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THE EFFECTS OF DIVORCE AND MARITAL DISCORD ON ADULT CHILDREN'S PSYCHOLOGICAL WELL-BEING

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Previous research has demonstrated associations between exposure to parental divorce and marital discord while growing up and children's psychological distress in adulthood. Few studies, however, have attempted to explain these associations. Three pathways are evaluated through which family disruption and discord may affect offspring's well-being: children's socioeconomic attainment, children's marital and relationship stability, and the quality of children's relations with parents. Using 17-year longitudinal data from two generations, results show that divorce and marital discord predict lower levels of psychological well-being in adulthood. Parent-child relationships mediate most of the associations between parents' marital discord and divorce and children's subsequent psychological outcomes. Marital discord appears to erode children's emotional bonds with mothers, whereas both divorce and marital discord appear to erode children's emotional bonds with fathers. The results highlight the continuing importance of parent-child ties for children's well-being in early adulthood.

INDIVIDUALS with divorced parents are at increased risk of experiencing psychological problems in adulthood. Although this tendency has been documented in many studies, the explanation for this phenomenon remains elusive. A few studies have considered the possibility that low educational attainment or poor interpersonal skills may mediate the association between parental divorce and adult psychological well-being. Because of the lack of appropriate longitudinal data, however, few studies have attempted to explain the link between childhood family structure and adult psychological functioning.

We use data from a 17-year longitudinal study of two generations to explain the estimated effect of parental divorce on adult offspring's psychological well-being. In ad-

dition to examining the mediating role of socioeconomic attainment and relationship stability, we consider a third mechanism: the quality of relations between offspring and parents in adulthood. Although good reasons exist for assuming that the quality of parent-child ties mediates some of the long-term negative effects of parental divorce, prior studies have not considered this possibility. Another unresolved issue concerns the long-term impact of discord between parents who remain married. In the present study, we examine whether exposure to chronic discord between parents while growing up predicts elevated levels of psychological distress among adults, and whether offspring's socioeconomic attainment, relationship instability, and quality of ties with parents account for this association.

BACKGROUND

PARENTAL DIVORCE

Previous studies have demonstrated that adults with divorced parents, when compared with adults with continuously married par-

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ents, report greater unhappiness, less satisfaction with life, a weaker sense of personal control, more symptoms of anxiety and depression, and a greater use of mental health services. These findings have emerged from analyses based on the General Social Survey (Biblarz and Gottainer 2000; Glenn and Kramer 1985), the National Survey of Families and Households (Amato 1991), the National Survey of Children (Furstenberg and Teitler 1994; Zill, Morrison, and Coiro 1993), the Marital Instability over the Life Course study (Amato and Booth 1991, 1997), the Detroit Area Study (McLeod 1991), and the Survey of Aging, Status, and Social Control (Ross and Mirowsky 1999). Similar associations appear in national samples from other countries, including the National British Child Development Study (Cherlin, Chase-Lansdale, and McRae 1998), the British National Survey of Health and Development (Rodgers 1994), the Canadian General Social Survey (Le Bourdais and Marcil-Gratton 1998), and the Australian Family Formation Study (Amato 1988). The great majority of studies, with few exceptions, support the existence of a link between childhood family structure and adult psychological well-being.

Although it is difficult to establish, the preponderance of evidence suggests that the link between divorce and children's psychological well-being is causal rather than spurious. Cherlin et al. (1998) found that children with divorced parents exhibited poorer adjustment than did children with continuously married parents *prior to* marital dissolution, suggesting that some of the apparent "effect" of divorce was a result of predivorce factors (also see Sun 2001). However, the gap in adjustment between these two groups of children continued to grow throughout adolescence and early adulthood, suggesting that parental divorce had a cumulative impact not accounted for by predivorce factors. The use of a fixed-effects model, which controlled for all time-invariant differences between children with divorced parents and children with continuously married parents, provided further support for a causal interpretation of this link (also see Hetherington 1998). Other studies have shown that the association between parental divorce and long-term outcomes for children persists after controlling

for a large number of predivorce family and child characteristics (Furstenberg and Kiernan 2001), parents' personality (Simons and associates 1996), unobserved heterogeneity (McLanahan and Sandefur 1994), genetic similarity between siblings (Kendler et al. 1992), and the adoption status of children (Brodzinsky, Hitt, and Smith 1993). Overall, most scholars working in this area have concluded that parental divorce has real consequences for children's long-term well-being (Amato 2000; Cherlin 1999; Emery 1999; Furstenberg and Kiernan 2001; Hetherington 1998; McLanahan and Sandefur 1994).

PARENTS' MARITAL DISCORD

The long-term consequences of parents' marital discord have been studied less extensively than the effects of divorce. Nevertheless, exposure to chronic interparental discord appears to have long-term consequences similar to those of divorce. Adults who recall a high level of conflict between parents while growing up tend to report a disproportionately large number of psychological and marital problems in their own lives (Amato and Booth 1991; Booth and Edwards 1990; Kessler and Magee 1993; Overall, Henry, and Woodward 1974). Amato and Booth (1997) used prospective data on parents' reports of marital discord and adult offspring's reports of well-being, thus avoiding problems with common method variance. Their analysis (based on an earlier wave of data from the present study) indicated that parental discord was positively associated with adult offspring's psychological distress 12 years later. Although few studies focus on parents' marital quality, both parental divorce *and* growing up in a high-conflict two-parent family appear to be linked with long-term decrements in children's psychological adjustment.

EXPLANATIONS

Marital dissolution is a process that begins before physical separation and continues after the marriage is legally ended. Separation is typically preceded by a period of conflict or mutual disengagement between spouses. Moreover, divorce is usually followed by a series of stressful circumstances for chil-

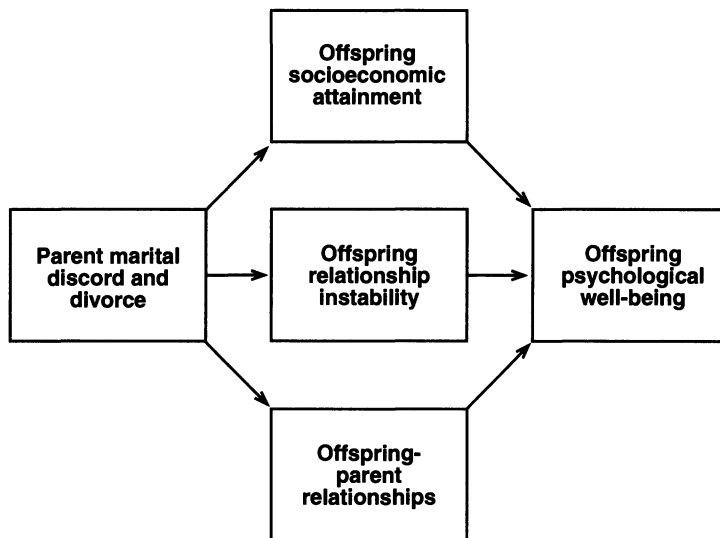


Figure 1. Mediation Model Relating Parents' Marital Discord and Divorce to Offspring's Psychological Well-Being

dren, including reduced contact with non-custodial parents (usually fathers), increased tension between children and custodial parents (usually mothers), continuing rancor between parents, a decline in standard of living, and an increase in residential mobility—often involving moving to neighborhoods with fewer community resources (for a review, see Amato 2000). In addition, divorce is usually followed by the remarriage of one or both parents, and dealing with stepparents represents a new source of stress for many children (Hetherington 1998). Parental remarriage also makes it possible for children to experience multiple parental divorces.

All of these stressful circumstances are likely to impact negatively on children's psychological adjustment. Consequently, the relatively high level of psychological distress among adult children who grew up in divorced families may represent a simple continuation of emotional problems that began in childhood. Most researchers, however, assume that childhood adversities are linked with adult mental health through a variety of intervening structural and psychological processes (e.g., Brown and Harris 1989). Moreover, a life-course perspective (Caspi and Elder 1988; Elder 1994) suggests that experiences in adulthood have the potential to ameliorate, maintain, or exacerbate problems that originate in the family of origin.

Figure 1 outlines our explanatory framework. Our model assumes that three processes in offspring's lives mediate the long-term effects of parental divorce and marital discord on adult psychological well-being: socioeconomic attainment, relationship instability, and the quality of relationships between offspring and parents. To the extent that parental discord and divorce interfere with children's educational attainment, leave them with inadequate interpersonal skills and a history of unstable intimate relationships, or undermine close ties with their parents and kin, children's distress is likely to be reinforced or even amplified after reaching adulthood. Because causal relations among the mediators are unclear, the model assumes that these processes are correlated but does not specify the direction of influence.

SOCIOECONOMIC ATTAINMENT

Parental divorce is associated with lower socioeconomic status in adulthood. Compared with children from two-parent families, children with divorced parents are more likely to drop out of high school, less likely to attend college, and complete fewer years of education overall (Biblarz and Gottainer 2000; Furstenberg and Teitler 1994; McLeod 1991; Ross and Mirowsky 1999; Zill et al. 1993). This educational disadvantage ap-

pears to be a result of several postdivorce factors: a decrease in children's standard of living, moving to neighborhoods with poorer schools, and declines in parental monitoring and school involvement (McLanahan and Sandefur 1994). Given the importance of education in determining later socioeconomic attainment, it is not surprising that occupational status, earned income, and the value of accumulated assets also are relatively low among adults with divorced parents (Amato and Keith 1991; Biblarz and Gottainer 2000; McLeod 1991; Ross and Mirowsky 1999).

Parents' marital discord, even in the absence of divorce, may impact negatively on children's school achievement. Observing overt conflict between parents is a direct stressor for children. In addition, parents who fight frequently, compared with less combative parents, tend to display less warmth toward their children and discipline them more harshly. Presumably for these reasons, children in high-conflict households are at increased risk for antisocial behavior, anxiety, depression, and difficulty in concentrating—factors known to influence school performance (Davies and Cummings 1994; Emery 1999). Few studies have related parental discord to children's educational outcomes in adulthood, although Snarey (1993), using longitudinal data, found that parents' marital quality when children were growing up was positively associated with daughters' (but not sons') later educational and occupational attainment.

Previous studies indicate that socioeconomic status is positively associated with psychological well-being. For example, educational achievement is positively related to people's reports of being happy and having stimulating, pleasant, and rewarding experiences at work and at home (Campbell 1981). Education also decreases the risk of depression (Kessler 1982) and increases people's sense of personal control (Ross and Wu 1995). Moreover, income and economic hardship are associated with psychological well-being independently of education (Ross and Mirowsky 1999). Therefore, if education and income both promote psychological well-being, and if offspring from divorced or discordant families have lower levels of both education and income, then socioeconomic

attainment may account for the link between divorce, marital discord, and offspring's psychological well-being in adulthood.

RELATIONSHIP INSTABILITY

Evidence suggests that parental divorce negatively affects the quality and stability of children's intimate relationships in adulthood. Individuals with divorced parents, compared with individuals with continuously married parents, report more dissatisfaction, problems, and conflict in their own marriages (Amato and Booth 1991, 1997). Similarly, the risk of marital disruption is higher for those who experienced parental divorce as children (Amato and Booth 1997; Bumpass, Martin, and Sweet 1991; Glenn and Kramer 1987; McLanahan and Bumpass 1988; McLeod 1991). Most observers assume that children from divorced families reach adulthood with traits that predispose them to relationship problems, such as a deficit in interpersonal skills, a weak commitment to the norm of lifelong marriage, or personality characteristics that interfere with relationship harmony and stability. Premarital cohabitation also is more common among adult children of divorce (Cherlin, Kiernan, and Chase-Lansdale 1995; Furstenberg and Teitler 1994; Le Bourdais and Gratton 1998). Cohabiting unions, however, are relatively tenuous and short-lived, with a large proportion dissolving before marriage (Bumpass and Lu 2000). This trend, coupled with their higher risk of marital dissolution, means that adults with divorced parents experience more union disruptions than do adults with continuously married parents.

Growing up with discordant but continuously married parents also appears to be a risk factor for offspring's later marital discord and instability. Several cross-sectional studies have shown that people who recall unhappiness in their parents' marriages tend to report less happiness, more conflict, and more problems in their own marriages (Belsky and Isabela 1985; Booth and Edwards 1990; Overall et al. 1974). In a longitudinal study, Caspi and Elder (1988) found that parents' ratings of marital conflict (using data collected when children were growing up) were positively associated with children's later reports of conflict

in their own marriages. Existing evidence, therefore, suggests that marital discord, as well as divorce, is transmitted across generations.

Research generally shows that married people, compared with single people, report greater happiness, fewer symptoms of psychological distress, more positive self-concepts, and better physical health (Aseltine and Kessler 1993; Ross 1995; Waite 1995). Most observers assume that the protective effects of marriage are due to the social support provided by spouses, the capacity of spouses to monitor one another's health, and the general benefits associated with participating in an institutionalized relationship (Nock 1998). Regardless of current marital status, the number of divorces people accumulate appears to be a factor in poor mental health (Kurdek 1990). Therefore, if individuals with histories of unstable relationships are prone to psychological distress, and if growing up in a discordant and unstable home environment makes it more difficult for children to maintain stable relationships in adulthood, then relationship instability may mediate the effects of parental discord and instability on adult offspring's psychological well-being.

RELATIONS WITH PARENTS

Parental divorce is associated with relatively weak parent-child ties in adulthood. Compared with adults with continuously married parents, adults with divorced parents have less frequent contact with parents, exchange less assistance with parents, and describe their relationships with parents less positively (Amato and Booth 1991, 1997; Aquilino 1994; Cooney 1994; Silverstein and Bengtson 1997; Umberson 1992; Zill et al. 1993). Parental divorce and remarriage also are associated with early home leaving among youth—another indicator of tension between parents and children (Amato and Booth 1997; Cooney 1994). Presumably, weak bonds with parents emerge from the turmoil that precedes and follows marital disruption. Research consistently shows that divorce is associated with fewer expressions of parental affection, greater parental harshness in dealing with children's misbehavior, and more inconsistency in dispensing disci-

pline (Davies and Cummings 1994; Hetherington and Clingempeel 1992). Although divorce appears to weaken children's ties with both parents, most studies indicate that the consequences are stronger for fathers than for mothers, presumably because most children reside with mothers following marital dissolution. Studies also show that interparental discord—even in the absence of divorce—is linked with poor relationships with parents among young children (Davies and Cummings 1994; Emery 1999; Hetherington and Clingempeel 1992) as well as adult offspring (Amato and Booth 1997; Rossi and Rossi 1990).

Even though problematic parent-child relationships may originate in childhood, they take on new significance as children make the transition to adulthood—a time when youth leave home, complete their educations, form career plans, become economically independent, marry, and begin their own families. During these critical years, children receive many potential benefits from parents, including emotional support; companionship; advice with educational plans, jobs, homes, and family life; practical assistance with everyday tasks such as child care; and money for special purchases, such as a down payment on a car or home. Parents also connect children with kin (such as grandparents) and other adults (such as family friends) who can serve as sources of support or assistance. These transitional years have become more difficult in recent decades because of a decline in wages for young men, the rising cost of housing, and an increase in the cost of a college education (Amato and Booth 1997). Correspondingly, the number of years that youth are economically and emotionally dependent on parents appears to be increasing (Furstenberg 2000). For example, recent cohorts of youth have been relatively slow to leave the parental home, and among those who do, "returning to the nest" is common (Goldscheider and Goldscheider 1994). Indeed, only when parents reach the last decade of the life course does the flow of assistance between generations shift primarily from children to parents (Rossi and Rossi 1990). Because the early adult years present many challenges to youth, and because parents represent a key resource for making the transition to adulthood, weak ties with par-

ents may exacerbate existing psychological problems or precipitate new ones.

Consistent with this reasoning, cross-sectional research shows that young adults' reports of emotional closeness to parents are positively associated with psychological adjustment (Amato 1994; Barnett et al. 1991; Barnett, Marshall, and Pleck 1992; Rossi and Rossi 1990; Umberson 1992). Not all studies are in agreement about the importance of fathers: Some studies find independent effects of both parents, while other studies show no father influences once the mother-child relationship is taken into account. Nevertheless, the preponderance of evidence indicates that the quality of parent-child relationships continues to be a salient correlate of well-being over the life course. Therefore, if strong parent-child ties promote psychological well-being, and if parental discord and divorce weaken these ties, then the quality of parent-child relations may explain the association between parental discord, divorce, and offspring's psychological well-being.

TESTING THE MODEL

Five prior studies have tested aspects of the model in Figure 1. These studies started with an observed association between parental divorce and a measure of offspring well-being, then added mediating variables to the regression equation, with the decline in the divorce coefficient between models reflecting the degree of mediation. Glenn and Kramer (1985), using the General Social Survey, and Amato (1991), using 1987-1988 National Survey of Families and Households, found that controlling for offspring's education and marital status resulted in modest reductions in the magnitude of associations between parental divorce and several indicators of psychological well-being. Amato (1988), using a national probability sample from Australia, found that controlling for educational attainment reduced the estimated effect of parental divorce on people's sense of control by about one half, suggesting a mediating role for this variable. McLeod (1991), using the Detroit Area Study, found that parental divorce was negatively associated with women's reports of marital happiness, and controlling for marital happiness eliminated

the association between parental divorce and depression. Similarly, Ross and Mirowsky (1999) found that parental divorce was associated with higher depression scores among men and women, and five variables—education, economic hardship, early marriage, being in an unhappy relationship, and being in no relationship—mediated this association. In summary, these five studies provide some support for the mediation model illustrated in Figure 1. No prior study, however, has considered the possible mediating role of parent-child relations, despite the fact that this variable is related to parental divorce as well as to adult well-being. Moreover, no prior study has attempted to determine which processes mediate the long-term effects of parents' marital discord on offspring.

Our study tests the model in Figure 1 using data from the 1997 wave of the Marital Instability over the Life Course Study. Analyses of the 1992 wave of data established that parents' marital discord and divorce are associated with children's psychological distress in adulthood (Amato and Booth 1997). Previous work, however, was not able to determine the factors that mediate these associations. The 1997 wave of data has several advantages over the 1992 data for this purpose: (1) The sample size is larger, increasing from 471 to 691, with a corresponding increase in the number of parental divorces; (2) the sample is older, and hence a larger number of offspring had completed their educations, become economically independent, cohabited, married, or divorced; and (3) the addition of new variables to the survey (such as parents' descriptions of their current relationships with offspring) made it possible to test the mediating role of parent-child relationships.

The present study also has three supplementary goals. The first is to explore gender differences in the estimated effects of divorce and discord. Some observers have argued that boys suffer more than girls, partly because boys (unlike girls) lose access to the same-gender parent (Hetherington and Clingempeel 1992). In contrast, several studies have reported no gender differences (Amato 1991; Zill et al. 1993) or found that the estimated long-term effects of parental divorce are stronger for daughters than for sons (Cooney and Kurz 1996; Glenn and

Kramer 1985; McLeod 1991; Rodgers 1994). Given the uncertainty in the literature about gender differences in the effects of parents' discord and divorce, we test the model separately for sons and daughters. The second goal is to see if weak parent-child bonds in adulthood can be traced to a time when children were still living with parents, and to determine, in cases of marital disruption, if problematic parent-child relationships were present prior to (rather than following) parental divorce. The final goal is to consider not only whether parents divorced, but also whether these divorces were followed by additional family transitions (remarriages and divorces). Several observers have suggested that the number of family transitions to which children must adjust is a better predictor of children's problems than is a single instance of marital disruption (Aquilino 1996; Pryor and Rodgers 2001; Wu and Martinson 1993). In the present study, we consider alternative models in which family structure is treated as an ordered variable (the number of transitions) rather than as a dichotomy (divorced versus not divorced).

METHOD

SAMPLE

Our analysis is based on a 17-year longitudinal study titled *Marital Instability over the Life Course*. The target population consisted of all married individuals in households in the contiguous United States with a telephone, both spouses present, and both spouses 55 years of age or less. In 1980, telephone interviewers used random-digit dialing to select a sample of households and a second random procedure to determine whether to interview the husband or wife. Seventeen percent of targeted telephone numbers could not be reached after 20 callbacks. Of those individuals contacted, 78 percent gave complete interviews. The final sample consisted of 2,033 married persons (not couples). When compared with U.S. census data, the sample was representative of married individuals with respect to age, race, household size, housing tenure, presence of children, and region of the country. In 1983, 1988, 1992, and 1997, we re-interviewed 78 percent, 66 percent, 58 percent,

and 53 percent, respectively, of the original respondents. Because of deaths during this period, the 1997 wave included interviews with 56 percent of living respondents.

A sample of offspring (children of the main respondents) was included as part of the 1992 and 1997 waves of data collection. To be eligible, offspring had to (1) be 19 years of age or older at the time of the interview, and (2) have resided in the parental household in 1980. Eighty-seven percent of the parents in 1992 and 1997 with eligible offspring provided the names and telephone numbers of their children. We obtained interviews with 88 percent of those offspring for whom we had names, for an overall completion rate of 77 percent. When parents had more than one eligible child, a random procedure was used to select one child for inclusion in the study. Our analyses pooled data from three groups: 431 offspring interviewed in 1992 and 1997, 40 offspring interviewed in 1992 but not in 1997 (mainly because we were unable to locate them), and 220 offspring who turned age 19 after 1992 and were interviewed for the first time in 1997. Because the quality of parent-child relationships was a central variable in the analysis, we omitted 36 offspring with a deceased biological parent, resulting in a final sample of 655.

Because the analysis pooled the three groups of offspring, we checked to see how these groups differed. The 40 offspring who dropped out between 1992 and 1997, compared with the 431 offspring who remained in the study, scored significantly lower on years of education, self-esteem, happiness, and life satisfaction ($p < .05$). The 220 offspring interviewed for the first time in 1997 were younger than the 431 interviewed for a second time in 1997 (mean age = 23 years versus 30 years, respectively). Because of this age difference, those interviewed for the first time in 1997 were less likely themselves to have married or to have experienced a divorce or a disrupted cohabitation. The three subsamples did not differ on parents' marital discord and divorce—the main independent variables in our analysis. In preliminary analyses, we controlled for membership in the three groups using dummy variables, but this procedure made little difference to parameter estimates. Conse-

quently, for the sake of parsimony, we do not control for sub-sample membership in the analyses reported here.

With respect to attrition, 1,371 respondents (parents) had children in the targeted age range living at home in 1980. We obtained interviews with offspring (one per family) from 691 of these parents in 1992 or 1997 (50.4 percent of the families). We relied on Heckman's (1979) method to correct for attrition bias. We began by constructing a probit regression equation to model the attrition of parents from the panel, based on a variety of potential predictors. Attrition was significantly greater among African Americans, relatively young or old parents, fathers, renters, parents with less education, parents married for fewer years, and parents living in the South. Marital discord and divorce, along with several additional demographic variables, were not significant predictors of attrition. Based on the significant predictor variables, we calculated lambda to reflect the probability of dropping out of the panel. We carried out a second probit analysis predicting failure to complete an offspring interview, given that parents remained in the panel, and calculated a second lambda variable on this basis. Both variables serve as controls.

VARIABLES

We rely on the 1997 wave of data for the majority of offspring variables. As noted above, a few offspring were interviewed in 1992 but not in 1997. Because omitting these cases could bias our results, we pooled their 1992 data (using reports of psychological well-being and parent-child relationships in that year) with the 1997 data from the rest of the sample. Most of the parent variables were obtained from the 1980, 1983, and 1988 interviews. Means and standard deviations for all variables appear in Table 1.

INDEPENDENT VARIABLES. Of the 655 offspring in the sample, 137 (21 percent) experienced a parental divorce or permanent separation while growing up. Of these individuals, 50 experienced divorce prior to 1980 and were living in stepfamilies during the first wave of data collection. Another 87 offspring experienced parental divorce between 1980 and 1997. (Only two cases involved

permanent separation, and we counted these as "divorces" in all analyses.) Offspring varied widely in age at the time of parental divorce: 27 percent were 0 to 4 years old, 23 percent were age 5 to 11, 35 percent were age 12 to 19, and 15 percent were age 20 to 25. We include the older offspring for conceptual and empirical reasons. Because educational levels are rising and because many youth are postponing full-time employment and marriage, many researchers now view the period of dependency and "adolescence" as extending well into the third decade of life (Furstenberg 2000). Moreover, Cooney and Kurz (1996) and Furstenberg and Kiernan (2001) found that parental divorce when children were in their twenties was associated with elevated levels of depression, less intimacy with fathers, more relationship instability, and other personal problems. In the present study, we carried out analyses both including and excluding offspring in their early twenties at the time of divorce, and the results were nearly identical. Furthermore, age at parental divorce was not related to offspring's psychological well-being ($r = .10$, $p > .10$). Time since divorce also was unrelated to psychological well-being.

As an alternative to a dichotomous variable measuring divorce, we create a variable reflecting the number of family transitions to which children were exposed prior to reaching adulthood. Among the 137 children with divorced parents, 62 percent saw their mothers remarry, 62 percent saw their fathers remarry, 23 percent saw their mothers experience a second divorce, and 12 percent saw their fathers experience a second divorce. Counting all parental divorces and remarriages, the number of family transitions experienced by offspring in this sample ranged from 0 to 5.

Three scales (completed by parents) measure parents' marital discord in 1980, 1983, and 1988. The first is a 5-item measure of marital conflict ($\alpha = .54$). Items asked about fights over the household division of labor, fights over child care, the frequency of disagreement in general, the number of serious quarrels in the past two months, and whether violence (initiated by either partner) had occurred in the marriage. The second scale is a 13-item measure of marital problems ($\alpha = .78$). Questions addressed the existence of

Table 1. Means and Standard Deviations of Variables Used in the Analysis: Marital Instability over the Life Course, 1980 to 1997

Variable	Mean	Standard Deviation	Range
<i>Independent Variables</i>			
Parents' divorce	.21	.41	0-1
Parents' marital discord	.24	.43	0-1
Number of family transitions			
0	.79	.41	0-1
1	.05	.22	0-1
2	.05	.22	0-1
3	.06	.24	0-1
4 or 5	.05	.24	0-1
<i>Dependent Variables</i>			
Offspring's self-esteem	3.38	.41	2.17-4.00
Offspring's psychological distress	1.68	.35	1.00-3.00
Offspring's life satisfaction	3.72	.60	1.86-5.00
Offspring's happiness	2.40	.54	1.00-3.00
<i>Control Variables</i>			
Offspring is female	.50	.50	0-1
Offspring's age	27.39	5.71	19-40
Offspring is nonwhite	.08	.28	0-1
Parents' education	13.87	2.17	8-21
Mother was interviewed	.62	.49	0-1
<i>Mediating Variables</i>			
Offspring's education	14.73	2.40	9-22
Offspring's income (in \$1,000s)	18.39	13.39	0-65
Offspring is married	.45	.50	0-1
Number of offspring's disrupted unions	.42	.84	0-7
Quality of relations:			
Mother-child (parent)	2.71	.42	1.00-3.00
Father-child (parent)	2.50	.56	1.00-3.00
Mother-child (offspring)	2.68	.40	1.00-3.00
Father-child (offspring)	2.47	.53	1.00-3.00
Early parent-child (parent)	3.34	.44	1.25-4.00

Note: Sample includes 655 adult children.

problems in the relationship, such as whether one (or both) partners is jealous, is critical, is not home enough, is unfaithful, or has difficulty controlling anger. The number of reported problems serves as the scale score. The third scale is a 13-item measure of divorce proneness ($\alpha = .91$). Items deal with cognition (thinking about divorce) as well as behavior (discussing the possibility

of a divorce with spouse, friends, or family members), and the sum of the items serves as the scale score. Correlations between the three scales (within the same interview year) range from .49 to .57 (all $p < .001$) (see Amato and Booth 1997 for additional details on these scales).

To form an overall measure of discord for a particular year, we compute z-score trans-

formations of each scale (to weight them equally) and took the sum. Correlations of this composite measure across time are high: $r = .71$ between 1980 and 1983, $r = .66$ between 1983 and 1988, and $r = .59$ between 1980 and 1988 (all $p < .001$). For parents who remained continuously married, we calculate the overall discord score as the mean of the scores for 1980, 1983, and 1988. For parents who divorced, we rely on the mean of all scores prior to marital dissolution. We split the scale at approximately the 75th percentile to distinguish high-discord couples from moderate- and low-discord couples. This step allows the creation of three groups: parents who divorced ($N = 137$), high-discord parents who did not divorce ($N = 158$), and low- or moderate-discord parents who did not divorce ($N = 360$). The first two groups are represented as dummy variables in the analysis, and the third group serves as the omitted reference category.

DEPENDENT VARIABLES. We use four scales to measure offspring's psychological well-being: the Rosenberg (1965) measure of self-esteem ($\alpha = .77$), the Langner (1962) measure of distress symptoms ($\alpha = .73$), a 7-item scale of satisfaction with various domains of life, including job, home, friends, and neighborhood ($\alpha = .65$), and a single-item rating of overall happiness with life (1 = "not very happy," 2 = "pretty happy," 3 = "very happy").

CONTROL VARIABLES. We control for offspring's gender, age, and race. Half of offspring were female, and 8 percent were nonwhite. The ages of offspring ranged from 19 to 40, and two-thirds were in their twenties. Because parents' education (represented as the mean of the mother's and father's years of education) could be a cause of parental discord and divorce, as well as of children's well-being, we use it as a control variable in all analyses. More mothers than fathers served as the interviewed parent.

MEDIATING VARIABLES. We use offspring's years of education and annual earned income as indicators of socioeconomic attainment. We rely on two variables to measure offspring's relationship instability. One is the offspring's current marital status. Nearly half of offspring (45 percent)

were married at the time of the interview. The second variable is the total number of disrupted unions offspring themselves had experienced, including prior divorces and cohabitations that ended without marriage. Twenty-nine percent of offspring had experienced one or more union disruptions, resulting in a mean for this variable of .42. Because this variable is positively skewed, we also tried a dichotomous version reflecting any disrupted relationships, but the dichotomous variable yielded similar results.

With respect to the quality of parent-child relations, offspring rated their mothers and fathers on five items, including "How well do you feel that your mother understands you?" and "How much respect does your father show you?" (1 = "not very much," 2 = "somewhat," 3 = "a great deal"). Other items dealt with trust, fairness, and the overall closeness of the relationship ($\alpha = .87$ for mothers and .90 for fathers). In 1997, the interviewed parent rated the focal child on three comparable items referring to understanding, respect, and overall closeness ($\alpha = .87$). Parents also responded to items reflecting the relationship between the noninterviewed parent and the focal child ($\alpha = .87$). Because these data were collected in 1997, in all cases of parents' marital dissolution they reflect the parent-child relationship *after* divorce. Correlations between parents' and children's ratings are moderately high: $r = .45$ for the mother-child relationship and $r = .54$ for the father-child relationship (both $p < .001$).¹

We also include a variable reflecting the general quality of parent-child relations when offspring were living at home. In

¹ Using one parent to provide proxy data on the other parent's relationship with the focal child was a less than optimal procedure but better than having no data at all. When fathers were interviewed, children's reports of the mother-child relationship correlated more strongly with fathers' reports of the mother-child relationship than with fathers' reports of the father-child relationship. Similarly, when mothers were interviewed, children's reports of the father-child relationship correlated more strongly with mothers' reports of the father-child relationship than with mothers' reports of the mother-child relationship. These trends support the discriminant validity of parents' reports.

1980, 1983, and 1988, parents responded to six questions about their children, including, "How often do you wish that you didn't have to live with your children?" (1 = "very often," 4 = "never"), "Would you say that your children have given you more than the usual number of problems?" (1 = yes, 0 = no), and "Overall, how close do you feel to your children? (1 = "not close at all," 4 = "very close"). To form a general measure of early parent-child relations, we equally weight and average the items across the three time periods ($\alpha = .65$). For children who left home prior to 1988, we base the score on 1980 and 1983 data only. In cases of divorce after 1980, we base the score on the mean of all items answered by parents *prior to marital dissolution*. We did not calculate scores for the 50 children whose parents had divorced prior to 1980 and hence were living in stepfamilies in that year. Note that this variable refers to relations between the interviewed parent and *all* children in the household. Information about parents' relations with the focal child in particular would have been preferable, but data were not available that far back in time. Focal children, on average, were 10 years old in 1980 and 18 years old in 1988.

MISSING DATA. Data were missing for several variables, with the greatest percentage (15 percent) occurring for the parent's rating of the relationship between the child and the other parent. We use three strategies to deal with missing data. First, we carry out all analyses using listwise deletion of missing data. This reduces the sample size by 20 percent, however. Second, we use full maximum-likelihood estimation with missing data (Arbuckle 1997). Although this procedure allows us to include all cases in the analysis, it is difficult to calculate fit indices for models. Third, we rely on missing data imputation using the expectation-maximization algorithm (Allison 2001). This method provides accurate estimates with up to 50 percent missing data. Data imputation also allows the use of all cases and the computation of fit indices. Because the results of the three methods for handling missing data are essentially identical, we present the results based on data imputation.

RESULTS

For the main analysis, we rely on structural equation modeling using the Analysis of Moment Structures (AMOS) software (Arbuckle 1997). We treat offspring's psychological well-being as a latent variable with four observed indicators: self-esteem, distress, life satisfaction, and happiness. We also treat mother-child and father-child relations as latent variables with two observed indicators reflecting parents' and children's reports. We weight parents' and children's reports equally by constraining the unstandardized loadings to be the same.

Figure 2 shows the measurement model for these three latent variables. All of the coefficients in the model are statistically significant at $p < .05$. Fit indices reveal that the model fits the data reasonably well. The latent mother-child and father-child relationship variables are positively correlated, suggesting that children who had a positive (or negative) relationship with one parent also tend to have a positive (or negative) relationship with the other parent. Moreover, each latent relationship variable is positively correlated with the latent psychological well-being variable, indicating that the quality of ties with parents is bound up with the offspring's well-being in adulthood. With respect to the relationship variables, note that we allow the error terms for parents to be correlated, along with the error terms for offspring. Although the model in Figure 2 does not include correlations between the errors for the indicators of well-being and children's ratings of parent-child relationships, correlations are included in the structural model (described below) to control for common method variance.

Table 2 presents the results of six structural equation models derived from six separate computer runs. Model 1 shows that divorce and marital discord predict lower psychological well-being among offspring. Although the two variables account for only 4 percent of the variance in offspring well-being, recasting the b coefficients as effect sizes tells a different story. Because the standard deviation of the latent well-being variable (not shown) is .612, the difference between offspring with divorced parents and those with continuously married par-

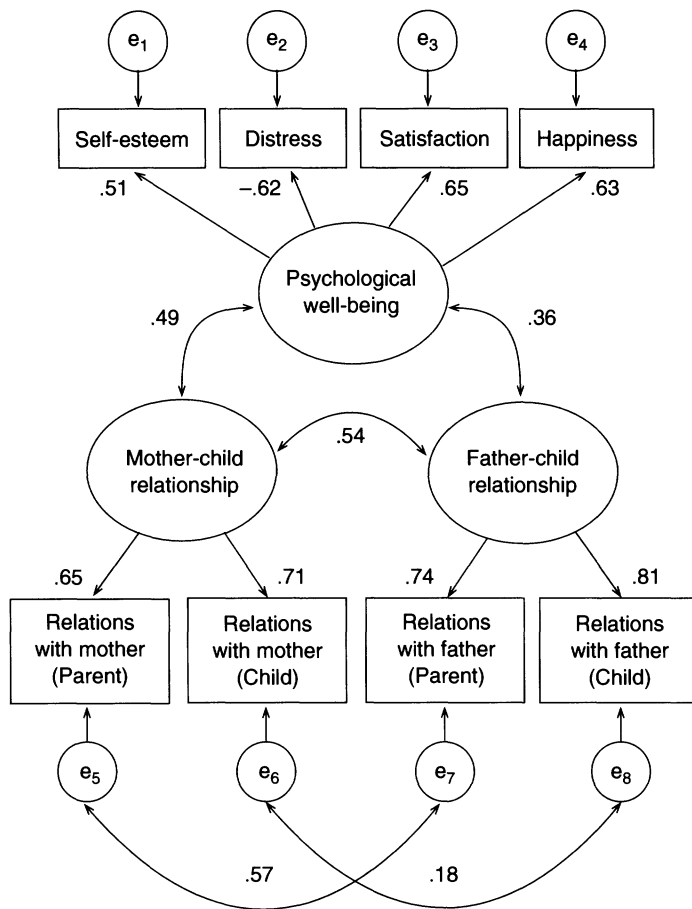


Figure 2. Measurement Model for Mother-Child Relations, Father-Child Relations, and Offspring's Psychological Well-Being

Note: All coefficients are standardized and are significant at $p < .05$ (two-tailed tests); $\chi^2 = 44.6$, d.f. = 17, GFI = .98, CFI = .98, RMSEA = .05.

ents (with low-discord marriages) represents .42 of a standard deviation. The corresponding difference for offspring with continuously married, high-discord parents represents .38 of a standard deviation. These effect sizes are moderate in magnitude and large enough to be nontrivial (Cohen 1988).

Model 2 includes the five control variables. The b coefficients for parental divorce and marital discord become slightly larger, rather than smaller, indicating a small suppression effect. No control variables are significant. Models 3, 4, and 5 add the proposed mediating variables in separate blocks. (To save space, the table does not show the equations in which mediators served as dependent variables.) Model 3 indicates that education and income are positively associated

with offspring's psychological well-being. Adding these variables to the equation, however, reduces the coefficients for parental divorce and marital discord slightly (Model 3 versus Model 2), indicating little mediation. Model 4 removes the socioeconomic variables and enters offspring's marital status and disrupted unions to the equation. Although married offspring report higher psychological well-being than do single offspring, a history of unstable relationships is not related to well-being. Moreover, including these variables in the model reduces the b coefficients modestly, indicating little mediation.

Model 5 reveals that the quality of parent-child relations is positively associated with offspring's psychological well-being.

Table 2. Unstandardized Coefficients from the Regression of Offspring's Psychological Well-Being on Parents' Divorce and Marital Discord: Marital Instability over the Life Course, 1980 to 1997

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Parents' divorce	-.259*** (.075)	-.261*** (.076)	-.246*** (.073)	-.231** (.074)	.088 (.107)	.079 (.102)
Parents' marital discord	-.234** (.071)	-.243*** (.072)	-.240*** (.070)	-.230*** (.070)	-.103 (.073)	-.111 (.069)
Offspring is female	—	.064 (.058)	.103 (.059)	.061 (.056)	.047 (.058)	.083 (.057)
Offspring's age	—	-.003 (.005)	-.015* (.006)	-.012* (.006)	-.003 (.005)	-.020** (.006)
Offspring is nonwhite	—	-.030 (.104)	-.028 (.101)	-.029 (.101)	-.103 (.103)	-.101 (.098)
Parents' education	—	.010 (.013)	-.004 (.014)	.015 (.013)	-.004 (.013)	-.003 (.013)
Mother was interviewed	—	-.070 (.059)	-.067 (.058)	-.055 (.058)	-.046 (.060)	-.029 (.057)
Offspring's education	—	—	.033** (.013)	—	—	.017 (.013)
Offspring's income	—	—	.008** (.003)	—	—	.006* (.002)
Offspring is married	—	—	—	.274*** (.068)	—	.277*** (.067)
Number of offspring's disrupted unions	—	—	—	-.037 (.036)	—	-.029 (.036)
Mother-child relations	—	—	—	—	.731*** (.171)	.597*** (.147)
Father-child relations	—	—	—	—	.345* (.141)	.320* (.136)
R ²	.039	.046	.086	.092	.259	.301
χ ²	21.3	62.6	81.8	84.5	143.9	186.1
d.f.	8	23	29	29	48	67
GFI	.989	.983	.981	.981	.972	.971
CFI	.973	.925	.941	.933	.941	.949
RMSEA	.050	.051	.053	.054	.055	.052

Note: The sample size for all equations is 655. Models are based on maximum-likelihood estimation. Standard errors are in parentheses.

* $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed tests)

The effect for mothers is especially strong, with each step on the relationship scale (range = 1 to 3) increasing the latent well-being variable by over one standard deviation. Furthermore, adding parent-child relations to the model reduces the coefficients for parental divorce and marital discord to nonsignificance. The coefficient for divorce changes direction (from negative to posi-

tive), although it is no longer significantly different from zero, whereas the coefficient for marital discord is reduced to less than half its value in Model 2. These results suggest that a decline in the closeness of parent-child relations mediates much of the association between parental divorce, marital discord, and offspring's psychological well-being in adulthood. Model 6 includes all of

Table 3. Unstandardized Coefficients from the Full Structural Model: Marital Instability over the Life Course, 1980 to 1997

Independent Variable	Dependent Variable						
	Off-spring's Education	Off-spring's Income	Offspring Is Married	Disrupted Unions	Relations with Father	Relations with Mother	Psychological Well-Being
Parents' divorce	-.320 (.223)	.387 (1.130)	-.031 (.045)	.408*** (.081)	-.642*** (.045)	-.182*** (.038)	.079 (.102)
Parents' marital discord	.149 (.214)	-.125 (1.085)	-.024 (.043)	.099 (.078)	-.151*** (.039)	-.131*** (.037)	-.111 (.069)
Offspring is female	.439* (.173)	-6.808*** (.879)	.003 (.035)	-.039 (.063)	-.037 (.031)	.041 (.030)	.083 (.057)
Offspring's age	.089*** (.019)	1.160*** (.077)	.038*** (.003)	.032*** (.006)	.002 (.003)	-.002 (.003)	-.020** (.006)
Offspring is nonwhite	-.357 (.312)	1.123 (1.585)	.003 (.062)	.115 (.113)	.091 (.057)	.101 (.053)	-.101 (.098)
Parents' education	.340*** (.040)	.243 (.204)	-.026** (.008)	-.026 (.015)	.012 (.007)	.015 (.007)	-.003 (.013)
Mother was interviewed	-.021 (.178)	-.135 (.905)	-.058 (.036)	-.054 (.065)	-.113** (.032)	.001 (.030)	-.029 (.057)
Offspring's education	—	—	—	—	—	—	.017 (.013)
Offspring's income	—	—	—	—	—	—	.006* (.002)
Offspring is married	—	—	—	—	—	—	.277*** (.067)
Number of offspring's disrupted unions	—	—	—	—	—	—	-.029 (.036)
Mother-child relations	—	—	—	—	—	—	.597*** (.147)
Father-child relations	—	—	—	—	—	—	.320* (.136)
R ²	.154	.299	.214	.086	.395	.069	.301

Note: Sample size is 655. Models are based on maximum-likelihood estimation. Standard errors are in parentheses. $\chi^2 = 186.1$, d.f. = 67, GFI = .971, CFI = .949, RMSEA = .052. This model also contains correlations between error terms for all mediating variables.

* $p < .05$ ** $p < .01$ *** $p < .001$ (two-tailed tests)

the mediating variables. The coefficients for divorce and marital discord change little between Models 5 and 6, indicating that offspring's education, income, marital status, and relationship disruptions contribute little to the mediation model.

To confirm the mediating role of parent-child relations, we use the method developed by Clogg, Petkova, and Haritou (1995) to compare regression coefficients. The coefficients for divorce and marital discord in Models 5 and 6 are significantly different ($p < .05$) from each of the corresponding coef-

ficients in Models 1 through 4. No other comparisons are significant.

The full set of structural equations for Model 6 is shown in Table 3. The first row indicates that offspring from divorced families (compared with offspring with continuously married, low-discord parents) achieved about one-third year less education, although the coefficient is not significant. Parental divorce is not related to offspring's earned income or offspring's marital status, although it is positively and significantly associated with offspring's

number of relationship disruptions. Parental divorce is negatively associated with both of the latent parent-child variables, and these associations are substantial. Compared with offspring with continuously and happily married parents, offspring with divorced parents score one and one-half standard deviations lower on father-child relations and about two-thirds of a standard deviation lower on mother-child relations. (The standard deviations for the latent variables are .424 and .277, respectively.) Parents' marital discord is not related to offspring's education, income, marital status, or relationship disruptions, although it is associated with poorer relations with mothers and fathers.

Table 3 also reveals a number of significant associations involving the control variables. Daughters are better educated but earn less money than sons. Older offspring have more education, have more income, are more likely to be married, and have experienced a greater number of relationship disruptions. Parents' education is positively related to offspring's education and negatively related to offspring being married. Each of these correlations is consistent with prior research, as well as with common sense. Finally, the quality of father-child relations is lower when mothers, rather than fathers, were interviewed. This association is a result of the fact that mothers rated the father-child relationship less positively than did fathers. (The gender of the interviewed parent, however, is not related to the offspring's ratings of fathers.) This finding demonstrates the necessity of controlling for the gender of the interviewed parents.

As noted earlier, the model in Figure 1 does not specify causal paths between the mediating variables. Although not shown in Table 3, however, the model includes correlations between the residuals of all mediators. Significant correlations include offspring's education and the number of disrupted relationships ($r = -.17, p < .001$), offspring's education and the quality of father-child relations ($r = .10, p < .05$), offspring's education and the quality of mother-child relations ($r = .12, p < .01$), offspring's income and being married ($r = .11, p < .01$), being married and the number of disrupted relationships ($r = -.30, p <$

$.001$), and the quality of relations with mothers and the quality of relations with fathers ($r = .51, p < .001$). All of these correlations are consistent with prior research.

ASSESSING THE EFFECT OF ATTRITION

To assess whether sample attrition affected our results, we reran the models in Table 2 controlling for lambda 1 (reflecting attrition of parents from the panel) and lambda 2 (reflecting failure to obtain an offspring interview, given that parents remained in the panel). Neither lambda variable is associated with offspring's psychological well-being. Adding the lambda control variables to Model 2 in Table 2 reduces the magnitude of the b coefficient for divorce by 6 percent and the b coefficient for discord by 2 percent, and both coefficients remain significant ($p < .001$). Results are comparable in other models. These findings indicate that adding controls for sample attrition results in only minor changes in the estimated effects of divorce and marital discord.

GENDER DIFFERENCES

Because some prior studies suggest differences between sons and daughters in the long-term effects of parental divorce, we tested for gender differences using multi-group models. Structural coefficients for sons and daughters (Model 2 in Table 2) are constrained to be the same in one model and are allowed to vary in another model, with the difference in chi-square values serving as the significance test. This procedure reveals that the estimated effects of parental divorce and marital discord on well-being are not significantly different for sons and daughters. Additional tests reveal that the associations between the parental divorce, marital discord, and the mediating variables do not differ significantly between sons and daughters, with one exception. The estimated impact of parental divorce on father-child relations is stronger for daughters ($b = -.77$) than for sons ($b = -.47, \chi^2 = 13.8, d.f. = 1, p < .001$). This difference, however, has no implications for the mediation process. For sons as well as daughters, parent-child relations appear to mediate the estimated effects of divorce and discord.

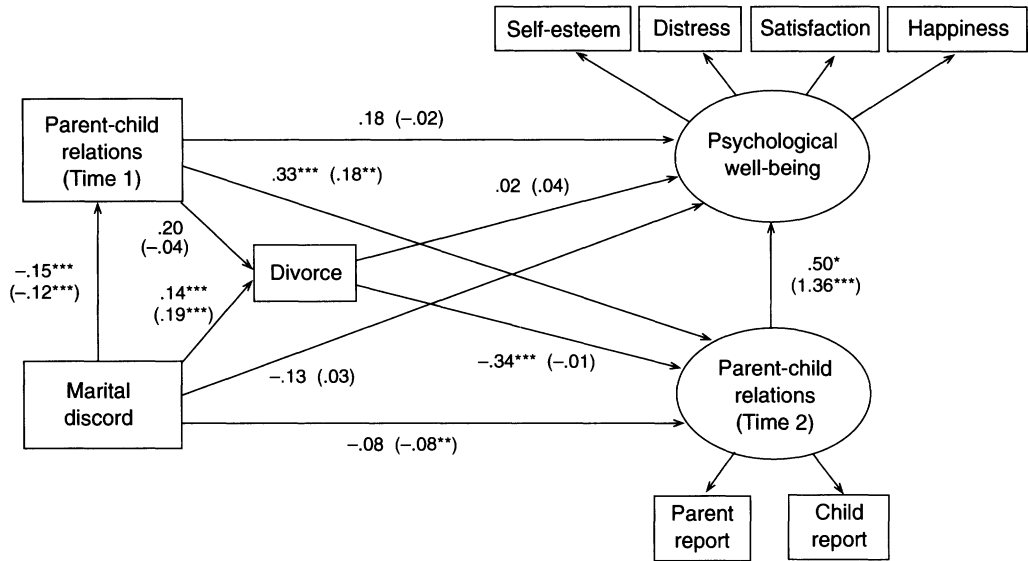


Figure 3. Unstandardized Coefficients from the Structural Equation Model Showing Links between Marital Discord, Divorce, and Parent-Child Relations at Time 1 and Time 2, and Offspring's Psychological Well-Being

Note: Numbers in parentheses are *b* coefficients for mothers. For fathers, $\chi^2 = 39.8$, d.f. = 34, GFI = .97, CFI = .98, and RMSEA = .03. For mothers, $\chi^2 = 62.2$, d.f. = 34, GFI = .98, CFI = .95, RMSEA = .05.

p* < .05 *p* < .01 ****p* < .001 (two-tailed tests)

THE ROLE OF EARLY PARENT-CHILD RELATIONS

To see if problems in parent-child relations could be traced to a time when children were still living at home with parents, we construct a structural equation model that includes the 1980–1988 measure of parents' relations with children. In this model (shown in Figure 3), we assume that marital discord affects parent-child relations at time 1 (t_1), subsequent divorce, and parent-child relations in adulthood (t_2). The model also includes the full marital discord scale rather than the dichotomized version.

To test this model, it is necessary to omit the 50 cases of divorce that occurred prior to 1980 (and for whom we had no data on parent-child problems or marital discord prior to divorce), leaving 87 cases of divorce. Recall that this parent-child relations scale is based only on items completed by parents prior to marital dissolution. Models were run separately for fathers and mothers because the measure of parent-child relations (t_1) refers only to the interviewed parent and not the interviewed parent's spouse.

The two analyses involve 376 mothers (including 59 cases of divorce) and 229 fathers (including 28 cases of divorce). Although not shown in the figure, the model includes correlations between the error term for all variables based on parents' reports (parent-child relations at t_1 , parent-child relations at t_2 , and marital discord), as well as the correlation between the error terms for children's reports of parent-child relations at t_2 and children's reports of psychological well-being. In addition, although parent-child relations at t_1 and marital discord are treated as observed variables, the model incorporates estimates of measurement error for these variables to provide more accurate parameter estimates.

Figure 3 shows the results for fathers and mothers; the unstandardized *b* coefficients for mothers are in parentheses. Note that for fathers as well as mothers, marital discord is negatively related to parent-child relations in childhood (t_1) as well as adulthood (t_2). In addition, for fathers and mothers, parent-child relations (t_1) are positively related to parent-child relations in adulthood (t_2), indicating a degree of continuity over time.

These results suggest that part—but not all—of the negative effect of early marital discord on parent-child relations in adulthood can be traced to a time when children were still living at home. Not surprisingly, marital discord increases the likelihood of divorce, regardless of whether mothers or father reported on discord. The results for mothers and fathers differ in one respect, however. For fathers (but not for mothers) divorce is associated with more negative father-child relations in adulthood, net of predivorce marital discord and predivorce father-child relations. These findings suggest that for mothers, the apparent effects of divorce are largely accounted for by discord that preceded marital dissolution. For fathers, however, discord and divorce appear to have independent effects on later relations with offspring.

The quality of parent-child relations in adulthood (t_2) is the only significant predictor of offspring's psychological well-being in the model. For fathers, marital discord, early parent-child relations (t_1), and divorce appear to have indirect effects on offspring's psychological well-being through their impact on parent-child relations in adulthood. For mothers, marital discord and early parent-child relations (but not divorce) appear to have similar indirect effects. These results suggest that parent-child relations in adulthood (net of parent-child relations in childhood) mediate much of the effect of parental discord and divorce on adult offspring's psychological well-being.

NUMBER OF FAMILY TRANSITIONS

Although most studies consider parental divorce as a discrete event, one also can conceptualize divorce as the first step in a series of family transitions involving additional parental remarriages and divorces. In this analysis, we replaced the dichotomous parental divorce variable with the family transition variable, coded as a series of dummy variables to capture 1, 2, 3, and 4 or more parental divorces and remarriages. No transitions (that is, parents continuously and happily married) served as the omitted comparison group. (See Table 1 for group sizes.) A structural equation model, which includes the full set of control variables, the dichoto-

mous discord variable, and all 655 cases, reveals a monotonic association between the number of transitions and offspring's psychological well-being. For 1, 2, 3, and 4 or more transitions, the respective b coefficients are $-.17$ (n.s.), $-.19$ (n.s.), $-.27$ ($p < .05$), and $-.42$ ($p < .01$). Interestingly, it was only when three or more transitions occurred that children's well-being was significantly lower than that of children from low-discord two-parent families. Comparable results are obtained when the father-child relations variable is treated as the dependent variable. For 1, 2, 3, and 4 or more transitions, the respective b coefficients are $-.53$, $-.62$, $-.62$, and $-.84$ (all $p < .001$). (The coefficients for mothers did not vary with the number of transitions.) Further analysis reveals that the coefficients for multiple and single parental transitions do not differ significantly, although this may be a result of the small number of cases in each group. We cannot say, therefore, that the estimated effect of multiple transitions is significantly greater than the estimated effect of a single divorce. Moreover, the small number of cases limits the extent to which we can decompose the transition variable into different types of transitions involving fathers versus mothers. Nevertheless, these results suggest the utility for future studies of treating changes in family structure as an ordered variable rather than as a dichotomy.

DISCUSSION

Our study makes four contributions. First, we have replicated previous research showing that children who experience parental divorce while growing up tend to report a comparatively low level of psychological well-being in adulthood. The gap in well-being between offspring with divorced parents and offspring with continuously married parents appears for sons as well as for daughters and is large enough to be non-trivial.

Second, we have shown that parents' marital discord has long-term implications for both sons and daughters that are comparable to marital dissolution. Although other studies have offered similar findings, our research design is particularly strong, with parents reporting on marital discord in the

1980s and offspring reporting on psychological well-being in the 1990s.

Third, rather than focusing on divorce as a single event, our findings suggest the utility of viewing divorce as the first step in a series of family transitions to which children must adjust. In the present study, over three-fourths of children who experienced divorce also had to contend with at least one parental remarriage, and many of these children experienced a second parental divorce as well. Our data suggest that children's psychological well-being generally declines with the number of family transitions—a finding consistent with recent work indicating that multiple transitions may be more important than a single divorce in understanding children's long-term adjustment (Aquilino 1996; Pryor and Rodgers 2001; Wu and Martinson 1993).

Fourth, we have gone beyond prior studies by testing a causal model to explain the lingering effects of parental discord and divorce on offsprings' psychological well-being. One might expect that children would gradually recover from stress in the family of origin as they leave home and become independent adults. The persistence of a gap in well-being between offspring with divorced parents and offspring with continuously married parents suggests that some factor in adulthood continues to disadvantage these individuals. We assumed that low socioeconomic attainment and a history of disrupted relationships would be determined to be the mediating factors, but the analysis did not support our assumptions. Instead, our analysis suggests that parents' marital problems weaken the emotional bonds between parents and children in adulthood, and weak parent-child bonds, in turn, place adult offspring at risk for distress, low self-esteem, and general unhappiness. The present study is the first to consider and demonstrate the mediating role of parent-child relationships in linking marital discord and divorce with children's long-term well-being.

Our analysis also revealed that problems in parent-child relationships associated with marital discord were apparent when children were still living at home. Interestingly, the link between divorce and weak mother-child relations was not significant when pre-divorce discord was controlled. But prob-

lems in the father-child relationship appeared to result from divorce as well as from marital discord. Although we do not have data on children's adjustment prior to adulthood, previous research suggests that children were exhibiting an elevated number of psychological and behavioral problems during this time. A continuation of weak bonds between parents and children into adulthood helps to explain why psychological difficulties associated with early marital discord and divorce do not go away. Meeting the challenges of early adulthood with relatively little support from parents is likely to be a key factor in maintaining, and perhaps amplifying, earlier levels of distress.

This assumption is consistent with a large body of research on children and adolescents. Many developmental psychologists argue that family problems, including discord and divorce, affect children primarily by disrupting parent-child relationships (Davies and Cummings 1994; Fauber et al. 1990; Hetherington and Clingempeel 1992). Sociologists, too, have relied on the quality of parenting and children's emotional bonds with parents to explain the impact of marital discord and divorce on children and adolescents (Conger and Elder 1994; Simons and associates 1996). Researchers appear to have assumed, however, that parent-child bonds become less important after offspring reach adulthood. Yet, many studies show that children's emotional ties to their parents continue to be associated with psychological adjustment and subjective well-being throughout the adult years (Amato 1994; Barnett et al. 1991; Barnett et al. 1992; Rossi and Rossi 1990; Umberson 1992). Moreover, a focus on parent-child relationships in adulthood is consistent with one of the fundamental insights of life course theory, that is, that parents and children's lives are inextricably linked throughout the life course (Elder 1994). Of course, poorly adjusted children also may alienate their parents' affection, although it was beyond the limits of our data to incorporate this assumption into our statistical model. Nevertheless, the existence of reciprocal causation does not undermine the notion that supportive parents are important resources for young adults, and that parents have the potential to contribute (positively

or negatively) to their adult children's sense of well-being.

Our findings may reflect the fact that most offspring in the sample were relatively young. Parent-child relationships may become less central to psychological well-being, and factors such as occupational success and marital stability may become more central, as people move through the life course. This assumption may account for the failure of our analysis to replicate previous research showing mediating roles for offspring's educational attainment and relationship instability (Amato 1988; McLeod 1991; Ross and Mirowsky 1999). In fact, most prior studies have used community samples of adults older than the adult offspring in our study. We do not argue, therefore, that offspring's socioeconomic attainment or relationship instability are unimportant—only that parent-child relationships (a heretofore neglected variable) are part of the process linking discord and disruption in the family of origin to psychological difficulties in later life.

It is possible that the links between parents' marital discord, divorce, weak bonds with parents, and psychological distress among adult offspring are a result of their mutual association with parental pathologies, such as alcohol addiction, mental illness, or a violence-prone personality—problems that often co-occur with divorce in dysfunctional families (Fergusson, Horwood, and Lynskey 1994; Kessler and Magee 1993). Although we cannot rule out this possibility empirically, we do not think that this explanation can account for our findings. Divorce may be common among seriously disordered individuals, but that does not mean that most individuals who divorce are seriously disordered. Currently, nearly half of all first marriages are projected to end in divorce, and the projections are even higher for second marriages. Rather than interpret divorce as a symptom of individual or family pathology, it makes more sense to view marital dissolution as a normative family transition. Indeed, research indicates that many divorces occur among couples who appear to be functioning reasonably well a year or two prior to marital dissolution (Amato and Booth 1997). Because divorce is common and widely accepted, however, does not mean

that its consequences for children are benign.

Some studies have found that the estimated effects of divorce are minimal—even positive—when marital dissolution is preceded by an especially high level of chronic and overt marital conflict, including violence (Amato and Booth 1997; Hanson 1999; Jekielek 1998). In these cases, divorce appears to benefit children by removing them from a dysfunctional home environment. We could not model interactions between divorce and predivorce marital discord in the present analysis because we used all cases of marital disruption, including those that occurred prior to the original 1980 interview. Pooling all cases of divorce into a single category, regardless of marital quality prior to divorce, provides an estimate of the “average” effect of divorce. Estimates in our study would have been stronger if we had eliminated divorces preceded by especially high levels of conflict.

In conclusion, our study contributes to a growing literature demonstrating that discord and disruption in the family of origin can have consequences for offspring that persist well into adulthood. This finding should be of general interest, given the high divorce rate in American society since 1980. Furthermore, an increasing number of children are born within cohabiting unions, and these unions are even more likely than marriages to end in disruption (Bumpass and Lu 2000). The divorce rate leveled off, then declined slightly, after 1980. If one counts as “marriages” all unions producing children, however, then the divorce rate, from the child's perspective, continued to rise during the last two decades. The result of this trend may be a gradual weakening of the bonds between the generations and a decline in the mean psychological well-being of the population.

Policymakers should keep in mind that restricting access to divorce will not address the central problem, as chronic marital discord between continuously married parents appears to be as detrimental as divorce. Instead, our findings suggest a need for interventions that promote the positive involvement of both parents in children's lives following divorce, as well as the development of cooperative postdivorce relationships be-

tween parents. The availability of mediation services and parent education classes for divorcing parents may help to achieve these goals (see Emery, Kitzmann, and Waldron 1999 for a review of programs and relevant research). More generally, the psychological well-being of the next generation of youth will be enhanced if emerging social trends or policies lead to an increase in the number of children raised by parents with stable and harmonious marriages.

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REFERENCES

Allison, Paul D. 2001. *Missing Data*. Thousand Oaks, CA: Sage.

Amato, Paul R. 1988. "Long-Term Implications of Parental Divorce for Adult Self-Concept." *Journal of Family Issues* 9:201-13.

———. 1991. "Parental Absence During Childhood and Depression in Later Life." *The Sociological Quarterly* 32:543-56.

———. 1994. "Father-Child Relations, Mother-Child Relations, and Offspring Psychological Well-Being in Early Adulthood." *Journal of Marriage and the Family* 56:1031-42.

———. 2000. "The Consequences of Divorce for Adults and Children." *Journal of Marriage and the Family* 62:1269-87.

Amato, Paul R. and Alan Booth. 1991. "Consequences of Parental Divorce and Marital Unhappiness for Adult Well-Being." *Social Forces* 69:895-914.

———. 1997. *A Generation at Risk: Growing Up in an Era of Family Upheaval*. Cambridge, MA: Harvard University Press.

Amato, Paul R. and Bruce Keith. 1991. "Separation from a Parent During Childhood and Adult Socioeconomic Attainment." *Social Forces* 70:187-206.

Aquilino, William S. 1994. "Impact of Childhood Family Disruption on Young Adults' Relationships with Parents." *Journal of Marriage and the Family* 56:295-313.

———. 1996. "The Life Course of Children Born to Unmarried Mothers: Childhood Living Ar-

rangements and Young Adult Outcomes." *Journal of Marriage and the Family* 58:293-310.

Arbuckle, James L. 1997. *Amos User's Guide*. Version 3.6. Chicago, IL: Smallwaters Corporation.

Aseltine, Robert H., Jr. and Ronald C. Kessler. 1993. "Marital Disruption and Depression in a Community Sample." *Journal of Health and Social Behavior* 34:237-51.

Barnett, Rosalind C., Nazli Kibria, Grace K. Baruch, and Joseph H. Pleck. 1991. "Adult Daughter-Parent Relationships and Their Associations with Daughters' Subjective Well-Being and Psychological Distress." *Journal of Marriage and the Family* 53:29-42.

Barnett, Rosalind C., Nancy L. Marshall, and Joseph H. Pleck. 1992. "Adult Son-Parent Relationships and Their Associations with Son's Psychological Distress." *Journal of Family Issues* 13:505-25.

Belsky, Jay and Russell A. Isabella. 1985. "Marital and Parent-Child Relationship in Family of Origin and Marital Change Following the Birth of a Baby: A Retrospective Analysis." *Child Development* 56:342-49.

Biblarz, Timothy J. and Greg Gottainer. 2000. "Family Structure and Children's Success: A Comparison of Widowed and Divorced Single Mother Families." *Journal of Marriage and the Family* 62:533-48.

Booth, Alan and John N. Edwards. 1990. "Transmission of Marital and Family Quality over the Generations: The Effects of Parental Divorce and Unhappiness." *Journal of Divorce* 13:41-58.

Brodzinsky, David, Jennifer C. Hitt, and Daniel Smith. 1993. "Impact of Parental Separation and Divorce on Adopted and Nonadopted Children." *American Journal of Orthopsychiatry* 63:51-461.

Brown, George W. and Tirril O. Harris. 1989. *Life Events and Illness*. New York: Guildord.

Bumpass, Larry and Hsien-Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies* 54:29-41.

Bumpass, Larry L., Teresa C. Martin, and James A. Sweet. 1991. "The Impact of Family Background and Early Marital Factors on Marital Disruption." *Journal of Family Issues* 12:22-42.

Campbell, Angus. 1981. *The Sense of Well-Being in America: Recent Patterns and Trends*. New York: McGraw Hill.

Caspi, Avshalom and Glen H. Elder Jr. 1988. "Emergent Family Patterns: The Intergenerational Construction of Problem Behavior and Relationships." Pp. 218-40 in *Relationships within Families: Mutual Influences*, edited by

- R. Hinde and J. Stevenson-Hinde. Oxford, England: Clarendon.
- Cherlin, Andrew. 1999. "Going to Extremes: Family Structure, Children's Well-Being, and Social Science." *Demography* 36:421-28.
- Cherlin, Andrew J., Kathleen E. Kiernan, and P. Lindsay Chase-Lansdale. 1995. "Parental Divorce in Childhood and Demographic Outcomes in Young Adulthood." *Demography* 32:299-318.
- Cherlin, Andrew J., P. Lindsay Chase-Lansdale, and Christine McRae. 1998. "Effects of Divorce on Mental Health throughout the Life Course." *American Sociological Review* 63:239-49.
- Clogg, Clifford C., Eva Petkova, and Adamantios Haritou. 1995. "Statistical Methods for Comparing Regression Coefficients between Models." *American Journal of Sociology* 100:1261-93.
- Cohen, Jacob. 1988. *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: Erlbaum.
- Conger, Rand D. and Glen H. Elder. 1994. *Families in Troubled times: Adapting to Change in Rural America*. New York: Aldine de Gruyter.
- Cooney, Teresa. M. 1994. "Young Adults' Relations with Parents: The Influence of Recent Parental Divorce." *Journal of Marriage and the Family* 56:45-56.
- Cooney, Teresa. M. and Jane Kurz. 1996. "Mental Health Outcomes Following Recent Parental Divorce." *Journal of Family Issues* 17:495-513.
- Davies, Patrick T. and E. Mark Cummings. 1994. "Marital Conflict and Child Adjustment: An Emotional Security Hypothesis." *Psychological Bulletin* 116:387-411.
- Elder, Glen. H., Jr. 1994. "Time, Agency, and Social Change: Perspectives on the Life Course." *Social Psychology Quarterly* 57:5-15.
- Emery, Robert E. 1999. *Marriage, Divorce, and Children's Adjustment*. 2d ed. Beverly Hills, CA: Sage.
- Emery, Robert E., K. M. Kitzmann, and M. Waldron. 1999. "Psychological Interventions for Separated and Divorced Families." Pp. 323-44 in *Coping with Divorce, Single Parenting, and Remarriage: A Risk and Resiliency Perspective*, edited by E. M. Hetherington. Mahwah, NJ: Lawrence Erlbaum.
- Fauber, Rob L., Rex Forehand, Amanda M. Thomas, and Michelle Wierson. 1990. "A Mediation Model of the Impact of Marital Conflict on Adolescent Adjustment in Intact and Divorced Families: The Role of Disrupted Parenting." *Child Development* 61:1112-23.
- Fergusson, David M., L. John Horwood, and Michael Lynskey. 1994. "The Childhood of Multiple Problem Adolescents: A 15-Year Longitudinal Study." *Journal of Child Psychology and Psychiatry* 35:1123-40.
- Furstenberg, Frank F. 2000. "The Sociology of Adolescents and Youth in the 1990s: A Critical Commentary." *Journal of Marriage and the Family* 62:896-910.
- Furstenberg, Frank F. and Kathleen E. Kiernan. 2001. "Delayed Parental Divorce: How Much Do Children Benefit?" *Journal of Marriage and the Family* 63:446-57.
- Furstenberg, Frank F. and Julien O. Teitler. 1994. "Reconsidering the Effects of Marital Disruption: What Happens to Children of Divorce in Early Adulthood." *Journal of Family Issues* 15:173-90.
- Glenn, Norval D. 1991. "The Recent Trend in Marital Success in the United States." *Journal of Marriage and the Family* 53:261-70.
- Glenn, Norval D. and Kathryn B. Kramer. 1985. "The Psychological Well-Being of Adult Children of Divorce." *Journal of Marriage and the Family* 47:905-12.
- . 1987. "The Marriages and Divorces of the Children of Divorce." *Journal of Marriage and the Family* 49:811-25.
- Goldscheider, Frances K. and Calvin Goldscheider. 1994. "Leaving and Returning Home in 20th Century America." *Population Bulletin* 48:1-33.
- Hanson, Thomas L. 1999. "Does Parental Conflict Explain Why Divorce Is Negatively Associated with Child Welfare? *Social Forces* 77:1283-1316.
- Heckman, James J. 1979. "Sample Selection Bias as a Specification Error." *Econometrics* 47:153-61.
- Hetherington, E. Mavis. 1998. "Social Capital and the Development of Youth from Nondivorced, Divorced, and Remarried Families." Pp. 177-209 in *Relationships as Developmental Contexts: The Minnesota Symposia on Child Psychology*, edited by W. Andrew Collins. Mahwah, NJ: Lawrence Erlbaum.
- Hetherington, E. Mavis and W. Glenn Clingempeel. 1992. "Coping with Marital Transitions." *Monographs of the Society for Research in Child Development*, vol. 57, nos. 2-3. Chicago, IL: University of Chicago Press.
- Jekielek, Susan. 1998. "Parental Conflict, Marital Disruption, and Children's Emotional Well-Being." *Social Forces* 76:905-36.
- Kendler, Kenneth S., Michael C. Neale, Ronald C. Kessler, Andrew C. Heath, and Lindon J. Eaves. 1992. "Childhood Parental Loss and Adult Psychopathology in Women." *Archives of General Psychiatry* 49:109-116.
- Kessler, Ronald C. 1982. "A Disaggregation of the Relationship between Socioeconomic Status and Psychological Distress." *American So-*

- biological Review* 47:752-64.
- Kessler, Ronald C. and William J. Magee. 1993. "Childhood Adversities and Adult Depression: Basic Patterns of Association in a US National Sample." *Psychological Medicine* 23:679-90.
- Kurdek, Lawrence, A. 1990. "Divorce History and Self-Reported Psychological Distress in Husbands and Wives." *Journal of Marriage and the Family* 52:701-708.
- Langner, Thomas, S. 1962. "A Twenty-Two Item Screening Score of Psychiatric Symptoms Indicating Impairment." *Journal of Health and Human Behavior* 3:269-76.
- Le Bourdais, Celine and Nicole Marcil-Gratton. 1998. "The Impact of Family Disruption in Childhood on Demographic Outcomes in Young Adulthood." Pp. 91-205 in *Labour Markets, Social Institutions, and the Future of Canada's Children*, edited by M. Corak. Ottawa, Canada: Statistics Canada and Human Resources Development Canada.
- McLanahan, Sara and Larry Bumpass. 1988. "Intergenerational Consequences of Family Disruption." *American Journal of Sociology* 94: 130-52.
- McLanahan, Sara and Gary Sandefur. 1995. *Growing Up with a Single Parent*. Cambridge, MA: Harvard University Press.
- McLeod, Jane D. 1991. "Childhood Parental Loss and Adult Depression." *Journal of Health and Social Behavior* 32:205-20.
- Nock, Steven L. 1998. *Marriage in Men's Lives*. New York: Oxford University Press.
- Overall, John E., B. W. Henry, and Arthur Woodward. 1974. "Dependence of Marital Problems on Parental Family History." *Journal of Abnormal Psychology* 83:446-50.
- Pryor, Jan and Bryan Rodgers. 2001. *Children in Changing Families: Life after Parental Separation*. Oxford, England: Blackwell.
- Rodgers, Bryan. 1994. "Pathways between Parental Divorce and Adult Depression." *Journal of Child Psychology and Psychiatry* 35:1289-1994.
- Rosenberg, M. 1965. *Society and Adolescent Self-Image*. Princeton NJ: Princeton University
- Ross, Catherine E. 1995. "Reconceptualizing Marital Status as a Continuum of Social Attachment." *Journal of Marriage and the Family* 57:129-40.
- Ross, Catherine E. and John Mirowsky. 1999. "Parental Divorce, Life-Course Disruption, and Adult Depression." *Journal of Marriage and the Family* 61:1034-45.
- Ross, Catherine E. and Chia-ling Wu. 1995. "The Links between Education and Health." *American Sociological Review* 60:719-45.
- Rossi, Alice and Peter Rossi. 1990. *Of Human Bonding: Parent-Child Relations across the Life Course*. New York: Aldine de Gruyter.
- Silverstein, Merrill and Vern L. Bengtson. 1997. "Intergenerational Solidarity and the Structure of Adult Child-Parent Relationships in American Families." *American Journal of Sociology* 103:429-60.
- Simons, Ronald L. and Associates. 1996. *Understanding Differences between Divorced and Intact Families*. Thousand Oaks, CA: Sage.
- Snarey, John R. 1993. *How Fathers Care for the Next Generation: A Four-Decade Study*. Cambridge, MA: Harvard University Press.
- Sun, Youngmin. 2001. "Family Environment and Adolescents' Well-Being Before and After Parents' Marital Disruption: A Longitudinal Analysis." *Journal of Marriage and the Family* 63: 697-713.
- Umberson, Debra. 1992. "Relationships between Adult Children and Their Parents: Psychological Consequences for Both Generations." *Journal of Marriage and the Family* 54:664-74.
- Waite, Linda. 1995. "Does Marriage Matter?" *Demography* 32:483-507.
- Wu, Lawrence L. and Brian C. Martinson. 1993. "Family Structure and the Risk of a Premarital Birth." *American Sociological Review* 58:210-32.
- Zill, Nicholas, Donna R. Morrison, and Mary J. Coiro. 1993. "Long-Term Effects of Parental Divorce on Parent-Child Relationships, Adjustment, and Achievement in Young Adulthood." *Journal of Family Psychology* 7:91-103.