She argues that if a transition is prevalent in a society, the individual is able to anticipate that it will happen and plan for its occurrence, often because others who have experienced the same event may assist in preparation and provide support. In other words, when events are somewhat predictable in both occurrence and timing, anticipatory socialization may provide the individual with the skills necessary to effectively adjust to the transition (George, 1993).

Events that are not anticipated, or that occur off-time, tend to be much more problematic than changes that happen as expected (Neugarten, 1968). Several childhood traumas, including divorce and death, have been linked to negative life course outcomes. Brown and Harris (1978), for example, used data from a working class sample of women in London to determine what the influence of parental loss during childhood was on adult well-being. They found that the experience of parental loss as a child was related to lower socioeconomic attainment, poorer quality marriages, and an increased risk of clinical
depression in adulthood. Brown and Harris (1978) suggested that the timing in the life course of an uncontrollable transition may be an important predictor of individual reaction to the event. Using a life course approach, the argument is that off-time or non-normative transitions, such as parental divorce or death during childhood, tend to have a more negative impact on well-being than on-time or normative life events. This is because off-time transitions are not anticipated or rehearsed, so the individual has not had time to prepare or to develop adequate coping strategies in expectation of the event (Nolen-Hoeksema, 1988).

One implication of this approach to life events is that as certain transitions become more normative in a society, they will have less impact on subsequent life course patterns than events that are rarely experienced. As previously noted, divorce has replaced widowhood as the most common pathway to single-parent family status in American society (Gordon & McLanahan, 1991; Uhlenberg, 1980). In 1993, over one-third of all single-parent families in the United States were created by divorce, while less than five percent were the result of a parental death (U.S. Bureau of the Census, 1994b). Several researchers have suggested that as divorce has become more common and acceptable, the effects of this transition may be less strong than they were in the past (Amato & Keith, 1991; Kitson & Morgan, 1990). This is most likely because others who have experienced a divorce may provide the individual with assistance and support during the transition. As Hagestad (1988) has noted, the opposite situation exists with regard to parental death. Experiencing the death of a parent remains a normal life event, but it is increasingly a transition that is
faced by adult children in middle-age or beyond. It is estimated that for women born in the 1970s, nearly 90 percent will experience the death of their mother after reaching age 40 (Winsborough, 1980). As a result of this demographic change, off-time deaths may increasingly represent a crisis which finds the individual unprepared and with little peer support.

While the life course perspective provides the initial rationale for arguing that parental death during childhood will have more negative effects on subsequent adult outcomes than parental divorce, attribution theory may be used to clarify this argument. According to Crittenden (1989), social psychologists developed attribution theory as a way to explain how people interpret and make sense of the events they encounter. One way that individuals attempt to understand their environment is through the attribution of events to causal sources. According to Heider (1958), “Attribution in terms of impersonal and personal causes...are everyday occurrences that determine much of our understanding of and reaction to our surroundings” (p. 16). Personal cause, or what is also known as internal causality, refers to the process of attributing responsibility for events to the personal qualities and traits of an individual. Impersonal cause, which is also termed external causality, refers to the process of attributing responsibility for events to environmental and situational circumstances that lie outside the individual. Heider (1958) argues that human beings are not content to simply observe their environment. Rather, they need to make sense of the situations and events they encounter by trying to assign either internal or external causality to them. Consequently, the underlying causes of events, as attributed by
the individual, “give meaning to what he experiences...and are precipitated as the reality of
the environment to which he then reacts” (Heider, 1958, p. 81).

Gurin and Brim (1984) extend this argument by using attribution theory to provide a
social psychological perspective on the prevalence and timing of life transitions. They
suggest that when events are common or widespread in a society, they “encourage
recognition of similarity” among the individuals who experience them. Acknowledgment of
this similarity, in turn, is a “major determinant leading people to decide that the cause of an
event lies in the circumstances, not in the person” (Gurin & Brim, 1984, p. 315). In other
words, when certain experiences are common in a given society people are more likely to
assign external rather than internal causality to the event. Gurin and Brim suggest that
events which are rare or occur with less frequency, however, tend to “heighten perception
of uniqueness and difference from others”. Therefore, experiencing an event alone or at a
non-normative time may “greatly narrow the range of explanations, decisively lower the
likelihood of situational explanations, and raise the probability that the person will focus on
the self” (Gurin & Brim, 1984, p. 316). Rather than leading to an external assessment of
causality, experiencing a rare or off-time transition is more likely to encourage the
individual to assign internal causality to the event. This may be especially true for children,
who tend to be acutely aware of the factors that make them different from their “normal”
peers. According to Humphrey (1984), deviating from others in characteristics or
experiences may be particularly stressful for children because it contradicts their need for
“mutuality”, or the desire to be like the other children they know. Events that make a
child different from others are likely to encourage the child to decide that the cause of the event lies in his or her actions, personality, or characteristics, rather than in situational or external circumstances.

Applying this approach to the current discussion, it is possible to argue that experiencing parental divorce or death during childhood will lead to different causal attributions for these two events. While there is no "good" or "right" time to go through a parental divorce, individuals have become increasingly more likely over this century to have a number of peers who have been through the same experience (Hagestad, 1988). As this event has become more common and children identify with peers who have been in similar situations, they may be more likely to externalize the cause of parental divorce to factors and circumstances that lie outside of themselves. In contrast, Hagestad (1988) has noted that the death of a parent has become less common over the last century, and therefore, is likely to be more traumatic than it has been in the past. Therefore, it is possible that children who experience parental death may tend to assign internal causality to the loss because experiencing a rare event narrows the range of possible explanations and encourages people to think that it is something about them that caused the event to happen (Gurin & Brim, 1984).

The type of attributions that individuals make for the underlying causes of events have direct implications for the outcomes and behaviors that are observed in relation to specific experiences. For example, Gjerde, Block, and Block (1988) have suggested that well-established gender differences in the expression of depressive symptoms among
adolescents can be explained by differences in how boys and girls are socialized to make causal attributions for negative events. They argue that boys are usually socialized to attribute responsibility for stressful events to situational circumstances that lie outside of their control. As a result, they are likely to respond to unpleasant situations with an overt or external expression of aggression, or an externalized pattern of behaviors. Gjerde and his colleagues suggested that in contrast, girls are more often socialized to attribute responsibility for negative events to internal factors such as their own personal qualities and characteristics. Consequently, they are likely to turn inward and become passive or self-focused in response to stressful situations and events, or express an internalized pattern of behaviors. In support of their position, Gjerde et al. (1988) found that male adolescents with depressive tendencies did manifest an externalized pattern of response to negative events, including behaviors that were antagonistic, unrestrained, discontented with self, and unconventional in thought. These young men also described themselves as being relatively aggressive and alienated from their social surroundings. Female adolescents tended to withhold or internalize depression-related feelings associated with negative events that they thought would be aversive to others. Depressive tendencies in these young women were closely related to introspection and low self-esteem, and in some cases even self-dislike. Other researchers have used similar arguments to explain gender differences in adult depression (Hammen & Padesky, 1977; Nolen-Hoeksema, 1987).

It is also possible to use this argument to theorize why experiencing parental divorce or death during childhood may be associated with specific outcomes in adulthood. If
parental divorce is an increasingly common experience in American society, then individuals who experience this event may tend to attribute responsibility for the family disruption to situational factors or circumstances that lie outside of themselves. This idea is consistent with research that has demonstrated that children often respond to divorce with feelings of anger and blame toward one or both of their parents (Wallerstein & Kelly, 1980). A causal attribution which assigns blame to parents for a divorce is most likely to lead to an externalized pattern of behaviors and outcomes in the child. If parental death has become much less common in American society, however, then individuals who experience this event may tend to attribute responsibility for the family disruption to traits or qualities that they possess. This would help explain why children often respond to the death of a parent with guilt or remorse (Klein, 1940; Stroebe et al., 1994), and symptoms of depression such as loss of appetite, insomnia, nightmares, and nausea (Gray, 1987; Meshot & Leitner, 1993). An attribution which assigns blame for the death of a parent to personal actions or characteristics is most likely to lead to an internalized pattern of behaviors and outcomes in the child. Although this argument is consistent with several studies which have found that parental divorce is related to externalizing problems among children, while parental death is more strongly associated with internalizing problems (Felner et al., 1975; Felner et al., 1981; Sandler et al., 1992), it is not clear if these patterns persist into adulthood.

Because the preceding argument may not apply to children at all ages of cognitive development (e.g., older children may be much less likely to blame themselves for a parental death than younger children), another explanation for why experiencing parental divorce or
parent death in childhood may manifest in different externalizing-internalizing behavior patterns in adulthood is provided by social learning theory. This perspective is based on the idea that human behavior can be socially transmitted, either deliberately or inadvertently, by watching people act and observing the consequences of their actions (Bandura & Walters, 1959). Modeling refers to the tendency for individuals to reproduce the actions, attitudes, or emotional responses displayed by others. Parental reaction to specific events may be particularly important for the modeling of certain behaviors. For example, several researchers have suggested that exposure to conflict events is likely to contribute to a context in which aggressive child behaviors are modeled and reinforced (Cummings & Cummings, 1988; Emery, 1982; Patterson, 1976). Therefore, children who have a history of family conflict, which is often the case with divorce, may be particularly likely to model aggressive or externalized parental behaviors. Emotional reactions to widowhood, on the other hand, are much more likely to be characterized by responses such as guilt, sadness, anxiety, and depression (Fenison, 1986; Gallagher et al., 1983; Parkes, 1972; Stroebe et al., 1988). Consequently, children who experience the death of a parent may be much more likely than the children of divorce to model passive or internalized parental behaviors. Research with a community sample of bereaved families has demonstrated that parental psychological distress is associated with increased mental health problems among children (Van Eerdewegh, Bieri, Parilla, & Clayton, 1982). Whether or not these patterns persist into adulthood, however, has not been determined by the empirical research to date.
Although the previous arguments have suggested that childhood family disruption may have a direct influence on the well-being of children, another alternative is that a mediational mechanism may link these two phenomena. For example, there is a growing body of research which suggests that the parenting behaviors of depressed parents place a child at risk for developing a variety of adjustment problems (Downey & Coyne, 1990). Ge,Conger, Lorenz, and Simons (1994) found that stressful life events have a positive effect on the depressed mood of a parent and increase his or her use of harsh, hostile, and inconsistent parenting behaviors. These negative parenting practices, in turn, placed the child at increased risk for the development of depressive symptoms. Downey and Coyne (1990) also suggest that depressed parents demonstrate high levels of hostility and negativity toward their children, and tend to choose parenting strategies that involve little cognitive effort such as demanding obedience or withdrawing from child resistance. Several researchers suggest that use of these types of strategies may socialize children to resolve conflict through coercion or withdrawal (Kochanska, Kuczynski, Radke-Yarrow, & Welsh, 1987; Kuczynski, 1984). These studies indicate that when custodial parents demonstrate self-involved, erratic, hostile, or irritable behaviors following divorce or death of a spouse, the child may be placed at risk for developing both externalizing and internalizing behavior problems.

The Conceptual Model

Based on the review of empirical evidence and guided by the life course perspective, attribution theory, and social learning theory, this study proposes that both parental divorce
and parental death during childhood have important, but distinct, consequences for social and personal well-being in adulthood. Hypothesized relationships between the concepts are summarized in Figure 1. This model is designed to address several questions regarding the role of childhood family structure in determining subsequent adult outcomes that have not been addressed in previous research. The first question considers the direct effect of childhood family structure on parent-child relationships and individual well-being in adulthood. Several studies have suggested that parental loss during childhood has long-term negative consequences for both family-level and individual-level outcomes (Amato & Booth, 1991; Brown & Harris, 1978; Lye et al., 1995; White, 1994), but the present study extends these findings by providing a theoretical rationale for why specific types of losses in childhood may be associated with differential effects that persist into adulthood. This model also differs from those examined in other studies by considering the possibility that the impact of childhood family structure on adult well-being is transmitted indirectly through its association with parent-child relationship quality. A third aspect of this model which has not been addressed in previous research involves the role of parent-child relationship quality as a moderator between childhood family structure and well-being in adulthood. Commonly referred to in the literature as the stress buffering hypothesis (e.g., Landerman, George, Campbell, & Blazer, 1989) it is possible that the stress of life events such as parental divorce and parental death has a more negative effect on individual well-being under conditions of low support (or parent-child relationship quality) than under conditions of high support.
Figure 1
The Conceptual Model
The underlying premise of this study is that different experiences have distinct effects on individuals. Therefore, the direct effects of childhood family structure on adult outcomes are expected to vary according to the specific types of comparisons that are being made. Amato and Keith (1991) indicate that the usual analytic strategy in the literature has been to compare adults who experienced parental divorce as children with those whose parents were continuously married. The present study extends this approach by making two additional sets of comparisons. First, adults who experienced parental death in childhood are compared with those who grew up in intact families. Second, adults who experienced parental death are directly compared with those who experienced parental divorce. Because this strategy provides a more thorough analysis of childhood family structure, the findings from this study should present a more realistic picture of the long-term effects of parental divorce and parental death than the one that has emerged from previous research.

Drawing on the existing literature which suggests that divorce has negative effects on family solidarity (Aquilino, 1994; Cooney & Uhlenberg, 1992; White, 1994) and individual well-being (Amato & Booth, 1991; McLanahan & Booth, 1989; Seltzer, 1994), it is hypothesized in the first set of comparisons that adults raised by divorced parents will have poorer parent-child relationship quality (Arrow B), lower levels of self-confidence (Arrow A), and higher levels of psychological distress (Arrow A) than adults raised by both biological parents. It is also predicted that parent-child relationship quality may mediate or moderate the association between childhood family structure and adult well-being. A given variable is said to function as a mediator when it transmits the effect of another variable
(Baron & Kenny, 1986). In the proposed model, the effect of childhood family structure on self-confidence and psychological distress in adulthood is expected to be mediated by contemporary parent-child relationship quality (Arrows B and C) when comparing adults raised by divorced parents with those raised in intact families. A given variable is said to be a moderator if it affects the direction or the strength of the relationship between two other variables (Baron & Kenny, 1986; Clearly & Kessler, 1982). The proposed model hypothesizes that the association between childhood family structure and adult self-confidence and psychological distress is stronger among individuals who have low levels of parent-child relationship quality than individuals who have high levels of relationship quality (Arrow D) when comparing adults raised by divorced parents to those raised in intact families.

A second set of hypotheses were developed in regard to experiencing parental death during childhood. Based on a limited amount of empirical research that suggests death has negative effects on survivors (Birtchnell, 1970; Dietrich, 1984; Dizmang, 1969; Lloyd, 1980), it is hypothesized that adults who were raised by widowed parents will have lower parent-child relationship quality (Arrow B), lower levels of self-confidence (Arrow A), and higher levels of psychological distress (Arrow A) than adults who were raised in intact families. The effect of childhood family structure on self-confidence and psychological distress in adulthood is also expected to be mediated by parent-child relationship quality (Arrows B and C) when comparing adults raised by widowed parents to those raised in intact families. A final possibility is that the association between childhood family structure
and adult well-being is moderated by parent-child relationship quality. It is hypothesized that childhood family structure has a stronger effect on self-confidence and psychological distress when individuals have low levels of parent-child relationship quality than when individuals have high levels of relationship quality (Arrow D) in this set of comparisons.

Because so few studies directly compare adults who experienced parental death as children to those who experienced parental divorce, this study draws on several theoretical perspectives to develop hypotheses regarding the nature of effects resulting from these different experiences. Based on the life course perspective and attribution theory it is hypothesized that experiencing parental divorce will have a negative effect on parent-child relationships, while parental death will have a negative effect on personal well-being. This is because conflict events such as divorce are likely to manifest in externalizing behaviors (Cummings & Cummings, 1988; Emery, 1982; Patterson, 1976), which may in turn cause lasting damage to the relationships between custodial parents and their children. In contrast, major loss events such as parental death are more likely to manifest in internalizing behaviors (Felner et al., 1981; Sandler et al., 1992), which may over time cause more serious damage to individual well-being. This position is consistent with social learning theory which suggests that children are likely to model behaviors they observe in regard to specific events. If children are exposed to high levels of anger and parental conflict during the process of divorce (Wallerstein, 1985), then they are likely to reproduce these behaviors in their own relationships. If parents respond to the death of their spouse with feelings such as guilt, sadness, and anxiety (Gallagher et al., 1983; Parkes, 1972; Stroebe et al., 1988),
then these are the behaviors that children are most likely to model. Specifically, it is hypothesized that adults raised by widowed parents will have better parent-child relationship quality (Arrow B), but lower levels of self-confidence (Arrow A), and higher levels of psychological distress (Arrow A) than adults raised by divorced parents. This model also predicts that parent-child relationship quality will mediate the association between childhood family structure and adult well-being (Arrows B and C) when comparing adults raised by widowed parents to adults raised by divorced parents. A moderating effect is also hypothesized. The association between childhood family structure and adult self-confidence and psychological distress is expected to be stronger among individuals who have low levels of parent-child relationship quality than individuals who have high levels of relationship quality (Arrow D) when making this set of comparisons.

Each model also controls for several variables that are thought to influence family relationships and individual well-being in adulthood. Current characteristics of adult children, for example, are likely to shape the nature of the relationships that they have with their parents as well as influence different indicators of well-being. Previous research has found that adult daughters report greater affective closeness with parents than adult sons (Rossi & Rossi, 1990) and that intergenerational ties are closer in African American families than in White families (Umberson, 1992). Younger individuals, persons with less education, and those who are not married typically display lower self-esteem and more depressive symptoms than older, highly educated, and married individuals (Kessler, Price, & Wortman, 1985; Mirowsky & Ross, 1989; Newman, 1989). For these reasons, each model controls
for gender, age, education level, marital status, and race of the respondent. Because researchers have generally failed to examine gender differences in the relationships between childhood family structure and adult outcomes (McLeod, 1991), each set of models also hypothesizes that parental losses will have stronger associations with family relationships and well-being outcomes for women than for men. This hypothesized moderating effect is based on the argument that females are more likely to be socialized to make internal attributions for negative events than males (Gjerde et al., 1988). Other researchers have suggested that girls are more likely than boys to define their identities through intimate relationships (Chodorow, 1978; Gilligan, 1982), and therefore, disruptions in parent-child relations may influence the well-being of girls more strongly than the well-being of boys.

It is also possible that childhood family circumstances have long-term effects on contemporary family relationships and personal well-being. For example, some researchers argue that the effects of family disruption may be directly linked to socioeconomic status in the family of origin (Acock & Kiecolt, 1989; Amato & Keith, 1991; Demo & Acock, 1988). Other researchers contend that the presence of a same-sex stepparent may be problematic for children who experience family disruption, while the arrival of an opposite-sex stepparent presents few problems and may even be beneficial over time for some individuals (Amato, 1993; Hetherington et al., 1985; Needle et al., 1990). Another alternative is that the effects of parental divorce or parental death are dependent on the age of the child when the family disruption occurred. There is some evidence that divorce, for example, is related to the highest number of behavior problems among children who are younger than age 5 or
older than age 12 at the time of marital separation (Zill, 1988). Accordingly, whether or not the family ever received public assistance, the presence of a stepparent, and age of the child at disruption are included in each appropriate model to control for the long-term effects of childhood family circumstances.

A final alternative is that parent-child relationships and individual well-being in adulthood are influenced by the current characteristics of the parent. With increasing age and decreasing health, parents are more likely to place demands on relationships with their children. Rossi and Rossi (1990) found that adult children, especially daughters, feel less close to parents who are in poor health than to parents who are in good health. They suggested that poor health alters interaction and help reciprocity between children and their parents because it increases the need for assistance and personal caregiving. Increasing age and poor health may also have a negative effect on well-being because it might trigger some emotional distancing by reminding adult children of the eventual death of their parent (Rossi & Rossi, 1990). Age and health of the custodial parent are included in each model to control for his or her current characteristics.
CHAPTER THREE

METHODS

Sample

Data for this study were collected as part of the first wave of the National Survey of Families and Households (NSFH). This survey consisted of personal interviews with a national probability sample of 13,017 respondents representing the noninstitutional United States population age 19 and older (Sweet, Bumpass, & Call, 1988). Funding for the survey was provided by the Center for Population Research of the National Institute of Child Health and Human Development, under Grant HD 21009. The NSFH originally developed in response to a growing recognition of the limitations that available data presented in studying the causes and consequences of changing family and household structure. During the 1980s, most of the research on family structure was based on data from large national samples which had originally been collected for some other purpose (e.g., the Panel Study of Income Dynamics, the National Longitudinal Surveys of Labor Market Experience, and the Current Population Survey). The use of secondary data in this area was problematic because it was difficult to gain knowledge about the effects of family structure from studies that were designed to examine demographic or economic issues. For example, studies that were not specifically designed to investigate the consequences of divorce tended to either exclude, or poorly operationalize, many theoretically important
variables, such as time since the separation or post-divorce living arrangements (Demo & Acock, 1988; Kitson & Morgan, 1990). As a result, researchers consistently documented the demographic determinants and consequences of divorce, but produced less empirical information on how divorce was related to relationship quality, family processes, or social-psychological factors (White, 1990).

Recognizing the importance of an improved understanding of both the structure and functioning of American families, the NSFH was designed as a national study that would permit research on a variety of family experiences and life course events. In order to avoid the problems encountered when using existing data sets, it was clear that the survey should focus almost exclusively on family issues and cover a broad range of family structures, processes, and relationships. The principle investigators also determined that the NSFH should involve large scale data collection from a national probability sample so that generalizations could be made to the United States population as a whole. The survey design also called for a large sample size in order to accommodate subgroup comparisons and produce reliable statistical estimation. Therefore, the underlying philosophy of the NSFH survey design was:

- that a data set covering a broad range of family issues should be developed;
- that the content of the survey be guided by scientific priorities; that the data set should be a resource for the research community at large; and that a cross-sectional survey, including appropriate retrospective questions, should be the immediate goal, but that it should be planned as the first round of a longitudinal design (Sweet et al., 1988, p. 10).

In adhering to these objectives, the designers of the NSFH hoped to create a data set which
would allow researchers to test a wide range of competing hypotheses about different aspects of the American family from a variety of theoretical perspectives.

The main sample for the NSFH was a national, multi-stage area probability sample containing over 17,000 housing units drawn from 100 sampling areas in the continental United States. The NSFH also included a double sampling of African Americans, Puerto Ricans, Mexican Americans, single-parent families, families with stepchildren, cohabiting couples, and recently married persons. This oversample was selected by doubling the number of households drawn within the original 100 sampling areas. Within each of the primary sampling units, an average of 17 block groups were selected as secondary sampling units. Listing areas containing 45 or more households were then created within each of the 1,700 secondary sampling units. One listing area was selected from each secondary sampling unit and approximately 20 housing units were selected from each listing area for inclusion in the sample.

After verifying the accuracy of addresses, an introductory cover letter was sent to each selected household. The letter contained information about the survey and indicated when an interviewer would visit the household to complete a screening form. The purpose of the screener was to randomly select a respondent from among the adult members of the household. Persons age 18 and younger were generally ineligible to be interviewed, but they were included as a potential respondent if they were currently married or if they lived in a household that did not have a member who was age 19 or older. These exceptions made it possible to represent all married couples and essentially all households. Only 31
respondents, or .2 percent of the total sample, were age 18 or younger and 25 of these individuals were married. The researchers who designed the NSFH had originally intended to define the target population as age 18 and older, but they changed the age criteria to 19 in order to minimize the number of high school students who were selected as the primary respondent. Young adults who were "currently away at college and live in a dorm, sorority, or fraternity house" or "currently away in the Armed Forces and live in military housing or on a ship" were included as members of the household and were eligible for the study if they were age 19 or older. All household members who were eligible for selection as the respondent were listed in order from youngest to oldest, with those having the same age listed alphabetically by their first name. The primary respondent was then randomly selected from among the eligible adults in the household by the use of a Kish (1965) selection table.

At the time of initial contact, the interviewer attempted to administer the main interview schedule to the primary respondent. The average interview lasted one hour and forty minutes and included several self-administered sections to facilitate the collection of sensitive information and to ease the flow of the interview. Respondents completed several retrospective sequences including one detailing family living arrangements during childhood. When appropriate, a shorter self-administered questionnaire was also given to the spouse or cohabiting partner of the primary respondent. In cases where the primary respondent was an adult son or daughter living in the parental home, a tertiary questionnaire was filled out by the householder. If the primary respondent was not available at the time of initial
contact, an appointment was made to conduct the interview at a later date. When the
spouse, partner, or tertiary respondent was not available, the questionnaire was left at the
household and arrangements were made for the interviewer to pick it up at a specified time.
Secondary respondent questionnaires were not left to be filled out unless the interview with
the primary respondent was successfully completed. Survey field work for the first wave of
the NSFH began in March of 1987 and was completed in May of 1988. The response rate
for the total sample of primary respondents was 74.3 percent.

A brief demographic profile of the individuals who participated in the first wave of
the NSFH indicates that there were 7,790 female (59.8%) and 5,227 male (40.2%)
respondents. They were primarily white (72.4%) and ranged in age from 16 to 95 years
old, with a median age of 38 years. Over half of the respondents (52.9%) reported that they
were married at the time of data collection. The number of completed years of education
ranged from 0 to 20, with a median education level of 12 years. A majority of the
respondents (62.4%) reported that they were currently working for pay in a job. Total
family income, summed over all related persons in the household, ranged from 0 to
$988,700, with a median income of $21,069.

The analyses which were conducted for the present study were based on the reports
of 4,507 respondents who met several sample restrictions that were imposed to increase
comparability across family types. Information about parental marital status during the
respondent’s childhood and at the time of the NSFH data collection was used to construct
an intact family structure comparison group (n = 3,598). Respondents were included in this
group if they lived with both their biological mother and biological father from the time they were born until age 19 or until they left home to be on their own, and if both of their parents were still living and married to each other. Current marital status of the parents was included as a criterion for the intact family structure group in order to control for the potential effects of later life family disruption on relationship quality and individual well-being.

Respondents who indicated that they did not live with both of their biological parents from the time they were born until age 19 or until they left home to be on their own were asked a series of questions that were used to determine their placement in a disrupted childhood family structure group. Respondents who indicated that they experienced one family disruption before age 19, that the type of parent they stopped living with was a biological or adoptive father, that the reason they stopped living with their father was a divorce, and that their mother was still living were placed in a divorced mother custody group (n = 537). Respondents who indicated that they experienced one family disruption during childhood, that they stopped living with a biological or adoptive father, that the reason they stopped living with their father was because he died, and that their mother was still living were placed in a widowed mother custody group (n = 226). Respondents who reported that they experienced one family disruption during childhood, that they stopped living with a biological or adoptive mother because of a divorce, and that their father was still living were placed in a divorced father custody group (n = 75). Finally, respondents who reported that they experienced one family disruption before age 19, that they stopped living
living with a biological or adoptive mother because she died, and that their father was still living were placed in a widowed father custody group (n = 71).

The decision to exclude respondents who experienced multiple family disruptions during childhood was made because considerable variation exists among children who do not live with both biological parents until leaving home to be on their own. A common problem for researchers who study family structure is that "a full history provides data that are, in some sense, too rich" (Martinson & Wu, 1992, p. 353). The implication of this statement is that it is difficult to isolate the effects of a particular disruption from the effects of multiple disruptions which occur for a variety of reasons. The frequency distributions of respondents in the NSFH who experienced at least one family disruption before the age of 19 because of either a parental divorce or death are presented in Table 1. Of the respondents whose first disruption was a parental divorce, over 45 percent (n = 646) experienced one or more subsequent family disruptions during their childhood. Among respondents whose first disruption was the death of a parent, almost 35 percent (n = 417) experienced multiple family disruptions before leaving home to be on their own. It is clear from these figures that although the majority of respondents report only one childhood disruption, a substantial number of respondents experienced one or more disruptions in addition to a parental divorce or death. To control for the confounding effects of multiple family disruptions, respondents who experienced only one disruption before the age of 19, either through parental divorce or death, were selected for this study. In comparisons that involve adults who experienced parental divorce as children, each model also includes a
variable that indicates whether or not the noncustodial parent is still living to control for the confounding effects of parental death during adulthood.

On average, the demographic characteristics of respondents in these subgroups do not appear to vary significantly from those of the total NSFH sample. A breakdown of demographic variables for the entire NSFH sample and for the subsample used in the current study is presented in Table 2. The two samples were very similar in terms of gender and racial composition. In both samples, over half of the respondents were female and about three-fourths identified themselves as white. The total NSFH sample was more normally distributed across age than the subsample, which was slightly skewed toward
Table 2  
Frequency Distributions of Demographic Characteristics by Total Sample and Study Sample

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>Total NSFH Sample N = 13,017</th>
<th>Study Sample n = 4,507</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Number of Cases</td>
<td>Percent</td>
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<tr>
<td>Gender</td>
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</tr>
<tr>
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<td>24 or younger</td>
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<td>19 or more</td>
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</tr>
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</table>
younger adults. Over half of the total sample (58.8%) was age 35 or older, while the
majority of the subsample (65.8%) was age 34 or younger. Although the percentage of
married, separated, and divorced respondents was similar for both groups, respondents in
the total sample were more likely to be widowed and less likely to have never married than
respondents in the subsample. The subsample appears to have a little more education and
to have slightly better financial stability than the total NSFH sample. The majority of
respondents in the subsample (50.9%) had at least one year of post-high school education,
while 6 out of 10 respondents in the total sample (61.7%) had completed 12 or less years of
formal education. In terms of total family income, over half of the respondents in the
subsample (51.5%) had incomes which exceeded $35,000. The majority of respondents in
the total sample (53.4%) reported a total family income of $34,999 or less, and only 46.6
percent had incomes of $35,000 or more. Despite these differences, the respondents
identified for this study appear to be comparable to the entire NSFH sample.

Measures

Three adult outcome variables were examined as dependent variables in this study.
The first variable, parent-child relationship quality, was measured by a single-item indicator
which asked the respondent how they would describe their relationship with their biological
mother. The same question was then asked in regard to their biological father. Response
categories for this question varied according to a 7-point scale, where 1 indicated a very
poor parent-child relationship and 7 indicated an excellent parent-child relationship.
Although this item measured only one aspect of family solidarity, relationship quality is
particularly relevant to the present analyses because researchers regard it as "the dimension of solidarity most deeply rooted in early family life" (Rossi & Rossi, 1990, p. 266). Relationship quality is also a strong indicator of family solidarity because it is not necessarily confounded by geographic proximity. Rossi and Rossi (1990), for example, found that while frequency of contact (associational solidarity) and help exchange (functional solidarity) were strongly determined by proximity of households, geographic distance between parents and adult children did not have a significant association with relationship quality (affective closeness). This finding implies not only that researchers must control for geographic distance when examining associational or functional solidarity, but also that relationship quality is in some sense a truer indicator of family solidarity because it is less dependent on a third variable (proximity) than other measures.

Self-confidence, as an indicator of self-esteem, was the second dependent variable examined in this study. It was measured by three items drawn from the Rosenberg Self-Esteem Scale (Rosenberg, 1979). The original version of the Rosenberg scale includes eight items and is widely used as a measure of global self-esteem, or "the individual's positive or negative attitude toward the self as a totality" (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). During the late 1960s, Kohn and Schooler (1969) used orthogonal principal component factor analysis to suggest that the Rosenberg scale contained both self-confidence and self-deprecation components. Several years later these same researchers used structural equation modeling to demonstrate that a two-factor model separating the positive and negative dimensions of self-esteem provided a better fit to the
data than the one-factor model originally proposed by Rosenberg (Kohn & Schooler, 1983). The three items used in the NSFH were taken from the self-confidence factor of the Rosenberg Self-Esteem Scale. The respondent was asked to indicate his or her agreement with the following statements: (a) “I feel that I am a person of worth, at least on an equal plane with others”; (b) “On the whole, I am satisfied with myself”; and (c) “I am able to do things as well as other people”. Responses to these statements were scored from 1 (strongly disagree) to 5 (strongly agree) and the items were summed to create an index with a possible range of 3 to 15. The alpha reliability estimate of this measure was .660 for the subsample of respondents used in the present study. Although this measure fails to tap the negative dimension of self-esteem, empirical evidence suggests that it may be used as a rough proxy for a global or general self-esteem construct. In addition to providing support for the existence of both positive and negative self-esteem factors, Owens (1993) demonstrated that a second-order global self-esteem factor had a stronger influence on self-confidence (gamma = .877) than on self-deprecation (gamma = -.637). This finding suggests that the measure used in this study should provide a reasonable estimate of positive self-evaluation and some indication of global self-esteem.

The final adult outcome variable considered in this study, psychological distress, was measured by a short form of the Center for Epidemiological Studies Depression Scale (CES-D). Rather than producing estimates of clinical depression or differentiating among types of depression, this scale was specifically designed to identify the presence of depressive symptoms among the general population. The short form of the CES-D was
developed by Ross and Huber (1985) and includes 12 items which are intended to tap the same somatic and negative affect factors first identified in the original version of the scale (Radloff, 1977). These items asked the respondent to indicate how many days in the past week he or she had experienced the following symptoms of depression: (a) “I felt bothered by things that usually don’t bother me”; (b) “I did not feel like eating, my appetite was poor”; (c) “I felt that I could not shake off the blues”; (d) “I had trouble keeping my mind on what I was doing”; (e) “I felt depressed”; (f) “I felt that everything I did was an effort”; (g) “I felt fearful”; (h) “I slept restlessly”; (i) “I talked less than usual”; (j) “I felt lonely”; (k) “I felt sad”; and (l) “I felt that I could not get going”. The number of days reported for each of the 12 items were summed to create a symptom score with a possible range of 0 to 84. Cronbach’s alpha for the CES-D scale using the subsample of respondents identified in this study was .932.

Hypotheses regarding the extent to which early family life demonstrates persistent effects on parent-child relationship quality and psychological well-being in adulthood were tested by including a childhood family structure variable in each model. This variable was created with the same data that was originally used to determine the subsample for the study. Life history records of the family types experienced while growing up were used to place respondents in one of the following categories: intact, divorced mother custody, widowed mother custody, divorced father custody, or widowed father custody. These categories were then combined to create a series of dichotomous variables which allowed for comparisons between the different types of childhood family structures (e.g., intact
versus divorced mother custody). The coding of each family structure variable is noted before the description of results from each particular model.

Several demographic variables that are likely to be related to both the quality of relations with parents and psychological well-being were also included in each model as control variables. Gender of the respondent was measured as a dichotomous variable with male coded 1 and female coded 0. Respondent age and years of formal education were both measured as continuous variables. The current marital status of the respondent was coded 1 for married and 0 for not married, which included separated, divorced, widowed, and never married respondents. Employment status was coded 1 if the respondent was working for pay in a job at the time of data collection and 0 if the respondent was not working. Race of the respondent was coded 1 for White, non-Hispanic and 0 for non-White, which included African American, Hispanic, Native American, Asian, and other. Public assistance was coded 1 if the respondent’s family of origin ever received this type of support and 0 if the respondent’s family never received public assistance. Step-parent was coded 1 if the respondent had ever lived with a non-biological parent and 0 if the respondent had never lived with a non-biological parent. Age that the respondent stopped living with a biological parent because of a family disruption was measured as a continuous variable. Similarly, age of the respondent’s mother or father at the time of data collection were both measured as continuous variables. Health of the parent was rated by the respondent according to a 5-point scale, where 1 indicated very poor health and 5 indicated excellent health. Finally, status of the noncustodial parent was coded 1 if the parent was
still living at the time of data collection and 0 if the noncustodial parent was deceased.
CHAPTER FOUR

RESULTS

The results in this study are presented in two sections structured around the questions addressed and the types of comparisons being made. The first section examines how being raised by a mother, after a divorce or death, affects adult outcomes. Three sets of analyses are used to address this issue. The first set of analyses compares adults raised by divorced mothers to adults raised by both biological parents. The second set of analyses compares adults raised by widowed mothers to those raised in intact families. The final set of analyses in this section compares adults raised by widowed mothers to those raised by divorced mothers. The second section of results reports on parallel sets of analyses which were conducted to determine if being raised by a divorced or widowed father had significant effects on adult outcomes. Ordinary least squares regression was used to test each of the hypotheses in this study. As noted, each model predicting self-confidence and psychological distress tested for the possible mediating and moderating effects of respondent gender and parent-child relationship quality. Only main effects are reported in cases where the interactions were not statistically significant.

Mother-Child Analyses

Table 3 presents the means and standard deviations for all of the study variables broken down by each family structure in which a respondent lived with his or her biological
Table 3
Means and Standard Deviations for Study Variables by Intact, Divorced Mother Custody, and Widowed Mother Custody Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Intact n = 3,183</th>
<th>Divorced Mother Custody n = 424</th>
<th>Widowed Mother Custody n = 193</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.43 (.50)*</td>
<td>.37 (.48)</td>
<td>.41 (.49)</td>
</tr>
<tr>
<td>Age</td>
<td>31.93 (8.21)</td>
<td>30.50 (9.39)</td>
<td>34.95 (11.10)</td>
</tr>
<tr>
<td>Education</td>
<td>13.64 (2.75)</td>
<td>12.79 (2.25)</td>
<td>12.92 (2.73)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.59 (.49)</td>
<td>.42 (.49)</td>
<td>.47 (.50)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>.78 (.41)</td>
<td>.74 (.44)</td>
<td>.76 (.43)</td>
</tr>
<tr>
<td>Race</td>
<td>.82 (.39)</td>
<td>.63 (.48)</td>
<td>.66 (.47)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>.05 (.21)</td>
<td>.25 (.43)</td>
<td>.20 (.40)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>.37 (.48)</td>
<td>.25 (.44)</td>
<td></td>
</tr>
<tr>
<td>Age at Disruption</td>
<td></td>
<td>8.16 (5.17)</td>
<td>9.88 (5.06)</td>
</tr>
<tr>
<td>Mother’s Age</td>
<td>58.00 (9.56)</td>
<td>55.15 (10.73)</td>
<td>63.64 (11.98)</td>
</tr>
<tr>
<td>Mother’s Health</td>
<td>3.74 (.87)</td>
<td>3.62 (.94)</td>
<td>3.48 (.95)</td>
</tr>
<tr>
<td>Father Alive</td>
<td>1.00 (.00)</td>
<td>.79 (.41)</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>6.00 (1.23)b,c</td>
<td>5.96 (1.29)d</td>
<td>6.03 (1.35)</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>12.45 (1.70)b,c</td>
<td>12.32 (1.78)d</td>
<td>12.03 (1.95)</td>
</tr>
<tr>
<td>Psychological Distress</td>
<td>13.90 (15.52)b,c</td>
<td>16.40 (16.86)</td>
<td>19.03 (19.78)</td>
</tr>
</tbody>
</table>

* Numbers in parentheses are standard deviations
b Significant difference between intact and divorced mother custody
c Significant difference between intact and widowed mother custody
d Significant difference between divorced mother custody and widowed mother custody
mother during childhood. These values were obtained as part of a correlational analysis which used a listwise deletion of missing values. This procedure ensured that individual cases which were missing data on any variable were excluded from all analyses. The reported means and standard deviations were obtained in this manner to provide a more accurate description of the final sample that was examined in the study. Using listwise deletion of cases reduced the effective sample size for this particular set of analyses to 3,800: 3,183 respondents who were raised by both biological parents, 424 respondents who were raised by a divorced mother, and 193 respondents who were raised by a widowed mother.

Several significant differences among the dependent variables in this study emerged when mean values were compared across the three types of mother-child family structures. T-tests indicated that respondents who were raised by widowed mothers reported significantly higher levels of mother-child relationship quality than respondents in the other two groups. When comparing respondents who had experienced parental divorce to those who had experienced parental death, respondents who were raised by widowed mothers reported significantly higher levels of relationship quality than respondents who were raised by divorced mothers. Significant mean differences were also demonstrated when examining self-confidence. Respondents raised in intact families reported significantly higher levels of self-confidence than respondents in the other two groups. When comparing respondents who had experienced parental divorce to those who had experienced parental death, respondents raised by divorced mothers reported significantly higher levels of self-
confidence than respondents raised by widowed mothers. In the final set of comparisons, respondents raised in intact families reported significantly lower levels of psychological distress than respondents in the other two groups. A significant mean difference did not emerge, however, when comparing adults raised by divorced mothers to adults raised by widowed mothers. Bivariate correlations for each of the three mother-child comparison groups are presented in the Appendix, Tables A1, A2, and A3.

Divorced Mother Custody Versus Intact Childhood Family Structure

The first set of regression analyses considered whether children raised by divorced mothers experience more negative adult outcomes than children raised in intact families. This issue was addressed by the inclusion of a childhood family structure variable which was coded 1 if the respondent had been raised by their mother following a divorce and 0 if the respondent had been raised by both biological parents. Table 4 shows the unstandardized ordinary least squares regression coefficients from multiple regression analyses in which childhood family structure predicted adult outcomes. The first column of this table presents the results for the regression predicting mother-child relationship quality. As shown in the table, the majority of background variables had statistically significant associations with relationship quality. Consistent with prior research, education had a significant negative effect on mother-child relationship quality (b = -.029). Relationship quality was also lower among White respondents (b = -.385) than ethnic minorities and among respondents who reported that their fathers were still living (b = -.355). Marital status of the respondent (b = .128) and age and health of the mother (b = .008 and b = .284, respectively) all had
Table 4
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Divorced Mother Custody Versus Intact Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.072 (.041)*</td>
<td>-.091 (.057)</td>
<td>-2.232** (.521)</td>
</tr>
<tr>
<td>Age</td>
<td>-.006 (.004)</td>
<td>-.002 (.006)</td>
<td>-.073 (.050)</td>
</tr>
<tr>
<td>Education</td>
<td>-.029** (.008)</td>
<td>.119** (.011)</td>
<td>-.339** (.097)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.128** (.040)</td>
<td>.105 (.057)</td>
<td>-4.807** (.520)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>-.051 (.049)</td>
<td>.080 (.069)</td>
<td>-1.936** (.629)</td>
</tr>
<tr>
<td>Race</td>
<td>-.385** (.050)</td>
<td>-.045 (.071)</td>
<td>-1.071 (.649)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>-.048 (.080)</td>
<td>-.116 (.114)</td>
<td>1.106 (1.032)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>.077 (.115)</td>
<td>-.065 (.163)</td>
<td>2.407 (1.479)</td>
</tr>
<tr>
<td>Mother’s Age</td>
<td>.008* (.003)</td>
<td>.007 (.005)</td>
<td>-.061 (.043)</td>
</tr>
<tr>
<td>Mother’s Health</td>
<td>.284** (.023)</td>
<td>.087** (.033)</td>
<td>-1.685** (.304)</td>
</tr>
<tr>
<td>Father Alive</td>
<td>-.355* (.138)</td>
<td>-.007 (.197)</td>
<td>1.150 (1.765)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>-.210* (.082)</td>
<td>.067 (.115)</td>
<td>-.194 (1.059)</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td></td>
<td>.161** (.023)</td>
<td>-1.198** (.209)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.691</td>
<td>9.160</td>
<td>42.818</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.059</td>
<td>.060</td>
<td>.075</td>
</tr>
</tbody>
</table>

* Numbers in parentheses are standard errors
* Significant at the .05 level, ** significant at the .01 level
significant positive effects on relationship quality. The other control variables in the model did not have statistically significant effects on the dependent variable. As predicted, childhood family structure demonstrated a significant negative effect on mother-child relationship quality in adulthood ($b = -.210$). Given the dummy coding used for the family structure variable, this indicates that adults raised by divorced mothers reported significantly lower relationship quality than adults raised in intact families. This finding provides additional support for a growing body of literature that has documented a consistent negative effect of divorced single-parent family structure on family solidarity.

The second column of Table 4 presents the results from the regression predicting self-confidence. In this model, only two of the background variables had significant effects on the dependent variable. Self-confidence was highest among respondents with more years of education ($b = .119$) and among those who reported that their mother was in good physical health ($b = .087$). Contrary to expectations, childhood family structure did not have a significant effect on self-confidence. Taking the coding of the family structure variable into account, this finding indicates that respondents who were raised by divorced mothers did not have significantly lower levels of self-confidence in adulthood than respondents who were raised in intact families. Mother-child relationship quality did, however, have a significant positive effect on the dependent variable ($b = .161$). Respondents who reported better relationship quality had significantly higher levels of self-confidence than respondents who indicated that they had poor relationships with their mothers.
Results from the regression predicting psychological distress are presented in the third column of Table 4. Several control variables had significant effects on the dependent variable in this model. Consistent with the findings of prior research, gender (-2.232) and education (-.339) both had significant negative effects on psychological distress. Also as expected, psychological distress was lower among married (b = -4.807) and employed (b = -1.936) respondents when compared to respondents who were not married and unemployed at the time of data collection. Current health status of the mother, as reported by the respondent, was the final background variable that demonstrated a significant relationship with psychological distress. Respondents who indicated that their mother was in good physical health reported significantly lower levels of psychological distress than respondents whose mothers were in poor health (b = -1.685). Similar to the results for the model predicting self-confidence, childhood family structure did not have a significant direct effect on psychological distress in adulthood. Mother-child relationship quality did demonstrate a significant negative effect on self-confidence (b = -1.198), which indicated that respondents who reported high levels of relationship quality have lower levels of psychological distress than respondents who reported poor mother-child relationship quality.

While it is surprising that childhood family structure did not have a direct influence on either self-confidence or psychological distress, there was evidence to support the hypothesis that the effects of this variable were transmitted indirectly through its influence on mother-child relationship quality. This is because statistically significant bivariate relationships between childhood family structure and self-confidence (r = -.025, p < .10)
and between childhood family structure and psychological distress ($r = .051, p < .05$) were no longer significant when mother-child relationship quality was controlled. Under these conditions, relationship quality is said to mediate the relationship between childhood family structure and adult well-being. There was no evidence in these models, however, that the association between childhood family structure and self-confidence or psychological distress was moderated by gender or mother-child relationship quality.

**Widowed Mother Custody Versus Intact Childhood Family Structure**

The second set of regression models considered whether children raised by widowed mothers have more negative adult outcomes than children raised in intact families. This comparison was made by including a childhood family structure variable in each model which was coded 1 if the respondent had been raised by their mother following the death of their father and 0 if the respondent had been raised by both biological parents. The results from regressions predicting relationship quality are shown in the first column of Table 5. In regard to the background variables, age ($b = -.009$), education ($b = -.030$), and race of the respondent ($b = -.419$) all had significant negative effects on contemporary mother-child relationship quality. Marital status of the respondent ($b = .144$), age of the mother ($b = .011$), and the mother’s current health status ($b = .279$) all demonstrated significant positive associations with relationship quality. The other control variables in this model did not have significant effects on the dependent variable. Counter to the hypothesized association, childhood family structure also failed to have a significant effect on mother-child relationship quality.
Table 5
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Mother Custody Versus Intact Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.035 (.041)*</td>
<td>-.125* (.060)</td>
<td>-2.113** (.536)</td>
</tr>
<tr>
<td>Age</td>
<td>-.009* (.004)</td>
<td>-.005 (.006)</td>
<td>-.070 (.051)</td>
</tr>
<tr>
<td>Education</td>
<td>-.030** (.008)</td>
<td>.128** (.011)</td>
<td>-3.80** (.099)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.144** (.041)</td>
<td>.121* (.058)</td>
<td>-4.974** (.536)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>-.001 (.050)</td>
<td>.073 (.071)</td>
<td>-1.733** (.653)</td>
</tr>
<tr>
<td>Race</td>
<td>-.419** (.052)</td>
<td>-.150* (.074)</td>
<td>-.608 (.680)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>.016 (.091)</td>
<td>-.232 (.127)</td>
<td>1.614 (1.167)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>-.148 (.185)</td>
<td>.106 (.260)</td>
<td>-2.461 (2.389)</td>
</tr>
<tr>
<td>Mother’s Age</td>
<td>.011** (.024)</td>
<td>.006 (.005)</td>
<td>-.067 (.044)</td>
</tr>
<tr>
<td>Mother’s Health</td>
<td>.279** (.003)</td>
<td>.097** (.034)</td>
<td>-1.875** (.314)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>.062 (.099)</td>
<td>-.634** (.171)</td>
<td>4.458** (1.300)</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Structure * Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.256</td>
<td>9.237</td>
<td>44.128</td>
</tr>
</tbody>
</table>

R² 0.060 0.72 0.076

* Numbers in parentheses are standard errors
* Significant at the .05 level, ** significant at the .01 level
The second column of Table 5 presents the results from the regression predicting self-confidence. Several of the control variables in this model had significant effects on the dependent variable. Self-confidence was significantly lower among women (b = -.125) and ethnic minorities (b = -.150) when compared to male and White respondents. Education level (b = .128), marital status (b = .121), and health status of the mother (b = .097) all had significant positive effects on self-confidence. As expected, childhood family structure demonstrated a significant negative effect on self-confidence (b = -.634). Taking the coding of the family structure variable into account, this finding indicates that self-confidence was significantly lower among respondents who were raised by widowed mothers than among respondents who were raised by both biological parents. Mother-child relationship quality was the final variable in this particular model that had a significant effect on self-confidence (b = .159).

In addition to the observed direct effects, this model also provided support for the hypothesis that the effect of childhood family structure on self-confidence was modified by gender of the respondent. As shown in the second column of Table 5, the interaction effect between childhood family structure and gender was statistically significant. The constant in this model (9.237) represents the effect of gender on self-confidence among respondents who were raised in intact families (those who scored 0 on the childhood family structure variable). This intercept term can also be interpreted as the mean score on self-confidence for women raised in intact families. The mean score on self-confidence for men raised in intact families was 9.112. This term was calculated by adding the constant to the
unstandardized regression coefficient for gender (9.237 - .125). The unstandardized
coefficient of the family structure variable (b = -.634) represents the slope of the effect of
childhood family structure on self-confidence among women. The interpretation of this
coefficient indicates that controlling for the other variables in the model, self-confidence is
.634 units lower for women raised by widowed mothers than for women raised in intact
families. The corresponding slope of the effect of childhood family structure on self-
confidence among men was .059. This term was calculated by adding the unstandardized
coefficient for the family structure variable to the unstandardized coefficient for the
interaction effect (-.634 + .693). In this case, self-confidence is .059 units higher for men
raised by widowed mothers than for men raised in intact families. Comparison of these two
slopes indicates that while there was a significant negative relationship between childhood
family structure and self-confidence for women, this effect was not significant and in fact
almost disappeared for men.

The results from the regression predicting psychological distress are shown in the
third column of Table 5. Gender (b = -2.113) and education (-.380) both had negative
effects on the dependent variable, indicating that psychological distress was significantly
lower among men and respondents with higher levels of education than among women and
respondents who had completed fewer years of school. The marital and employment status
of the respondent (b = -4.974 and b = -1.733, respectively) also had significant negative
effects on the dependent variable. The final control variable that had a negative effect on
psychological distress in this model was health status of the mother (b = -1.875).
Consistent with expectations, childhood family structure was found to have a significant positive effect on psychological distress ($b = 4.458$). Given the coding of the variable, this indicates that respondents raised by widowed mothers reported significantly higher levels of psychological distress than respondents raised in intact families. Also as predicted, mother-child relationship quality had a significant negative effect on the dependent variable ($b = -1.053$). Because none of the interaction terms were significant, there is no evidence to support the moderating hypotheses for the psychological distress model. Similarly, no support was found for the hypothesis that at least part of the influence of childhood family structure on self-confidence and psychological distress was indirect through its association with mother-child relationship quality. This is because respondents who were raised by widowed mothers did not report significantly lower relationship quality than respondents raised by both biological parents.

**Widowed Mother Custody Versus Divorced Mother Custody Childhood Family Structure**

The final set of regressions in this section examined whether children raised by widowed mothers have more positive or more negative adult outcomes than children raised by divorced mothers. This issue was addressed by including a childhood family structure variable in each model which was coded 1 if the respondent had been raised by their mother following the death of their father and 0 if the respondent had been raised by their mother following a parental divorce. The results from regressions predicting contemporary mother-child relationship quality are shown in the first column of Table 6. Four background variables demonstrated significant effects on the dependent variable in this model.
Table 6
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Mother Custody Versus Divorced Mother Custody Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.016 (.104)*</td>
<td>.231 (.144)</td>
<td>-4.062** (1.385)</td>
</tr>
<tr>
<td>Age</td>
<td>.003 (.009)</td>
<td>-.004 (.013)</td>
<td>-.172 (.121)</td>
</tr>
<tr>
<td>Education</td>
<td>-.045* (.022)</td>
<td>.149** (.030)</td>
<td>-.462 (.290)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.219* (.102)</td>
<td>.230 (.141)</td>
<td>-6.118** (1.361)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>.029 (.117)</td>
<td>.310 (.163)</td>
<td>-2.351 (1.571)</td>
</tr>
<tr>
<td>Race</td>
<td>-.291** (.109)</td>
<td>.255 (.153)</td>
<td>-2.564 (1.463)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>-.137 (.121)</td>
<td>.009 (.169)</td>
<td>1.262 (1.617)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>-.007 (.113)</td>
<td>-.099 (.156)</td>
<td>2.085 (1.504)</td>
</tr>
<tr>
<td>Age at Disruption</td>
<td>.003 (.010)</td>
<td>.001 (.014)</td>
<td>.137 (.132)</td>
</tr>
<tr>
<td>Mother’s Age</td>
<td>.003 (.008)</td>
<td>.007 (.012)</td>
<td>-.001 (.111)</td>
</tr>
<tr>
<td>Mother’s Health</td>
<td>.311** (.054)</td>
<td>-.032 (.076)</td>
<td>-1.862* (.745)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>.162 (.116)b</td>
<td>-.409* (.160)</td>
<td>3.764* (1.542)</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>.130* (.052)</td>
<td>-.1269* (.507)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.163</td>
<td>8.916</td>
<td>47.170</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.072</td>
<td>.087</td>
<td>.111</td>
</tr>
</tbody>
</table>

*a Numbers in parentheses are standard errors

b Significant at the .10 level, * significant at the .05 level, ** significant at the .01 level
Education level \( (b = -0.045) \) and race \( (b = -0.291) \) both had significant negative effects on relationship quality, while marital status of the respondent \( (b = 0.219) \) and health of the mother \( (b = 0.311) \) had significant positive effects. Childhood family structure demonstrated only a marginally significant effect on mother-child relationship quality in adulthood \( (b = 0.162, p < 0.10) \). Taking the coding of this variable into account, respondents who were raised by widowed mothers reported slightly better relationship quality than respondents who were raised by their mothers following a divorce.

The second column of Table 6 presents the results from regressions predicting self-confidence. Only one of the control variables in this model had a significant influence on the dependent variable. Respondents who had completed more years of school had significantly higher levels of self-confidence than respondents with lower levels of education \( (b = 0.149) \). While the other background variables did not demonstrate significant relationships, the childhood family structure variable did have a significant negative effect on self-confidence \( (b = -0.409) \). Given the coding of the family structure variable, this finding provides support for the hypothesis that respondents who were raised by their mother following the death of their father had significantly lower levels of self-confidence than respondents who were raised by their mother following a divorce. Mother-child relationship quality also has a significant effect on the dependent variable within the context of this model. Respondents who reported good relationship quality had significantly higher self-confidence than respondents who reported that they had poor relationships with their mothers \( (b = 1.30) \).
The third column of Table 6 presents the results from the regression predicting psychological distress. Three of the background variables had significant relationships with the dependent variable in this model. Gender ($b = -4.062$) and marital status of the respondent ($b = -6.118$) both had significant negative effects on psychological distress. Since these variables were both dichotomously scored, this finding indicates that psychological distress was lower among men and married respondents when compared to women and unmarried respondents. The other control variable that had a significant effect on the dependent variable was health status of the mother. Respondents who reported that their mother was in poor physical health demonstrated significantly higher levels of psychological distress than respondents who reported that their mother was in good health ($b = -1.862$). As hypothesized, the childhood family structure variable also had a significant effect on the dependent variable in this particular model. Respondents raised by widowed mothers reported significantly higher levels of psychological distress in adulthood than respondents raised by divorced mothers ($b = 3.764$). Mother-child relationship quality also had a significant impact on psychological distress, but the effect of this particular variable was negative ($b = -1.269$). There was no evidence in this set of models that the relationship between childhood family structure and either self-confidence or psychological distress was mediated by mother-child relationship quality, nor was there any support that the influence of childhood family structure was modified by gender or mother-child relationship quality.
**Summary of Mother-Child Analyses**

The comparisons made in this first set of analyses indicate that when compared to respondents raised by both biological parents, respondents raised by divorced mothers reported significantly lower levels of contemporary mother-child relationship quality, but not significantly lower levels of self-confidence or higher levels of psychological distress. Rather than having direct effects on these variables, in this comparison childhood family structure had an indirect influence on both self-confidence and psychological distress through its association with relationship quality. When comparing respondents raised by widowed mothers to respondents raised in intact families, contrasting results were found. Childhood family structure failed to demonstrate a significant influence on mother-child relationship quality, but had direct effects on self-confidence and psychological distress. Respondents who were raised by widowed mothers had significantly lower levels of self-confidence and higher levels of psychological distress than respondents who were raised in intact families. Another finding from this set of models was that the relationship between childhood family structure and self-confidence was stronger for women than for men when comparing respondents raised by widowed mothers to respondents raised in intact families. The differences that emerged when comparing the effects of parental divorce and death during childhood to growing up in an intact family were reiterated in the third set of models. While respondents who had experienced different types of family disruptions in childhood did not differ in terms of reported mother-child relationship quality, those who were raised by widowed mothers reported significantly lower levels of self-confidence and higher levels
of psychological distress than respondents who were raised by divorced mothers. Taken together, the results from this set of models provide strong evidence for the importance of distinguishing between different types of family disruptions when examining the influence of childhood family structure on adult outcomes.

**Father-Child Analyses**

This section of the results presents a parallel set of analyses that examined how being raised by a divorced or widowed father affects adult outcomes. Three sets of regression models are used to address this issue. The first set of analyses compares adults raised by divorced fathers to adults raised by both biological parents. The second set of analyses compares adults raised by widowed fathers to those raised in intact families. The final set of analyses compare adults raised by widowed fathers to those raised by divorced fathers. Again, ordinary least squares regression was used to test the hypotheses and interaction terms are only presented when they were found to be significant.

The mean values and standard deviations for all of the study variables broken down by each family structure in which a respondent lived with his or her biological father during childhood are presented in Table 7. Similar to the means and standard deviations for the three mother-child subgroups, these values also were obtained as part of a correlational analysis which used a listwise deletion of missing values. This procedure reduced the sample size for the father-child comparisons to 3,340: 3,225 respondents who were raised by both biological parents, 58 respondents who were raised by a divorced father, and 57 respondents who were raised by a widowed father. The size of this intact family
Table 7  
Means and Standard Deviations for Study Variables by Intact, Divorced Father Custody, and Widowed Father Custody Childhood Family Structure

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intact</th>
<th>Divorced Father Custody</th>
<th>Widowed Father Custody</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 3,225</td>
<td>n = 58</td>
<td>n = 57</td>
</tr>
<tr>
<td>Gender</td>
<td>.43 (.50)*</td>
<td>.55 (.50)</td>
<td>.35 (.48)</td>
</tr>
<tr>
<td>Age</td>
<td>31.90 (8.17)</td>
<td>31.76 (9.19)</td>
<td>33.60 (9.73)</td>
</tr>
<tr>
<td>Education</td>
<td>13.64 (2.76)</td>
<td>12.40 (2.54)</td>
<td>13.39 (2.34)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.59 (.49)</td>
<td>.38 (.49)</td>
<td>.58 (.50)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>.78 (.41)</td>
<td>.78 (.42)</td>
<td>.75 (.43)</td>
</tr>
<tr>
<td>Race</td>
<td>.82 (.39)</td>
<td>.79 (.41)</td>
<td>.67 (.48)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>.05 (.21)</td>
<td>.09 (.28)</td>
<td>.09 (.29)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>.41 (.50)</td>
<td>.54 (.50)</td>
<td></td>
</tr>
<tr>
<td>Age at Disruption</td>
<td></td>
<td>9.36 (5.61)</td>
<td>10.16 (5.62)</td>
</tr>
<tr>
<td>Father’s Age</td>
<td>61.34 (9.85)</td>
<td>58.79 (11.06)</td>
<td>63.21 (10.18)</td>
</tr>
<tr>
<td>Father’s Health</td>
<td>3.66 (.89)</td>
<td>3.62 (.91)</td>
<td>3.49 (1.00)</td>
</tr>
<tr>
<td>Mother Alive</td>
<td>1.00 (.00)</td>
<td>.88 (.33)</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>5.81 (1.29)*</td>
<td>5.09 (2.01)</td>
<td>5.33 (1.77)</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>12.45 (1.70)</td>
<td>12.35 (1.73)</td>
<td>12.49 (2.26)</td>
</tr>
<tr>
<td>Psychological Distress</td>
<td>14.01 (15.63)</td>
<td>16.62 (16.25)</td>
<td>18.83 (20.67)</td>
</tr>
</tbody>
</table>

* Numbers in parentheses are standard deviations  
* Significant difference between intact and divorced father custody  
* Significant difference between intact and widowed father custody  
* Significant difference between divorced father custody and widowed father custody
comparison group does not correspond to the size of the mother-child intact group because different variables are used in each set of analyses. For example, where the mother-child comparisons control for the age and health status of the mother, the father-child comparisons control for the age and health status of the father. Because these variables have different amounts of missing data, the resulting sample sizes are different as well.

A few significant differences were found among the dependent variables in this study when mean values were compared across the three types of father-child family structures. T-tests indicated that respondents who were raised by both biological parents reported significantly higher levels of father-child relationship quality than respondents in the other two groups. When comparing respondents who had experienced parental divorce to those who had experienced parental death, respondents who were raised by widowed fathers reported significantly higher levels of relationship quality than respondents who were raised by divorced fathers. Mean differences among self-confidence and psychological distress, however, were not found to be statistically significant when the three groups were directly compared. Bivariate correlations for each of the three father-child comparison groups are presented in the Appendix, Tables A4, A5, and A6.

**Divorced Father Custody Versus Intact Childhood Family Structure**

The first set of regression analyses in this section examined whether children raised by divorced fathers experience more negative adult outcomes than children raised in intact families. This issue was addressed by the inclusion of a childhood family structure variable which was coded 1 if the respondent had been raised by their father following a divorce and
0 if the respondent had been raised by both biological parents. The unstandardized ordinary least squares regression coefficients from analyses in which childhood family structure predicted adult outcomes are presented in Table 8. The first column of this table shows the results from the regression predicting father-child relationship quality. Several control variables were significant predictors of the dependent variable in this model. Education level (b = -.042) and race of the respondent (b = -.199) had significant negative effects on relationship quality, while marital status (b = .193) and age and health of the father (b = .010 and b = .350, respectively) had significant positive effects. As hypothesized, childhood family structure demonstrated a significant negative relationship with father-child relationship quality (b = -.802). Taking the scoring of the family structure variable into account, this finding indicates that respondents raised by divorced fathers reported significantly lower relationship quality than respondents raised in intact families.

The second column of Table 8 shows the results from the regression predicting self-confidence. Only three of the control variables in this model were significant predictors of the dependent variable. As expected, education (b = .121) and health status of the father (b = .153) had significant positive effects on self-confidence. Race also had a significant relationship with the dependent variable, but the direction of this effect was negative (b = -.181). In addition to the majority of background variables, childhood family failed to demonstrate a significant effect on self-confidence. Contrary to expectations, respondents raised by divorced fathers did not have significantly lower levels of self-confidence than respondents raised by both biological parents. Father-child relationship quality did,
Table 8
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Divorced Father Custody Versus Intact Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>.078 (.045)*</td>
<td>-.105 (.059)</td>
<td>-1.952** (.545)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.003 (.004)</td>
<td>.001 (.005)</td>
<td>-.081 (.050)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>-.042** (.008)</td>
<td>.121** (.011)</td>
<td>-.385** (.101)</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td>.193** (.045)</td>
<td>.110 (.059)</td>
<td>-4.939** (.546)</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td>.031 (.055)</td>
<td>.040 (.072)</td>
<td>-1.755** (.663)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>-.199** (.057)</td>
<td>-.181* (.076)</td>
<td>-.370 (.694)</td>
</tr>
<tr>
<td><strong>Public Assistance</strong></td>
<td>-.027 (.104)</td>
<td>-.163 (.137)</td>
<td>1.231 (1.248)</td>
</tr>
<tr>
<td><strong>Step-Parent</strong></td>
<td>.111 (.294)</td>
<td>.073 (.394)</td>
<td>-1.207 (3.566)</td>
</tr>
<tr>
<td><strong>Father's Age</strong></td>
<td>.010** (.003)</td>
<td>.003 (.005)</td>
<td>-.042 (.041)</td>
</tr>
<tr>
<td><strong>Father's Health</strong></td>
<td>.350** (.026)</td>
<td>.153** (.035)</td>
<td>-1.456** (.318)</td>
</tr>
<tr>
<td><strong>Mother Alive</strong></td>
<td>-.162 (.425)</td>
<td>-.041 (.580)</td>
<td>.661 (5.071)</td>
</tr>
<tr>
<td><strong>Family Structure</strong></td>
<td>-.802** (.214)</td>
<td>.132 (.284)</td>
<td>1.609 (2.559)</td>
</tr>
<tr>
<td><strong>Relationship Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>4.578</td>
<td>9.500</td>
<td>38.848</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>.069</td>
<td>.062</td>
<td>.064</td>
</tr>
</tbody>
</table>

* Numbers in parentheses are standard errors
* Significant at the .05 level, ** significant at the .01 level
however, have a significant positive effect on self-confidence (b = .118).

The results from the regression predicting psychological distress are presented in the third column of Table 8. In regard to the background variables, gender (b = -1.952), education (b = -.385), marital and employment status (b = -4.939 and b = -1.755, respectively), and health of the father (b = -1.456) all had significant negative effects on psychological distress. Although in the predicted direction, childhood family structure did not have a significant effect on the dependent variable. This finding indicates that psychological distress did not differ significantly when comparing respondents raised by divorced fathers with respondents raised in intact families. Father-child relationship quality did have the predicted effect on the dependent variable in this model. Respondents who reported good relationship quality had significantly lower levels of psychological distress than respondents who reported poor relationships with their fathers (b = -.777).

While childhood family structure did not have direct effects on either measure of adult well-being, there was evidence to support the hypothesis that the relationship between childhood family structure and psychological distress was mediated by father-child relationship quality. This is because the marginally significant bivariate relationship between childhood family structure and psychological distress (r = .022, p < .10) was not significant when father-child relationship quality was controlled. Under these conditions, relationship quality is said to mediate the relationship between childhood family structure and psychological distress. There was no evidence in these models, however, that the association between childhood family structure and adult well-being was moderated by
respondent gender or father-child relationship quality.

Widowed Father Custody Versus Intact Childhood Family Structure

The second set of regressions in this section considered whether children raised by widowed fathers have more negative adult outcomes than children raised by both biological parents. This issue was addressed by including a childhood family structure variable in each model which was coded 1 if the respondent had been raised by their father following the death of their mother and 0 if the respondent had been raised in an intact family. The results from regressions predicting contemporary father-child relationship quality are shown in the first column of Table 9. Several of the control variables demonstrated statistically significant relationships with the dependent variable. Education level (b = -.041) and race of the respondent (b = -.193) had significant negative effects on relationship quality. Father-child relationship quality was higher among married respondents (b = .197) and respondents with older fathers (b = .010) who were in good health (b = .356) than among unmarried respondents and those whose fathers were younger and in poor health. Consistent with expectations, childhood family structure had a significant negative effect on relationship quality (b = -.571). Within the context of the model, this finding demonstrates that respondents who lived with their father following the death of their mother reported significantly poorer relationship quality with him in adulthood than respondents who were raised in intact families.

The second column of Table 9 presents the results from regressions predicting self-confidence. Examination of the model that was originally estimated indicated that there was
Table 9
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Father Custody Versus Intact Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.080 (.045)*</td>
<td>-.126 (.060)</td>
<td>-1.834** (.546)</td>
</tr>
<tr>
<td>Age</td>
<td>.004 (.004)</td>
<td>-.003 (.005)</td>
<td>-.056 (.049)</td>
</tr>
<tr>
<td>Education</td>
<td>-.041** (.008)</td>
<td>.118* (.011)</td>
<td>-.350** (.101)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.197** (.045)</td>
<td>.124** (.060)</td>
<td>-4.915** (.547)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>.053 (.054)</td>
<td>.075 (.072)</td>
<td>-2.195** (.664)</td>
</tr>
<tr>
<td>Race</td>
<td>-.193** (.056)</td>
<td>-.194** (.076)</td>
<td>-.223 (.692)</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>.002 (.103)</td>
<td>-.141 (.137)</td>
<td>.900 (1.253)</td>
</tr>
<tr>
<td>Step-Parent</td>
<td>.323 (.296)</td>
<td>-.544 (.394)</td>
<td>-4.801 (5.656)</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.010** (.003)</td>
<td>.005 (.004)</td>
<td>-.051 (.041)</td>
</tr>
<tr>
<td>Father's Health</td>
<td>.356** (.026)</td>
<td>.175** (.035)</td>
<td>-1.546** (.317)</td>
</tr>
<tr>
<td>Family Structure</td>
<td>-.571* (.226)</td>
<td>-1.430* (.727)</td>
<td>24.010** (6.688)</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>.279** (.062)</td>
<td>-.1859** (.572)</td>
<td></td>
</tr>
<tr>
<td>Family Structure *</td>
<td>.340** (.125)</td>
<td>-3.104** (1.161)</td>
<td></td>
</tr>
<tr>
<td>Relationship Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.314</td>
<td>9.885</td>
<td>36.033</td>
</tr>
<tr>
<td>R²</td>
<td>.068</td>
<td>.064</td>
<td>.066</td>
</tr>
</tbody>
</table>

* Numbers in parentheses are standard errors
* Significant at the .05 level, ** significant at the .01 level
a significant interaction effect between childhood family structure and father-child relationship quality. Baron and Kenny (1986) have argued that when the moderator is a continuous variable and the independent variable is a dichotomy, as was the case in this model, one way to test the interaction is to dichotomize the moderating variable at the point where its effect becomes more pronounced. As a practical matter, the usual procedure is to separate the responses to a variable into two categories using the mean value as a dividing point. In this model, the mean value of relationship quality was 5.806, so responses lower than this value were assigned a score of 0 and responses higher than this value were assigned a score of 1. The model was then re-estimated with this dichotomous moderating variable.

As shown in the table, education (b = .118), marital status (b = .124), and current health of the father (b = .175) had significant positive effects on self-confidence. Race, on the other hand, had a significant negative influence on the dependent variable (b = -.194). Consistent with expectations, childhood family structure also demonstrated a significant negative effect on self-confidence. Respondents who were raised by widowed fathers reported significantly lower levels of self-confidence than respondents who were raised by both biological parents (b = -1.430). Father-child relationship quality was the final variable in the model that had a direct effect on the dependent variable. As hypothesized, respondents who reported good relationship quality had significantly higher levels of self-confidence than respondents who reported poor relationship quality (b = .279).
A significant interaction term also provided support for the hypothesis that the effect of childhood family structure on self-confidence was modified by contemporary father-child relationship quality. The constant in this model (9.885) represents the effect of relationship quality on self-confidence among respondents who were raised in intact families (those who scored 0 on the childhood family structure variable). This intercept term can also be interpreted as the mean score on self-confidence for respondents raised in intact families who scored low on relationship quality. The mean score on self-confidence for respondents raised in intact families who scored high on relationship quality was 10.164. This term was calculated by adding the constant to the unstandardized regression coefficient for father-child relationship quality (9.885 + .279). The unstandardized coefficient of the family structure variable (b = -1.430) represents the slope of the effect of childhood family structure on self-confidence for respondents who scored low on relationship quality. The interpretation of this coefficient indicates that controlling for the other variables in the model, self-confidence is 1.430 units lower for respondents raised by widowed fathers who scored low on relationship quality than for respondents scoring low on relationship quality who were raised by both biological parents. The corresponding slope of the effect of childhood family structure on self-confidence among respondents who scored high on relationship quality was -1.090. This term was calculated by adding the unstandardized coefficient for the family structure variable to the unstandardized coefficient for the interaction effect (-1.430 + .340). This slope indicates that self-confidence is 1.090 units lower for respondents raised by widowed fathers who scored high on relationship quality.
than for respondents scoring high on relationship quality who were raised in intact families. Comparison of these two slopes indicates that the negative relationship between childhood family structure and self-confidence was stronger for respondents who scored low on relationship quality than for respondents who scored high on this variable.

Results from the regression predicting psychological distress are presented in the third column of Table 9. Again the original model that was estimated included a significant interaction effect between childhood family structure and father-child relationship quality. The same procedures were used to construct a dichotomous moderating variable and the model was re-estimated. Consistent with previous findings, gender (b = -1.834), education (b = -0.350), marital status (b = -4.915), employment (b = -2.195), and the health of the father (b = -1.546) all had significant negative effects on psychological distress. The other control variables were not significant predictors of the dependent variable. As predicted, childhood family structure had a significant positive effect on psychological distress (b = 24.010). This finding provides support for the hypothesis that respondents raised by widowed fathers had significantly higher levels of psychological distress in adulthood than respondents raised in intact families. Relationship quality also demonstrated a significant relationship with the dependent variable (b = -1.859), but the direction of this effect was negative.

As noted, there was also evidence of a significant interaction effect between childhood family structure and father-child relationship quality. The constant in this model (36.033) represents the effect of relationship quality on psychological distress among
respondents who were raised in intact families. This term can also be interpreted as the mean score on psychological distress for respondents raised in intact families who scored low on relationship quality. The corresponding mean score on psychological distress for respondents raised in intact families who scored high on relationship quality was 34.174. This term was calculated by adding the constant to the unstandardized regression coefficient for father-child relationship quality (36.003 - 1.859). The unstandardized coefficient of the family structure variable (b = 24.010) represents the slope of the effect of childhood family structure on psychological distress for respondents who scored low on relationship quality. The interpretation of this coefficient indicates that psychological distress is 24.010 units higher for respondents raised by widowed fathers who scored low on relationship quality than for respondents scoring low on relationship quality who were raised by both biological parents. The corresponding slope of the effect of childhood family structure on psychological distress among respondents who scored high on relationship quality was 20.906. This term was calculated by adding the unstandardized coefficient for the family structure variable to the unstandardized coefficient for the interaction effect (24.010 - 3.104). This slope indicates that psychological distress is 20.906 units higher for respondents raised by widowed fathers who scored high on relationship quality than for respondents scoring high on relationship quality who were raised in intact families. Comparison of these two slopes indicates that the positive relationship between childhood family structure and psychological distress was stronger for respondents who scored low on relationship quality than for respondents who scored high on this variable.
The final set of regressions examined whether being raised by a widowed father has more positive or more negative adult outcomes than being raised by a divorced father. This last issue is addressed by including a childhood family structure variable in each model that is coded 1 if the respondent lived with their father following the death of their mother and 0 if the respondent lived with their father following a divorce. The results from the regression predicting contemporary father-child relationship quality are presented in Table 10. Only two of the variables in this model have significant effects on the dependent variable. The age and health of the father, as reported by the respondent, both had significant positive effects on relationship quality (b = .056 and b = .858, respectively). The other variables in the model, including childhood family structure, failed to demonstrate statistically significant effects on the dependent variable. Contrary to expectations, this finding indicates that respondents who were raised by widowed fathers did not report significantly higher relationship quality than respondents who were raised by divorced fathers.

The second column of Table 10 shows the results from the regression predicting self-confidence. Again only two of the variables in the model were significant predictors of the dependent variable. In this model, employment status of the respondent (b = .862) and current physical health of the father (b = .440) both had significant positive effects on self-confidence. There was no evidence to support the hypothesis that respondents raised by a father following the death of their mother had significantly lower levels of self-confidence than respondents raised by a father after a parental divorce. It is also noteworthy that this
Table 10
Unstandardized OLS Regression Coefficients Predicting Adult Outcomes, Widowed Father Custody Versus Divorced Father Custody Childhood Family Structure

<table>
<thead>
<tr>
<th></th>
<th>Relationship Quality</th>
<th>Self-Confidence</th>
<th>Psychological Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.635 (.351)*</td>
<td>-.020 (.401)</td>
<td>3.089 (3.855)</td>
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<td>-.033 (.034)</td>
<td>-.024 (.313)</td>
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<td>-10.982** (4.131)</td>
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<td>.230 (4.350)</td>
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<td>Father’s Health</td>
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<td>.440* (.219)</td>
<td>-2.035 (2.065)</td>
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<td>Family Structure</td>
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<td>.025 (.401)</td>
<td>5.103 (3.853)</td>
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<td>Relationship Quality</td>
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<td>.178 (.107)</td>
<td>-1.683 (1.011)</td>
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<tr>
<td>$R^2$</td>
<td>.233</td>
<td>.163</td>
<td>.201</td>
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</table>

* Numbers in parentheses are standard errors
* Significant at the .05 level, ** significant at the .01 level
was the first regression equation in which father-child relationship quality failed to
demonstrate a statistically significant effect on a subsequent dependent variable.

The results from the regression predicting psychological distress are presented in the
third column of Table 10. As with the previous models in this particular set of regressions,
only two background variables had significant effects on the dependent variable. Married
respondents (b = -8.068) and those who were employed (b = -10.982) had significantly
lower levels of psychological distress when compared to respondents who were not married
or employed at the time of data collection. Contrary to expectations, there were no
significant effects of either childhood family structure or father-child relationship quality on
psychological distress. Respondents who were raised by a widowed father did not have
significantly higher levels of distress than respondents who were raised by a divorced father.
This set of models also failed to provide any evidence for the hypothesized mediating and
moderating effects.

**Summary of Father-Child Analyses**

The comparisons made in this second set of analyses indicated that when compared
to respondents raised in intact families, respondents raised by divorced fathers reported
significantly lower levels of contemporary relationship quality. There were not significant
differences between these two groups, however, in terms of self-confidence or
psychological distress. Rather, the effect of experiencing a divorce during childhood on
psychological distress was found to be indirect through its influence on father-child
relationship quality. When respondents raised by widowed fathers were compared to those
who grew up in intact families, a more complex pattern of results were found. Similar to
the previous comparison, respondents raised by widowed fathers reported significantly
lower relationship quality than respondents raised by both biological parents. However, the
effect of childhood family structure on self-confidence and psychological distress in this set
of models was moderated by contemporary father-child relationship quality. The results
indicated that the negative effect of maternal death on self-confidence was stronger for
respondents who scored low on relationship quality than for respondents who scored high
on this variable. A similar moderating effect of father-child relationship quality was found
for the positive influence of maternal death on psychological distress. Although these
differences were found between the first two sets of models in this section, it is important to
note that very few differences emerged when comparisons were made between respondents
raised by widowed fathers and respondents raised by divorced fathers. In fact, no
statistically significant differences were found on any of the adult outcome variables when
these two groups were directly compared. The implication of this set of results taken in
consideration with the previous set of analyses is that it may be less critical to distinguish
between types of family disruptions when father-child situations are examined than when
mother-child situations are addressed.
CHAPTER FIVE

DISCUSSION

This study uses data from the first wave of the National Survey of Families and Households to examine the long-term effects of early life family disruption on adult outcomes. Controlling for a variety of background factors, adults who were raised by either divorced mothers or divorced fathers report significantly lower levels of parent-child relationship quality than adults who were raised in intact families. This finding is consistent with other studies that demonstrate a persistent negative effect of parental divorce on family relationships regardless of post-separation living arrangements (Aquilino, 1994; Cooney & Uhlenberg, 1990; Lye et al., 1995; White, 1994). This study differs from previous research, however, by suggesting the process by which divorce may have a negative impact on relationships within the family. As divorce has become more common in American society, it is possible that children who experience this event are likely to make external attributions for the cause of the family disruption. Several studies find that children tend to blame either their mother or father for breaking up the family (Wallerstein & Kelly, 1976, 1980). A causal attribution which places blame on the parents for a divorce is likely to lead to an overt expression of anger and aggression, or an externalizing pattern of behaviors in the child. To the extent that this anger is directed toward the custodial parent, affective ties between the parent and child are likely to be damaged. The findings of the present study
suggest that this damage may persist well into adulthood. An alternative explanation of this finding is that children who are exposed to conflict events such as divorce, are particularly likely to model aggressive or externalizing behaviors (Cummings & Cummings, Emery, 1982; Patterson, 1976). Children who observe high levels of conflict and fighting between their parents are likely to reproduce these same behaviors in their own intimate relationships. Although it cannot be assumed that all divorces are preceded by high levels of parental conflict, when the child does observe marital discord, it is likely that this will have a negative effect on later interpersonal outcomes, including parent-child relationship quality.

While the negative effect of divorce on parent-child relationships is important by itself, this finding is particularly noteworthy when considering the fact that relationship quality is a significant predictor of both self-confidence and psychological distress. Contrary to expectations, childhood family structure did not demonstrate a significant direct effect on either indicator of individual well-being when comparing adults raised by divorced mothers or fathers to those raised in intact families. Childhood family structure did, however, have an indirect influence or mediating effect on both self-confidence and psychological distress through its association with relationship quality. This finding calls attention to the fact that researchers who fail to consider the indirect effects of childhood family structure may underestimate the impact of parental divorce on subsequent adult outcomes.
In contrast to the significant effect of parental divorce on parent-child relationships, adults who were raised by widowed mothers do not report lower quality relationships than adults raised in intact families. This finding provides additional support for the argument that conflict events such as divorce, rather than major loss events such as death, are likely to lead to externalizing behaviors and modeling of aggression which may cause lasting damage to family relationships. Parental death did, however, demonstrate significant negative effects on individual well-being. When compared to adults raised by both biological parents, adults raised by either widowed mothers or widowed fathers report lower levels of self-confidence and higher levels of psychological distress. This finding is consistent with other studies that find long-term negative effects of early parental death on adult well-being (Birtchnell, 1970; Dizmang, 1969; Lloyd, 1980; Barnes & Prosen, 1985), but the present study differs from previous research by using a much larger and more diverse sample. While most of the literature on bereavement is based on small, clinical samples, use of the NSFH in the current study increases the extent to which the findings can be generalized to the larger population of adults who experienced a parental death during childhood.

This study also extends previous work on the long-term consequences of parental death by suggesting the mechanism by which certain outcomes are observed. As parental death during childhood becomes less common in American society, it is possible that younger children who experience this event are likely to make internal attributions for the cause of the family disruption. Most studies find that children respond to the death of a parent with remorse (Klein, 1940; Stroebe et al., 1994) and symptoms of depression (Gray,
An attribution which suggests that something about the child caused the death to occur is likely to lead to withdrawal and self-doubt, or an internalizing pattern of behaviors. To the extent that anger and distress over the death is expressed internally, self-confidence is likely to be damaged and psychological distress is likely to be enhanced. Another interpretation of this finding which is more likely to explain the response among older children is that those who experience the death of a parent may be likely to model feelings of rejection, worthlessness, or helplessness because adult reactions to the death of a spouse are often characterized by sadness, anxiety, and depression (Fenison, 1986; Gallagher et al., 1983; Parkes, 1972; Stroebe et al., 1988). Children who observe high levels of distress and maladjustment in their parent are likely to reproduce these same behaviors in their own coping efforts. The findings from the present study suggest that the negative effects of making internal attributions for parental death and modeling the behavior of a widowed parent may persist into adulthood.

Another important finding that emerges from the comparison of adults raised by widowed mothers to adults raised in intact families is that the relationship between childhood family structure and self-confidence is moderated by gender of the individual. Specifically, the negative effect of paternal death on self-confidence was stronger for women than for men. This finding may be explained by differences in how males and females are socialized to make causal attributions for negative events. While it has already been argued that parental death is likely to be associated with an internalizing pattern of behaviors, this may be especially true for females. Gjerde et al. (1988) suggest that girls are
often socialized to attribute responsibility for negative events to internal factors such as their own personal qualities and characteristics. As a result, they are likely to turn inward and become self-focused in response to stressful situations and events. Boys, on the other hand, are usually socialized to attribute responsibility for negative events to situational or environmental circumstances (Gjerde et al., 1988). Consequently, they are likely to respond to stressful situations with an overt expression of anger or aggression. In regard to the finding from the present study, it is possible that paternal death has a stronger effect on self-confidence for women than for men because females are more likely to make internal attributions for this and other types of negative events. A more likely explanation for this finding is that children at all levels of cognitive development tend to pattern their behavior after same-sex models (Bussey & Bandura, 1984). Therefore, girls may be more prone than boys to model the emotional reactions to widowhood that are exhibited by their mothers. Since these responses may include feelings of anxiety and dissatisfaction with self (Fenison, 1986; Parkes, 1972), it is possible that the self-confidence of girls who model the behavior of their widowed mothers may remain low well into adulthood. A final interpretation of this finding is that girls may be more likely than boys to define their identities through intimate relationships (Chodorow, 1978; Gilligan, 1982). If this is the case, then disruptions in parental relationships may have a stronger influence on the self-concept of girls than on the self-concept of boys.

When adults raised by widowed fathers are compared to adults raised in intact families, a different type of moderating effect is found. In this comparison, the association
between childhood family structure and individual well-being is moderated by father-child relationship quality. Specifically, the negative association between childhood family structure and self-confidence and the positive association between childhood family structure and psychological distress is stronger for adults who report low relationship quality than for adults who score high on this variable. This finding is consistent with other studies which demonstrate that the relationship between life events and psychological well-being is conditional upon or buffered by level of social support (Cobb, 1979; Thoits, 1982; Turner, 1981). These researchers suggest that the effects of stress are stronger under conditions of low support than under conditions of high support. This is because social support is thought to serve a protective function by enhancing the effective coping behaviors of the individual. In regard to the present study, it appears that if a family is disrupted by the death of a mother, then relationship quality with the widowed father may take on enhanced importance in determining how this event affects the well-being of the child over time.

Results from these comparisons imply that parental divorce and parental death during childhood have differential effects on adult outcomes, but this conclusion cannot be drawn without a direct comparison of individuals who have experienced these events. When compared to adults raised by divorced mothers, adults raised by widowed mothers report slightly higher levels of mother-child relationship quality. Although this effect is only marginally significant, given the length of time between the family disruption and contemporary reports of relationship quality, it is of interest that any effect is observed.
There is stronger evidence, however, in regard to the differential effects of childhood family disruptions on individual well-being. Adults raised by widowed mothers demonstrate significantly lower levels of self-confidence and higher levels of psychological distress than adults raised by divorced mothers. Taken together, these results provide additional support for the argument that parental divorce is more likely to be associated with externalizing behaviors and the modeling of aggression which may cause lasting damage to family relationships, while parental death is more likely to be associated with internalization and the modeling of self-focused behaviors which may cause more harm to individual well-being. These findings are particularly important because they suggest that parental absence alone is not a sufficient explanation for the differences that are found among children who grow up in various family structures. Rather, events such as death and divorce appear to have specific qualities and characteristics that are associated with different outcomes among the individuals who experience them. This suggests that research which does not distinguish between specific types of parental absence and continues to group all single-parent families together will lead to inaccurate and misleading conclusions about the effects of family structure.

It is important to note that the comparisons of adults raised by widowed fathers to adults raised by divorced fathers did not result in significant differences when predicting relationship quality, self-confidence, or psychological distress. There are several possible explanations for why the hypothesized effects were not found. The first possibility is that different family disruptions which lead to father custody do not affect children in distinct
ways. If this is the case, then the absence of the mother alone may provide a sufficient explanation for the outcomes that are observed among children who grow up in single-parent families headed by a father. A more probable explanation is that dimensions of family solidarity or individual well-being, other than the ones examined in this study, are more important in determining differences between adults raised by either divorced or widowed fathers. For example, Cooney and Uhlenberg (1990) find that divorce has particularly negative consequences for frequency of contact between fathers and their adult children. It will be important to determine in future analyses if this finding is specific to divorce or if it applies to family disruptions which involve the death of a mother as well. A third reason why significant differences between adults raised by widowed fathers and adults raised by divorced fathers are not found involves the sample which is used for these comparisons. It is possible that the sample size of these father-child subgroups are too small or homogenous to demonstrate specific differences or detect certain relationships under study. It may be the case that when a larger, more diverse sample of fathers and their adult children are examined the hypothesized differences will emerge. Regardless of the explanation, the inability to detect differences between adults who were raised by their fathers after a divorce or death in the present study does not suggest that individuals who experience these types of events should be grouped together in analyses on the effects of childhood family structure. Rather, these findings indicate that there is considerable work to be done in discovering the types of differences that may exist.
Limitations of the Study

Although there are many advantages to secondary analysis of survey data, including the benefits of having access to a nationally representative sample and specific subgroups that are large enough to conduct statistical analysis, use of data from the NSFH in the present study is also associated with several limitations. As Kiecolt and Nathan (1985) note, one limitation of using secondary data is that errors in interviewing, coding, or data entry made in the original survey are no longer visible to the researcher. It would be naive to assume that mistakes are not made in the collection and development of any data set, but this may be particularly true for a survey as large as the NSFH. The real difference between primary and secondary data analysis in this regard is that the user of a data set such as the NSFH has no way to check for himself or herself on the accuracy of the data. While it may be assumed that painstaking measures were taken to assure the reliability and validity of the data set, it is possible that undetected problems with the NSFH could make the conclusions from the present study questionable or misleading.

Another limitation of using secondary data is that frequently the researcher must accommodate his or her inquiry to the available data, rather than examining the precise issues of interest (Kiecolt & Nathan, 1986). As in any survey, the primary investigators of the NSFH had to make difficult decisions regarding the topics to cover and the amount of space given to each issue. While every effort was made to produce a well-balanced data set that would allow researchers to test a wide range of hypotheses, it is almost inevitable in a survey of this nature and magnitude that very few topics are considered in depth. This is
problematic to the extent that particular survey items are imprecise measures of the concepts that are being examined. For example, in the present study whether or not the respondent's family of origin ever received public assistance is used as a measure of childhood socioeconomic status. Although this is a relatively weak measure of SES, the public assistance variable was used instead of other indicators such as parental education or family income level because it had a significantly lower amount of missing data. Another example is that a single-item indicator of contemporary parent-child relationship quality may not be an adequate measure of affectional solidarity if this variable is conceptualized as a multi-dimensional concept. A more pressing problem is that the present data does not allow us to examine the mechanisms that are responsible for the specific effects that are observed. This study, for example, establishes the existence of certain differences among adults who experienced specific types of childhood family structures. While previous research and theoretical arguments are used to suggest several explanations for these differences, this study does not uncover the primary mechanisms that diminish relationship quality for adult children of divorced parents and individual well-being for adult children of widowed parents. An issue for further study will be to examine which characteristics of parental divorce and parental death lead to different types of adult outcomes and specifically how these events are involved in a process that influences social and personal well-being over time.

A more general limitation of this study involves the cross-sectional nature of the data. Collecting information at one point in time does not allow the researcher to determine
the extent to which childhood family disruptions cause later adult outcomes. This is because one wave of data does not provide enough evidence to sort out whether observed effects are a result of the childhood family disruption itself or a consequence of other circumstances such as family conflict or problems that existed before the divorce or death occurred. For example, Amato, Loomis, and Booth (1995) find that the relationship between childhood family structure and adult well-being is moderated by parental marital conflict. Based on 12 years of longitudinal data, they find that when family conflict is high, children demonstrate better well-being as adults if their parents divorce than if their parents stayed married. In low-conflict families, however, children have higher levels of well-being as adults if their parents stayed together than if they divorced. Because other studies also suggest that at least some of the negative effects of family disruption are likely to be caused by conditions that preceded the separation, research which is based on cross-sectional data cannot lead to conclusions that specific events such as parental divorce or death are the only cause of outcomes that are observed among the adults who experience them. Therefore, the present study provides information on the extent to which adults who are raised within the context of certain family structures differ, rather than determining how childhood family structure causes these differences to occur. Future studies examining the influence of childhood family disruption on adult outcomes should be based on longitudinal data in order to assess the causal relationships that may exist between childhood experiences and adult outcomes. The present study is also limited by the inability to control for family disruptions that occurred after the child was age 19 or when he or she left home for the first time. It is
possible that later life parental divorce and parental death have a considerable influence on both contemporary parent-child relationships and individual well-being. Studies which are able to control for the effects of family disruptions that occur after children are grown may provide a more thorough understanding of how these events affect the individuals who experience them.

A final limitation of the present study is the reliance on a single respondent as the only source of information. As Lorenz, Conger, Simons, Whitbeck, and Elder (1991) note, "Reports from a single source may yield misleading results because of the respondent’s overarching dispositions, global personality traits, or attributional style" (p. 376). This is due to the fact that dispositions, traits, or attributions may influence the judgments that respondents make about conceptually distinct ideas or issues. Another problem with single respondent reports is that individuals tend to recall events or base assessments in a manner that is congruent with their current mood state. For example, Amato (1991) finds that adults who are psychologically distressed report more negative early parental behaviors than adults who are not distressed. In regard to the present study, it is possible that adults who have low levels of self-confidence or high levels of psychological distress may exhibit overly negative reporting on other variables such as parent-child relationship quality. Therefore, the effects that are observed may be attenuated due to the affective mood of the respondent at the time of data collection. As additional waves of the NSFH become available, two strategies may be used in future analyses to minimize the potential bias of reliance on a single reporter. First, reports on the dependent variable (e.g., depression) from one wave of
data could be used to predict the same dependent variable measured in a later wave of data. Second, information collected from other sources such as the parent of the respondent could be used as indicators of theoretically important constructs. Both of these approaches would control for the potentially biasing effects of contemporary mood state.

Garfinkel and McLanahan (1986) suggest that ideally, knowledge of how children fare in different family arrangements should inform social policies to enhance the well-being of future generations. The findings of the present study have particularly intriguing implications in this regard. If divorce has long-term negative effects on family solidarity, then it may be important for parents in this situation to concentrate on the relationship they have with their child by providing him or her with warm and affectionate exchanges. Intervention programs for children of divorce might be designed to teach both parents and children how to develop more effective communication skills. Divorced parents might also be encouraged to engage in positive family activities that allow for individual time with each particular child. If parental death has more negative long-term effects on the child’s well-being, then it might be more important for parents in this situation to concentrate on helping their child develop effective coping skills. Intervention programs for bereaved children might be designed to teach parents how to encourage their children become more aware of their feelings and how to develop positive problem solving techniques. Evaluation of these different types of intervention strategies is just one of the ways that further research may contribute to a more thorough understanding of the differential effects of childhood family structure based on the findings from this study.
REFERENCES


I would like to thank my major professor, Dr. Dan Hoyt, for his support and encouragement throughout five years of graduate school. His advice has always guided me in the right direction and the opportunities he has offered me have made my experience at Iowa State University a very valuable one. I would also like to thank the members of my committee, Dr. Les Whitbeck, Dr. Stacy Rogers, Dr. Betty Dobratz, and Dr. Carolyn Cutrona. Their insightful comments have not only improved the quality of this manuscript, but will continue to influence the research agenda that I pursue in the future. Finally, I would like to thank the individuals who were interviewed in the first wave of the National Survey of Families and Households. Without their participation, this study would not have been possible.
APPENDIX
Table A1: Bivariate Correlations among Study Variables for Respondents Raised in Intact Childhood Family Structure

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<th>Step-Parent</th>
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<th>Father Alive</th>
<th>Relation Quality</th>
<th>Self-Confidence</th>
<th>Psych Distress</th>
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** Significant at the .01 level, * significant at the .05 level
Table A2: Bivariate Correlations among Study Variables for Respondents Raised in Divorced Mother Custody Childhood Family Structure

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Table A4: Bivariate Correlations among Study Variables for Respondents Raised in Intact Childhood Family Structure

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Table A5: Bivariate Correlations among Study Variables for Respondents Raised in Divorced Father Custody Childhood Family Structure

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** Significant at the .01 level, * significant at the .05 level
Table A6: Bivariate Correlations among Study Variables for Respondents Raised in Widowed Custody Childhood Family Structure

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<th>Step-Parent</th>
<th>Father Age</th>
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** Significant at the .01 level, * significant at the .05 level