RUNNING HEAD: FAMILY STRUCTURE

Family structure or family resources?

Linking marital status to children's adjustment in economically diverse Black and White families

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Abstract

Examined the associations of family structure with problem behavior, psychological distress, and academic achievement among an ethnically and economically diverse sample (N=1195) of preadolescents (modal age=12 years). Tested the role of family processes and resources (i.e., family income, parent psychological distress, family climate, parent monitoring and discipline behaviors) in mediating these associations. Family structure was broadly defined to include youth living in continuously intact, step, cohabiting, separated or divorced, and never-married parent families. Results suggested that family structure per se explains relatively little of the variance in the youth outcomes, and highlighted the important role of family processes, particularly family climate and parent monitoring and discipline. Income and parent psychological distress exhibited more domain-specific associations. We also tested but found little evidence for variations in these associations by youth sex and ethnicity. Results emphasize the importance of family processes across multiple types of family structures in explaining youth adjustment.

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INTRODUCTION

Recent estimates suggest that over half of all children born in the early 1980's will live apart from a parent before reaching age 18 (McLanahan, 1997). It has been suggested that these children face numerous psychosocial and emotional risks. In previous research, the effects of living in a single-parent or disrupted household have extended to a broad range of outcomes. Evidence suggests that adolescents from disrupted and single-parent homes are more likely to experience lower school achievement and aspirations (McLanahan & Sandefur, 1994), increased psychological distress (Aseltine, 1996; Dawson, 1991; Hetherington & Clingempeel, 1992; Zill & Peterson, 1986), greater susceptibility to negative peer pressure (Steinberg, 1987), increased vulnerability to health problems (Dawson, 1991) and greater likelihood of engaging in problem behaviors or deviant activities (Dornbusch, Carlsmith, Bushwall, Ritter, Leiderman, Hastorf, & Gross, 1985; Steinberg, 1987; McLanahan & Sandefur, 1994).

Despite several decades' worth of research on this topic, general conclusions regarding the effects of family structure on children's outcomes have been difficult to reach (Barber & Eccles, 1992). There are three primary limitations to much of the prior research on this topic. First, previous research has not systematically identified and observed a full range of family structures. Second, existing studies have focused on a relatively narrow range of mediating processes that may account for variations in children's adjustment across different family structures. Lastly, many studies have focused on single, discrete outcomes, thus limiting researchers' ability to develop comprehensive theories of family structure effects across multiple domains of children's

adjustment. The present study extends and improves upon existing research by addressing each of these limitations. Below, we summarize the existing research in greater detail and justify our proposed extensions of current theoretical models.

BACKGROUND

Defining family structure

A common feature of previous investigations of family structure is the conceptualization of marital status as a dichotomous variable (Hill, Yeung, & Duncan, 1996). The most popular distinction is that pitting continuously intact families against all others. This construction derives from the hypothesis that children in all types of "non-intact" families experience fewer of the economic and social resources necessary for successful development (McLanahan, 1997; McLanahan & Sandefur, 1994). A second oft-used distinction relies on comparisons of single-versus dual-parent households. Rationalization for this method derives from the "additional adult" hypothesis (i.e., that a second parent, or parent-figure, contributes valuable economic and social resources to the household and that two parents are consequently better than one (Dornbusch, et al., 1985; Steinberg, 1987; Stolba & Amato, 1993).

Unfortunately, the use of these crude distinctions has yielded conflicting results and has limited our ability to discern important differences across a wide range of family structures (Amato & Keith, 1991). Furthermore, combining multiple types of family structures into an unrefined dichotomy misses potentially important process-by-context interactions (Barber & Eccles, 1992; Barber & Lyons, 1994) and limits our understanding of the relative importance of different types of non-intact or two-parent family structures on child outcomes. Research is particularly limited regarding the adjustment of children whose parent lives as an unmarried

romantic partner with another adult. For example, while the additional adult hypothesis would suggest that children with remarried and cohabiting parents would fare equally well, it is possible that the "legitimacy" conferred by legal marriage, and perhaps the accompanying commitment of the stepparent, would result in better outcomes for children in stepparent families. Tests of the additional adult hypothesis (e.g., Steinberg, 1987; Stolba & Amato, 1993) have not included comparisons of children in stepparent and cohabiting partner families. We extend existing research in this regard by examining differences in children's outcomes between continuously intact families and a wide range of non-intact family structures, including stepparent, cohabiting partner, divorced, and never-married family types.

Identifying mediating processes

An extensive literature summarizes various correlates of childhood family structure and the direct and indirect pathways through which these correlates might affect children's adjustment (e.g., Amato, 1993; McLanahan & Sandefur, 1994). The study of indirect, or mediating, effects, motivated by Bronfenbrenner's (1986) call for person-process-context models of children's development, consists largely of two perspectives: the "economic disadvantage" perspective and the "family disorganization" perspective (Amato, 1993; Wu, 1996). These two theories propose that links between family structure and children's outcomes reflect diminished economic resources as well as disruptions in parenting practices that co-occur with marital disruption and single parenting.

Differences in economic resources among family structures are substantial. In 1994, 44.6 percent of female-headed families with children were poor, compared with 9.3 percent of male-present families (Committee on Ways and Means, 1996) and the economic stability of female-

headed households declines dramatically after a marital separation (McLanahan, 1997). Single mothers constitute the poorest of all demographic groups, due to their decreased likelihood of employment, low earnings capacity, and the absence or irregularity of child support from absent fathers (Garfinkel & McLanahan, 1986). Wide-ranging studies document the deleterious effects of poverty and economic insecurity on children (Duncan & Brooks-Gunn, 1997). Poverty can affect adolescent development directly, via its effect on children's health, environmental contexts, or the resources necessary for optimal development, or it can affect children indirectly via its negative effect on parents' psychological well-being and parenting practices (Conger & Elder, 1994; McLoyd, 1990). In a recent review of 13 different studies, McLanahan (1997) found that income accounted for approximately 50 percent of the difference in children's outcomes across different types of family structures.

What factors account for the remaining differences after income is controlled? The "family disorganization" perspective has focused primarily on differences in family management or socialization behaviors, such as parental control, that occur among disrupted and single-parent households. Single parents, because they occupy the role of breadwinner as well as primary caregiver, are hypothesized to monitor and supervise their children less, thus increasing the chances that children will become involved in deviant or problem behaviors (McLanahan & Sandefur, 1994). Similarly, step-parent families are hypothesized to exert less or inconsistent control over children, perhaps because the lines of parental authority are blurred in blended families (McLanahan & Sandefur, 1994).

Parental control is a key dimension of parenting and youth outcomes. However, research testing the "family disorganization" perspective has not systematically investigated other theoretically important family processes, besides parental monitoring and control, such as the

affective quality of parent-child relationships. According to developmental psychologists, the triumvirate of "good" parenting behaviors for adolescents consists of parental nurturance, consistent discipline, and appropriate provision of autonomy (Baumrind, 1989, 1991; Lempers, Clark-Lempers, & Simons, 1989; Maccoby & Martin, 1983). Research suggests that these and other parenting behaviors vary across different family structures. For example, during the period of separation, parents are hypothesized to demonstrate decreased affection, communication, control, and monitoring (Wallerstein & Kelly, 1980). Researchers also report that relative to original-parent families, single-parent and reconstituted families experience greater parent-adolescent conflict (Montemayor, 1983), less parental warmth and involvement (McLanahan & Sandefur, 1994), less consistent and effective discipline behaviors (Simons, Beaman, Conger, & Chao, 1993) and lower levels of parental monitoring (McLanahan & Sandefur, 1994).

These family processes have important implications for conduct problems and delinquency (Loeber & Stouthamer-Loeber, 1986; Patterson & Stouthamer-Loeber, 1984; Patterson,

DeBaryshe, & Ramsey, 1989; Sampson & Laub, 1994), behavioral and psychological problems

(Conger, Ge, Elder, Lorenz, & Simons, 1994), and academic achievement (Comer & Haynes,
1991; Connell, Spencer, & Aber, 1994). For example, warm and supportive parenting, positive

parent-child relationships, and parental monitoring and involvement in children's lives have been
linked to high self-esteem, positive psychosocial development and academic competence, and low
levels of behavior problems and internal distress (e.g., Avery & Ryan, 1988; Harter, 1990;

Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Dornbusch, & Darling,
1992; McLanahan & Sandefur, 1994).

Besides economic stability and effective parenting behaviors, another important family process that may account for differences in children's outcomes across family structures is

parental psychological well-being. Amato (1993) proposed the "adjustment of the custodial parent" perspective, which suggests that parents' mental health, an important determinant of children's adjustment, may be diminished among parents who experience a marital disruption or are single. Single mothers are at greater risk for depression, anxiety, and health problems than other marital status groups (Belle, 1990; Compas & Williams, 1990; Hall, Gurley, Sachs, & Kryscio, 1991; McLanahan & Adams, 1987; McLoyd, 1990; Weissman, Leaf, & Bruce, 1987), in part because they experience greater everyday stressors, more daily hassles related to family and health problems, and fewer social resources (Compas & Williams, 1990; Hall et al., 1991; Weinraub & Wolf, 1983). Depressed mothers, in turn, view their role as parent less positively than controls (Downey & Coyne, 1990) demonstrate less favorable parenting attitudes (Hall et al., 1991) and exhibit less positive and more negative behavior to their children (Barber & Eccles, 1992; Conger, et al. 1994; Downey & Coyne, 1990). Parents' psychological distress can also have a direct effect on children's well-being through dyadic interaction with the child (Dodge, 1990).

These different mediating factors (i.e., economic resources, parenting behaviors, and parent psychological well-being) are undoubtedly related. Yet, while many studies examine the role of one particular family resource on children's adjustment, few have examined the relative and combined importance of multiple related family resources and thus, existing support for all of these theories remains mixed (Amato, 1993; Hill et al., 1996). We therefore improve on existing research in this area by examining the conjoint influences of multiple mediating factors, including economic resources, family climate, parenting style, parental monitoring, and parent mental health. Moreover, our measures of family climate, parenting style, and parental monitoring are

derived from reports from parents as well as children, thus improving on past studies that used single-reporter information only.

Children's adjustment in multiple domains

A third major limitation of existing research is the dearth of studies that examine the effects of family structure across multiple outcomes. As Musick and Bumpass (1997) point out, there is no logical reason to expect that family structure effects, and the pathways through which they occur, would be the same across different outcomes. Evidence from different studies suggests that the effects of family structure depend on the outcome under consideration (Amato & Keith, 1991). On average, the effects of family structure are stronger for predicting children's conduct problems and weaker for predictions of cognitive adjustment (Amato & Keith, 1991; Dawson, 1991; McLanahan, 1997). In this study, we examine the links between family structure, mediating factors, and children's adjustment for three important outcomes: engagement in problem behavior, psychological distress, and academic achievement. An important methodological feature of our assessment of these outcomes is the use of youth's own report of problem behavior and psychological adjustment, thus improving on studies that have relied exclusively on maternal reports of these factors (e.g., Demo & Acock, 1996).

Gender and ethnic differences

Children's responses to marital transitions may depend on their gender (Allison & Furstenberg, 1989). Early research on sex differences in children's adjustment across different types of non-intact family structures focused in particular in differential responses to divorce and remarriage. In general, boys from divorced families appeared to be at greater risk for behavior

problems and poor academic achievement than girls (Hetherington, Bridgess, & Insabella, 1998; Kalter, Kloner, Schreier & Okla, 1989; Wallerstein & Kelly, 1980). However, based on qualitative clinical interviews with young girls and adolescents, Wallerstein and Kelly reported finding a "sleeper effect" for girls, such that the negative effects of divorce on girls' adjustment (e.g., difficulties in intimate relationships, poorer achievement in school) grew increasingly more pronounced as they entered adolescence and young adulthood.

More recent evidence from a national sample, however, found mixed support for the hypothesis that marital dissolution has a greater impact on boys, and even suggests that where significant sex differences occur, the effects are greater for girls, especially in the areas of academic difficulty, distress, and dissatisfaction (Allison & Furstenberg, 1989). Further, sex differences in adjustment may be limited to specific family structures; boys in divorced family structures and girls in step-families are hypothesized to fare particularly poorly (McLanahan & Sandefur, 1994). However, Allison and Furstenberg found only moderate supporting evidence for this hypothesis in a national sample and Amato & Keith (1991) found mixed evidence for sex differences in their widely-cited meta-analysis.

Due to mixed evidence for sex differences, particularly in more recent studies, some have concluded that these sex differences may have been cohort-specific, and appear to be diminishing (Amato & Keith, 1991; Hetherington et al., 1998; Johnston, Kline, & Tschann, 1989). Hetherington and colleagues suggest that this may be due to increases in paternal involvement in custody and childrearing following divorce, which may lessen the risks of poor outcomes for boys in particular.

Given the historical evidence for sex differences in post-divorce and post-remarriage adjustment, we test interactions terms to identify different patterns of adjustment for boys versus

girls across multiple family structures. However, due to mixed evidence for sex differences in adolescent adjustment across different types of non-intact family structures, we do not make specific hypotheses regarding the patterning of sex differences across our multiple outcomes.

Ethnicity differences

Wilson (1986) argued that a "cultural approach" to studying the Black family (e.g., one that examines the Black family within the context of Black cultural traditions, concepts, and values) frames any comparison between Black and White samples in cross-cultural perspective. Specifically, the meaning of, and processes involved in, marriage, marital dissolution, and single parenting are expected to differ in Black and White families. Hatchett, Veroff, and Douvan (1995) demonstrated that among young Black and White married couples, marital quality in the two groups was differentially affected by financial success, ethnicity-related stressors, and spousal support, in particular. Although Hatchett et al. did not discuss parenting processes and parent-child relationships in Black and White married couples, we would, following their theoretical framework, also expect differences in these processes and their meanings in the two groups.

Further evidence suggests that reactions to marital dissolution and single parenthood may differ by parent ethnicity (Fine & Schwebel, 1988; McKenry & Fine, 1993). Specifically, Black mothers may adjust more successfully than White mothers to single parenthood (Fine & Schwebel, 1988; McKenry & Fine, 1993). This observed resilience to single-parenthood among Black women may be due in part to the fact that single-parent status may be more normative in the Black community than in the White community (Fine & Schwebel, 1988). For example, whereas rates of marital dissolution and the number of never-married mothers have increased for Blacks as well as Whites, these changes have been especially dramatic for Black families (Tucker

& Mitchell-Kernan, 1995). Indeed, Tucker and Mitchell-Kernan suggested that marriage is not necessarily normative in the Black community, and that other relationship forms, such as cohabitation, may replace marriage as the normative family type.

Although few studies have examined how marital transitions affect non-White children (Amato, 1994), a serious omission in the literature, the cultural differences in the meaning and correlates of family structure are likely to affect outcomes differentially for Black and White youth. For example, McLanahan and Bumpass (1988) demonstrated that the effects of marital disruption on adolescent childbearing were significantly more pronounced among White than Black girls (although youth from Black female-headed families, like their White counterparts, experienced more negative outcomes than those from intact households). We therefore also test the significance of interaction terms with ethnicity and family structure in our analyses. Based on available evidence, we hypothesize that the differences in family structure across the outcomes investigated in the present study will be greater among Whites.

Summary

In summary, the present study addresses and improves upon three major limitations of existing research on the effects of family structure on children's adjustment. First, we use a measure of family structure that represents a fuller array of living arrangements than has been used in most previous studies. Our family structure variable distinguishes adolescents living in continuously intact from those in step, cohabiting, divorced, and never-married families. Second, we examine a more extensive set of mediating factors representing multiple aspects of family economic, social, and psychological capital (Coleman, 1988). These include economic resources, indicated by household income; positive family climate, which reflects a positive affective

environment and parent-child involvement; authoritarian parenting style, which reflects parents' strictness and control of decision-making; parental monitoring, which reflects the extent to which the parent knows about the child's whereabouts, and parent mental health, assessed via parents' reports of depression and anger. Third, we examine the effects of family structure and these mediating variables on three important domains of early adolescent adjustment: involvement in problem behavior, psychological distress, and academic achievement. Importantly, we avoid the biases associated with method variance by using reports of mediating processes and youth outcomes collected from parents *and* youth, thus improving upon previous studies that have relied on reports from only one family member and that may thereby artificially inflate the effects of family structure (Amato, 1993). Finally, we test the significance of interactions between family structure and ethnicity as well as family structure and gender, thereby addressing, in particular, the dearth of evidence concerning ethnicity differences in family structure research.

METHODS

Participants

The participants in this study are part of an ongoing longitudinal study of adolescent development (the Maryland Adolescent Growth in Contexts [MAGICS]; Principal Investigators:

J. Eccles & A. Sameroff) designed to examine the influences of the social contexts related to peers, family, school, and neighborhood (Eccles & Sameroff, 1998). This study was initiated by J. Eccles as part of the work of the MacArthur network on successful Adolescent Development in High Risk Settings (Chair, R. Jessor). Each participating family had a seventh grader who was in middle school during the first wave of the study (1991). The sample represented 23 middle schools that were all part of one county-wide school district (see Eccles, Early, Fraser, Belansky,

& McCarthy, 1997 for a complete description of the sample and sampling procedures). We limit the sample to the 1,195 (out of a total of 1,492) families for whom valid data on marital status and income were available, as they were key variable in the analysis. This subset of families did not differ from the larger sample on demographic characteristics or the family and youth adjustment measures considered herein. Mean substitution was used to handle missing data on the remaining variables in multiple regression analyses. In these families, the target youth and a primary caregiver were interviewed (approximately one hour each) and also completed a 45-minute self-administered questionnaire. In addition, academic grades and standardized achievement test scores were collected from the schools. Primary caregivers were self-identified as the adult in the family with the most caretaking responsibility for the target child. Eighty-nine percent of primary caregivers were mothers; six percent were fathers, and the remaining were primarily step-mothers and grandmothers.

The sample of 1195 families includes 767 self-identified Black and 428 self-identified White adolescents and their primary caregivers. The families resided in an ethnically diverse and socioeconomically unique county in Maryland. In 1991 less than 4.6 percent of White residents and 6.5 percent of Blacks were classified as poor according to Federal Government standards. In contrast, national poverty rates at that time were 11.3 and 32.7 percent for Whites and Blacks, respectively (Committee on Ways and Means, 1996). Therefore, unlike many studies with significant representation of Black participants, the Black adolescents in this study were drawn from families across the full range of socioeconomic status. For example, the median annual income of White adolescents' families was in the range of \$50-54,999; the corresponding figure for Black adolescents' families was \$45-49,999. In addition, the primary caregivers' average levels of education were the same in the two groups: 54 percent had a high school degree, and 40

percent had a college degree. Thus, both the White and Black samples represented populations of comparable socioeconomic diversity. This comparability is a key feature of the study, as it is allows for comparisons across ethnic groups that are not confounded by substantial differentials in income and education. This issue is particularly relevant for an investigation of family structure, as most previous studies of family structure in Black samples have focused on poor single mothers (Wilson, 1986).

Scale construction and data reduction

Scale construction of the family resource and adolescent adjustment measures occurred by a multi-step process, involving first- and second-order data reduction. First, for each reporter, all of the discrete items were organized according to conceptual constructs created by the research team. All of the discrete variables that possibly defined and contributed to a given construct were listed under that construct category. Next, a confirmatory factor analysis (principal component with oblimin rotation, if necessary) was carried out for each construct. Those items with factor loadings of .7 or better were retained. In order to assess the internal consistency of the items in each factor, Cronbach's alpha was determined. Those items in the derived scale that significantly reduced the reliability of the scale were dropped and scales were then created by averaging the unit-weighted items. For those constructs that consisted of items with response scales of different variances (e.g., 5-point and 7-point Likert type response format), each of the items was z-scored and scales were created by averaging the standardized items. In order to handle missing data, scales were computed when all but one data point existed (Eccles et al., 1997).

In order to further reduce the data and derive higher-order operational constructs for the parenting resource and adolescent adjustment measures, second-order scale construction was

performed. Each of the composite scales was submitted to the same procedure outlined above for the first-order analyses and second-order composite scales were computed as an average of the constituent scales. The parenting and youth outcome measures are described in detail elsewhere and are therefore only summarized here (see Eccles et al., 1997; Eccles & Sameroff, 1998; Roeser & Eccles, 1998).

Measures

Control variables. In the multivariate analyses, five variables were included in each of the equations as statistical controls. These included the adolescent's age, sex (females coded "1" in regression analyses, males coded "0"), and ethnicity (Blacks coded "1", Whites coded "0", the primary caregiver's sex (females coded "1", males coded "0"), and number of children in the household under the age of 18. The modal age of the adolescents in the study, half of whom are female, is 12 years old (range= 11-14). Sixty-four percent of the families are Black. 93 percent of the primary caregivers are female. The average number of children in the household is 2 (range= 1-7).

Independent variable. Primary caregivers were asked to describe their current marital status, the number of times they had ever been married, and (if unmarried) whether they were currently living with someone described a "live-in partner." From this information, five mutually exclusive categories of current family structure were created. Dummy variables were created to reflect these family structures; in regression analyses continuously intact families were the omitted category. Continuously intact family caregivers (54% of sample) were defined as having been continuously married (legal and common law) since the birth of the target child. Step family caregivers (15% of sample) were currently married to a partner who was not the target child's

original mother or father.¹ Cohabiting caregivers (4% of sample) were those who may have been divorced or never-married but were currently living with a boyfriend or girlfriend.² Divorced family caregivers (20% of sample) described themselves as separated or divorced, and not currently married to or cohabiting with a partner. Never married family caregivers (7% of sample) described themselves as single, never having married the child's other parent, and not currently married to or living with a partner. We note that while these five categories are mutually exclusive regarding families' present situation, families' history of living arrangements may clearly overlap. We therefore present our results with the caveat that they represent the links between current family structure and adolescent outcomes only, and not other links, such as associations between the number or timing of marital disruptions and children's outcomes.

Mediators. Economic resources were represented by the family's total income for the previous year. The data were originally coded into 16 equal categories ranging from 1= "less than \$5,000" to 16= "more than \$75,000". Values were assigned the midpoint of each category, with "\$2,500" assigned to the first category and "\$75,000" assigned to the last category. A natural log transformation of this variable was used in the mutivariate analyses (Hardy, 1993).

Parents' psychological resources were assessed with their reports of frequency of symptoms of anger and depression over the previous few months. These symptom measures were originally adapted from items on the Symptoms Checklist 90-R (SLC 90-R; Derogatis, Rickels, & Rock, 1976). Item scores ranged from 1= "almost never" to 5= "almost always". Four items comprised the depression scale (e.g., "how often have you felt depressed"?) and four items comprised the anger scale (e.g., "how often have you felt really mad at other people?"). The two scales were highly correlated (r=.56, p <.001); a composite scale was created by averaging the scores from the two subscales. Higher scores indicate greater psychological distress.

The positive family climate index was based on the average of two composite scales reflecting parent and youth reports of positive parent-child affect, parent-child communication and humor, parent involvement in positive activities with the adolescent, enjoyment of time spent together, and youth identification with parent. These items come from Conger et al.'s (1994) Iowa Youth and Family Study. The youth composite comprised eight subscales (Cronbach alpha=.87); the parent composite comprised six subscales (Cronbach alpha=.75). The youth and parent standardized composite scales were moderately correlated (\underline{r} =.35, \underline{p} <.001). Higher scores indicate a more positive family climate.

The authoritarian parenting index was based on the composite of six subscales representing the frequency of certain family behaviors. Items for these scales came from the Philadelphia Family Management Study (Furstenberg, Cook, Eccles, Elder, & Sameroff, 1998) and from studies by Steinberg (e.g., Steinberg et al., 1992) and Dornbusch (e.g., Dornbusch et al., 1985). These items measure the frequency of the following parental behaviors: assertion that the youth always follow family rules about behaviors; control of decisions regarding issues involving the youth; enforcement of rules governing the youth's behavior inside and outside the home; "grounding" of youth as a response to an important rule being broken; and threatening punishment for engaging in risky activities. Reports were gathered from adolescents as well as parents; each was the reporter for 3 of the 6 subscales. The internal reliability of this composite scale was .61. Answers were assessed on five-point Likert scales ranging from 1= "not at all" to 5= "all the time" and are anchored in the direction of more authoritarian parenting behaviors.

The <u>parent monitoring index</u> reflects the extent to which the parent is aware of the youth's behaviors and whereabouts. A composite index was created by averaging the scores from two subscales, one each from the parent and youth. The two scales were significantly, albeit modestly,

correlated (r=.15, p <.001). The 5-item youth scale (alpha .63) asked the youth how often: 1) the parent would know if the youth broke a family rule; 2) the youth leaves a note or calls to let the parent know his or her whereabouts; 3) the youth knows how to reach the parent when parents are not at home; 4) parents know whether youth meet their curfews; and 5) parents know who the youth is with when youth are away from home. The four-item parent scale (alpha=.62) asked the parent how often they: 1) know where the youth is in the course of the day; 2) know who the youth is with when the youth is not at home; 3) know if the youth meets his or her curfew on school nights; and 4)) know if the youth meets his or her curfew on weekend nights. Answers were assessed on five-point Likert scales ranging from 1= "almost never" to 5= "almost always" and are anchored in the direction of greater parental monitoring. Items for these scales came from the Philadelphia Family Management Study (Furstenberg et al., 1998)

Dependent variables. We assessed youth problem behavior, psychological adjustment, and academic achievement. The measure of adolescent problem behavior was derived from the adolescents' report of the extent of their participation in 24 different problem behaviors. These items were derived and adapted from The National Youth Survey (Elliott, Huizinga, & Menard, 1989). Based on a conceptual scheme outlined by Elliott and his colleagues, items were conceptually organized into three subscales and weighted accordingly: Minor problem behaviors (e.g., truancy, lying, cheating, cigarette smoking) were assigned a value of "1" if yes, "0" if no; moderate problem behaviors (e.g., being involved in a gang fight, suspended from school) were assigned a value of "2" if yes, "0" if no; and major problem behaviors (e.g., auto theft, using hard drugs, being involved with the police) were assigned a value of "3" if yes, "0" if no. The composite problem behavior measure was created by summing the weighted, standardized items.

Similar to the parental psychological resources scale, youth reports of psychological distress were assessed with their own reports of the frequency of symptoms of anger and depression over the past month. These items were also taken from the SCL 90-R (Derogatis et al., 1976). Item scores ranged from 1= "almost never" to 5= "almost always". Six items comprised the depression scale (e.g., "how often have you felt depressed"?) and four items comprised the anger scale (e.g., "how often have you felt really mad at other people?"). The two scales were highly correlated (r=.59, p <.001); a composite scale was created by averaging the scores from the two subscales. Higher scores indicate greater psychological distress.

A composite measure of adolescents' <u>academic achievement</u> was created as the standardized average of final grades in English, Science, Math, and Health, as well as scores on a standardized math test administered in the 7th grade. These data were collected from the adolescents' schools. Cronbach alpha for this composite standardized measure was .87.

We note that we rely exclusively on adolescents' self-report of their psychological distress and their involvement in problem behaviors. Parents' reports of their children's psychological distress are hypothesized to be affected by their own mental health; further while parents are better able to report externalizing symptoms of children's distress, they have been shown to be poorer reporters of internalizing symptoms such as depression, particularly among adolescents (Achenbach, McConaughy, & Howell, 1987, although see Richters, 1992, for a rebuttal of this assumption). Self-report indicators of problem behaviors have been shown to have adequate reliability and validity when compared with other social science measures (Elliott et al., 1989). Indeed, given that parents may be mostly unaware of their child's involvement in problem behaviors, the children themselves may be the most reliable reporters. While the potential for

over- or under-reporting of involvement in such activities exists, Elliott and his colleagues noted that deliberate falsification is relatively rare.

RESULTS

Correlations among mediators and among youth outcome variables

Zero-order correlations among the mediators and among the youth outcome variables are presented in Table 1. These results indicate that family income was positively associated with monitoring ($\mathbf{r} = .11$, $\mathbf{p} < .001$), negatively correlated with parent psychological distress ($\mathbf{r} = -.25$, $\mathbf{p} < .001$) and authoritarian parenting ($\mathbf{r} = -.12$, $\mathbf{p} < .05$), but not related to warm family climate. Parent psychological distress was positively associated with authoritarian parenting ($\mathbf{r} = .06$, $\mathbf{p} < .05$) and negatively correlated with warm family climate ($\mathbf{r} = -.21$, $\mathbf{p} < .001$) and monitoring ($\mathbf{r} = .06$, $\mathbf{p} < .001$). Authoritarian parenting was positively associated with monitoring ($\mathbf{r} = .24$, $\mathbf{p} < .001$) and, somewhat surprisingly, with warm family climate ($\mathbf{r} = .14$, $\mathbf{p} < .001$). Among the outcomes, youth problem behavior was positively associated with psychological distress ($\mathbf{r} = .33$, $\mathbf{p} < .001$) and negatively related to academic achievement ($\mathbf{r} = -.35$, $\mathbf{p} < .001$). Youth psychological distress was also negatively associated with academic achievement ($\mathbf{r} = -.20$, $\mathbf{p} < .001$).

Comparison of mediator and outcome variables across family types

Table 2 present means and standard deviations of the mediators and youth outcome variables. Omnibus tests of group differences were conducted using one-way analysis of variance procedures. For all analyses in which the overall F-test was significant, we present the pairs of means that are significantly different at the .05 level, based on the Bonferroni multiple comparison procedure. These differences are indicated in the far right column.

In general, significant differences reflected our theoretical predictions. Parents in continuously intact families had higher incomes than all others groups. Step-parent families, in turn, had higher incomes than either cohabiting, divorced, or never-married families, and both cohabiting and divorced families had higher incomes than never-married families. Parents in continuously intact and step families both had lower levels of psychological distress than their counterparts in cohabiting, divorced, and never-married families. Parents in continuously intact and step families both had warmer family climates than their divorced counterparts. Step-families and divorced parents had higher levels of authoritarian parenting than those in continuously intact families. Finally, parents in continuously intact and step families had higher levels of monitoring than those in never-married families.

Youth in continuously intact families had significantly lower levels of psychological distress and problem behavior than their counterparts in divorced families. Youth in continuously intact families also had higher levels of academic achievement than their counterparts in any other family structure. We note that, although differences did not achieve statistical significance, youth in cohabiting family types had the highest rates of psychological distress, the lowest academic achievement, and the highest rates of problem behavior among the family types.

Hierarchical multiple regressions predicting adolescent adjustment

For each of the three youth outcomes we present two hierarchical multiple regression models. In each regression analysis, variables were entered into the equation in a step-wise fashion. In Model 1, we regress the outcome measure on the control variables (entered at Step 1) and the four family structure dummy variables (entered at Step 2). Model 1 thus demonstrates the simple effects of family structure adjusted for the controls. The second model (Model 2)

regresses the outcome measure on the control variables (entered at Step 1), the five family resource measures (entered at Step 2), and the family structure dummies (entered at Step 3). We compare the significance of the family structure coefficients in Model 2 to those in Model 1 to assess how much the family resource variables account for, or mediate, the effects of family structure. Baron and Kenny (1986) suggested that mediation occurs if the proposed mediator reduces the previously significant relation between the predictor and criterion variables once it is added to the model. Full mediation occurs if the previously significant relation is reduced to nonsignificance; partial mediation, in which the association is reduced but not eliminated, is also possible.

Two additional criteria must be met to test for mediation; (1) the independent variable (i.e., family structure) must be significantly related to the mediating variables (i.e., family resources) and (2) the mediating variables must be significantly related to the outcomes (Baron & Kenny, 1986). Additional analyses (not reported here) confirm that these conditions are met for all regression models.

As mentioned previously, we also tested the significance of interaction terms between the four family structure dummy variables and youth sex and race. The significance of these variables was tested by adding an additional Step (Step 3 in Model 1 and Step 4 in Model 2) containing the 8 interaction terms to the model and observing the significance of the corresponding F- and R-Square change. In none of these analyses (not shown here) did this additional step add to or significantly change the model. Therefore, we present results only from the more parsimonious models using the total sample. These null results are discussed later in the paper.

Standardized and unstandardized regression coefficients from the final models for the adolescent outcomes are illustrated in Table 3. Due to the small cell sizes of the cohabiting and

never-married families in particular, we will also discuss results of family structure for these groups when significance levels are p < .10; such results will be referred to as "marginally significant."

Adolescent problem behavior

In Model 1, entering the control variables at Step 1 added significantly to the model (\underline{F} [5, 1189] 17.45, p < .001). Specifically, Black, male, and older youth reported more involvement in problem behavior. The family structure variables entered at Step 2 added only marginally (\underline{R} -square change=.01, p < .06) to the variance explained by the control variables in predicting adolescent problem behavior. Although the family structure variables did not add significantly to the model as a group, results suggested that youth in divorced families and, to a marginal extent (\underline{p} =.05), those in cohabiting families engaged in more problem behavior than their counterparts in continuously intact families.

In Model 2, the family process variables added at Step 2 made a significant contribution to the model (R-square change=.08; p <.001). This effect was due to the contribution of parent authoritarianism, parental monitoring, and family climate. Youth whose parents demonstrated more authoritarianism were more likely to engage in problem behaviors, while those whose parents monitored their behavior more and those with more positive climates reported engaging in fewer problem behaviors. Adding the family structure variables back in at Step 3 did not add to the model (which is expected, given that they did not contribute significantly in Model 1). The final model explained 14 percent of the variance in youth problem behavior.

Adolescent psychological distress

In Model 1, entering the control variables at Step 1 added significantly to the model (F [5, 1189] 3.27, p < .01). This effect was entirely due to the ethnicity variable and indicated that Black youth reported more distress than their White counterparts. Entering the family structure variables at Step 2 added significantly (albeit modestly) to the variance explained by the control variables in predicting adolescent psychological distress (R-square change=.01, p < .05). These results suggested that youth in cohabiting, divorced, and never-married families all report more psychological distress (p < .05) than their counterparts in intact families.

In Model 2, the family process variables added at Step 2 made a significant contribution to the model (R-square change=.12; p < .001). This effect was due to the significant (p < .001) contributions of parent psychological distress, parent authoritarianism, monitoring, and family climate. Youth whose parents report more psychological distress report more distress of their own, as do youth in families with more authoritarian parenting. In contrast, youth whose parents engage in more monitoring and those in more positive family climates reported less psychological distress. Adding the family structure variables back in at Step 3 did not add to the model, suggesting that the links between family structure and youth psychological distress are mediated by the family processes, although the coefficient for cohabiting families remained marginally significant (p < .08) in the final model. The final model explained 13 percent of the variance in youth psychological distress.

Adolescent academic achievement

In Model 1, entering the control variables at Step 1 added significantly to the model (\underline{F} [5, 1189] 48.79, \underline{p} < .001). This effect was due to the ethnicity, child sex, and child age variables and

indicated that Black youth, boys, and older children had lower academic achievement than their White, female, and younger counterparts. The number of children in the household was marginally (p < .07) negatively related to academic achievement. Entering the family structure variables at Step 2 added significantly to the variance explained by the control variables in predicting academic achievement (R-square change=.04, p < .001). These results suggested that youth in all types of nonintact families had poorer (p < .01) academic achievement than their counterparts in intact families.

In Model 2, the family process variables added at Step 2 made a significant contribution to the model (\mathbb{R} -square change=.08; \mathbb{p} <.001). This effect was due to the significant contributions of all five measures of family processes. Youth in families with higher incomes, greater parental monitoring, and more positive family climates did better in school, while those whose parents had more psychological distress and who reported more authoritarian parenting did more poorly. Adding the family structure variables back in at Step 3 add significantly (albeit modestly) to the model (\mathbb{R} -square change=.01; \mathbb{p} < .01). In the final model, the family structure coefficients for youth in step, cohabiting, and divorced families remained significant, while the coefficient for living in a never-married family was reduced to nonsignificance. The final model explained 25 percent of the variance in academic achievement.

Discussion

In the present investigation we examined differences among family structures on a variety of adolescent adjustment outcome measures. A particular strength of this investigation was our ability to examine the association of intact family structure relative to a variety of non-intact family types, whereas many related studies treat all types of non-intact, or single- versus two-

caregiver, families as equivalent. Furthermore, we assessed adolescent adjustment across a variety of domains, including engagement in problem behavior, mental health, and academic achievement. We were particularly interested in the extent to which family resources (i.e., income, parent behaviors) mediated the associations between family structure and adolescent adjustment. Finally, our sample afforded us the opportunity to examine whether adolescent sex or ethnicity interacted with the associations among family structure and youth outcomes. The results of this study suggest a number of conclusions about differences among family structures, the relative importance of family structure versus family resources, and the domain specificity of links among family structure, processes, and youth adjustment. These conclusions will be discussed below.

Differences among family structures

The differences apparent among family types in our analysis were consistent with most previous research. In general, adolescents from continuously-intact families demonstrated better adjustment and parents in these families tended to have more resources available than their counterparts in different family types. Consistent with findings reported elsewhere, both intact and step-families had more income available than other types of single-parent families (McLanahan, 1997; McLanahan & Sandefur, 1994). However, our results also revealed important differences in resource availability among different types of dual-adult families. Specifically, both continuously-intact and step-families had more income available than cohabiting families. Apparently, adults in cohabiting arrangements either share fewer resources or have fewer to draw upon (Carlson & Danzinger, 1998). Non-intact families also generally fared worse on the dimensions of family process (i.e., family climate, parent mental health, parental

monitoring, and authoritarian parenting). The simple contrasts suggested that, in general, youth in cohabiting, divorced, and never-married family structures experienced less positive family processes and poorer adjustment.

The specific results linking cohabiting family structure and youth adjustment are noteworthy given the paucity of research concerning these types of families. The trends apparent in our data suggest that these adolescents may be at particular risk for problems across a variety of domains. While the contrasts between cohabiting and other types of family structures did not always reach statistical significance, this may be a function of relatively limited cell sizes. Importantly, these results suggest that the "dual-adult" hypothesis may be insufficient for explaining differences in youth adjustment in intact versus non-intact family structures. Further research is clearly warranted in order to understand the unique experiences of adolescents in cohabiting family structures. It is possible that such arrangements are less stable; that is, the parents may change romantic partners more frequently than parents in the other groups. In addition, children in step families may feel a sense of "legitimacy," which makes adaptation to the new family easier than it is for the cohabitation group adolescents. This hypothesis seems plausible given that family processes and youth adjustment in step-families were fairly similar to those in intact families. Lastly, selection effects may explain these results. Families with certain, perhaps problematic, characteristics may be more likely to cohabit than to re-marry; the difference in family income in step versus cohabiting families provides suggestive evidence to support this claim (i.e., among these two types of non-intact dual adult families, cohabiting families had substantially less income). They may also experience other deleterious correlates of low income to a greater extent than their counterparts in step-families.

In contrast, and somewhat unexpectedly, the association of never-married family structure with youth outcomes was not consistently negative in the multivariate models. When controlling for family process variables the never-married family type did not differ significantly from intact families on any of the outcome measures. Given the attention (political as well as academic) to the supposed substantial and negative effects of non-marital childbearing, this result is particularly important. Although our data permit us to know only that the never-married families are not currently living with a partner (and not their history of cohabitation), it may be that transitions in family living arrangements, such as those inherent in divorce and remarriage or re-partnering, are an important element of adolescents' adjustment. For instance, Miller and Davis (1997) found that differences between continuously married and never-married mothers in levels of emotional support (i.e., warmth and discipline behaviors) of children ages 6-9 in a national data set were smaller than the differences between continuously married and divorced mothers on this dimension of parenting. Future studies should pursue this line of inquiry by focusing on the

The multivariate analyses further indicated that, despite a relatively small influence of family structure per se, its association with youth adjustment varied across behavioral domains. Indeed, the present findings highlight the importance of considering multiple indicators of adjustment when examining the effects of family contexts on adolescent outcomes (Amato & Keith, 1991; Barber & Eccles, 1992). Family structure was associated most with academic achievement, moderately with psychological adjustment, and minimally with problem behavior. Given previous research, we had expected a stronger association between family structure and problem behavior, particularly among boys (e.g., Hetherington et al., 1998). The relatively weak link between family structure and this outcome may reflect the limited variance in problem

effects of stability of family structures, whether dual or single-adult.

behavior during early adolescence. As the adolescents grow older we expect to find greater variance in problem behavior, and hence, stronger associations with family structure. Moreover, the finding that children in non-intact family structures of all types are performing more poorly in school may be a predictor of subsequent maladjustment in other behavioral domains (Roeser & Eccles, 1998). Research suggests that school difficulties are often an early sign of socioemotional problems that later develop into other behavioral problems. If this is true, then the effects of family structure on academic achievement may eventually "spill over" and affect other domains of adolescent functioning. Further research is needed to illuminate the developmental trajectories associated with different types of family structures. An alternative explanation, consistent with our measurement concerns, is that the family structure-academic achievement link was strongest because it relied on the most objective indicators of adolescent functioning (i.e., academic records). In this regard, teacher reports of classroom behavior problems or peer difficulties would have been useful.

The role of family resources and processes

Although the present findings document a number of significant contrasts among family types on family resources and youth outcomes, they also suggest that family structure per se contributes relatively little to the variance in youth adjustment. Instead, our results highlight the important role of particular processes that mediate the impact of family structure on adolescent development.

Family structure effects were substantially explained by family resources and processesparticularly with regard to psychological distress and problem behavior. Just as family structure has domain-specific effects on youth adjustment, the magnitude of the effect of family resources and processes included in our analysis also varied across the youth outcomes. In particular, income, one of our hypothesized mediators which is often described in the literature as a key pathway by which family structure affects youth adjustment (Amato, 1993), had relatively weak effects. Although a number of researchers have noted the profound effect of economic disadvantage associated with single-parenting (McLanahan, 1997), in the present analyses income made a unique contribution only to adolescent academic achievement, and indeed only partially mediated the effects of family structure on this outcome. The observed link between income and academic achievement is likely due to differences in the resources that families are able to provide for promoting children's academic success. These differences may include differences in parental education, fewer resources for enriching school learning, differential access to quality schools, and differences in levels of parental involvement in school.

The effects of parent psychological distress likewise had domain-specific effects, making a unique contribution to adolescent psychological distress but not the other youth outcomes. Our simple contrasts revealed that across all four subgroups, parents in intact families had the least amount of psychological distress. Together, these findings are consistent with the hypothesis that parents' preoccupation with their own mental health concerns, for example, anger at the exspouse, or a focus on feelings of narcissistic injury (e.g., lower self-esteem, questions about self-worth), which often accompany separation from a romantic partner, diminishes their ability to respond to their children's emotional needs (Kalter et al., 1989; Wallerstein & Kelly, 1980).

In contrast to the domain-specific effects of income and parental psychological distress, family climate, parental authoritarianism, and parental monitoring each made a substantial and unique contribution to all three youth outcome measures.

Consistent with many previous studies, high levels of parental authoritarianism and low

levels of parental monitoring of youth behavior did relate negatively to youth academic achievement, psychological distress, and problem behaviors (e.g., Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; McLanahan & Sandefur, 1994; Steinberg, Elmen, & Mounts, 1989). These results indicate that problematic parenting practices (i.e., authoritarian parenting and inadequate parental monitoring) increase the risk for poor outcomes across each of the outcome domains. We further found that these negative parenting practices contributed to the full mediation of the association between divorce and youth problem behavior and psychological distress. This suggests that disrupted or ineffective parenting following a divorce or separation may account for much of the psychological hardship of divorce for youth.

The finding that family climate also contributes significantly to each of the youth outcomes, and along with the other family resources mediates the association between structure and youth distress, is particularly important given that most studies of family disruption have focused on negative family relationships (e.g., family conflict) that are posited to result from divorce or remarriage. Our family climate variable includes questions regarding parent-child shared time in positive activities, parent-child positive communication, and shared humor. These positive aspects of family life appeared to be globally important across different domains of adolescent adjustment. The strong role played by family climate suggests that positive parent-child and familial relationships are an important element of positive youth adjustment across a variety of domains.

Variations by ethnicity and sex

While there were a moderate number of main effects of sex and ethnicity in the youth outcome measures, the interactions of these variables with family structure were non-significant

across each of the outcomes. This is consistent with findings from a number of recent studies, suggesting a cohort trend towards a diminishing of sex differences in youth adjustment post-divorce (Amato & Keith, 1991; Hetherington et al., 1998). It is also possible that sex differences may grow more pronounced as these currently pre- and young- adolescents transition more fully into adolescence. Research has documented marked changes in the prevalence of internalizing disorders in female adolescents during this time period (Nolen-Hoeksema & Girgus, 1994) and it is possible that the relations between family structure and young female adolescent psychological adjustment, in particular, will increase as these children grow older.

Notably, in contrast to our initial hypotheses, we failed to obtain significant interactions for ethnicity by family structure. The fact that our results did not reveal ethnicity by family structure interactions in youth adjustment across the different outcomes may reflect the unique economic attributes of our sample. In our particular sample, the response to different family structures among predominantly middle- and upper-middle-class Black and White youth appear to be more similar than different. This suggests that the oft-cited "cultural" response to family structure (c.f., Fine & Schwebel, 1988; McHenry & Fine, 1993) may not be readily apparent in ethnic comparisons among individuals who share similar social and economic contexts.

Limitations and conclusion

Although the results of our investigation highlight the importance of considering multiple family structures and mediating processes in explaining youth adjustment across a variety of domains, there are several limitations to our present findings. Since the data analyzed are drawn from the first wave of the study, previous levels of adolescent adjustment are not available and thus we are unable to control for levels of adolescent adjustment prior to family structure

changes. Indeed, due to the correlational nature of the data we are unable to assume causal relations between the mediators and youth outcomes. For example, although we found that family climate is an important predictor of youth psychological distress, it is possible that the youths' distress may determine whether the parent and youth participate in and enjoy activities together. Furthermore, we cannot rule out the possibility that families may select into different structures in part based on characteristics of the youth. Perhaps parents of children who are oppositional or defiant are more likely to divorce. Longitudinal data would permit us to further examine these particular issues, and indeed, we are planning to investigate these competing hypotheses using data from a three-year follow-up study of these families.

It is important to note that the present sample is not nationally representative, which is both an advantage and disadvantage. Given the unique sociodemographic characteristics of our sample, we were able to disentangle ethnicity and ethnicity issues from economic hardship. However, the number of people at each level of socioeconomic status for our sample was limited, due to sample size. This is especially true at the poverty end of the distribution; there were few severely economically disadvantaged families in our sample. Replication with samples including greater representation of families living at or below the poverty will be necessary in order to determine the generalizability of our findings to other populations of children and families.

Finally, we note that in all analyses, our models explain a relatively small amount of the variance in youth outcomes. Our separate models explained 14 percent of the variance in youth problem behavior, 13 percent of youth psychological distress, and 25 percent of the variance in academic achievement. These results are likely due to the low variance in our outcome measures. However, our goal was not to explain the maximum variance in outcomes, but to understand the relation of family structure to these outcomes.

In sum, this study draws attention to the limited role played by family structure per se and highlights the importance of family resources, in particular positive family climate, parental authoritarianism, and parental monitoring, in explaining youth adjustment across different family structures. Results are consistent with Bronfenbrenner's (1986) assertion that we must consider more than mere "social address" models, and rather increasingly employ person-process-context models towards understanding adolescent development. Indeed, our findings suggest that the effects of family structure, as well as the role played by specific family resource variables, vary as a function of the youth outcome under consideration. Continued exploration of ethnicity and sex differences is clearly necessary in order to elucidate possible cohort-specific effects, and to continue to disentangle income and ethnicity in explaining the effects of family structure. Lastly, we highlight the important role of positive familial processes, the presence of which may serve protective functions among adolescents in non-intact families, and the absence of which may increase the risks associated with particular non-intact family contexts.

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REFERENCES

Achenbach, T., McConaughy, S., & Howell, C. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity.

Psychological Bulletin, 101, 213-232.

Allison, P. & Furstenberg, F. (1989). How marital dissolution affects children: Variations by age and sex. <u>Developmental Psychology</u>, 25, 540-549.

Amato, P. (1993). Children's adjustment to divorce: Theories, hypotheses, and empirical support. <u>Journal of Marriage and the Family</u>, 55, 23-38.

Amato, P. (1994). Life-span adjustment of children to their parents' divorce. The Future of Children, 4, 143-164.

Amato, P. & Keith, B. (1991). Parental divorce and the well-being of children: A metaanalysis. <u>Psychological Bulletin, 110</u>, 26-46.

Aseltine, R. (1996). Pathways linking parental divorce with adolescent depression.

<u>Journal of Health and Social Behavior</u>, 37, 133-148.

Avery, R. & Ryan, R. (1988). Object relations and ego development: Comparison and correlates in middle childhood. <u>Journal of Personality</u>, 56, 547-569.

Barber, B. & Lyons, J. (1994). Family processes and adolescent adjustment in intact and remarried families. <u>Journal of Youth and Adolescence</u>, 23, 421-436.

Barber, B.L. & Eccles, J.S. (1992). Long-term influence of divorce and single parenting on adolescent family- and work-related values, behaviors, and aspirations. <u>Psychological Bulletin</u>, <u>111</u>, 108-126.

Baron, R. & Kenny, D. (1986). The moderator-mediator variable distinction in social-psychological research: Conceptual, strategic, and statistical considerations. <u>Journal of Personality and Social Psychology</u>, 51, 1173-182.

Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.) Child development today and tomorrow. (pp. 349-378). San Francisco: Jossey-Bass.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance abuse. <u>Journal of Early Adolescence</u>, 11, 56-94.

Belle, D. (1990). Poverty and women's mental health. <u>American Psychologist</u>, 45, 385-389.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development.

Developmental Psychology, 22, 723-742.

Carlson, M. & Danziger, S. (1998). <u>Cohabitation and the measurement of child poverty</u>. Manuscript under review.

Coleman, J. (1988). Social capital in the creation of human capital. <u>American Journal of Sociology</u>, 94, supp; S95-S120.

Comer, J.P. & Haynes, N.M. (1991). Parent involvement in schools: An ecological approach. Special issues: Educational partnerships: Home-community-school. <u>Elementary School Journal</u>, 91, 271-277.

Committee on Ways and Means, U.S. House of Representatives (1996). <u>Green Book.</u>

Washington D.C.: U.S. Government Printing Office.

Compas, B.E. & Williams, R.A. (1990). Stress, coping, and adjustment in mothers and young adolescents in single- and two-parent families. <u>American Journal of Community</u>

Psychology, 18, 525-545.

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Conger, R. & Elder, G.H., Jr. (1994). Families in troubled times. New York: Walter de Gruyter.

Conger, R.D., Ge, X., Elder, G.H., Lorenz, F.O., & Simons, R.L. (1994). Economic stress, coercive family processes, and developmental problems of adolescents. Child Development, 65, 541-561.

Connell, J.P., Spencer, M.B., & Aber, J.L. (1994). Educational risk and resilience in African American youth: Context, self, action, and outcomes in school. Child Development, 65, 493-506.

Dawson, D. (1991). Family structure and children's health and well-being: Data from the 1988 National Health Interview Survey on child health. <u>Journal of Marriage and the Family</u>, 53, 573-584.

Demo, D. & Acock, A. (1996). Family structure, family process, and adolescent well-being. <u>Journal of Research on Adolescence</u>, 6, 457-488.

Derogatis, L.R., Rickels, K., & Rock, A.F. (1976). The SCL-90 and the MMPI: A step in the validation of a new self-report scale. <u>British Journal of Psychiatry</u>, 128, 280-289.

Dodge, K. (1990). Developmental psychopathology in children of depressed mothers.

<u>Developmental Psychology</u>, 26, 3-6.

Dornbusch, S., Carlsmith, J., Bushwall, S., Ritter, P., Leiderman, H., Hastorf, A., & Gross, R. (1985). Single parents, extended households, and the control of adolescents. Child Development, 56, 326-341.

Dornbusch, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F., & Fraleigh, M.J. (1987). The relation of parenting style to adolescent school performance. Child Development, 58, 1244-1257.

Downey, G. & Coyne, J. (1990). Children of depressed parents: An integrative review.

Psychological Bulletin, 108, 1-27.

Duncan, G. & Brooks-Gunn, J. (1997). <u>Consequences of growing up poor</u>. New York: Russell Sage Foundation.

Eccles, J.S., Early, D., Fraser, K., Belansky, E., & McCarthy, K. (1997). The relation of connection, regulation, and support for autonomy to adolescents' functioning. <u>Journal of Adolescent Research</u>, 12, 263-286.

Eccles, J.S. & Sameroff, A.J. (1998). <u>Making sense: Assessing successful adolescent</u> development in multiple contexts. Manuscript in preparation.

Elliott, D.S., Huizinga, D., & Menard, S. (1989). <u>Multiple problem youth: Delinquency, substance use, and mental health problems.</u> New York: Springer-Verlag.

Fine, M.A. & Schwebel, A.I. (1988). An emergent explanation of differing racial reactions to single parenthood. <u>Journal of Divorce</u>, 11, 1-23.

Furstenberg, F.F., Cook, T.D., Eccles, J., Elder, G.H., & Sameroff, A. (1998). Managing to make it: Urban families and adolescent success. Forthcoming. Chicago: University of Chicago Press.

Garfinkel, I. & McLanahan, S.S. (1986). Single mothers and their children: A new American dilemma. Washington D.C.: Urban Institute.

Hall, L. A., Gurley, D. N., Sachs, B., & Kryscio, R.J. (1991). Psychosocial predictors of maternal depressive symptoms, parenting attitudes, and child behavior in single-parent families.

Nursing Research, 4, 214-220.

Hardy, M. A. (1993). <u>Regression with dummy variables.</u> Newbury Park: Sage Publications.

Harter, S. (1990) Self and identity development. In Feldman, S.S. & Elliott, G.R. (Eds.), At the threshold: The developing adolescent. Cambridge: Harvard University Press.

Hatchett, S., Veroff, J., & Douvan, E. (1995). Marital instability among Black and White couples in early marriage. In M. Belinda Tucker & Claudia Mitchell-Kernan (Eds.), The decline in marriage among African Americans. New York: Russell Sage Foundation.

Hetherington, E. M., Bridgess, M., & Insabella, G.M. (1998). What matters? What does not? Five perspectives on the association between marital transitions and children's adjustment.

American Psychologist, 53, 167-184.

Hetherington, E. M. & Clingempeel, W. (1992). Coping with marital transitions: A family systems perspective. Monographs of the Society for Research in Child Development, 57 (2-3, Serial No. 227).

Hill, M., Yeung, W., & Duncan, G. (1996). <u>Parental family structure across childhood</u> and young adulthood behaviors. Unpublished manuscript, University of Michigan, Institute for Social Research.

Johnston, J.R., Kline, M., & Tschann, J.M. (1989). Ongoing postdivorce conflict: Effects on children of joint custody and frequent access. <u>American Journal of Orthopsychiatry</u>, 59, 576-592.

Kalter, N., Kloner, A., Schreier, S., & Okla, K. (1989). Predictors of children's postdivorce adjustment. <u>American Journal of Orthopsychiatry</u>, 59, 605-618.

Lamborn, S., Mounts, N., Steinberg, L., & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 62, 1049-1065.

Lempers, J.D. Clark-Lempers, D., & Simons, R.L. (1989). Economic hardship, parenting, and distress in adolescence. Child Development, 60, 25-39.

Loeber, R. & Stouthamer-Loeber, M. (1986). <u>Family factors as correlates and predictors</u> of juvenile conduct problems and delinquency. Chicago: University of Chicago Press.

Maccoby, E.E. & Martin, J.A. (1983). Socialization in the context of the family: Parent-child interaction. In E.M. Hetherington (Ed.), P.H. Mussen (Series Ed.), <u>Handbook of Child Psychology</u>, Vol. 4. Socialization, <u>Personality</u>, and <u>Social Development</u>. New York: Wiley.

McKenry, P. & Fine, M. A. (1993). Parenting following divorce: A comparison of black and white single mothers. <u>Journal of Comparative Family Studies</u>, 24, 99-111.

McLanahan, S. S. (1997). Parent absence or poverty: Which matters more? In Duncan, G. & Brooks-Gunn, J., (Eds.). Consequence of growing up poor. New York Russell Sage Foundation.

McLanahan, S.S. & Bumpass, L. (1988). Intergenerational consequences of family disruption. <u>American Journal of Sociology</u>, 94, 130-152.

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

McLoyd, V. (1990). The impact of economic hardship on Black families and children:

Psychological distress, parenting, and socioemotional development. Child Development, 61, 311-346.

Miller, J.E. & Davis, D. (1997). Poverty history, marital historyt, and quality of chidlren's home environments. <u>Journal of Marriage and the Family</u>, 59, 996-1007.

Montemayor, R. (1983). Parents and adolescents in conflict: All families some of the time and some families most of the time. <u>Journal of Early Adolescence</u>, 3, 83-103.

Musick, K. & Bumpass, L. (1997). How do prior experiences in the family affect transitions to adulthood? Unpublished manuscript, University of Wisconsin, Center for Demography and Ecology.

Nolen-Hoeksema, S. & Girgus, J.S. (1994). The emergence of gender differences in depression during adolescence. <u>Psychological Bulletin</u>, 115, 424-443.

Patterson, G. & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-307.

Patterson, G.R., DeBaryshe, B.D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. <u>American Psychologist</u>, 44, 329-335.

Richters, J. (1992). Depressed mothers as informants about their children: A critical review of the evidence for distortion. Psychological Bulletin, 112, 485-499.

Roeser, R.W. & Eccles, J.S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. <u>Journal of Research on Adolescence</u>, 8, 123-158.

Sampson, R. & Laub, J. (1994). Urban poverty and the family context of delinquency: A new look at structure and process in a classic study. Child Development, 65, 523-540.

Simons, R., Beaman, J., Conger, R., & Chao, W. (1993). Stress, support, and antisocial behavior trait as determinants of emotional well-being and parenting practices among single mothers. <u>Journal of Marriage and the Family, 55</u>, 385-398.

Steinberg, L. (1987). Single parents, stepparents, and the susceptibility of adolescents to anitsocial peer pressure. <u>Child Development</u>, 58, 269-275.

Steinberg, L., Elmen, J., & Mounts, N. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. Child Development, 60, 1424-1436.

Steinberg, L., Lamborn, S, Dornbusch, S., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. Child Development, 63, 1266-1281.

Stolba, A. & Amato, P. (1993). Extended single-parent households and children's behavior. The Sociological Quarterly, 34, 543-549.

Tucker, M.B. & Mitchell-Kernan, C. (1995). The decline in marriage among African Americans. New York: Russell Sage Foundation.

Wallerstein, J.S. & Kelly, J.B. (1980). <u>Surviving the breakup: How children and parents</u> cope with divorce. New York: Basic Books.

Weinraub, M. & Wolf, B. (1983). Effects of stress and social supports on mother-child interactions in single- and two-parent families. Child Development, 54, 1297-1311.

Weissman, M.M., Leaf, P. J., & Bruce, M.L. (1987.) Single parent women: A community study. Social Psychiatry, 22, 29-36.

Wilson, M. (1986). The Black extended family: An analytic consideration.

<u>Developmental Psychology</u>, 22, 246-258.

Wu, L. (1996). Effects of family instability, income, and income instability on the risk of a premarital birth. American Sociological Review, 61, 386-406.

Zill, N. & Peterson, J.L. (1986). Marital disruption, parent-child relationships, and behavior problems in children. <u>Journal of Marriage and the Family</u>, 48, 295-307.

ENDNOTES

- 1. Both legal and common law marriages were recognized. Common law marriages were assumed when the primary caregiver's partner was both identified as the target child's stepparent, and had been a member of the household for at least half the child's life
- 2. The presence of other adults in the household who were not identified as romantic partners (e.g., grandparents, other adults identified as "friends") did not affect the creation of these family structure variables.

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7								.33 ***
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<i>ک</i>					i i i	.12 ***	22 ***	27 ***
4				# # 1	.37 **	*** 61.	32 ***	24 ***
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7		 	* 90.	10 **	**	15 ***	* 10.	.17 ***
	1 2 6 1	.25 ***		***	.05	.27 ***	* 40	* 20
	Income	2 Parent distress	3 Authoritarianism	4 Monitoring	5 Family Climate	Youth Achievement	Problem behavior	8 Youth distress
	,	2	3 4	4 N	ς π	٠ و	7 P	≯

Table 2. Comparison of family types on outcomes and explanatory variables: Unadjusted means.

Significant Differences		I < D I < C, D, N I > all		I > all; S>C, D, N; C, D, > N	I, S < all	I < S, D	Z	Q <
		I < D I < C, I > ell		1 > g D,	I, S	V	I. S >	I, S >
Never-married (N) M SD		.99 .53 1.01		1.42	.62	.58	.57	1.08
Neve M		.15 2.02 34		2.49	1.77	3.74	4.36	12
Divorced (D) M SD	·	.97 .52 .97		1.70	09:	.57	.48	.79
Divor M		.12 1.90 34		3.31	1.83	3.74	4.47	11
Cohabiting (C) M SD		.24 .95 2.05 .60 45 1.06		3.45 2.01		3.79 .59		
(S) SD	!	97.		1.96	.58	.55	.46	.74
Step M	Č	.06 1.84 13		4.81	1.61	3.85	4.50	80
Intact (I) M SD	-	11 1.01 1.75 .44 .25 .97		1.73	.50	.60	.46	.79
Intac M	•	1.75		5.79	1.56	3.64	4.53	.05
Variable	Youth Outcomes	Psych. Distress Achievement (z)	Mediators	Income (\$10,000's)	Parent Distress	Authoritarianism	Monitoring	Climate (z)

Note: The number of intact families ranges from 605-647; the number of step from 158-177; the number of cohabiting from 45-49; the number of divorced from 206-244; and the number of never-married from 64-78. Sample sizes differ due to missing data. "Z" denotes a standardized score.

Table 3: Multiple Regression Ordinary Least Squares (OLS) for Youth Outcome Variables: Coefficients from Final Models

	Proble	m Behavior	You	Youth Distress	Academic	Academic Achievement	
	X		Model	Model 2	Model 1	Model 2	
	ж 52	В	В	Вβ	Вβ	Вβ	
Controls							
Race	.11 .05 +	9.			*** 00 07	,	
Youth sex	4122 ***		10			.13	
# Children < 18	+ 50. 50.	10:	03 05	.0000 + 10. 10	C7:	_	
Youth Age	.10 .06 *	707			9.	 10:-	
Parent sex	1404	.12	.0502	0502	2815 *** 0602	2413 *** 0301	
Mediatore							
Taxxa							
income		.02 .01				*** C1 UC	
Parent Distress		01					
Authoritarianism							
Monitoring		,				2716 ***	
Climate				20			
: :					•		
Family Structure (Intact=omitted)	e and c						
(trumor - oranica)							
duch 				.01 .01	3011 ***	2108 **	
Cohabiting						-31 -06 *	
Divorced	* 90. 21.	.11 .05	.14 .08 *		- 17	. 73 . 10 **	
Never-married		.10 .03	* 90. 61.	.13 .04	.08	0702	,
i							
Constant	-1.0	.82	1.78 ***	2.12 **	3.87 **	7	
Adjusted R ²	*** 40.	*** **	*** CU	***	***	i i	
					*** 07.	*** C7.	