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The effects of parental antisocial behavior trait and parenting practices on child adjustment: a study of single-mother families

Jacqueline Marie Davis
Iowa State University

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The effects of parental antisocial behavior trait and parenting practices on child adjustment: A study of single-mother families

Davis, Jacqueline Marie, Ph.D.
Iowa State University, 1993

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The effects of parental antisocial behavior trait and parenting practices on child adjustment: A study of single-mother families

by

Jacqueline Marie Davis

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

Department: Sociology
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Approved:
Signature was redacted for privacy.

In Charge of Major Work
Signature was redacted for privacy.

For the Major Department
Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1993

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DEDICATION

Dedicated to my nephew, Brian Antonio Grant,
for whom life has been no crystal stair,
but who keeps laughing and joking
through it all.
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CHAPTER ONE
INTRODUCTION

Recent social science research makes evident an increase in attention to adolescence as an important phase in the life course, and to the family as a context for understanding adolescent development (Gecas & Seff, 1991). Because the incidence of several problem behaviors among adolescents is rising (Uhlenberg & Eggebeen, 1986), this line of research into family and adolescent development is likely to increasingly reflect a particular focus on adolescent deviant behavior and its relationship to family process and interaction (Barber, 1992).

Over the past three decades family processes and interactions have changed dramatically due to structural changes which have occurred in American marriage and family life. These changes have transformed "traditional" living arrangements for children and stimulated an enormous amount of popular and scholarly interest regarding the consequences for children's well-being. Of greatest concern have been the impact of divorce, single-parent families, and a general erosion of parental commitment and support (Demo, 1992).

A recent meta-analysis of 92 studies of children found that parental divorce is associated with negative outcomes in the areas of academic achievement, conduct, psychological adjustment, self-esteem, and social relations (Amato &
Keith, 1991b). Another meta-analysis of 33 studies found that adults who experienced parental divorce as children, compared with those from continuously intact families of origin, have poorer psychological adjustment, lower socioeconomic attainment, and greater marital instability (Amato & Keith, 1991a). The cumulative picture that emerges from the evidence suggests that parental divorce (or some factor connected with it) is associated with lowered well-being among both children and adult children of divorce. However, the differences in well-being between those from divorced and nondivorced families, on average, are not large. This is due to the fact that a great deal of variability is present among children of divorce, with some experiencing problems and others adjusting well or even showing improvements in behavior (Amato, 1993:23). Thus, recent research, has failed to acknowledge the variations among children in single-parent families. Studies such as this one, acknowledge and strive to explain these variations.

Explanations have been proposed from several perspectives to account for children’s adjustment to divorce. Most explanations revolve around one or another of five central concepts: the loss of the noncustodial parent, the adjustment of the custodial parent, interparental conflict, economic hardship, and stressful life changes.
Yet, Lahey et al., (1988) hypothesize that what has appeared in previous studies to be a relation of etiological significance between divorce and conduct disorder is actually a spurious correlation attributable to the common association of these two variables with a "third variable", parental antisocial personality disorder (APD). These researchers suggest that APD is causally related to both divorce and child conduct disorder, but that divorce and child conduct disorder are not directly related (p.336).

In response to this hypothesis, Patterson & Capaldi (1991) argue that parental antisocial personality disorder is not directly related to child adjustment problems, but APD is directly related to poor parenting practices. According to these researchers, antisocial parents are at significantly greater risks for a variety of problems, such as unskilled parenting practices. As noted by Patterson and Capaldi, antisocial parents are apt to lack the motivation or skill necessary for competent parenting. They tend to be less educated, poorly employed, and inattentive to parenting responsibilities. Thus, the group of children most at risk for adjustment problems are children with antisocial parents.

In an attempt to examine the hypotheses presented by Lahey and his colleagues, as well as, Patterson and his colleagues, the present study uses the following concepts to
construct an explanation for children’s adjustment to divorce: family income, mother’s education, mother’s antisocial behavior trait, father’s antisocial behavior trait, mother’s parenting practices and father’s parenting practices. This model can distinguish several effects, and identify which effects are direct and which are indirect. Therefore, this research can help to answer many of the questions posed by Lahey et al., (1988) and Patterson and Capaldi (1991).

Theoretical Perspective

In an attempt to build a model of parenting that (a) specifies the manner in which various factors found to be important in previous studies related to each other and (b) identifies potentially important constructs that have been included in prior research, this study employs social learning and exchange concepts and principles.

The social learning perspective suggests that child behaviors are direct outgrowths of the thousands of social exchanges that occur on a daily basis among family members. The function of parenting practices such as discipline, monitoring, and other family-management skills is to control the microsocial exchanges (Patterson, 1982; Patterson et al., 1989). From this perspective, skillful employment of family-management procedures plays a key role in the socialization process. The presence of deviant child
behavior implies ineffective parenting skill in one or more family management areas (Patterson & Capaldi, 1991:198). This perspective takes the view that family members directly train the child to perform antisocial behaviors (Wahler & Dumas, 1984). Kelley (1983) contends that these principles represent a general set of assumptions common to virtually all social scientific theory.

In attempting to account for variability in parenting, social learning and exchange theory suggests the importance of considering factors both internal and external to the parent-child relationship (Simons et al., 1990:376). Social learning theory will predict variability in parenting practices as a function of differences in socialization experiences.

Social learning and exchange theory sensitizes one to the fact that parenting takes place within the context of a parent-child relationship. Hence, just as the parent brings certain skills, perceptions, and values to this relationship, so the adolescent's behavior toward the parent is a function of his or her comparison level (e.g., ideas about proper parenting), equity judgments, social skills, values, and comparison level for alternative relationships and rewards. According to Simons et al. (1990:389), any comprehensive explanation of parenting must include a consideration of the factors that influence the child's
behavior and the manner in which this behavior shapes the response of the parent.

Rationale

This study is important because the data were selected on the basis of divorce in the parents rather than conduct disorder in the children. Thus, it is free of referral biases unlike most of the previous studies in this area. Also, previous models have been limited to conduct disorders in boys only, but this study allows for gender analyses. Previous research only looks at maternal effects, but in this study an analysis of paternal effects on child adjustment problems is possible because fathers are included.

The purpose of this study is to provide a more accurate picture regarding divorce and child adjustment problems by examining the effects of parental antisocial behavior trait and parenting practices on child adjustment problems. This study explores the question of why some single-mother families are more vulnerable to a variety of problems (e.g., unskilled parenting practices) than others. It goes beyond comparing two-parent and single-parent families and begins to look at variations among the latter.

Organization of the Study

Chapter one provides a brief statement of the problem, the rationale for and importance of the research, and a
brief description of the organization of the study. Chapter two reviews the relevant research, discusses the theoretical perspective, presents research questions and hypotheses, and introduces the conceptual model. The sample, data collection procedures, and measures used for the analyses are presented in chapter three. Chapter four explains the data analysis, the method employed, and presents the research results. The discussion of the results and conclusions, suggestions for future research, and policy implications are found in chapter five. The study concludes with a list of references and a set of appendices (all measures used in the analyses are included in the appendices).
Overview

Divorce rates in the United States increased precipitously during the 1960s and 1970s, and, although the incidence leveled off in the 1980s, projections indicate that between one-half and two-thirds of recent first marriages will end in divorce (Martin & Bumpass, 1989). In response to this high rate of marital disruption, the last two decades have seen a profusion of studies concerned with the functioning and adjustment of divorced parents. Several studies have reported that single parents are at greater risk for psychological problems (Kitson & Morgan, 1990) and inept parenting (Hetherington, 1989) than those who are married. Although there is strong evidence regarding these general differences, it is also true that there is great variation in functioning among these individuals (Kitson, 1992). While some are depressed and engage in ineffective parenting practices, others manifest high morale and exemplary parenting.

But, for the small subset of these single mothers who are antisocial, they are at risk, in that, their parenting practices (e.g., consistent discipline, explanation of rules and standards, monitoring) may be disrupted after the divorce (Patterson & Capaldi, 1991). Structural equation
modeling using data from a large sample of recently separated families provides strong support for the relation among stress, disrupted discipline, and antisocial behavior for boys (Forgatch et al., 1985).

In the case of divorce, postseparation behavior problems occur with diminished parental responsiveness, affection, and involvement, and increased parental punitiveness and irritability (Hetherington et al., 1982). What seems to disrupt the family are the accompanying shifts in family-management practices. If these shifts persist, there are likely to be long-term increases in child adjustment problems, both at home and at school, accompanied by fundamental shifts in roles within the family (Patterson & Capaldi, 1991:216). Disrupted monitoring would suggest that during early adolescence boys are at risk for involvement in a deviant peer group (Dishion et al., 1989). According to Kazdin (1987), antisocial children are likely to experience major adjustment problems in the areas of academic achievement and peer social relations.

Experimental studies of group formation show that aggressive behavior leads to rejection (Dodge, 1983). Research suggests that antisocial behavior and peer group rejection are important preludes to deviant peer group membership (Dishion et al., 1989). A large number of studies point to the peer group as the major training ground for delinquent
acts and substance use (Elliott et al., 1985). But, the disrupted family processes producing antisocial behavior may indirectly contribute to later involvement with a deviant peer group. This may function as an additional determinant for future antisocial behavior. The deviant peer group variable may be thought of as a positive feedback variable that contributes significantly to maintenance in the process (Patterson et al., 1989:331).

Although children of single-parent families are more apt than children of two-parent families to experience such problems as previously discussed, there is tremendous variation among children of single-parent families. Some children in single-parent families display significant adjustment problems while others do quite well. Some researchers suggest (e.g., Lahey et al.) that the children who do not do well are those who have antisocial parents. They argue that antisocial adults are at risk for marital problems and divorce, and that it is this minority of single parents that largely accounts for the higher rate of problems among children in single-parent families.

Families of antisocial children are characterized by harsh and inconsistent discipline, little positive parental involvement with the child, and poor monitoring and supervision of the child’s activities (Loeber & Dishion, 1983). Stressors impinging on the family such as
unemployment, family violence, marital discord, and divorce are associated with both delinquency (Farrington, 1987) and child adjustment problems in general (Garmezy & Rutter, 1983).

This particular study is concerned with examining the extent to which antisocial behavior of either mother or noncustodial father is related to internalizing and/or externalizing problems in children. The effect of antisocial behavior trait on child adjustment may be direct, in that children may model antisocial behavior displayed by their parents and exhibit conduct problems or children may be disturbed by their parents' antisocial behavior and exhibit psychological problems. The effects may also be indirect through their impact on parenting practices. Patterson and Capaldi found that antisocial adults are apt to be less interested or competent as parents; thus, through poor family management practices they effect the adjustment of their children.

This study is concerned with examining the extent to which the effect of adult antisocial behavior trait on child adjustment is direct, or indirect through parenting practices. In examining the effect of antisocial behavior trait, this research will focus upon fathers, as well as mothers.
The Model To Be Tested

The model to be tested is shown in Figure 1. The figure depicts a relationship between the outcomes that are the focus of this study - child adjustment problems. The two problems that are discussed are conduct problems and psychological problems. Children who experience these types of maladjustments tend to have difficulties at home, as well as at school (Kazdin, 1988). They are apt to have low self-esteem, are less interested in their school work, and often become involved in delinquent peer groups (Garmezy & Rutter, 1983).

Antisocial Behavior Trait and Parenting Practices

According to Kline et al. (1991), the amount of access the child has to the noncustodial father is not related to child adjustment. But, while simple frequency of visitation may not be important, the characteristics of the father may be. Children may model antisocial behaviors exerted by the father, or may be psychologically upset by his antisocial actions. This would suggest a direct effect from father's antisocial behavior trait to child adjustment. On the other hand, it may be that father's parenting practices are important. Most studies look at the frequency of contact with the noncustodial father rather than the quality of parenting by him. If father's parenting practices are related to child adjustment, father's antisocial behavior
trait may exert an influence on child adjustment through its impact on the quality of his parenting.

Patterson and his colleagues support the theory that disrupted parenting practices are causally related to child antisocial behavior (Patterson et al., 1989:330). They found that antisocial parents and parents with marginal child-rearing skills are perhaps most susceptible to the disrupting effects of stressors and socioeconomic disadvantage. External events are most disabling to those individuals who already exhibit negative personality traits or weak personal resources because stressors amplify such problems in adjustment. When antisocial parents or parents with minimal family management skills are faced with acute or prolonged stress, nontrivial disruptions in family management practices are likely to occur (Patterson et al., 1989:332).

According to Patterson et al. (1989), the major impact of stress on child adjustment is mediated by family management practices. These findings are supported by other studies in this area. For example, Forgatch (1988) used a quasi-experimental design based on data from families referred for treatment of antisocial boys. She showed that changes in parental discipline and monitoring were accompanied by significant reductions in child antisocial behavior. There were no changes in antisocial child
behavior for those families who showed no changes in these parenting skills.

Follow-up studies of antisocial children show that as adults they ultimately contribute disproportionately to the incidence of alcoholism, accidents, chronic unemployment, divorce, physical and psychiatric illness, and the demand on welfare services (Caspi et al., 1987). Thus, as a predictor of adult antisocial personality, having an antisocial parent places the child at significant risk for antisocial behavior; having two antisocial parents puts the child at even higher risk (Robins & Earls, 1985).

In order to test for the extent to which antisocial behavior trait directly or indirectly (through parenting practices) affects child adjustment, this model needs to control for mother’s education and family income.

Family Income

One of the most significant changes that occurs after a separation or divorce is a decrease in economic resources. This is especially true for custodial mothers. Women with children experience a 30 percent decline in income in the first year following a divorce (Hoffman & Duncan, 1988), and divorce accounts for many women falling below the poverty line (Lerman, 1987). Historically, as it has evolved through the political and legal systems (Kahn & Kamerman, 1988), the central mechanisms by which divorced fathers
contribute to their children has been court-ordered child-support payments. Yet, recent estimates indicate that nearly 20 percent of divorced mothers do not have a child-support award (Office of Child Support Enforcement, 1988). Moreover, of women with an award, less than 75 percent receive payment, and the amount of support received is generally below the costs associated with rearing children (Seltzer, 1991).

Such economic strains and surrounding events help to shape the well-being of the parent, which may in turn influence parental attitudes toward children and the quality of parent-child interactions (Takeuchi et al., 1991). The emotional health of children is affected by these childrearing practices and families with limited resources frequently live in neighborhoods with adverse physical and social environments characterized by such features as crime, poor housing, and low-quality schools. Among adolescents, poor environmental conditions often lead to social isolation from important role models and social support systems and can result in emotional and behavioral problems (Wilson, 1987). Thus, Figure 1 shows the effect of income upon the adjustment measures to be indirect through parenting practices.
Personal Characteristics

In addition to variables involving economic strain, Figure 1 includes two constructs concerned with personal characteristics. The first is education. Figure 1 shows a path from education to parenting practices. Highly educated adults are more likely than less educated persons to seek out and strive to apply "scientific" materials on parenting (Harman & Brim, 1980). The higher a person's education, the greater the probability that he or she has completed college courses on child development, has attended parenting classes, and has read books concerning effective parenting strategies. Also, inductive reasoning is more apt to be used as a form of child control by more educated, highly verbal parents, and corporal punishment by individuals of low education (Straus et al., 1980). These dissimilarities by level of education should translate into significant, albeit modest, differences in parental behavior. Consonant with this hypothesis, prior research has found a small association between parents' education and parenting practices (Simons et al., 1990).

In addition to this direct effect, level of education is expected to exert an indirect influence on parenting practices. Education is likely to impact adjustment through its association with income. Persons of low education are apt to work at unskilled, low-paying jobs. As noted by
Patterson et al., uneducated parents working in unskilled occupations are significantly less effective in discipline, monitoring, problem solving, positive reinforcement, and involvement.

The second personal characteristic is that of antisocial behavior trait. A trait consists of a pattern of behavior that is exhibited across time and settings (Patterson et al., 1992). Antisocial behavior involves actions that are deemed risky, inappropriate, short-sighted, or insensitive by the majority of people in the society (DMS III-R, 1987). Thus individuals meeting the criteria for the antisocial behavior trait engaged in delinquent behavior during late childhood and early adolescence, and continue as adults to participate in deviant actions such as interpersonal violence, substance use, sexual promiscuity, traffic violations, and the like.

Lahey et al. (1988) reported a higher incidence of antisocial behavior trait among single mothers in their clinical sample than among mothers from intact families, and Capaldi and Patterson (1991) found that women high on the antisocial behavior trait had more marital transitions than those low on this pattern of behavior.

According to Patterson and Capaldi (1991), the relation between parental antisocial behavior, unskilled parenting practices, and family transitions can illuminate the
relation between transitions such as divorce and child antisocial behavior. Therefore, due to their inept parenting practices, an antisocial parent places a child at significant risk for antisocial behavior, and having two antisocial parents puts the child at even higher risk (Robins & Earls, 1985). Thus, the antisocial behavior trait of both parents is also a strong predictor of child adjustment problems.

Patterson and Dishion (1988) hypothesized that faulty discipline may be the mediating link between antisocial behavior in one generation and the next. They found that antisocial parents are at risk for using ineffective discipline in rearing their children, in so doing, they produce antisocial children.

Patterson and Capaldi (1991) noted that antisocial parents may lack the motivation or skill necessary for competent parenting. They speculate that it is single parents who manifest this behavior trait, rather than single parents in general, who are at risk for inept parenting and children with adjustment problems. Consonant with this hypothesis, they found an association between mothers' antisocial behavior and quality of their monitoring and discipline. Similarly, Laub and Sampson (1988), using the Gluecks' (Glueck & Glueck, 1968) well-known Boston data set, found that parental antisocial behavior was related to poor
FIGURE 1. Factors Contributing to Child Adjustment Problems.
discipline practices. Based upon these arguments and findings, Figure 1 depicts a path from antisocial behavior trait to parenting practices.

The various hypotheses can be summarized in the path model presented in Figure 1. The model indicates that the effect of father’s and mother’s antisocial behavior trait on child adjustment problems may be a direct effect—produced by a modeling effect, or an indirect effect through parenting practices; family income may also directly effect child adjustment, or its effect may be indirect through parenting practices; education may also have a direct effect on child adjustment, but is more likely to have an indirect effect through parenting practices.

The model was tested using data from WAVE 1 and WAVE 2 of the Iowa Single Parent Project, a panel study of 210 single parent women and their adolescent children. Because both income and education are included in the model as explanatory variables, it is unlikely that any results obtained can be attributed to the effects of social class. Yet, due to the fact that this is an all white, rural population, this particular sample, though representative of Iowa and many parts of the midwest, is not representative of the country as a whole.
CHAPTER THREE

METHODOLOGY AND DATA DESCRIPTION

Sample

A sample of 207 female-headed households was recruited through the cohort of 8th and 9th grade students living in approximately two-thirds of all counties in Iowa. University communities, and the counties contiguous to them, were excluded from the sampling frame. All measures for this study were reviewed and approved by the Iowa State University Human Subjects Committee. The sample was generated through lists of students provided by schools. The lists identified the name of each student's parent. Telephone calls were made to residences where the parent's name suggested the individual was female. Mothers were screened according to the criteria that they be permanently separated from their husbands, that the separation occurred within the past two years, that the husband from whom they separated is the biological parent of the 8th or 9th grade target child, and that they have a sibling within 3 years of age of the target child. These are rather stringent criteria, and only about 15% of the women telephoned met all of these requirements. Of the women who met the study criteria, an amazing 99% agreed to participate. Indeed, out of the 210 women recruited, only 3 later refused to be involved. This high response rate appeared to be a function
of two factors: the women's need for the $175 subject compensation fee, and their desire to facilitate research concerned with the difficulties experienced by single-parent mothers.

Roughly one-third of the families lived in communities smaller than 7,500 population, another third resided in towns ranging in size from 7,500 to 50,000 residents, and the remaining third dwelled in cities larger than 50,000 inhabitants. Median family income, including child support and government payments, was $21,521. Mean level of education was 13 years. Only 4% had not completed high school, 42% had some post high school training, and 16% had a college degree.

Procedures

Each family was visited twice at their home. During the first visit, each of the three family members completed a set of questionnaires focusing upon family processes, individual family member characteristics, and economic circumstances. On average, it took approximately two hours to complete the first visit. Between the first and second visits, family members completed questionnaires left with them by the first interviewer. These questionnaires dealt with information concerning beliefs about parenting and plans for the future. Each family member was instructed to place his/her completed questionnaire in an envelope, seal
it and give it to the interviewer at the time of the second visit.

During the second visit, which normally occurred within two weeks of the first, the family was videotaped while engaging in several different structured interaction tasks. The visit began by having each individual complete a short questionnaire designed to identify issues of concern or disagreements within the family (e.g., chores, recreation, money, etc.). The family members were then gathered around a table and given a set of cards to read and discuss. All three family members were asked to discuss among themselves each of the items listed on the cards and to continue talking until the interviewer returned. The family was given 25 minutes to complete the task. The items on the cards concerned family issues such as discipline and chores, and the children's friends and school performance. The second task, 15 minutes in length, also involved all three family members. For this task, the family was asked to discuss and try to resolve the issues and disagreements which they had cited in the questionnaires they had completed earlier in the visit. The third task involved only the two youth and was 15 minutes in length. The youth were given a set of cards listing questions related to the way they got along, the manner in which their parents treated them, their friends, and their future plans.
The family's interaction around these three tasks was videotaped. Interviewers explained each task and then left the room while the family members discussed issues raised by the task cards. During the time family members were not involved in a videotaped interaction task, each family member completed an additional questionnaire asking about significant life events, attitudes toward sexuality, and personal characteristics. The second visit lasted approximately two hours.

The videotapes were coded by project observers using the Iowa Family Interaction Rating Scales (Melby et al., 1990). These scales focus upon the quality of behavior exchanges between family members. The project observers were staff members who had received several weeks of training on rating family interactions and specialized in coding one of the three interaction tasks. Before observing tapes, coders had to independently rate precoded interaction tasks and achieve at least 90% agreement with the standard. For purposes of assessing interobserver reliability, 25% of the tasks were randomly selected to be independently observed and rated by a second observer. Reliability between observers was determined by calculating a generalizability coefficient. In the case of two independent observers, this coefficient is an intraclass correlation and provides an estimate of true score variance.
relative to error variance (Suen & Ary, 1989). The magnitude of this coefficient varied by rating scale but on average ranged between .60 and .70.

**Measures**

**Family Income.** During WAVE 2, the mothers were asked to report the amount of money they had received during the previous year from employment, child support, alimony, government payments, their children's earning, etc. These amounts were summed to form a measure of total family income. This total was divided by the number of family members to form a percapita measure.

**Mother's Education.** The mothers were asked and reported the number of years of schooling they had completed.

**Mother's Antisocial Behavior Trait.** Using both WAVE 1 and WAVE 2 data sets, a composite measure of antisocial behavior trait was formed by standardizing and summing the scores from five scales in WAVE 1 and three scales in WAVE 2. The first scale consisted of a list of 12 delinquent acts before age 15 involving items such as shoplifting, skipping school, drinking alcohol, and fighting. Respondents were asked to indicate which of the acts they engaged in prior to age 15. Coefficient alpha for this instrument was .68.
The second instrument consisted of a deviant behavior checklist that asked respondents how often (0 = never, 4 = 4 or more times) during the past 12 months they engaged in each of 5 deviant acts. The acts focused upon fighting, traffic violations, lying, gambling, and having been arrested. Both WAVE 1 and WAVE 2 data were used in this composite measure. The third scale consisted of 12 items concerned with substance use. The respondents were asked to report how often during the last 12 months (1 = never, 4 = often) they had engaged in the behavior or experienced the phenomena described in each question. The items involved incidents such as getting drunk, trouble at work because of alcohol, and using illicit drugs from both WAVE 1 and WAVE 2. The coefficient alpha for WAVE 1 was .79, and for WAVE 2 was .80.

The fourth instrument listed 12 delinquent acts and asked the respondent to indicate how wrong (1 = very wrong, 5 = not at all wrong) it would be for a 9th grader to engage in each of the behaviors. This deviant values scale involved acts such as skipping school, shoplifting, drinking alcohol, and having sexual intercourse from both WAVE 1 and WAVE 2. The coefficient alpha for WAVE 1 was .84, and for WAVE 2 was .85.

The last measure of the antisocial trait consisted of a single item that asked the respondent to rate her attraction
to a risky, adventurous life style. The question was phrased as follows:

Some people prefer a calm and orderly life while others prefer a life filled with adventure and risks which may sometimes include breaking rules or laws. Please rank yourself on a 100 point scale where 1 = preference for a very calm/orderly life, 50 = the average person, and 100 = risky/adventuresome life.

The eight indicators were standardized and summed to form a composite measure of antisocial behavior trait. Coefficient alpha for this new instrument was .62.

Father's Antisocial Behavior Trait. Scores from two scales were combined to form a composite measure of father's antisocial behavior trait. First, mothers' were asked to report how often (0 = never, 5 = more than once a month) during the three years prior to the marital separation their former spouse engaged in abusive behavior toward them. The items were adapted from the Conflict Tactics Scale (Straus & Gelles, 1991), and focused on physical aggression (e.g., shoved you, slapped you, beat you, etc.). The coefficient alpha for the scale was .91.

The second measure asked mothers to report the antisocial behaviors of their former spouse during the past 12 months. Mothers were asked to indicate whether they (5 = strongly agree, 1 = strongly disagree) the following statements:
He has tended to drink too much alcohol.

He has gotten a traffic ticket for a moving violation.

He has done many reckless things.

He has had many arguments or conflicts with other people.

He has had problems with other people or on the job because of his drinking.

He takes too many prescription medications for sleeping or calming his nerves.

He doesn’t always tell me the truth about things.

He has had problems with the police for something other than traffic violations.

The coefficient alpha for this scale was .86.

**Mother's Effectual Discipline.** Past research has established that effective parents set standards for their children, monitor their behavior, are consistent in enforcing rules, and eschew harsh punishments (Maccoby & Martin, 1983). High scores on these four dimensions of parenting were treated as indications of effectual discipline. Measures for each of the dimensions were formed by aggregating mother self-reports, adolescent reports, and observer ratings of the videotaped family interaction tasks.

Family member reports about family processes are apt to be biased by the emotional state, attributional style or personality of the respondent (Baucom, Sayers, & Duhe, 1989; Lorenz, Conger, Simons, Whitbeck, & Elder, 1991). Simply substituting observational ratings for family member reports
is not a wholly satisfying solution as videotapes of family interaction sample a restricted segment of parental behavior. Olsen (1977) suggests that one remedy is to utilize both reports from insiders (the parent and child) and outsiders (trained observers) in constructing measures, the strategy used in constructing the measure of effectual discipline the present study. Family members are oftentimes poor observers of one another's behavior (Furman, Jones, Buhrmester, & Adler, 1989), and yet they have the greatest opportunity to observe one another in a myriad of contexts. Trained observers, on the other hand, have only limited access to a family's time together can assess family interactional patterns using a well-defined coding system and a broader view of normative behavior from having applied that system to numerous families. Thus pooling the two types of information should provide a more valid assessment of parental behavior than is provided by either of the two sources of data alone. Coefficient alpha for the several child and mother-report scales were generally above .65. On average, the correlation between child and mother reports, or between either child and mother report and the observational ratings, was .50 to .86, and the intra-class correlations used to measure intercoder reliability averaged .60. These levels are within the range of acceptable values and suggest the presence of basic agreement between coders
(Bakeman & Adamson, 1984; Harmann, 1977) and between family member reports (Schwartz, Barton-Henry & Pruzinsky, 1985). Although the measures are briefly described below, a more detailed description of the instruments and the factor analytic procedures used to generate them is presented in McGruder, Lorenz, Hoyt, Ge, & Montague (1992).

Mothers used a 4-item scale to report on the extent to which they used harsh disciplinary practices (e.g., "When punishing your 9th grader, how often do you hit him or her with a belt, paddle or something else?"). Response format for this instrument ranged from 1 (always) to 5 (never). Adolescents used the same four items to report on their mothers' harsh discipline. Observational coders rated the harsh discipline of mothers toward their children based upon family interaction and content of discussion in task 1 of the videotaped interaction. The mother-reports, child-reports, and observational ratings were standardized and summed to form a measure of low harsh discipline.

Mother reported on their monitoring using a 4-item scale (e.g., "How often do you know who your 9th grader is with when he/she is away from home?"). The response format ranged from 1 (always) to 5 (never). The adolescents reported on their mothers using the same items. The observational rating of monitoring was based upon the interaction and content of the discussion in task 1. The
mother-reports, child-reports, and observational ratings were reverse coded, standardized, and then summed to form a measure of high monitoring.

Mothers were asked to rate their consistency of discipline using a 4-item scale (e.g., "How often do you punish your 9th grader for something at one time and then at other times not punish him/her for the same thing?"). The response format ranged from 1 (always) to 5 (never). Adolescents rated their mothers consistency using the same items. The observational ratings of consistent discipline were based upon family interaction and content of discussion in videotaped task 1. The mother-reports, child-reports, and observational ratings were standardized and summed to form a measure of consistent discipline.

Finally, a 5-item scale was used to obtain mothers' ratings of their inductive reasoning in the course of enforcing rules or disciplining their children (e.g., "How often do you discipline the target child by reasoning, explaining, or talking to him or her?"). The response format ranged from 1 (always) to 5 (never). Adolescents reported on their mothers' behavior using the same items, and coders rated level of setting standards based upon family interaction and content of the discussion in task 1 of the videotapes. The mother-reports, child-reports, and
observational ratings were reverse coded, standardized, and summed to form a measure of setting of standards.

These four composite indicators of effective parenting practices were summed to form an aggregate measure of effectual Discipline. Although technically coefficient alpha is a measure of the internal consistency of scales, and not indices formed by aggregating scales, it can be used as method of summarizing the degree of inter-correlation among aggregated scales. Using alpha in this way, the coefficient for the four-item index of Effectual Discipline was .42.

Father's Effectual Parenting. Although children may show better adjustment when their divorced fathers continue to be involved in the role of parent, it is clear that effective parenting practices for nonresidential fathers will differ from those of fathers who live in the home. It would be difficult, for example, for fathers living outside of the home to monitor curfews or enforce punishments such as grounding. Indeed, noncustodial fathers who attempted to engage in such activities might be perceived as intrusive and the consequence might be increased conflict with the children and former spouse. Hence scales designed to measure effective parenting by parents living with the child are often not appropriate for nonresidential parents. Many nonresidential parents are, however, in a position to
monitor their children's school performance and friendship choices, to stress the importance of certain behavior standards, to enforce rules in a fair and consistent fashion, and to support the parenting efforts of the custodial parent.

In an attempt to construct an instrument which tapped these dimensions of parenting, 12 items were selected from parenting scales previously developed by the authors to measure monitoring and involvement (Simons, Lorenz, Conger & Wu, 1992), effective discipline (Simons, Whitbeck, Conger & Wu, 1991), inductive reasoning, and consistent enforcement of rules (Simons, Wu, Conger, & Lorenz, 1993) in a project focusing upon two-parent families. Child reports on these scales have been shown to correlate with parent self-reports on the same scales and with observational ratings of parental behavior. Further, the scales have been shown to predict adolescent adjustment problems. The 12 items selected from these scales represented actions that a parent might continue to perform even though he or she no longer lived in the same residence as the child. Adolescents were asked to indicate the extent to which they agreed (1 = strongly disagree, 5 = strongly agree) that their father engaged in each of the 12 parenting practices. The actual items are presented in Appendix E. Coefficient alpha was .73.
Externalizing Problems. Two instruments served as indicators of Externalizing Problems. The first was a 16-item, self-report commitment to school scale. The items focused on grade-point average, relationships with teachers, completion of homework, attendance record, and troubles with school authorities. Response format for the items ranged from 1 (strongly disagree) to 5 (strongly agree), and all items were coded such that high scores indicated difficulties. Coefficient alpha was .93. The second instrument consisted of a self-report delinquency inventory adapted from the National Youth Survey (Elliott, Huizinga, & Ageton, S.S. 1985; Elliott, Huizinga, & Millard, 1989). Respondents were asked to indicate how often during the preceding year they had engaged in (0 = never, 5 = six or more times) each of 34 delinquent activities. The acts varied from relatively minor offenses such as using alcohol to more serious offenses such as attacking someone with a weapon or stealing something worth over $25. Scores for the two instruments were standardized and summed to form a composite measure of Externalizing Problems.

Internalizing Problems. The depression and hostility subscales from the SCL-90-R (Derogatis, 1983) were used as indicators of Internalizing Problems. The 12-item depression subscale asks respondents to report how much discomfort each of twelve problems (e.g., crying easily,
feeling blue) has caused in the past week. The 6-item hostility subscale asks respondents to indicate how much they have been distressed by hostile feelings and impulses during the preceding week. The response format for each of the scales ranges from 1 (not at all) to 5 (extremely). The scale has demonstrated construct validity and internal consistency. Items from the two subscales were summed to form a composite measure of Internalizing Problems. Coefficient alpha for this measure was above .80.
Analysis

Within the field of sociology there is an emphasis upon quantitative analysis and hypothesis testing that seeks to maximize explained variance. Rather than merely incorporating variables into a simple regression model in an effort to maximize explained variance, path analysis will be employed so that the causal relationships that were previously hypothesized can be subjected to empirical scrutiny.

Path analysis is a form of multivariate analysis in which causal relationships among variables are graphically presented. The advantages of path analysis are that it forces the researcher to specify a causal order among the variables (particularly in terms of time sequence) and it allows for the evaluation of indirect effects of variables. The latter advantage provides a check for spurious effects.

According to Asher (1983), path analysis has become an increasingly popular tool for the analysis of data in the social sciences. Path analysis is a method for the formal explication of theory which attaches quantitative estimates to causal effects which are thought to exit on a priori grounds (Wolfle, 1980). Path analysis also requires the
researcher with the ability to assess the causal impact of theoretically linked variables.

Assessments of causality are made through the use of ordinary least squares regression. According to Lewis-Beck (1980), regression analysis employs several assumptions. First, regression analysis assumes no specification error. This requires that all relevant variables have been excluded, and that the relationship between X and Y is linear. Secondly, X and Y must be accurately measured. Finally, there is a set of assumptions regarding the error term. Specifically, the error term should have a mean of zero. The variance of the error term should be normally distributed and constant for all values of X. Error terms should also be uncorrelated with each other and uncorrelated with the independent variables.

When more than one predictor variable is employed the absence of perfect multicollinearity is also assumed. According to Bohrnstedt and Knoke (1988), multicollinearity is a condition of either high or near-perfect correlation among the independent variables in a multiple regression equation. Multicollinearity is damaging to the extent that it leads to unstable estimates of regression coefficients and large standard errors. In order to check for the presence of multicollinearity, Pearson Product-Moment
correlation coefficients were examined prior to the analyses.

In order to test the proposed model, listwise backward deletion was employed. This technique allows variables to be removed from the equation one at a time, only leaving the variables with significant p-values in the final equations.

Results

There are two dependent variables of interest in the conceptual model presented in this study. They are **externalizing problems** (conduct problems) and **internalizing problems** (psychological problems). The population for the study is limited to 56 boys and 65 girls from the first two years of a three year panel study conducted by the Center for Family Research and Rural Mental Health at Iowa State University. In this section there is a presentation of the mediating effects of mother’s parenting and father’s parenting on child adjustment, while controlling for family income, mother’s education, mother’s antisocial behavior trait, and father’s antisocial behavior trait.

The analysis begins with a brief description of the correlations between the variables in the model. This is followed by a description of the regression analysis for each of four sub-models.

A correlation matrix was derived for the two subgroups, boys and girls, using Pearson’s correlation coefficients.
These matrices can be found on the following pages in the form of Table 1 and Table 2.

The findings indicate that among boys, externalizing or conduct problems are most strongly associated with mother's parenting practices (−.59). Mother's education (−.39), father's parenting practices (−.38) and mother's antisocial behavior trait (.32) are also highly correlated with boys conduct problems. Conduct problems among girls was also most strongly correlated with mother's parenting practices (−.35), but at a lower level correlation than that of the boys. The only other significant variables correlated with conduct problems among girls was father's parenting practices (−.32), still slightly lower than the correlation found among boys.

Internalizing or psychological problems for boys are strongly associated with mother's parenting practices (−.44) and father's antisocial behavior trait (.37). Family income (−.29) and father's parenting practices (−.28) are also strongly correlated with boys psychological problems. Among girls, father's parenting practices (−.23) and family income (−.23) were most strongly correlated with psychological problems. Other significant variables correlated with psychological problems among girls are mother's parenting practices (−.22), mother's education (−.20) and mother's antisocial behavior trait (.20).
Table 1. Distributions and correlations among study variables for boys. (N=56)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation 1</th>
<th>Correlation 2</th>
<th>Correlation 3</th>
<th>Correlation 4</th>
<th>Correlation 5</th>
<th>Correlation 6</th>
<th>Correlation 7</th>
<th>Correlation 8</th>
</tr>
</thead>
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<td>12221.968</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mother's education</td>
<td>14.000</td>
<td>2.199</td>
<td>.482**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Mother's antisocial</td>
<td>.110</td>
<td>4.137</td>
<td>-.122</td>
<td>-.107</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Father's antisocial</td>
<td>.153</td>
<td>1.720</td>
<td>-.248*</td>
<td>-.285**</td>
<td>.131</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mother's parenting</td>
<td>.469</td>
<td>5.501</td>
<td>.034</td>
<td>.161</td>
<td>-.244*</td>
<td>-.114</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Father's parenting</td>
<td>44.107</td>
<td>6.211</td>
<td>-.226*</td>
<td>-.192</td>
<td>-.095</td>
<td>-.121</td>
<td>.318**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conduct problems</td>
<td>.584</td>
<td>1.670</td>
<td>-.224*</td>
<td>-.391**</td>
<td>.318**</td>
<td>.233*</td>
<td>-.593**</td>
<td>-.375**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>8. Psychological problems</td>
<td>-.175</td>
<td>1.967</td>
<td>-.287**</td>
<td>-.128</td>
<td>.159</td>
<td>.373**</td>
<td>-.443**</td>
<td>-.278**</td>
<td>.607**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p<.05**, **p<.10*
### Table 2. Distributions and correlations among study variables for girls. (N=65)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mother's education</td>
<td>13.615</td>
<td>1.966</td>
<td>.524**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mother's antisocial</td>
<td>.339</td>
<td>4.556</td>
<td>-.196</td>
<td>-.127</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Father's antisocial</td>
<td>-.502</td>
<td>1.315</td>
<td>-.092</td>
<td>-.217*</td>
<td>.284**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mother's parenting</td>
<td>.430</td>
<td>6.040</td>
<td>.179</td>
<td>.250**</td>
<td>-.020</td>
<td>.107</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Father's parenting</td>
<td>45.462</td>
<td>6.713</td>
<td>.097</td>
<td>.003</td>
<td>-.060</td>
<td>-.223*</td>
<td>.169</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conduct problems</td>
<td>-.677</td>
<td>1.630</td>
<td>-.131</td>
<td>-.058</td>
<td>.081</td>
<td>-.020</td>
<td>-.351**</td>
<td>-.317**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>8. Psychological problems</td>
<td>.150</td>
<td>1.748</td>
<td>-.232*</td>
<td>-.203*</td>
<td>.183</td>
<td>.069</td>
<td>-.223*</td>
<td>-.234*</td>
<td>.474**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* p < .05**, p < .10*
Overall, though many of the same variables appear to be associated with externalizing and internalizing problems for both boys and girls (e.g., mother's parenting practices, father's parenting practices, family income), the correlations are consistently stronger for boys than for girls.

Path Analysis
The relationships between the variables were investigated by using a path analysis. The model was run separately by gender and type of adjustment problem. Thus four models were analyzed. They were:

(1) Boys and Externalizing or Conduct Problems
(2) Girls and Externalizing or Conduct Problems
(3) Boys and Internalizing or Psychological Problems
(4) Girls and Internalizing or Psychological Problems

Figures 2, 3, 4 and 5 present the results of the path analyses of adjustment problems among boys and girls. For each path, the standardized regression coefficient or beta were presented. These path analyses provide an evaluation of the effect, or the degree of influence of each independent variable on the dependent variable when all other variables in the model are controlled.

Conduct Problems Among Boys and Girls
Figure 2 presents the results of the path analysis of conduct problems among boys. The results indicate that
mother’s parenting practices (B = -.40) and mother’s education (B = -.37) have the strongest direct effects on conduct problems among boys. Father’s parenting (B = -.30) and mother’s antisocial behavior trait (B = .15) also directly effect externalizing or conduct problems among boys. Family income (B = -.27) effects boys’ conduct problems indirectly through father’s parenting practices. While, mother’s antisocial behavior trait (B = -.24) indirectly effects boys’ conduct problems through mother’s parenting practices. Father’s antisocial behavior trait (B = -.19), also indirectly effects conduct problems among boys, through father’s parenting practices.

Figure 3 presents the results for the path analysis of conduct problems among girls. Mother’s parenting practices (B = -.31) and father’s parenting practices (B = -.27) have strong direct effects on conduct problems among girls. Mother’s education (B = .29) has a strong indirect effect on externalizing or conduct problems among girls through mother’s parenting practices. Father’s antisocial behavior trait (B = -.22) effects conduct problems among girls through father’s parenting practices. Also, father’s antisocial behavior trait (B = .17) indirectly effects conduct problems among girls through mother’s parenting practices.

The results of these path analyses indicate that mother’s and father’s parenting practices are consistently
FIGURE 2. Factors Contributing to Boys' Conduct Problems.
FIGURE 3. Factors Contributing to Girls' Conduct Problems.
Table 3. Decomposition of the effects of the explanatory variables on boys' conduct problems.

<table>
<thead>
<tr>
<th></th>
<th>Direct Effects</th>
<th>Indirect Effects</th>
<th>Total Effects</th>
<th>Mediated Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Income</td>
<td>---</td>
<td>.081</td>
<td>.081</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>-.370</td>
<td>---</td>
<td>-.370</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mother's Antisocial</td>
<td>.150</td>
<td>.096</td>
<td>.246</td>
<td>39.0%</td>
</tr>
<tr>
<td>Father's Antisocial</td>
<td>---</td>
<td>.057</td>
<td>.057</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mother's Parenting</td>
<td>-.400</td>
<td>---</td>
<td>-.400</td>
<td>0.0%</td>
</tr>
<tr>
<td>Father's Parenting</td>
<td>-.300</td>
<td>---</td>
<td>-.300</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Table 4. Decomposition of the effects of the explanatory variables on girls' conduct problems.

<table>
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<th>Direct Effects</th>
<th>Indirect Effects</th>
<th>Total Effects</th>
<th>Mediated Portion</th>
</tr>
</thead>
<tbody>
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<td>Family Income</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>---</td>
<td>-.090</td>
<td>-.090</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mother's Antisocial</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Father's Antisocial</td>
<td>---</td>
<td>.007</td>
<td>.007</td>
<td>100.0%</td>
</tr>
<tr>
<td>Mother's Parenting</td>
<td>-.310</td>
<td>---</td>
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</tr>
<tr>
<td>Father's Parenting</td>
<td>-.270</td>
<td>---</td>
<td>-.270</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
the strongest and most important predictors for explaining conduct problems among boys and girls. Family income and mother’s education indirectly influence conduct problems through their effect on parenting practices.

**Psychological Problems Among Boys and Girls**

Figure 4 presents the results of the path analysis of psychological problems among boys. Mother’s parenting practices (-.34), family income (-.26) and father’s antisocial behavior trait (.25) have the strongest direct effects on psychological problems among boys. Father’s parenting practices (-.20) also has a direct effect on psychological problems among boys. Family income (-.27) indirectly effects boys’ psychological problems through father’s parenting practices. Mother’s antisocial behavior trait (-.24) indirectly effects internalizing or psychological problems among boys through mother’s parenting practices, while, father’s antisocial behavior trait (-.19) has an indirect effect on psychological problems among boys, through father’s parenting practices.

Figure 5 presents results for the path analysis of psychological problems among girls. Family income (-.19), mother’s parenting practices (-.16) and father’s parenting practices (-.19) directly effect psychological problems among girls. Mother’s education (.29) has a strong indirect effect on psychological problems among girls through
mother's parenting practices. Father's antisocial behavior trait (-.22) indirectly effects internalizing problems among girls through father's parenting practices. Father's antisocial behavior trait (.17), also has an indirect effect on internalizing problems among girls through mother's parenting practices.

The results of these path analyses indicate that mother's parenting practices is consistently the strongest predictor for explaining psychological problems among boys and girls. Family income, mother's education, and father's antisocial behavior trait indirectly influence psychological problems among boys and girls through their effects on parenting practices.
FIGURE 4. Factors Contributing to Boys' Psychological Problems.
Factors Contributing to Girls' Psychological Problems.

FIGURE 5. Factors Contributing to Girls' Psychological Problems.
Table 5. Decomposition of the effects of the explanatory variables on boys' psychological problems.

<table>
<thead>
<tr>
<th></th>
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<th>Indirect Effects</th>
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<th>Mediated Portion</th>
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<td>.054</td>
<td>-.206</td>
<td>-26.2%</td>
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<tr>
<td>Mother's Education</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Mother's Antisocial</td>
<td>---</td>
<td>.082</td>
<td>.082</td>
<td>100.0%</td>
</tr>
<tr>
<td>Father's Antisocial</td>
<td>.250</td>
<td>.038</td>
<td>.288</td>
<td>13.2%</td>
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<td>Mother's Parenting</td>
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<tr>
<td>Father's Parenting</td>
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<td>-.200</td>
<td>0.0%</td>
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Table 6. Decomposition of the effects of the explanatory variables on girls' psychological problems.

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<th>Indirect Effects</th>
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<td>Mother's Antisocial</td>
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<td>.015</td>
<td>.015</td>
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<td>0.0%</td>
</tr>
<tr>
<td>Father's Parenting</td>
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<td>---</td>
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CHAPTER FIVE
DISCUSSION AND CONCLUSIONS

Summary

The present study was designed to provide more information concerning the factors that explain the relationship between single-mother families and child adjustment problems. By examining the effects of parental antisocial behavior trait on child adjustment problems, this study explored the question of why a minority of single-mother families are more vulnerable to a variety of problems (e.g., unskilled parenting practices). The review has revealed that although there is an abundance of research comparing two-parent and single-parent families and child adjustment, there is little research that examines variations among children within single-parent families. The model proposed in this study has been an attempt to consolidate some of the fragmentations in the relevant literature and produce a better explanatory model.

Essentially the framework has two major aspects (see Figure 1). First, there is socioeconomic status and its effect on parenting practices and child adjustment problems. Second, there is parental antisocial behavior trait and its effect on parenting practices and child adjustment problems.

Findings indicate that the effect of parental antisocial behavior trait is largely indirect through
parenting practices, so there is little support for the modeling effect hypothesis proposed by the social learning and exchange principles employed. But, this does support the notion that antisocial behavior trait has a direct effect on parenting practices, and parents who exert these behaviors display poor parenting skills. The direct effect from father's antisocial behavior trait to boys' internalizing problems may suggest that boys need role models and are disturbed when their father exerts antisocial behavioral traits. Thus, this study supports the contentions of Lahey et al. (1988) and Patterson et al. (1991). Antisocial behavior trait does affect parenting practices, which in turn cause child adjustment problems.

Family income has a significant direct effect on both boys' and girls' psychological problems. These findings suggest that economic strain has a strong effect on the well-being of the children, as well as the parents. As stated by Wilson (1987), a drastic decrease in income causes a dramatic change in living conditions. Children are often forced to live in poor neighborhoods with few role models and social support systems, and such conditions can lead to emotional and behavioral problems. Thus, the relationship between family income and child adjustment problems is confirmed.
Mother's education has a strong direct effect on boys' conduct problems. Thus, as expected from the review of literature, socioeconomic status (measured by family income and mother's education) does directly, as well as indirectly effect (through parenting practices) child adjustment problems. These findings suggest that mother's education and family income are not good indicators of socioeconomic status for single-mother families. Future research should employ other measures when defining socioeconomic status for single-parent families.

One of the most unique findings in this research is that mother's antisocial behavior trait consistently does not effect girls' adjustment. These findings suggest a different socialization process for boys and girls. Girls tend to be socialized to talk things over with others; therefore, girls are more likely to confide in someone about their problems while boys are more likely to internalize problems and exhibit conduct disorders. These findings also refute the same-sex modeling effect suggested by the theories employed.

These data are also unique in several ways. One of the greatest strengths of the data is the use of multiple indicators for each response variable. By using more than one indicator, the possibility of reporting biases significantly declines.
Another factor that aids in reporting accuracy is the recency of divorce. Since the criteria only allowed those families divorced or separated within past two years to participate, many of the families were actually experiencing the problems being tested for at the time of the interview. Therefore, their reports are more accurate than those of previous research.

Limitations and Suggestions For Future Research

Naturally, the model does not completely explain adolescent problem behaviors. It was purposely focused on the role of the family as the fundamental socializing agent on the assumption that the pervasive influence of family experience will be useful in informing about adolescent behavior in other contexts of socialization. Once the proposed family relationships have been adequately tested and refined the model should be expanded to include interactions with other agents of socialization such as peers, schools, religion, and so forth.

One of the most compelling criticisms of the socialization research is its failure to consider children’s individual differences (Hess & Camara, 1979). Children vary considerably in temperament and personality, and children of these varying personality types respond to (and elicit) different socialization behaviors. Therefore, in future research, it will be important to consider children’s
individual differences and incorporate that information in the research (Barber, 1992).

Also, the sample used for this research was very homogeneous. Though representative of Iowa and many parts of the midwest, it was not representative of the nation as a whole. Future research should employ a more diverse sample, which includes rural as well as urban areas; thus, generating a more general model of children’s outcomes following divorce.

Another limitation of the data used is the lack of direct reports from noncustodial fathers. Future research should make every effort to get as much information directly from the fathers as possible so his perspective is more accurately portrayed; thus, producing a more precise model.

A more general model of children’s outcomes following divorce can be developed around the concepts of resources and stressors. Children’s development can be viewed as being facilitated by the possession of certain classes of resources. Major resources for children include parental support (emotional support, practical help, guidance, supervision, and role models) as well as parental socioeconomic resources. Children with high levels of resources not only have opportunities to develop social and cognitive forms of competence, but are better able to deal with stressful life situations than are other children.
The advantage of a general framework such as the one outlined above is that it suggests why other perspectives have received inconsistent support. Implicit in the above model is the notion that one resource might compensate for the lack of another.

This is particularly true in African-American families. Though some 80% of African-American children live in single-parent families, the extended family (e.g., grandmothers, aunts, uncles) helps to compensate for the noncustodial parent’s absence. Thus, the loss among these children does not have as great an impact, because of the extended family support. As stated by Amato, children who experience minimal loss of resources and minor stress following divorce are unlikely to experience a decrease in well-being. While, the children who lose access to parental resources and are exposed to many unwelcome and aversive changes are probably at high risk for developing problems (Amato, 1993:35-36).

A general framework that considers the total configuration of resources and stressors, as well as variations in personalities would appear to be a useful direction for future research on children (particularly minority children) and divorce. Firmer conclusions will emerge when researchers address some of the gaps in our understanding, as noted above (Amato, 1993:36). Thus, the ever-increasing diversity of American families requires that
we broaden our research agenda beyond traditional concepts and notions of family normality. Children's well-being depends much more on enduring parental support and satisfying family relationships than it does on a particular family structure. Classifications relying on the number of parents in the household, or the number of employed parents, provide, at best, crude indicators of family relations and the larger social context. More consequential than family type for children's well-being is the quality of parent-child and other family relationships. Lack of parental supervision and control, persistent parent-child conflict, marital conflict, and family violence have lasting consequences for children of all family types (Demo, 1992). Most of these patterns are most prevalent in single-parent families, and are precipitated by economic hardship. Thus, the linkages between socioeconomic resources, family processes, and child outcomes require much more systematic attention from researchers.

Policy Implications

As Sprey (1979) wrote, "Divorce (or any form of marital separation) ends a marriage but not a family" (p.155). The fact that some families may be missing one parent from the home does not automatically preclude them from being defined as a family. Therefore, the first thing policymakers must do is redefine "family" to include single-parent families.
This redefinition would keep these families from being mistreated or overlooked in social situations (e.g., religious community) and the community as a whole. And, these parents would have social networks and supports to aid the process of rearing their children alone.

The social ideology of "appropriate" sex roles has left many women ill prepared, in terms of education, job skills, motivation, and work attitudes, to compete successfully for better paying jobs. Lacking these basic necessities leads to inept parenting skills and practices. Thus, such ideologies and double standards need to be abolished. The general organization of work within our society needs to be recast in order to include women in the workforce. Employees must be viewed as workers, as well as family members with family responsibilities.

Economic policies should be created to make housing in good neighborhoods available for single-parent families. Poor neighborhoods, with few good role models, tend to have high rates of delinquency; therefore, programs need to be initiated that keep as many of these families out of these areas as possible. Major needs such as child-care services and long-term educational and vocational upgrading for single mothers must be started. Such programs will help these parents learn to better rear their children and give
them the resources needed to improve their economic condition.

Child support legislation needs to be stricter and mandate fathers to pay more support for their children. As shown in this study, socioeconomic status has an indirect, as well as a direct effect (mostly indirect through parenting practices) on child adjustment. Therefore, the policies created to address these issues must take into account both the direct and indirect effects.

Fathers must be given more responsibility regarding their children; thus, joint-custody settlements should be encouraged. As this study shows, both parents are important factors in a child's development. Though frequency of visits from the noncustodial parent does not make a difference, the style of parenting from that parent does affect child adjustment. Therefore, the noncustodial parent should also be educated concerning child-care and parenting practices and should be expected and encouraged to have an active part in their child's life.
REFERENCES


APPENDIX A

INDICATORS OF FAMILY PERCAPITA INCOME

A - 1. Mother report of family income.

During WAVE 2, each mother was asked several questions concerning her income:

In 1991, how much income did your household receive from wages and salaries only? Please provide your GROSS income without any deductions for taxes, savings, or benefits. IF NONE, PLEASE WRITE "0".

In 1991, how much income did your household receive from dividends or interest from savings, investments, or stocks?

In 1991, how much income did your household receive from Social Security Benefits?

In 1991, how much income did your household receive from Food Stamps?

In 1991, how much income did your household receive from Family assistance such as ADC/AFDC or heating assistance?

In 1991, how much income did your household receive from Unemployment compensation?

In 1991, how much income did your household receive from Worker’s compensation or disability payments?

The scale concerning alimony was derived from the summation of two items:

1. Over the past six months, how much child support have you actually received per month, on average?
2. Over the past six months, how much alimony have you actually received per month, on average?
In 1991, how much income did your household receive from Pensions, IRAs, or other retirements?

In 1991, how much income did your household receive from Rental income from property?

* Note: These amounts were summed to form a measure of total family income. This total was divided by the number of family members to form a percapita measure.
APPENDIX B

INDICATORS OF MOTHER’S ANTISOCIAL BEHAVIOR TRAIT

B - 1. Mother’s self-report of delinquent acts

Delinquent Acts Index

Each mother was asked about things she might have done before she turned 15. Did you...

a. Did you play hooky a lot from school before the age of 15?
b. Did you run away from home overnight more than once before the age 15?
c. Did you tell a lot of lies before the age of 15?
d. Did you more than once steal things from a store or from someone you knew?
e. Before the age of 15, did you ever deliberately start a fire you were not supposed to?
f. Did you ever deliberately destroy someone else’s property other than by setting a fire?
g. Before the age of 15, did you physically hurt animals on a number of occasions?
h. Did you drink alcohol before the age of 15?
i. Before the age of 15, did you ever drink enough alcohol to get drunk?
j. Did you often start a physical fights before the age of 15?
k. Did you use a weapon in a fight more than once before the age of 15?
l. Before the age of 15, did you physically hurt other people a number of times?

Response format: 1. no 2. yes
B - 2. Mother’s self-report of deviant behavior

Deviant Behavior Checklist

Mothers were asked how often have the following things happened to you during the past 12 months? How often have you...

a. Gotten into a fight that came to hitting or punching another person, including friends or relatives
b. Gotten a traffic ticket for a moving violation
c. Not told your spouse the truth about things
d. Been concerned because you spent too much on lottery tickets or other kinds of betting
e. Gotten arrested for something other than a traffic violation

Response format: 0. never
1. one time
2. two times
3. three times
4. four or more times
B - 3. Mother’s self-report of substance use

Substance Use Index

Mother's were asked how often did the following things happen during the past 12 months?

a. How often have you had enough alcohol at one time to get drunk?
b. How often have you had a morning drink as an "eye opener?"
c. How often have you had family problems because of drinking too much?
d. How often has drinking alcohol taken up so much time that you've had trouble getting your work or chores done?
e. How often have friends, a doctor, clergy person, or any other professional ever said you were drinking too much for your own good?
f. How often have you had troubles on the job because of drinking?
g. How often have you had health problems or accidents because of your drinking?
h. How often have you had guilty feelings about drinking?
i. How often have you been arrested for drinking while driving or for disorderly conduct?
j. How often have you gotten into trouble with friends or acquaintances because of your drinking?
k. How often have you felt the need to cut down on drinking?
l. How often have you felt annoyed by criticisms of your drinking?

Response format:  1. never  
                2. rarely  
                3. sometimes  
                4. often
B - 4. Mother’s self-report of deviant values

Deviant Values Scale

Mothers were asked to think about someone who is the same age as your target child, how wrong would it be for someone that age to do the following?

a. Drink alcohol
b. Purposely damage or destroy property that does not belong to them
c. Hit someone with the idea of hurting them
d. Steal something worth less than $25
e. Use marijuana or other illegal drugs
f. Steal something worth more than $25
g. Skip school without an excuse
h. Shoplift something from a store
i. Smoke or chew tobacco
j. Cheat on a test
k. Lie to teachers or parents
l. "Make out"

Response format: 1. very wrong
2. wrong
3. a little bit wrong
4. not at all wrong
APPENDIX C

INDICATORS OF FATHER'S ANTISOCIAL BEHAVIOR TRAIT

C - 1. Mother's report of father's violence toward mother

Former Spouse Conflict Scale

Mothers were asked below are a list of things that spouses sometimes do during conflicts and disagreements. In the 3 years prior to your separation, how often did your former spouse engage in the following behaviors toward you?

a. Threatened to hit you
b. Pushed, grabbed, or shoved you
c. Slapped you
d. Kicked, bit, or hit you with his fist
e. Beat you
f. Threatened you with a knife or gun

Response format: 1. never
                2. once a year
                3. 2 to 3 times a year
                4. about once a month
                5. more than once a month
C - 2. Mother’s report of father’s antisocial behavior trait

Father’s Antisocial Behavior in Last Year Scale

Mother’s were asked to please think about your former spouse’s life during the past year. Would you agree or disagree that the following statements describe his experiences during the past 12 months?

a. He has tended to drink too much alcohol.
b. He has gotten a traffic ticket for a moving violation.
c. He has done many reckless things.
d. He has had many arguments or conflicts with other people.
e. He has had problems with other people or on the job because of his drinking.
f. He takes too many prescription medications for sleeping or calming his nerves.
g. He doesn’t always tell me the truth about things.
h. He has had problems with the police for something other than traffic violations.

Response format: 1. strongly disagree
                 2. disagree
                 3. neutral or mixed
                 4. agree
                 5. strongly agree
APPENDIX D

INDICATORS OF MOTHER’S PARENTING PRACTICES

D - 1. Mother’s self-report of her harsh discipline

Mother’s were asked to please circle the number that best indicates how you relate to the target child and what kind of expectations you have of him or her.

a. When the target child does something wrong, how often do you lose your temper and yell at him or her?
b. How often do you spank or slap the target child when he or she does something wrong?
c. When punishing the target child, how often do you hit him or her with a belt, paddle, or something else?
d. When the target child does something wrong, how often do you tell him or her to get out or lock him or her out of the house?

Response format:  
1. never  
2. almost never  
3. about half the time  
4. almost always  
5. always  

* Note: For target’s report, target was asked these same questions to report on his or her mother’s behavior. The response format was the same.
D - 2. Mother’s self-report of child monitoring

**Child Monitoring Scale**

Mothers were asked to please circle the number that best indicates how you relate to the target child and what kind of expectations you have of him or her.

a. In the course of a day, how often do you know where he or she is?
b. How often do you know who the target child is with when he or she is away from home?
c. How often do you talk with the target child about what is going on in his or her life?
d. How often do you know if he or she came home or was in bed by the set time?

Response Format:  
1. always  
2. almost always  
3. about half the time  
4. almost never  
5. never

* Note: For target’s report, target was asked these same questions to report on his or her own behavior. The response format was the same.
D - 3. Mother’s self-report of inconsistent discipline

**Consistent Discipline Scale**

Mother’s were asked to please circle the number that best indicates how you relate to the *target child* and what kind of expectations you have of him or her.

a. How often do you give up when you ask the target child to do something and he or she doesn’t do it?
b. When you tell the target child to stop doing something and he or she doesn’t stop, how often do you punish him or her?
c. Once a punishment has been decided, how often can he or she get out of it?
d. How often do you punish the target child for something at one time, and then at other times not punish him or her for the same thing?
e. When you punish the target child, how often does the kind of punishment you use depend on you mood?
f. How often do you and your spouse disagree about punishing the target child?

**Response Format:**
1. never
2. almost never
3. about half the time
4. almost always
5. always

* Note: For target’s report, target was asked these same questions to report on his or her mother’s behavior. The response format was the same.
D - 4. Mother’s self-report of inductive reasoning

Inductive Reasoning Scale

Mother’s were asked to please circle the number that best indicates how you relate to the target child and what kind of expectations you have of him or her.

a. How often do you ask the target child what he or she thinks before deciding on family matters that involve him or her?
b. How often do you give reasons to the target child for your decisions?
c. How often do you ask the target child what he or she thinks before making decisions that affect him or her?
d. When he or she doesn’t know why you make certain rules, how often do you explain the reasons?
e. How often do you discipline the target child by reasoning, explaining, or talking to him or her?

Response Format: 1. always  
2. almost always  
3. about half the time  
4. almost never  
5. never

* Note: For target’s report, target was asked the same questions to report on his or her mother’s behavior. The response format was the same.
APPENDIX E

INDICATORS OF FATHER'S PARENTING PRACTICES

E - 1. Target's report of father's parenting practices

Targets were asked how often do each of the following things happen?

a. When you do something wrong and your dad decides on a punishment, how often can you get out of it?
b. How often does your dad punish you for something at one time and then at other times not punish you for the same thing?
c. When your dad is punishing you, how much does the kind of punishment you get depend on his mood?
d. When you do something wrong, how often does your dad lose his temper and yell at you?
e. When you do something wrong, how often does your dad spank or slap you?
f. When punishing you, how often does your dad hit you with a belt, paddle or something else?
g. How often does your dad disagree with your mom about how or when to punish you?
h. How often does your dad give you reasons for his decisions?
i. How often does your dad ask you what you think before making a decision about you?
j. When you don’t understand why your dad makes a rule for you to follow, how often does he explain the reason?
k. How often does your dad discipline you by reasoning, explaining, or talking to you?
l. When you do something your dad likes or approves of, how often does he let you know he is pleased about it?

Response format:  
1. always
2. almost always
3. about half the time
4. almost never
5. never
APPENDIX F

INDICATORS OF CHILD EXTERNALIZING PROBLEMS

F - 1. Target's self-report of delinquency

Delinquency check list 1

Targets were told the following is a list of behaviors related to laws and rules. We'd like to know whether you've done any of these things during the past 12 months. This is personal and confidential. No one will know how you answered these questions. Please be honest in answering them. During the past 12 months have you...

a. Run away from home
b. Taken something worth less than $25 that didn't belong to you
c. Taken something worth $25 or more that didn't belong to you
d. Cut classes, or stayed away from school without permission
e. Beat up on someone or fought someone physically because they made you angry (other than just playing around)
f. Gone to court or been placed on probation for something you did
g. Been placed in juvenile detention or jail
h. Snatched someone's purse or wallet without hurting them
i. Driven a car when drunk
j. Been drunk in a public place
k. Broken into or tried to break into a building just for fun or to look around
l. Taken a car or other vehicle without the owner's permission, just to drive around
m. Broken into or tried to break into a building to steal or damage something
n. Thrown objects such as rocks or bottles at people to hurt or scare them
o. Attacked someone with a weapon, trying to seriously hurt them
p. Sold illegal drugs such as pot, grass, hash, LSD, cocaine, or other drugs
q. Been picked up by the police for something you did
r. Set fire to a building or field or something like that just for fun
s. Sneaked into a movie, ball game or something like that without paying
t. Gotten into trouble for driving a car without a license
u. Gotten a ticket for speeding or other traffic violations in a car

Response format:
1. never
2. once
3. 2-3 times
4. 4-5 times
5. 6 or more times

Delinquency check list 2

Targets were then told next we'd like to know about any drug or alcohol use you have been involved with during the past 12 months. Please be honest. Remember that your answers are completely confidential. During the past 12 months, how often have you...

a. Smoked cigarettes, cigars, or a pipe
b. Used smokeless tobacco, snuff, chewing tobacco
c. Drunk beer
d. Drunk wine or wine coolers (not at church)
e. Drunk hard liquor, such as bourbon, whiskey, vodka, or gin
f. Used nonprescription drugs for fun or to get "high," such as Vivarin, No Doz, diet aids, etc.
g. Used marijuana, hashish, pot, grass, weed, etc.
h. Used gasoline, glue, or other inhalants to get high ("rush," solvents, etc.)
i. Used hallucinogens (LSD, mescaline, PCP, peyote, shrooms, mushrooms, acid, etc.)
j. Used barbiturates (downers, quaaludes, sopers, reds, etc.) or tranquilizers (librium, valium, etc.)
k. Used amphetamines (speed, black cadillacs, white cross, crystal)
l. Used cocaine, "ice," crack, etc.
m. Used prescription drugs for fun or to get "high" without a doctor’s prescription

Response format:
1. never
2. 1 or 2 times
3. 3 to 11 times
4. about 1-3 times per month
5. about 1-2 times per week
6. about 3 or more times per week
F - 2. Target’s self-report of commitment to school

Commitment to School Scale

Target was asked how much do you agree or disagree with these statements about school?

a. In general I have liked school a lot
b. School has bored me
c. I have not done well at school
d. I have not felt like I really belong at school
e. Homework has been a waste of time
f. I have tried hard at school
g. I have usually finished my homework
h. Grades have been very important to me
i. I have felt very close to at least one of my teachers
j. I have had a high grade point average
k. I have gotten along well with my teachers
l. Other students have thought of me as a good student
m. I have done most of my school work without help from others
n. I have done well in school, even in hard subjects
o. My teachers have thought of me as a good student
p. I often gotten in trouble at school for arguing, fighting, or not following the rules

Response format: 1. strongly agree
2. agree
3. neutral or mixed
4. disagree
5. strongly disagree
APPENDIX G

INDICATORS OF CHILD INTERNALIZING PROBLEMS

G - 1. Target's self-report of hostility

Targets were asked during the past week, including today, how much were you distressed or bothered by...

a. Feeling easily annoyed or irritated
b. Temper outbursts that you could not control
c. Having urges to beat, injure, or harm someone
d. Having urges to break or smash things
e. Getting into frequent arguments
f. Shouting or throwing things

Response format: 1. not at all
               2. a little bit
               3. a moderate amount
               4. quite a bit
               5. extremely
G - 2. Target's self-report of depression

Targets were asked during the past week, including today, how much were you distressed or bothered by...

a. Feeling low in energy or slowed down
b. Thoughts of ending your life
c. Poor appetite
d. Feelings of being trapped or caught
e. Blaming yourself for things
f. Feeling lonely
g. Feeling blue
h. Worrying too much about things
i. Feeling no interest in things
j. Feeling hopeless about the future
k. Feeling everything is an effort
l. Feelings of worthlessness

Response format: 1. not at all
2. a little bit
3. a moderate amount
4. quite a bit
5. extremely