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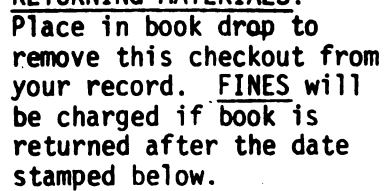
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By

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ABSTRACT

THE FUNCTIONS OF SOCIAL SUPPORT IN CHILDREN'S ADJUSTMENT TO MARITAL DISRUPTION AND SEPARATION

By

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There is an increasingly well established literature on children's reactions to marital disruption and a growing literature on children's social support, particularly as it relates to adjustment to critical life events. However, the precise ways in which social support is related to or impacts children's adjustment to these life stressors is still not clear. This study attempted to further elucidate the relationship between social support and children's adjustment to marital disruption. The structure and function of the social networks of children whose parents identified themselves as maritally distressed, or had separated within the past two years, were examined. Forty-four children, ages 6 to 16, participated in the study. Social support was measured by the children's report of the levels of support that they received in four different areas. Differences in social support were expected to account for both major group differences (i.e. gender differences) and for individual differences in children's reactions to this stressor. Hypotheses as to specific sources of support (family, peers, etc.), the types of support provided by these sources, age and gender

Julie Ann Kriegler

differences in support, and specific support effects on the stress-adjustment relationship, as indicated by both parent and child-report, were tested. Major findings indicated that stress was significantly related to children's reports of depression and levels of self-concept, but not significantly related to parent-report outcome variables. Family supporters were found to provide significantly more advice and information, emotional support, and physical assistance than other sources. However, the direct relationship between level of familial support and outcome was inconsistent and no significant buffering effects for familial support were found. A buffering effect for peer support was found for older children. Contrary to expectations, no significant gender differences in emotional support or in satisfaction with this support were found. Based on parent-report, boys had significantly more trouble on psychosocial adjustment while girls were rated significantly higher on social incompetence. Proposed mediating effects of incidence of emotional support on outcome for boys and girls were supported. Implications of these results for future research and for intervention are discussed.

To endings,
for the beginnings
they bring in their wake

And to all of you who have
shared both the beginnings
and the endings with me.

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1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

1. *Journal of the American Medical Association*, 1997; 277: 1033-1036.

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Introduction

In recent years psychologists have focused on the community based and/or ecological factors that influence people's psychological and physical well being. One such variable that has been related to a host of health-outcome variables is social support. In fact, once questions are translated from, "What type of illness has the patient," to "What type of patient has the illness?" social marginality or weak social ties are discovered to be a common factor underlying (or co-occurring with) a diverse set of symptoms. Furthermore, many persons who would not be considered "socially marginal," enter the high risk category for illness when they experience an interruption in their predictable sources of support (Pilisuk, 1982). This work with adult populations has led to the conclusion that interventions that increase available social support can facilitate people's ability to cope. Theorists (e.g., Mueller, 1980) have suggested that the concept of social support may provide the basis for a unifying framework within which diverse findings regarding the relationship of social factors to psychiatric/psychological disorder or health may be integrated. It is well established that social support has health enhancing properties. What is unclear is the precise process(es) or mechanism(s) by

which social support influences individuals' coping, adjustment, or overall health status.

Evidence for each of the postulated models of social support functions (main, moderating, and mediating) has been found in the literature. Precisely what type of an effect is found may, in fact, be determined by which aspects of the social support construct are assessed.

Models of Social Support Functions: Main, Moderating, and Mediating

Main Effects. An early theory regarding the place of social networks in the development and maintenance of health was proposed by Smith and Hobbs (1966). These theorists suggested that mental illness was not the private misery of an individual, but was directly tied to the unavailability or dysfunction of natural sources of support in the individual's life. This perspective has been called the main effect model of social support; support having a direct effect on health outcomes.

Evidence for main effects of support is found when the degree of integration in a large community social network is measured (Cohen & Wills, 1985). That is, these general "structural" aspects of social support (e.g., embeddedness in a network) seem to influence well-being in ways that do not necessarily involve means of coping with stressful events. Evidently, these aspects of social support are beneficial to

well-being but not necessarily helpful in the face of stress.

Moderating/Buffering Effects. More recently, social support has been conceived of as a moderator variable that helps to explain why some people under stress remain healthy and others become ill (Cobb, 1976; Erikson, 1977; Johnson & Sarason, 1979; Leavy, 1983). This theoretical stance states that interventions that increase available social support facilitate people's ability to cope by moderating or buffering the effects of stress.

There are two hypothesized ways in which social support buffers the effects of stress (Cohen & McKay, 1984; Cohen & Wills, 1985; Gore, 1978; House, 1981). First, social support may intervene between a stressful event and a stress reaction to that event by attenuating or preventing a stress appraisal response. Specifically, the perception that others are available to one for support --as resources-- may redefine the situation or strengthen one's ability to cope with the situation in an adequate fashion. Second, social support may intervene between the experience of stress and the onset of pathology by reducing or eliminating the stress reaction or by directly influencing physiological processes (Cohen & Wills, 1985, p. 312).

Evidence for a moderating (buffering) model of social support is found when interpersonal resources responsive to the needs elicited by stressful events are assessed.

Evidence reviewed by Cohen and Wills (1985) supported the existence of a pure buffering effect rather than a buffering effect accompanied by a main effect. These buffering effects tend to be found only when certain conditions are met in the investigation: (a) minimal methodological and statistical criteria must be met, (b) the instrument must measure perceived ability of support functions, and (c) the support functions assessed must be ones that enhance coping skills. Buffering effects have generally not been found when global, quantitative aspects of support (e.g. total supporters in one's network) are measured. The qualitative, multidimensional aspects of a network, such as types of support perceived, the sources providing them, and satisfaction with this support must be specified and analyzed to adequately measure the stress moderating function served by support networks.

As mentioned above, evidence for buffering effects has primarily been found in studies which have measured people's perceptions of available support. Cohen and Wills suggest that the qualities of social support are to some extent cognitively mediated, and thus a measure of the perception of support should be a sensitive indicator of buffering effects (Cohen & Wills, 1985, p. 349). Perceptions of available support have been found to buffer the effects of both acute and chronic stress. Thus, in any longitudinal work, the perception of satisfactory network support from

pertinent sources should show buffering effects across time (as one continues to deal with a stressful process such as marital distress and separation).

Mediating Effects. In addition to the main effects and moderating effects models, social support has been conceptualized as a mediator of the stress-adjustment relationship. In the mediation model, social support serves as the link between two variables (e.g., stress and health) that would not otherwise be related, and high degrees of covariation between the mediating variable and both the antecedent and the consequence are desirable. While moderation does not connote causality, mediation implies at the minimum a causal ordering: "those variables whose operational role involves transmission of influence" (James & Brett, 1984, p. 317).

Children's Social Support

Compared to the extensive literature on adults' social support, the data base on children's social support is relatively small. If mental health professionals wish to successfully intervene with social networks, it is important to gain knowledge about their developmental functions (Nair & Jason, 1984). This knowledge becomes crucial if professionals are going to work effectively with natural social relations in primary prevention programs. A preventive approach is facilitated when one knows which

stages, qualities, or structures of social support development lead to later difficulties and how to intervene before or at those critical points. By understanding why some children do well and why some do not, we may acquire the potential to provide an environment that will ensure healthy adaptation (Reznik, Mendick, Baker, & Hocevar; 1986, p. 2). That is, the findings of these types of studies should have an impact on procedures for identification of children who are "at risk."

Descriptive Studies

Cochran and Brassard (1979) addressed several developmental considerations related to the evolution and utilization of support networks. These authors illustrated the direct influence parental networks may have on children. Adult relationships provide cognitive and social stimulation from various activities in a variety of settings. Furthermore, direct support, observational models, and opportunities for active participation are all provided for the child by these adult relationships (Cochran & Brassard, 1979, p. 605). In regard to children developing their own networks, Cochran and Brassard argue that the ability to engage in the exchange of goods and services, information, and emotional support in an increasingly sophisticated manner is integral to participation in social groups across the lifespan. Therefore, to fully understand the

development and structure of social support, researchers must begin their investigations where the concept of exchange is first developed; the study of concrete-operational children's social support networks.

An in-depth examination of the social networks of 169 elementary-aged children (3rd-6th grades) was carried out by Kriegler and Bogat (1985). They found that family members act as support generalists in children's networks, while peers and professionals provide more specialized forms of support. Specifically, family supporters provided significantly more physical assistance, advice and information, and emotional support than did any other source group. Peers were nominated significantly more often on questions about socialization/companionship than for any of the other three types of support measured. Finally, the primary type of support provided by professionals (teachers, priests, counselors, etc.) was advice and information, for which this source group was nominated significantly more than for any other type of support measured. In addition, the structure of children's networks differed as a function of both gender and age. The oldest age group nominated significantly more supporters in the area of emotional support than did any of the other three grades. Girls had significantly more nominees for emotional support than did boys, and the difference between the sexes on this type of support got larger as the childrens' age increased.

Finally, only the qualitative aspects of the children's networks (i.e., happiness with the support received) were correlated with a self-competence measure.

The different relationships between support and health have not been tested as extensively in the area of children's support as in studies of adult networks. Although the findings are not conclusive, evidence for both main and moderating effects have been found.

Main Effects

In a study of children's use of confidants (Belle & Longfellow, 1984), the investigators found that as children got older, they turned more frequently to child confidants (siblings and friends) and less to fathers. However, there was no decline in the frequency with which these children turned to their mothers. Regardless of age, both boys and girls turned to their mothers more often than to other confidants. In general, confiding appeared to be positively related to both locus of control and self-esteem, regardless of the level of stress the child was reportedly experiencing. Children who more frequently confided in no one were found to have lower self-esteem and a more external locus of control.

In another study of children's social networks, Nair and Jason (1984) found that the relative influence of specific dimensions of social support was different for

their 5th through 8th grade subjects than previous findings with adult populations. For these school-aged children, the support functions of cognitive guidance, material aid, and emotional support were provided primarily by family members (cf., Kriegler & Bogat, 1985) and networks predominated by family members appeared to be the most satisfying to children. Regression analyses indicated that a network containing a large number of members who provide material aid was predictive of adjustment ratings by teachers.

The importance of family members in children's social networks have been replicated in studies of children's social support from elementary (Kriegler & Bogat, 1985; Nair & Jason, 1984) to college years. For instance, in a study of college students' networks, Bogat, Caldwell, Rogosch, and Kriegler (1985) found that while other support sources (e.g., professionals) provided only specific types of support, family members were nominated across types and thus were perceived as support generalists by these students.

Thus, familial support appears to have a significant direct influence on children and their adjustment.

Moderating Effects

In an early study investigating the effects of children's support systems, Sandler (1980) found that the effects of stress on the adjustment of elementary school children were reduced when the children were living with two

parents and an older sibling. However, this study failed to provide information about the qualitative aspects of these relationships which actively moderate the effects of the stressors.

The importance of family support was also noted by Rutter (1979). He found that a good relationship with at least one parent served to buffer children from the potentially negative effects of marital discord, parental mental illness, and social disadvantage. Relatedly, Zelkowitz (1982) found that when a child's mother was stressed, depressed, or nonnurturant, supportive care from fathers and other adults was associated with lower levels of the child's aggressive behavior in the home.

Mediating Effects

While there have been no reported findings on the mediating functions of children's social support, there is reason to believe that this effect may be an explanatory variable in the relationship between boys' and girls' adjustment to stressful life events. It is conceivable that the gender differences in network structure account for the gender differences in children's adjustment to life events such as marital discord. Specifically, the larger emotional support networks of girls (e.g., Kriegler & Bogat, 1985) are consistent with the findings cited on adult social networks. Overall, women nominate more, and are more satisfied with,

supportive relations than are men (see Leavy, 1983 for a review of this area). At the same time, males are said to be at greater risk for a number of psychosocial difficulties (e.g., Anthony, 1970; Eme, 1979), including a relatively worse adjustment to parental divorce (e.g., Heatherington, Cox, & Cox, 1979), than are females. These parallel findings, coupled with the already established relationship between network structure and adjustment, suggest that if gender differences in children's networks are measured and held constant, the gender differences in these children's adjustment may no longer be significant. Mediating hypotheses such as these remain to be investigated.

While the specific mediating function of children's social support in adjustment to marital discord has not yet been tested, the necessary empirical foundations for this type of an investigation have been established. The stressful effects of marital disruption, and gender differences in children's adjustment to this stressor, have been documented (e.g., Kalter, 1977; Hammond, 1979). Furthermore, some work has recently been completed on the relationship of children's social support and adjustment to marital disruption in general (e.g., Wolchik, Sandler, & Braver, 1984). A brief review of each of these areas of research is presented below.

Children of Divorce

The beginning phases of the divorce process are inevitably marked by marital discord and eventually separation. The literature on these primary stages are scant; however, the findings of the extant literature demonstrate that children in these families are at risk for a number of pathologies and difficulties in life-adjustment and boys are at higher risk for these problems than are girls.

Preliminary results of a nationwide study comparing children from divorced and intact families (Guidulbaldi, Cleminshaw, Perry, & McLoughlin, 1983) indicate a significant relationship between various measures of child dysfunction and parental marital status exists. [Results based on parent and child interviews, intelligence, and achievement tests, and teacher ratings of classroom performance, indicate significant differences favoring children from intact homes.] These differences were maintained even when IQ and socioeconomic status were controlled. Sex differences were found within the divorce group, with boys demonstrating lower social and academic adjustment scores. In addition, home and school environmental variables were also related to post-divorce adjustment (cf., Kalter, 1977).

The overall psychosocial adjustment and academic achievement of third through sixth graders from intact and divorced families, and the attitudes of the children of divorce towards the divorce process has also been a focus of study. Hammond (1979) found no significant differences between children of divorced and intact families on self-concept, reading achievement, or checklist measures of withdrawal, peer relations, or immaturity. However, teachers did rate boys from divorced homes significantly higher on a problem checklist. Furthermore, these boys rated their families as significantly less happy, and were less satisfied with the attention they received from their mothers than boys from intact families. [Both male and female children from divorced families were significantly less satisfied with the attention they received from their fathers.]

In their longitudinal study of the effects of divorce on young children at two months, one year, and two years after divorce, Heatherington, Cox, and Cox (1979a) found that during the first year of divorce the children in divorced families had significantly more behavior problems than children in high-conflict families. However, at two-year follow up, these findings were reversed. Children in high-conflict families had the most behavior problems, while children of divorce had less but still more than children in low-conflict families. In both the highly

conflicted and the divorced groups, the boys were said to be more disturbed than were the girls. At two years after the divorce, the girls appeared to be functioning almost as well as the girls from intact ("nuclear") families. However, the boys continued to demonstrate more problem behaviors than their age-mates. Children from high-conflict divorced families were found to be the "most disturbed of all" on behavioral measures of adjustment. By the end of the second year, children of divorced families evidenced a drop in the performance IQ on the W.P.P.S.I. and shorter latencies and more errors on the Matching Familiar Figures Test, possibly as a result of a decline in maternal discipline and control in the household (i.e., a lack of consistent parenting).

Data presented by the same investigators on the effects of divorce on play and social interaction (Heatherington, Cox, & Cox, 1979b) are parallel to those presented above. In the first year following the divorce, significant disruptions in the social relations of both boys and girls were found. At two-year follow-up these effects had basically disappeared for girls but not for boys (cf., Hodges & Bloom, 1984). Furthermore, children of divorce demonstrated a relatively high rate of dependent-helpseeking and noncompliant-acting out behaviors. Once again, this behavior was longer-lasting for boys than for girls. Even when these boys had improved, they continued to be rated more negatively by both peers and teachers than were

children from nondivorced families and girls from divorced families.

Wallerstein (1983) conceptualized children's adjustment to divorce based on intrafamilial variables and the child's mastery of six coping tasks (including acknowledging the reality of the divorce and resolution of loss) in dealing with specific threats to development that divorce may pose. However, even with the successful resolution of these tasks, the child of divorce is still said to experience ongoing sadness, anger, and anxiety about the "potential unreliability of relationships" (Wallerstein, p. 242). A process which may alter these children's difficulty with social relationships is the establishment of a more effective social support network.

Children's social support and adjustment to marital disruption

Much of the recent work on children's social support has been in relation to the children's adjustment to parental divorce. The results of these studies are somewhat inconsistent. Thus, the evidence is inconclusive as to whether the support processes acting in these situations are the same as those reported above in the adult literature.

In a study of 6 to 10 year old children, regression analyses indicated that only the network quality measures were significant predictors of their adjustment to their

parent's separation or divorce (Phelps & Huntly, 1985). There were distinct gender differences in the sources of support that buffered these children's reactions. In terms of overall adjustment, boys' interactions with their peers and the custodial mothers were the most salient relationships. For girls, relations with the non-custodial father and other adults besides parents were most salient. Scores on a depression measure (CDI, Kovacs, 1981) were also related to relationships with significant adults. For the boys, only the quality of the relationship with the mother predicted depression scores, whereas for girls, the quality of contact with other adults also entered into the relationship. Although this study clearly points out the necessity of specifying the source as well as the content of support, it did not go quite far enough. Who exactly these "other adults" are and what role(s) they play in these children's lives needs to be examined.

In a study of peer social support and coping of children of divorced and nondivorced parents, Schreiber (1985) examined the relationship between parent and child perceptions of peer support and child pathology. Once again, multiple regression analyses demonstrated that quality of peer social support was inversely related to dysfunction in both groups at a similar magnitude. Thus, contrary to Cohen and Wills' findings regarding the function of perceived quality of support in adult networks, a main or

direct effect of support was found. However, while no significant evidence of a buffering effect was found, mean differences show that the children from divorced families experience both fewer and "less supportive" peer relations. Furthermore, mean differences indicate that these children were more likely to have scale scores on the Personality Inventory for Children (Lachar, Klinedinst, & Seat, 1977) in the clinical range than were children from nondivorced homes.

Another group of investigators (Wolchik, Sandler, & Braver, 1984) conducted a study of the social support received by 139 children, 8 to 15 years of age, whose parents had divorced within the last two and one-half years. Significant gender differences were found. Girls reported more nonfamily supporters in the categories of advice, goods and services, emotional and positive feedback than did boys. Girls also reported more family supporters who provided emotional support and positive feedback than did boys. In addition, girls reported feeling more positively about their supporters than did their male age-mates. The relationships found between social support and adjustment were not large and were somewhat inconsistent across different support indices. However, larger family networks were related to better adjustment (i.e., less internalizing and externalizing problems reported on the Childs Behavior Check List, [Achenbach, 1978]). This direct effect is consistent

with the findings cited by Cohen and Wills on adult networks. More multiplex family relations were also related to less problems, while more multiplex nonfamily relations were related to more problems. Thus, once again, the nature of perceived familial support was found to be central to children's adjustment.

Relatedly, Wolchik, Ruchlman, Braver, & Sandler (1985) found a direct effect for support on parental report of child maladjustment, and a stress buffering effect for child report of maladjustment under moderate to high levels of stress. These effects were observed for family support but not for non-family support. As in the previous studies, these results affirm the need to specify the source of the support children are reporting. Furthermore, as the authors of this study point out, the different results related to child and parental report indicate the importance of obtaining multiple perspectives in these investigations.

While its precise nature is somewhat unclear, these studies indicate that a significant relationship, apparently different for boys than for girls, does exist between the qualities of children's networks and their adjustment to the stress of marital disruption. It is this relationship that will serve as the focus for the current investigation.

Rationale

One life stress experienced by an increasing number of children each year is the dissolution of their parents' marital relationship. The first phases of this process are usually marked by marital discord or distress and separation. Marital discord creates serious risk of developmental insult for years beyond the separation. Therefore, we need an understanding of this process' preliminary stages so that we may ultimately be able to develop and institute preventive programming in this area.

While the literature on children's reactions to divorce has established the potentially harmful effects of this process, not every child is affected in the same way. In fact, some children come through the experience relatively unaffected. A more thorough understanding of the processes which underlie or affect adjustment to marital discord and separation may help account for some of these differences. Given the literature on the effects of social support in relation to stressful life events, and to adjustment in general, a logical place to begin this search for significant underlying variables is with the study of social support. In this case, social support was conceived of as a multidimensional construct, measured in terms of the level of support or assistance that children perceived themselves as having in four areas; Companionship, Advice and

Information, Physical Assistance, and Emotional Support. Stress, on the other hand, was conceived of in terms of the magnitude of the behavioral changes brought about by the discord within the family. That is, the level of stress was measured through an assessment of the consequences of this stressful life event for the children.

In accordance with the needs specified above, this investigation examined the structure and function of children's social support networks for children whose parents identified themselves as maritally distressed or had separated within two years of the initial contact with the researchers. This time frame was chosen because it is seen to be a time of heightened stress due to the relatively recent occurrence of the identified stressor. Hypotheses as to the basic structure of the network, specific sources of support (e.g., family), the types of support provided by these sources, age and gender differences in support, and specific support effects on the stress-adjustment relationship, as indicated by both parent and child-report measures, were tested.

Hypotheses

- I. Higher levels of both past and present stress will be predictive of relatively worse child-adjustment. That is, the stress experienced by the children around the time of separation and the stress currently being experienced will both be positively related to level of maladjustment or symptoms as measured by the outcome measures.
- II. A main effect for familial support is expected. The most frequently nominated source group of support for these children will be the nuclear family. Children nominating family members consistently (across different types of support) and frequently will be happier with the support they receive than children who nominate family members less frequently. Furthermore, the children for whom their family and particularly their parents continue to function as support generalists will have better adjustment scores than will those children who do not perceive their families as providing this support service.
 - A) Children will nominate a higher proportion of family members on Physical Assistance, Advice and Information, and Emotional Support than they will any other support source.

B) Where family is not perceived as providing significant amounts of physical assistance, advice and information, and emotional support, particularly after the separation or during the current familial distress, there will be evidence of relatively worse adjustment. Thus, a positive relationship between the level of familial support in these three areas and the level of child adjustment is expected.

C) Children's perceptions of their parents' positive and negative behaviors towards them will be significantly related to the children's report of levels of depression and to their level of self-concept.

III. Moderating functions of social support:

As stated above, the perception of satisfactory support from important sources should lead to buffering effects across time as a child continues to deal with the stressful process of marital disruption. Thus, it is expected that the moderating functions of familial support proposed below will occur in relation to both past (time of separation) stress and current stress levels.

- A) Social support provided by the immediate family will buffer the stress-effects of parental discord and separation. Specifically, more contact with both parents and with siblings will lead to relatively better adjustment for children from distressed families. Given equivalent absolute past and present stress levels, children reporting frequent contact with these support sources will evidence higher overall self-concept, better adjustment on a parent report personality inventory, and lower scores on a depression index. In addition to the theoretical rationale stated at the beginning of the section, the ongoing developmental importance of familial support to individuals of this age also suggests that buffering effects of familial support should be found in regards to both past and present stress.
- B) Relatively large (high ratio of peers to overall network size) and established (frequent /consistent contact) peer component (i.e., classmates, friends, and peers) within the older child's social support network will be positively related to adjustment. Children with equivalent stress levels will demonstrate different levels of adjustment relative to the composition of the perceived peer component

within their network. Specifically, there will be a positive correlation between the size of and frequency of contact with the child's peer network and adjustment to his/her family situation. Along with this direct effect, this peer component is also expected to have a buffering effect on the stress-adjustment relationship. Once again, given the ongoing importance of peers to this age group, the influence of the peer network is expected to be present in relationship to both past and present levels of stress.

- C) Frequent contact with adults other than the parents (e.g., other family members or professionals) will help in coping with the stress of loss of contact with a parent or parents. That is, this support could act as a moderating variable in the relationship between perceived or actual loss of a parent (past stress) and the adjustment of the child. This should be particularly true for older children (adolescents vs. grade-school children) due to their increased contact with, and ability to utilize, these alternative support sources.

IV. There will be significant gender differences in the structure and the function of the children's networks, and in their adjustment to their parents' conflict or separation.

A) Boys will show significantly worse adjustment than will girls.

B) Girls will perceive themselves as having a significantly larger and more satisfying emotional support network than will boys.

C) Given the relative nature of their emotional support networks as described above (A), adjustment will be relatively better for girls than it will be for boys. Specifically, it is hypothesized that, once the differences in perceived emotional support are accounted for, the gender differences in adjustment will no longer be significant. That is, perceived emotional support is expected to mediate the negative effects of marital disruption on child-adjustment.

METHOD

Subjects

The subjects participating in this investigation were the children of individuals who identified themselves as experiencing marital difficulties or who had separated within the last two years. In all, forty-four children from twenty-six families participated in the study. All of the children resided in south-central Michigan. Twenty-seven of these children were females and 17 were males. They were 6 to 16 years of age with a mean age of approximately ten years. Seventy per cent of the children were from families who were already separated, and 30% were from distressed, but not separated, families. The parents of these children had been married an average of 13.5 years. The average length of separation was 8.6 months. Thirty-six children lived primarily with their mother, and 1 child lived primarily with his father, while 7 children resided equally with both parents. Forty-two of the children were white and 2 of the children were Black. The median level of parental education was thirteen and a-half years for the mothers and 14 years for the fathers, and the families were from varied socioeconomic and religious backgrounds. That is, the participants represented every economic and educational classification on the Hollingshead index, and belonged to all of the major religious groups including Catholicism, Judaism, Baptist, and Protestant.

Procedure

This particular investigation was part of a larger collaborative project focusing on multigenerational reactions and adjustments to marital disruption and separation (The Family Studies Project at Michigan State University; Kriegler, Pearson, Weinstein, Caldwell, & Stollak, 1986). Participants were recruited from a variety of sources. Letters describing the study were mailed to clergy, lawyers, and helping professionals in the greater Lansing area. Enclosed with these letters of introduction were letters to be distributed these to individuals and their families whom these professionals deemed appropriate for the Family Studies Project. Newspaper advertisements and postings of the descriptive information in public places, as well as a mass mailing through Friend of The Court, were also utilized as recruitment procedures. Each of these recruitment procedures were relatively unsuccessful, resulting in only a small proportion of the target population contacting the project. Due to the difficulty in contacting eligible participants, the recruitment process lasted for a year and a half. The details and impact of these difficulties are addressed in the discussion section of this manuscript.

Interested persons were requested to telephone the project and at that time they participated in a telephone screening interview (Appendix A) to determine their

eligibility for the project. This study chose to define marital discord widely, as those people who had separated but not necessarily divorced or who identified themselves as maritally distressed. This definition is based on the current literature which has shown that children's reactions to the marital situation are not tied to the divorce per se but rather to the interpersonal distress or discord present in the family (Beck, Beck & Gjerde, 1986; Christopolpos, Westerman, & Tanaka, 1985; Emery, 1982, Rutter, 1971). Thus, individuals were considered eligible if they were married for the first time and were experiencing marital distress or difficulty or if they had separated from their first spouse within the last two years. Persons married more than once, or separated longer than two-years were not eligible. If the caller indicated that they had children between the ages of six and eighteen and the parents consented to the children's participation in the study, then the children became subjects for this particular portion of the investigation.

Follow-up phone calls were made to schedule interviews for the children and/or their parents. Child interviews were conducted by members of an undergraduate research staff, trained in child assessment techniques by the primary investigators. These interviews consisted of six self-report instruments completed within one hour-and-a-half session. In addition, a parent-report measure of the

child's or children's psychosocial functioning was completed by the custodial parent(s). Descriptions of each of these instruments are provided below. Signed informed consent (Appendix B) was obtained from the parent(s) before any child participated in this study. The majority of these interviews took place at the families' homes, while a few interviews were conducted at the psychological clinic on campus. The choice of location was left up to the families. In either case, the interviews with individual family members all took place at the same time. The children were each interviewed separately by trained staff members and the parent(s) were interviewed separately by senior members of the research team.

Training of staff. The training of the research staff included an initial intensive training period, ongoing group supervision, on-sight individual supervision, and continuing feedback between interviewers and senior staff members.

During the initial training phase senior staff presented each of the measures, covering them item by item during weekly group meetings. Staff members role-played interviews with each other and volunteer children under the supervision of senior staff, and were provided with feedback from fellow staffers and from supervisors. They were also assigned practice interviews to do on their own, and were asked to share these experiences during group supervision. In addition to technical expertise with each instrument, the

interviewers developed skills in the use of voice tone and vocabulary appropriate for interviewing children of various ages, empathy, building and maintaining rapport, and answering difficult questions about the project or the interview process.

Consistency in interview procedures was maintained through ongoing supervision and staff meetings throughout the data collection process, as well as through the on-sight supervision available during interviews. A senior staff member was available for any necessary consultation or intervention during all of the interviews. Furthermore, before the contact with each family ended, the supervising staff member consulted with the interviewer about any concerns or observations they may have had regarding the child's answers or demeanor during the course of the interviews. This included some discussion as to the child's understanding of the questionnaires. Based on anecdotal reports of the interviewers and intermittent live observation of the interviews, the children did understand the questions posed to them and were able to respond appropriately on each questionnaire.

Tests and Measurements

The Children's Social Support Questionnaire. The Children's Social Support Questionnaire (CSSQ, Bogat et al., 1983) is designed to measure school-aged children's perceived social support. Children are asked sixteen

questions requesting the identity of people who fulfill specific supportive functions in their lives. Each question has space for the child to list names of ten different supporters. The sixteen questions are divided into four subareas or types of support each containing four questions: (a) Socialization/Companionship (e.g., Who do you hang out with?), (b) Advice and Information (e.g., Who gives you advice and information about religious things), (c) Physical Assistance/Tangible Aid (e.g., Who takes you places you need to go?), and (d) Emotional Support (e.g., Who cares about you?). The scale provides both quantitative (amount of people overall and within each subarea) and qualitative indices of the children's perceived social network. The latter data are collected on the final page of the questionnaire which is administered separately. On this sheet the investigator compiles a list of the unique names in the child's network, gathered from his/her answers to the original questions. The child is then asked to complete a series of questions about each person listed, specifying the following: the sex of the support person, their relationship with the target child (parent, sibling, grandparent, other relative, friend, neighbor, classmate, or professional for this study), the frequency of the contact between the child and the supporter, and how happy the child is with the relationship. An additional question regarding who initiates contact within the relationship was added for

the purposes of this research project. Aggregate scores from these indices allow for analysis of the children's networks in terms of source (sex and role of the support person), content (type of support received), frequency of, and satisfaction (happiness) with the support they receive (see appendix C for a copy of this scale).

Separation and Divorce Stress Questionnaire (SADS).

The SADS (Kriegler, 1985), was developed to provide a quantifiable measure of the stress the children had experienced during and immediately after the separation (or an equivalent time in the past for children in distressed families), and the stress they are experiencing currently at the time of the interview. Each child is given two SADS, one pertaining to their past and one to their current functioning. There are eight forms which differ according to the child's age (different instructions geared to older and younger children) and according to the parental marital status (separated or distressed). Thus, there are four forms for children who are in a distressed family and four forms for members of recently separated families: a form for young children now, young children six months ago (at separation), older children presently, and older children six months ago (at separation). Each of these forms consists of the same twelve questions pertaining to potentially stressful events that the child might have experienced or be experiencing (e.g., I had to move to a new

school, I did/do not get to see my dad much anymore, and I didn't or couldn't do as well in school). Each question is answered on the basis of a five-point Likert-type scale indicating to what degree each event did or did not trouble the child (1) bothered/upset me very much/caused me alot of trouble, (2) bothered/upset me/caused trouble for me, (3) only bothered (upset) me a little/caused a little trouble, (4) didn't bother (upset) me or not bother (upset) me, and (5) was not a problem/did not happen. The sum of the child's responses yields absolute levels of past and current stress for the child. (See Appendix D for copies of these measures).

The SADS is a newly developed measure and there are no reliability or validity data on it. A purpose of this study will be to validate its usefulness as a stress measure.

Children's Depression Inventory (CDI). The Children's Depression Inventory (CDI, Kovacs, 1981) is a scale designed to assess and define depression in children from six to seventeen years of age. The CDI is a self-report measure made up of 27 items. Each item consists of three graded statements from 0 (absent) to 3 (severe) (e.g., I never think of killing myself, I think about killing myself once in a while but would not do it, I think about killing myself every day). The scale measures the child's feelings during the past two weeks. Its content is based on commonly accepted symptoms of depression such as insomnia,

withdrawal, and sadness. Cutoff levels for varying degrees of depression have been established.

Parent Perception Inventory (PPI). The Parent Perception Inventory (Hazard, Christensen, & Margolin, 1983) is a brief measure of children's reports of critical positive and negative parental behaviors. It was developed to assess children's perceptions of 18 parental behavior classes. Nine positive behavior classes (positive reinforcement, comfort, talk time, involvement in decision making, time together, positive evaluation, allowing independence, assistance, and nonverbal affection) and nine negative behavior classes (privilege removal, criticism, command, physical punishment, yelling, threatening, time-out, nagging, and ignoring) are assessed.

The PPI is administered to the child by reading descriptions and examples of each behavior class. The child responds by choosing a phrase on a five-point scale (never, a little, sometimes, pretty much, a lot) which indicates his/her perception of his/her parent's behavior. The 18 behavior classes are first assessed with regard to the mother's behavior and then with regard to the father's behavior.

There are four subscales on the PPI: Mother Positive (the sum of the nine positive items referring to the mother), Mother Negative, Father Positive, and Father Negative. The possible scores for each item range from 0

(for "never") to 4 (for "a lot"); each subscale has a potential range of 0 to 36.

The internal consistency of the PPI was assessed through item-total correlations for each item and the subscale to which it belonged. The resultant correlations ranged from .40 to .83 for the positive items and from .34 to .72 for the negative items. Alphas calculated separately on different age groups of children yielded coefficients ranging from .74 to .89 for older children, and from .81 to .87 for younger children (Hazzard, Christensen, & Margolin, 1983). A series of correlational analyses also successfully established the convergent and discriminant validity of the PPI in relation to four other measures of children's functioning (Hazzard et al., 1983).

The Piers-Harris Children's Self-Concept Scale. The Piers-Harris Children's Self-Concept Scale (Piers, Revised, 1984) is a self-report measure of self-concept in children and adolescents. A high score on this measure suggests a positive self-evaluation, while a low score suggests a negative self-evaluation.

During the administration of the Piers-Harris, children are read 80 statements that tell how some people feel about themselves, and are asked to indicate whether each statement applies to them by using dichotomous "yes" or "no" responses. The resultant data are compiled into three summary scores reflecting an overall assessment of

self-concept: a total raw score, a percentile score, and an overall stanine score. The Piers-Harris also provides six cluster scales: Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction.

The test-retest reliability of the Piers-Harris has been assessed in a number of studies with both normal and "special" populations. The reliability coefficients have ranged from .42 (with an interval of 8 months) to .96 (with an interval of approximately one month) (McLaughlin, 1970; Piers & Harris, 1964; Shavelson & Bolus, 1982). The internal consistency of the Piers-Harris has also been substantiated. Alphas calculated using responses of children from normative samples in the third through sixth grades ranged from .89 (Smith & Rogers, 1978) to .92 (Franklin et al., 1981).

A number of studies have been carried out to assess the validity of the Piers-Harris. An extensive item analysis was conducted to establish the content validity of the scale. Furthermore, significant relationships between performance on the Piers-Harris and teacher and peer ratings, other self-concept measures, locus of control, and cognitive style, have been found in samples of both girls and boys across a broad age-range (see Piers & Harris, 1984 for an extensive review of these findings).

Personality Inventory for Children (PIC). The Personality Inventory for Children (PIC, Wirt, Lachar, Klinedinst, & Seat, 1984) was developed to facilitate the description of children's and adolescents' overall personalities. The short form of the measure will be used in this investigation. This questionnaire contains 280 items which are answered by the parent or parents of the focal child. The items on the PIC are a series of true-false statements about the child or about family relations. The instrument is made up of 16 scales (3 validity scales, a screening scale and 12 clinical scales)

Three different samples provided the test-retest reliabilities for the 16 scales on the PIC. The reliabilites ranged from .71 to .89 over a time period from four to 102 days. Internal consistency estimates have ranged from .72 to .84 on a normal standardization sample (N = 2,390).

Factor analyses of the items from the original 16 scales were undertaken and a six factor solution yielding four robust factors was maintained. Factor Scale I is called Undisciplined/Poor Self Control and is said to reflect such dimensions as ineffective discipline, impulsivity, poor peer relationships, and poor school behavior. Factor Scale II is called Social Incompetence. The major dimension associated with this factor is sad affect and it also includes such areas as shyness, social

isolation, and poor general adjustment. Factor Scale III is called Internalization/Somatic Symptoms and measures worry and a poor self-concept, and to a lesser extent such areas as somatization, and insecurity and fearfulness. Finally, Factor IV is called Cognitive Development which reflects such areas as adaptive behavior, academic and pragmatic skills, and developmental delay.

Tests of internal consistency for the four factors were calculated using a clinical sample of 1,226 subjects. The alphas resulting from these analyses were as follows: Undisciplined/Poor Self Control = .92; Social Incompetence = .89; Internalization/Somatic Symptoms = .82; and Cognitive Development = .81. The mean stability coefficients obtained from 2-week test-retest evaluations of the factors were .91, .91, .90, and .82 for Factors I, II, III, and IV respectively. The construct validity (Lachar, Gdowski, & Snyder, 1982), and the predictive validity (Lachar & Gdowski, 1979) of the factor scales have also been established.

In the present study, the four factor scales were used as outcome measures because of the established theoretical and research applications of these "broad band" measures (vs. the clinical utility of the individual scales or "narrow band" measures). In addition, scores on the Adjustment Scale, a screening scale which acts as a general measure of poor psychological adjustment, were also retained

and used in the analyses. This decision was based on the belief that this scale description fit closely with the description of psychological maladjustment used in previous research on children's reactions to marital discord. Thus, five parent-report outcome scores (the four factors and the Adjustment score) were used.

RESULTS

Network Characteristics

When analyzing total network size across the entire sample the number of supporters nominated by the children ranged from five to thirty-two, with a mean of 14.36 supporters. The average number of supporters nominated was larger at each end of the age range, and the oldest subjects nominated more supporters than any other age child. The average network size (total support) was essentially equivalent for girls and boys. See Table 1 for a breakdown of total support by gender and age.

When the four subtypes of support were examined separately, the average number of supporters in each of the four areas was also similar for girls and boys (see Table 2). When the number of supporters in each of the four areas was broken down according to age, no particular trends were evident across the entire age range; however, the eldest children consistently nominated the most supporters in each of the areas. A specific breakdown of these findings is included in Table 2.

Relationship of Stress to Outcome Measures: Hypothesis I

It was predicted that higher levels of both past and present stress would be related to relatively worse child adjustment. Scores on the the two SADS measures (past and present) and on the adjustment measures were calculated and

Table 1.

Total Support by Age and Sex

| Age | <u>M</u> | Std. Dev. |
|--------------------|----------|-----------|
| Supporters | | |
| 6 (<u>n</u> = 7) | 16.86 | 6.69 |
| 7 (<u>n</u> = 6) | 11.50 | 4.23 |
| 8 (<u>n</u> = 11) | 16.73 | 6.50 |
| 9 (<u>n</u> = 2) | 8.50 | 0.71 |
| 10 (<u>n</u> = 1) | 11.00 | 0.00 |
| 11 (<u>n</u> = 4) | 10.75 | 6.08 |
| 12 (<u>n</u> = 1) | 9.00 | 0.00 |
| 13 (<u>n</u> = 3) | 10.33 | 4.04 |
| 14 (<u>n</u> = 2) | 9.00 | 1.41 |
| 15 (<u>n</u> = 4) | 16.75 | 8.26 |
| 16 (<u>n</u> = 3) | 21.67 | 8.08 |
| Gender | | |
| Male | 14.77 | 7.86 |
| Female | 14.11 | 5.79 |
| Total Population | | |
| Sum (N=44) | 14.36 | 6.59 |

TABLE 2

Comparison of Four Types of Support by Age and Sex

| Age | N | Socialization | | Advice & Information | | Physical Assistance | | Emotional Support | |
|------------|----|---------------|-----------|----------------------|-----------|---------------------|-----------|-------------------|-----------|
| | | M | STD | M | STD | M | STD | M | STD |
| | | Supporters | Deviation | Supporters | Deviation | Supporters | Deviation | Supporters | Deviation |
| 6 | 7 | 12.86 | 6.87 | 6.86 | 4.77 | 7.30 | 2.43 | 8.60 | 2.85 |
| 7 | 6 | 10.17 | 3.76 | 6.50 | 2.17 | 6.00 | 3.03 | 8.67 | 4.27 |
| 8 | 11 | 16.09 | 8.12 | 12.55 | 7.50 | 11.18 | 4.00 | 4.55 | 4.55 |
| 9 | 2 | 6.00 | 4.24 | 5.00 | 0 | 4.50 | 0.70 | 0.71 | 0.71 |
| 10 | 1 | 8.00 | 0 | 7.00 | 0 | 6.00 | 0 | 10.00 | 0 |
| 11 | 4 | 8.00 | 4.08 | 7.25 | 2.87 | 8.25 | 3.95 | 8.50 | 5.69 |
| 12 | 1 | 8.00 | 0 | 6.00 | 0 | 8.00 | 0 | 7.00 | 0 |
| 13 | 3 | 13.67 | 10.50 | 7.33 | 2.52 | 10.33 | 5.86 | 10.67 | 6.11 |
| 14 | 2 | 11.50 | 3.54 | 5.00 | 1.41 | 6.00 | 1.41 | 8.00 | 2.83 |
| 15 | 4 | 18.00 | 5.83 | 10.00 | 3.56 | 8.75 | 4.35 | 16.00 | 6.38 |
| 16 | 3 | 24.00 | 4.36 | 11.67 | 1.53 | 15.33 | 4.51 | 16.00 | 5.57 |
| <u>Sex</u> | | | | | | | | | |
| Male | 17 | 12.06 | 5.41 | 7.94 | 4.04 | 8.82 | 3.25 | 10.47 | 4.96 |
| Female | 27 | 14.48 | 8.28 | 9.22 | 5.73 | 8.88 | 4.85 | 11.67 | 5.60 |
| Σ | 44 | 13.55 | 7.33 | 8.73 | 5.13 | 8.86 | 4.25 | 11.21 | 5.34 |

Pearson Product Moment correlations were calculated between the SADS scores and the scores from each adjustment measure. Significant correlations between the scores on the SADS and those on the PIC, Piers-Harris, and CDI were expected. These correlations were expected to be positive between the stress scores and the scores on the CDI and on the PIC, and negative between the stress scores and the scores on the Piers-Harris.

As a preliminary step to these analyses, the reliability of the stress measures was assessed using Cronbach's alpha as a test of internal consistency. "Past Stress" and "Current Stress" were both evaluated. Each of these scales consisted of twelve items. The alpha for Past and Current Stress indicated an acceptable level of internal consistency for both scales: .82 for Past Stress; .88 for Current Stress.

Both past and present stress levels, as measured by the children's responses on the SADS, were significantly related to the self-report outcome measures. The relationship between Current Stress and these two variables was somewhat stronger than their relationship with Past Stress. As expected, an inverse correlation between Current Stress and positive self-concept was found ($r = -.36, p < .001$) and a significant positive relationship between Current Stress and depression ($r = .54, p < .001$) was also found. Although there was a trend in the hypothesized direction, Past Stress

was not significantly related to positive self-concept, but was positively related to children's scores on the depression inventory ($r = .48, p < .001$). These results are presented in Table 3A.

Contrary to expectations, and in contrast to the relationships found with the self-report measures, neither measure of stress was significantly related to parental reports of adjustment/child problems on the personality inventory. See Table 3A for these results. Furthermore, only one of the outcome variables based on parental report of adjustment/problems were significantly related to the children's reports of self-concept or depression. Undisciplined on the PIC was significantly related to Self-Concept ($r = .35, p < .01$). See Table 3B for these results.

Quality and Impact of Familial Support: Hypothesis II

Children were expected to nominate a higher proportion of family members as supporters on the areas of Physical Assistance, Advice and Information, and Emotional Support.

Proportional variables were created which represented the ratio of family, peers and others to total number of supporters in the network providing Physical Assistance, Advice and Information, and Emotional Support. Then repeated ANOVAs were carried out to test for

Table 3A

Relationship of Outcome Measures to Stress Levels

| | Past Stress | Current Stress |
|--------------------------|-------------|----------------|
| Depression | .48** | .54** |
| Self-Concept | -.23 | -.36** |
| Adjustment | .13 | .06 |
| Social
Incompetence | .01 | .08 |
| Internalization | .20 | .14 |
| Cognitive
Development | .14 | .14 |
| Undisciplined | .15 | .16 |

** p < .001

Table 3B

Correlational Relationships Between Self- and Other Report of Adjustment

| | Depression | Self-Concept |
|--------------------------|------------|--------------|
| Adjustment | .18 | -.21 |
| Social
Incompetence | -.15 | -.04 |
| Internalization | .17 | -.18 |
| Cognitive
Development | -.05 | .08 |
| Undisciplined | .14 | -.35* |

* p < .01

significant differences between the amount of each type of support that each of these three source groups provided. As hypothesized, highly significant differences between family and the other source groups on all three types of support were found. Nuclear family (parents and sibs) provided significantly more Physical Assistance than either peers or other supporters ($F(2, 88) = 25.02, p < .0001$), more Advice and Information than the other source groups ($F(2, 88) = 6.00, p < .005$), and significantly more Emotional Support than the other sources ($F(2, 88) = 14.30, p < .0001$). Analyses testing the difference between extended family (parents, siblings, aunts, uncles, cousins, etc.) and other source groups were also carried out. The results of these ANOVAS indicated that the inclusion of extended family simply made the already reported differences larger ($F(2, 88) = 37.32, p < .0001$; $F(2, 88) = 11.17, p < .0001$; and $F(2, 88) = 31.76, p < .0001$ for Physical Assistance, Advice and Information, and Emotional Support respectively).

Family support and adjustment. A positive relationship between the level of familial support in these three areas and child adjustment was also expected. Pearson Product Moment correlations between family support in each of the specified areas and the adjustment variables were calculated. A negative relationship between both the proportion and number of family members nominated and symptoms was expected. These hypothesized relationships

between familial support and child adjustment were not strongly supported. The ratio of family members nominated on Emotional Support was significantly related to the total score on the CDI ($r = -.32$, $p < .05$) and marginally significant trends between the number of family nominated on Advice and Information and on Emotional Support and children's self concept scores were also found ($r = .24$, $p = .06$ and $r = .22$, $p = .07$ respectively). The number of family nominated for Advice and Information support was significantly related to Internalization ($r = -.28$, $p < .05$) and to Cognitive Development ($r = .32$, $p < .05$), and the number of nuclear family nominated on Emotional Support was significantly related to Undisciplined scores ($r = .31$, $p < .05$). The remainder of the relationships between quantity of support from nuclear family and child outcome measures were not found to be statistically significant.

When extended familial support in these three areas was correlated with outcome, significant relationships between the number of extended family nominated on Advice and Information support and self-concept ($r = .28$, $p < .05$), number of extended family on Advice and Information with Cognitive Development ($r = .33$, $p < .05$); and between the number of extended family members nominated on Emotional Support and self-concept ($r = .29$, $p < .05$) were found. All other relationships between extended family support and outcome were statistically insignificant.

In contrast, to the findings above, the majority of the postulated relationships between the scores on the Parent Perception Inventory and those on the self-report outcome variables were significant.

Parental behavior and adjustment. Pearson product Moment correlations between the Mother Positive and Negative and the Father Positive and Negative Behavior on the PPI and total scores on the CDI and Piers Harris were calculated. It was expected that the correlations between the ratings of parental negative behavior and the CDI would be positive and relationships between these two variables would be negative. The opposite was hypothesized for the positive ratings.

Perceived Mother Positive Behavior was not related to scores on the depression inventory ($r = .017$, $p = .45$) but was highly related to children's self concept ($r = .35$, $p < .01$). Conversely, Mother Negative Behavior was positively related to depression scores ($r = .28$, $p < .05$) and inversely related to self-concept scores ($r = -.39$, $p < .005$). The relationships between father behavior and these variables demonstrated a similar pattern. Father Positive Behavior was not significantly related to depression scores ($r = .11$, $p = .25$) but was related to self-concept ($r = .29$, $p < .05$); and Father Negative Behavior was positively related to depression scores ($r = .35$, $p < .01$) and inversely related to self concept ($r = -.25$, $p < .05$).

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Moderating Functions of Social Support: Hypothesis III

The moderating functions of social support were tested using product-term multiple regression. These analyses failed to support most of the hypothesized models proposed for moderating effects of perceived social support.

Frequent familial support was expected to buffer stress effects on adjustment for the entire sample tested. A multiple hierarchical regression of the scores from each adjustment measure on the frequency of family contact, the stress scores from the SADS, and the interaction term were carried out. Scores on the Piers Harris, CDI, the four PIC factor t-scores, and the t-score from the adjustment scale on the PIC were regressed separately on the independent variables. Thus, seven multiple regressions were run in an attempt to account for the expected variance in the children's adjustment scores.

When the outcome variables were regressed on stress, frequency of familial support, and the interaction terms a main effect for Past Stress ($F = 7.42, p < .01$) and Current Stress ($F = 10.27, p < .005$) on depression scores was found. However, all of these analyses resulted in nonsignificant findings for both main and buffering effects of familial support. Results are presented in Table 4.

TABLE 4

Multiple Regression Analyses of the Buffering Effects of Familial Support on the Stress-Adjustment Relationship for All Ages. (N = 42)

| Time Frame | Independent Variable | Depression R ² Change | Self-Concept R ² Change | Personality Inventory for Children (PIC) | | | |
|------------------------------|-----------------------------|----------------------------------|------------------------------------|--|---|---------------------------------------|---|
| | | | | Adjustment R ² Change | Social Incompetence R ² Change | Internalization R ² Change | Cognitive Undisciplined Development R ² Change |
| Past (At separation) | Stress | .228** | .053 | .016 | .000 | .041 | .021 .017 |
| | Frequency of Family Support | .014 | .010 | .017 | .011 | .004 | .000 .015 |
| | Interaction Term | .002 | .003 | .006 | .000 | .005 | .018 .000 |
| | Cumulative R ² | .244 | .066 | .039 | .011 | .050 | .039 .032 |
| ----- | | | | | | | |
| Current (At time of testing) | Stress | .291*** | .130 | .003 | .007 | .019 | .025 .020 |
| | Frequency of Family Support | .009 | .021 | .012 | .006 | .007 | .000 .014 |
| | Interaction Term | .000 | .000 | .005 | .001 | .002 | .012 .000 |
| | Cumulative R ² | .30* | .151 | .02 | .015 | .028 | .037 .034 |

* P < .05

** P < .01

***P < .005

A high ratio of peers (classmates and friends) and frequent support from these peers was expected to buffer the stress-adjustment relationship for older children.

A hierarchical multiple regression was conducted. The stress variable was entered first, followed by the support variables (this placement allowed for a test of the direct effect of support). Then the product term of stress x support was computed and entered (any unique variance accounted for will be due to moderating effects), and finally the dependent variable(s) measuring adjustment was entered into the equation.

While the support variables representing the peer component of the older children's networks (age 11 and older) appeared to account for a substantial amount of the variance (see Table 5), there was only one statistically significant buffering effect found for peer support. The interaction term, past stress x ratio of peers in the network, was a significant predictor of Cognitive Development ($F = 10.01$, $p < .05$).

Finally, frequent support from other adults (aunts, uncles, teachers, and other professionals) was expected to buffer or moderate the stress-adjustment relationship overall, and particularly for the children in the older age range.

TABLE 5

Multiple Regression Analyses of the Buffering Effects of Peer Support on the Stress-Adjustment Relationship for Children Eleven Years and Older. (N = 18)

| Time Frame | Independent Variable | Depression
R ² Change | Self-Concept
R ² Change | Personality Inventory for Children (PIC) | | | | |
|------------------------------|---------------------------|-------------------------------------|---------------------------------------|--|---|--|--|---|
| | | | | Adjustment
R ² Change | Social
Incompetence
R ² Change | Internalization
R ² Change | Undisciplined
R ² Change | Cognitive
Development
R ² Change |
| Past (At separation) | A. Stress | .334 | .042 | .069 | .015 | .305 | .138 | .046 |
| | Frequency of Peer Support | .081 | .093 | .059 | .058 | .058 | .042 | .122 |
| | Interaction Term | .104 | .022 | .004 | .034 | .092 | .003 | .349 |
| | Cumulative R ² | .519 | .157 | .132 | .107 | .455 | .183 | .517 |
| | B. Stress | .334 | .042 | .069 | .015 | .305 | .138 | .046 |
| | Ratio of Peers in Network | .002 | .003 | .039 | .017 | .099 | .049 | .105 |
| | Interaction Term | .000 | .012 | .494 | .002 | .018 | .006 | .654* |
| | Cumulative R ² | .336 | .057 | .602 | .033 | .421 | .193 | .805 |
| | A. Stress | .413 | .079 | .050 | .006 | .241 | .062 | .037 |
| | Frequency of Peer Support | .048 | .088 | .026 | .030 | .011 | .097 | .075 |
| Current (At time of testing) | Interaction Term | .044 | .024 | .002 | .055 | .241 | .018 | .387 |
| | Cumulative R ² | .506 | .191 | .078 | .091 | .493 | .177 | .499 |
| | B. Stress | .413 | .079 | .050 | .006 | .241 | .062 | .037 |
| | Ratio of Peers in Network | .019 | .000 | .045 | .014 | .112 | .033 | .112 |
| | Interaction Term | .000 | .019 | .252 | .003 | .068 | .030 | .477 |
| | Cumulative R ² | .432 | .098 | .347 | .023 | .421 | .125 | .626 |

* P < .05

The frequency of contact with professionals and other family members outside of the immediate family was calculated. Then a new cross-product term of stress with frequency of these relationships was created and entered into a multiple regression with the simple terms and the adjustment and the stress score.

When the whole sample ($N = 44$) was included in these analyses, a main effect for Past Stress on depression ($F = 7.42, p < .01$) was found. However, no other significant direct or buffering effects were found for stress, other support, or the interaction term. See Table 6A for these results.

When the subpopulation of children eleven years and older was included in the analyses, the resultant reduction in n coupled with the amount of missing data on the frequency of other support in this age group, caused the cross-product term (buffering effect) to become uncomputable. Thus, results were only available for direct effects of "other support." None of these analyses reached significance. Results are presented in Table 6B.

TABLE 6A

Multiple Regression Analyses of the Moderating Effects of "Other Support" for All Children. (N = 39/44)

| Independent Variable | Depression R ² Change | Self-Concept R ² Change | Adjustment R ² Change | Cognitive Development R ² Change | Social Incompetence R ² Change | Internalization R ² Change | Undisciplined R ² Change |
|--|----------------------------------|------------------------------------|----------------------------------|---|---|---------------------------------------|-------------------------------------|
| Past Stress | .229** | .053 | .016 | .017 | 0 | .041 | .021 |
| Frequency of Other Support | .001 | .001 | .002 | .001 | .001 | 0 | .005 |
| Frequency of Other Support X Past Stress | .023 | .017 | .027 | .026 | .061 | .060 | .113 |
| Cumulative R ² | .253 | .070 | .044 | .043 | .062 | .101 | .140 |

TABLE 6B

Multiple Regression Analyses of the Direct Effects of "Other Support" for Older Children. (N = 17)

| Independent Variable | Depression R ² Change | Self-Concept R ² Change | Adjustment R ² Change | Cognitive Development R ² Change | Social Incompetence R ² Change | Internalization R ² Change | Undisciplined R ² Change |
|----------------------------|----------------------------------|------------------------------------|----------------------------------|---|---|---------------------------------------|-------------------------------------|
| Past Stress | .334** | .042 | .069 | .046 | .015 | .305 | .138 |
| Frequency of Other Support | .035 | .190 | .082 | .070 | .065 | .005 | .029 |
| Cumulative R ² | .369 | .232 | .251 | .116 | .080 | .310 | .167 |

** p < .01

Gender, Support and Adjustment: Hypothesis IV

Girls were expected to demonstrate better adjustment, nominate more emotional supporters, and to be happier with the emotional support they received than would boys. T-tests measuring the difference of boys' and girls' scores on the adjustment measures was used. T-tests measuring the gender differences in the number of supporters nominated in, and the average happiness with, emotional support were also completed. "Emotional support" was operationalized in two distinct ways. The first was as a network variable: total emotional support or the number of unique supporters nominated in the area of emotional support. The second was as a measure of actual support: the instances of social support or the overall total number of nominations on the emotional support questions regardless of how many times each supporter was nominated. Both of these variables were calculated and used separately in the analyses. Given the relative reliance of this age child on concrete operations, it was expected that the second, the measure of support instances, would be a more significant predictor than the number of unique supporters potentially available for emotional support.

Contrary to expectations, the majority of the gender differences hypothesized in terms of both outcome/adjustment

measures and in terms of network characteristics were not supported.

The results of t-tests between boys and girls indicated no significant differences between the two groups on the sum of the supporters nominated on the four emotional support questions ($M = 10.47$ vs. $M = 11.67$, $t(42) = -.72$, $p = .48$), on the number of unique supporters nominated in the area of emotional support ($M = 5.82$ vs. $M = 5.85$, $t(42) = -.02$, $p = .98$), nor on average happiness with their perceived emotional support ($\underline{M} = 4.43$ vs. $\underline{M} = 4.43$, $t(42) = .07$, $p = .94$).

The t-tests comparing boys and girls on the outcome measures also resulted in a relative lack of significance. The only gender differences found were on two of the parent report indices, and one of these was in the opposite direction than hypothesized. Girls ($\underline{M} = 51.62$) were rated higher on Social Incompetence than were boys ($\underline{M} = 43.25$) ($t(40) = -2.12$, $p < .05$). On the other hand, boys ($\underline{M} = 68.94$) were reported to have more psychological adjustment difficulties than girls ($\underline{M} = 57.38$) ($t(38) = 2.09$, $p < .05$ on the PIC Adjustment scale). No gender differences were found for depression ($\underline{M} = 7.41$ for boys, 7.59 for girls), self-concept ($\underline{M} = 62.29$ for boys, 61.67 for girls), Undisciplined ($\underline{M} = 51.2$ for boys, 48.38 for girls), Internalization ($\underline{M} = 57.73$ for boys, 56.96 for girls), nor

for Cognitive Development ($\bar{M}$ = 44.63 for boys, 51.00 for girls).

The predicted differences in boys and girls adjustment was expected to be mediated by their respective levels of emotional support. The mediation effect of gender differences in emotional support was tested through a comparison of the percent variance accounted for by gender in several different paired sets of multiple hierarchical regressions. The first analyses regressed adjustment scores on gender first and the emotional support terms second. The second test regressed adjustment variables on the emotional support terms first and gender second. It was expected that there would be a significant difference in the amount of unique variance gender accounted for in the two equations. Relatively little variance was expected to be accounted for by gender once the variance associated with emotional support had been accounted for. Again, the incidence of emotional support was expected to be a more significant predictor than the total number of unique supporters within emotional support.

For the two outcome variables where a gender difference was originally found, incidence of emotional support, but not number of emotional supporters, acted as a mediating variable. When placed first sex had a significant main effect on Social Incompetence ($F = 4.04$, $p < .05$), when sex was entered second, behind incidence of emotional support,

its contribution was no longer significant ($F = 3.71$, $p = .06$). Similarly, sex had a significant main effect on Adjustment when it was entered into the regression equation first ($F = 4.16$, $p < .05$), yet this effect was no longer significant when it was entered into the equation after incidence of emotional support ($F = 3.68$, $p = .06$). The variables of sex and incidence of emotional support appeared to both mediate the other's relationship with Cognitive Development. When entered first, incidence of emotional support had a significant main effect on the dependent variable ($F = 4.23$, $p < .05$), but when entered second, after sex, the main effect was not statistically significant ($F = 3.66$, $p = .06$). At the same time, while there were no significant main effects for sex in either position, the amount of variance accounted for by sex decreased slightly as it was moved from first to second place in the regression (results are presented in Table 7). A main effect for total number of emotional supporters was found for Cognitive Development ($F = 4.88$, $p < .05$) but a mediating effect in either direction was not found for this variable. None of the regression equations predicting the other outcome variables demonstrated a significant main or mediating effect for either of the two emotional support variables or for gender. See Table 7 for results of these analyses.

TABLE 7

Multiple Regression Analyses of the Mediating Effects of Emotional Support on Adjustment in Boys and Girls. (N = 44)

| Independent Variable† | Depression R ² Change | Self-Concept R ² Change | Adjustment R ² Change | Social Incompetence R ² Change | Internalization R ² Change | Undisciplined R ² Change | Cognitive Development R ² Change |
|--------------------------------------|----------------------------------|------------------------------------|----------------------------------|---|---------------------------------------|-------------------------------------|---|
| A1)1. Gender | .000 | .001 | .103* | .101* | .001 | .020 | .073 |
| 2. Number of Emotional Supporters | .023 | .014 | .044 | .015 | .001 | .012 | .120* |
| A2)1. Number of Emotional Supporters | .023 | .014 | .044 | .015 | .001 | .012 | .119 (.120) |
| 2. Gender | .000 | .001 | .103* | .100 | .001 | .020 | .073 |
| Cumulative R ² | .023 | .015 | | .115 | .002 | .032 | .193 |
| ----- | | | | | | | |
| B1)1. Gender | .000 | .001 | .103* | .101* | .001 | .020 | .073 |
| 2. Incidence of Emotional Support | .027 | .022 | .023 | .005 | .018 | .000 | .088 |
| B2)1. Incidence of Emotional Support | .026 | .021 | .034 | .011 | .019 | .000 | .105* |
| 2. Gender | .001 | .002 | .091 | .094 | .000 | .020 | .056 |
| Cumulative R ² | .027 | .023 | .1255 | .106 | .019 | .020 | .161* |

† In order of entrance into the equation.

* P < .05

Supplemental Analyses

In addition to the analyses reported above, a series of correlational analyses between support variables and other variables used in the study were carried out. Given the number of correlations computed there was a higher probability that some would be significant by chance alone. Thus, the significance levels reported below may be more meaningful descriptively than statistically.

The size of the children's networks (total support) was not related to either past or present stress, nor was it related to either of the self report outcome measures. There was a significant inverse relationship between the frequency of family support and both past and present stress levels ($\underline{r} = -.31$, $p < .05$, and $\underline{r} = -.32$, $p < .05$ respectively). Thus, the higher the reported stress levels were the lower the frequency of family support was.

In terms of the subtypes of social support, Emotional Support was the only one of the four that was significantly related to stress ($\underline{r} = -.27$, $p < .05$ with Past Stress and $\underline{r} = -.29$, $p < .05$ with Current Stress).

Discussion

This study chose to focus on the structure and function of children's social networks as a means of understanding the underlying processes which affect children's adjustment to marital disruption. It was predicted that differences in social support would help explain differences in children's reactions to marital discord and separation. In fact, differences in social support were expected to be related to both major group differences (i.e. gender differences) and to individual differences in children's reactions to this stressor. The precise sources of support which would impact and explain differences in outcome were expected to vary in accordance with the children's age.

Descriptive Network Statistics

The mean number of total supporters nominated by the children ranged from 6 to 21. The mean number of supporters on the four different types of support ranged from approximately 6 to 24 supporters. This is a more constricted range than has been found in other recent network research with school-aged populations (Cruise, 1987; Kriegler, 1985). In the current study the eldest children consistently nominated more supporters than the younger children on total support and across all four types of support. This developmental increase in the number of supporters nominated by the children is similar to that

found in previous studies. However, the average number of supporters nominated by the children nine years and older was substantially smaller than those found in these prior investigations (Cruise, 1987; Kriegler, 1985). Thus, the number and range of supporters nominated by the children from a distressed sample appears to be smaller and more truncated than that found in cross-sectional samples of similar ages. One explanation for these results may be that children under stress are less able to access normative levels of support. This could be because their preexistent natural support networks are lost or altered due to the changes in lifestyle often demanded of these children, or because the stress itself affects the children in such a way (e.g., they become more depressed or withdrawn) that they can not actively elicit necessary or normative support services.

The Stress-Adjustment Relationship

In exploring the stress-support-adjustment relationship, a new stress measure, Separation and Divorce Stress Questionnaire (SADS) was used. Thus, preliminary analyses focused on establishing the usefulness of this instrument as a measure of stress. Satisfactory alphas indicating that both Past and Current Stress were internally consistent, reliable, scales were obtained. Frequencies on the individual items also indicated that children were

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endorsing a range of responses and not just "not applicable." That is, the scores were not truncated, and the items appeared to be meaningful representations of stressors encountered by children living in families that are distressed or separated.

The results of this study indicated that levels of self-reported stress were significantly related to self-report, but not to parent report, of adjustment. Thus, in terms of the overall relationships between stress levels and outcome, the issue of self- versus other report can not be ignored. One variable which has not received enough attention in this area of study is precisely who is providing the data upon which conclusions are based. A substantial number of these investigations have involved data collection from children and their custodial parent, who in the vast majority of cases is the mother. Thus, the fact that mothers were the primary adult "others" from whom data were gathered in this study makes this research comparable to much of the previous research (e.g. Emery & O'Leary, 1982; 1984; Westerman, La Luz, Cavallero, & Tanaka, 1986;). What makes this research somewhat different than these studies is the manner in which stress was assessed.

In previous studies the measure of stress used has frequently been based on parent report of levels of marital discord or simply on having come from a divorced family, and not on the children's report of the stress they have

experienced. The fact that stress--as experienced and reported by the children themselves--would be significantly related to their own report of well being and to their view of themselves is logical. The fact that parental report was not related to the stress levels reported by the children may also be a logical finding when cast within the framework of social psychology and the robust differences found between self- and other perceptions of events and behavior (e.g., Aronson, 1980). Furthermore, these parents are distressed themselves and their reporting of their children's behavior, their awareness of it, and the meaning they ascribe to it, may be "colored" by their own experiences of the events. Examples of this phenomena are recorded in the literature. For instance, the confounding impact of parent report of stress ("distress") was offered as an explanation by Christopolous et al. (1985) when they failed to find a relationship between marital distress and child self-esteem, when distress was based on mothers' report and self-esteem was based on child-report.

Relatedly, there was only one parent report variable in the current study that was significantly related to the children's report of depression and self-concept. Self-Concept was related to Undisciplined on the PIC. This may be understood within a family-systems framework which suggests that parents of acting-out or "externalizing" children often do not set limits and are ineffective at

discipline; and that these children often give and get higher levels of negative or punishing attention (and receive relatively little positive reinforcement) (Patterson, 1982). These patterns may end up making these children feel worse about themselves and thus they may end up having a more negative self image than those children whose problems take other, less noticable or intrusive, forms. Thus, one factor that may account for the differences found on outcome measures may be the family structure and the already chaotic or conflictual patterns that are present within it.

Familial Support and Adjustment

The significant results indicating that family supporters provide more Advice and Information, Physical Assistance, and Emotional Support than do any other sources of support provide evidence that familial support is an important and unique source of support for this age group. The finding is one that has been replicated several times (Kriegler, 1985; Nair & Jason, 1984), however the specific impact of this familial support is still unclear.

When the relationship between level of familial support and adjustment was examined in the current study the results were not consistent. The level of familial Emotional Support and Advice and Information were significantly related to depression, Undisciplined, and Internalization;

and marginally significant trends were also noted for the relationship between the number of family supporters in these two areas and self-concept. Unexpected positive correlations between Cognitive Development and number of familial supporters in these two areas were also found.

Conversely, consistently strong relationships between parental behaviors on the Parent Perception Inventory and self-reported adjustment were found. The positive behavior of both parents was significantly related to self-competence levels. However, the magnitude of this relationship was stronger for mothers' or custodial parents' behavior than for fathers' behavior. At the same time, the relationship between negative behavior and depression was stronger for fathers' behavior than for mothers'. The day to day impact of custodial parent's interactions with their children might be expected to have a significant effect on their children's feelings of self-competence; and the perceived or actual loss of a father through discounting or punishing experiences with him may theoretically be tied to increasing feelings of depression.

It was expected that the direct effects of parental behavior as measured by the PPI would also be reflected in the relationship between familial support and outcome. However, the expected effects of this support were not found. Theoretically, main or direct effects should be found when general structural aspects of support, and not

necessarily those aspects which involve coping with stressful events, are measured. While the proposed hypotheses predicted that familial support would provide both a direct and moderating function, perhaps the actual nature of this variable does not lend itself to a direct effects model. If, in fact, we are dealing with an either-or phenomenon where pure effects (either main or buffering but not both) are predicted (i.e. Cohen & Willis, 1985)--then it seems likely that the perception of substantial and consistent familial support might aid children in coping with stress rather than simply having a direct relationship with outcome regardless of stress levels. However, these expected buffering effects were not found.

Moderating (Buffering) Effects of Support on Adjustment

Developmental/Age related considerations. Given the age range represented in this study the reader might conclude that there are actually two developmentally different populations represented within this sample. However, when correlational analyses were performed to ascertain the extent of the influence of age differences on other variables of interest, the only areas in which there were significant findings were familial and peer support. The ratio of peers in the network was positively related to age, while the ratio of family in the network was inversely

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related to age. Thus, relatively speaking, older children were nominating more peers and younger children were nominating more family. However, age was not significantly related to gender or to outcome measures, and thus it was not necessary to include age as a covariate in the relevant analyses.

When the analyses with "older children" were conducted, "older" was defined as eleven years and older, thus splitting the sample just above the mean age. A median split would have defined "older children" as age 9 and above, and while this would have been preferable statistically, it did not make sense developmentally. That is, nine year olds would not be expected to access or utilize peer or non-familial adult support significantly more than six, seven, or eight year olds. In fact, the degree of integration into a peer network, and the development of increasing autonomy vis-a-vis the family network, would not be expected to develop until early adolescence. Thus the compromise between methodology and theory was to use the mean age as the dividing line.

Familial support. While main effects for stress on depression were found, the results of regression analyses indicated no significant buffering effects for familial support for either self- or other report outcomes. One explanation of the absence of significant buffering effects of familial support on adjustment may be age related. The

presence of the adolescent sub-sample within the overall sample may have been masking the effects of familial support on the outcome for younger children (given the relative developmental importance and presence of family as supporters in this age group). However, when post-hoc analyses were run to ascertain whether or not this was the case the results continued to be nonsignificant. A median split dividing the children into ages eight and below and nine and above did not show significance for familial support in the younger age group.

Contrary to these results, recent findings in the literature have continued to suggest that interpersonal familial variables do have a greater impact on younger children than they do on older children. For example, Westerman, La Luz, Cavallaro, and Tanaka (1986) studied a group of four to thirteen year olds and found that there was a stronger negative relationship between marital adjustment and behavior problems for younger children than for older children. Once again, older children would be expected to have other social connections that would account for some of their well being (i.e., friends and other adults such as teachers and counselors).

Other studies have continued to find a significant relationship between parental or marital status and child adjustment. Thus, it is premature to assume that ongoing support from members of one's family is not facilitative of

better adjustment. Certainly, clinical lore suggests that the child is better off if s/he is able to maintain a steady relationship with both parents. In addition, the current investigation did find an inverse relationship between the frequency of family support and stress. This relationship was not present for other sources of support. Therefore, familial support remains a special or unique source of support, and the expectation that familial support would buffer child outcome appears to be theoretically valid even though the present study was not able to demonstrate this empirically. A lack of power due to a relatively small sample size may be the most logical explanation for these findings at this point.

Peer support. The results (or lack there of) of the analyses of the buffering effects of peer support on older children's adjustment were similar to those for familial support. The only significant buffering effect found for peer support on older children's adjustment was the significant impact the interaction between the ratio of peers in the network and Past Stress had on Cognitive Development. Perhaps a larger peer network, made up of many people who are one's classmates, may aid children in coping with the academic demands at school and help model and support adaptive, developmentally appropriate behavior in this environment. Thus, those children who had the benefit of this support may have been relatively protected from the

experience of academic difficulty and developmental delay (both of which are measured on the Cognitive Development Factor) to which extreme stress may contribute in children of this age.

Other support. Finally, when the possible buffering effects of support from other, non-family, supporters were analyzed there was a main effect for Past Stress on depression but no other significant results were found. When these latter analyses were conducted with the subsample of children eleven years and older, the small number of eligible cases made the buffering effects incomputable and no direct effects of "other support" were found.

The clear difficulty in attempting to sort out these potential age differences, as they related to the possible effects of support on adjustment, was a lack of statistical power. Although there was only one statistically significant finding in terms of the moderating functions of peer support for older children, the actual variance accounted for by the buffering (interactive) term in some of these regression equations was quite substantial (as high as 40+%). Furthermore, the support terms accounted for more variance than they did when parallel post-hoc analyses involving the entire population were run. This would seem to indicate that despite the lack of statistical significance, the variables of interest are not entirely unrelated.

Another potential explanation for the absence of buffering effects is that high levels of stress may actually negate any possible moderating/interactive relationships between support and other variables. That is, high levels of stress may be related to negative outcomes regardless of the resources the child may possess (Westerman et al., 1986). This could account for the significant main effects of stress in the absence of any significant effects of support. Of course this explanation does not fit with prior theoretical and empirical explorations of the relationship between social support and stress. However, the fact that this "stress" has been operationalized according to the child's experience of it and not as just a marker variable determined by a stressful life event, or parental report of distress, may make this a different situation than those examined previously. Adults may believe (or wish to believe) that the provision of basic levels of assistance or support would moderate the impact of the discord and thus report these beliefs when questioned about their child's adjustment. However, perhaps the children's subjective experience of marital disruption acts to outweigh the potential contributions of support, particularly in the early stages when the impact is still relatively fresh.

Finally, there may also be some question as to what is outcome and what are active mediators in this process. For instance, Westerman et al. (1986) examined the role of child

variables such as self-esteem as mediating and moderating variables instead of using them as outcome variables. The mechanisms underlying the relationship between marital discord and child adjustment or behavior have yet to be precisely identified. Perhaps interactions between "external" variables such as social support and "internal" variables such as self-esteem should be examined in further attempts to understand who and how certain children survive stressful life events such as marital discord better than others.

Gender Differences

There is still a popular belief that girls do not suffer the effects of marital discord at the same magnitude that boys do. Such beliefs and the findings in the literature that have supported them led to the hypotheses proposed in the current study. However, it appears that for nonclinical populations this assumption may be erroneous. It seems that a better description of these events would be that girls' reactions may be categorized as different but not necessarily as less pathological than boys'. These differences in behavioral style stand to reason given the different socialization experiences that males and females are exposed to from a very young age (Urbeg & LaBouvie-Vief, 1976).

The gender differences found within this sample conform to socialization and gender-specific behaviors and might have been expected within this frame work. Gender differences on Social Incompetence and Adjustment were found. The boys were rated higher or as doing worse on Adjustment while the girls were significantly higher on Social Incompetence than were the boys. That is, boys were perceived to be more psychologically maladjusted according to a parent report scale that loads heavily on externalizing/acting out dimensions, while girls were perceived to have more difficulties in an area that is made up of more internalizing sorts of behaviors such as sad affect, shyness, and social isolation. As indicated, the Adjustment scale is similar to the description of adjustment used in previous research which found differences indicating worse adjustment for boys than for girls. It may be that the previously reported differences have mainly been judged by other-report and that the way in which boys react to distress (externalizing) is more obvious and more noxious to others who interact with them than the more internally based reactions of their female age mates. That is, the fact that the only gender differences that were found were on other-report measures may also have to do with who is doing the reporting and the way in which the child's behavior or lack of desired behavior (in the case of the girls) may impact the parent.

Within the established literature, several studies have found that discord is related to externalizing problems only (Emery & O'Leary 1982; Rutter, 1971) while others have found that there is a relationship for internalizing factors as well (Christopoulos et al., 1985). In addition, some studies have shown relationships between discord and behavior problems for boys only, or significantly stronger relationships for boys rather than girls (Emery & O'Leary, 1982), while others have found no difference for gender (Emery & O'Leary, 1984; Whitehead, 1979). Westerman et al. (1986) found no significant sex by marital adjustment interactions in their study. This is consistent with the current results and other previous findings cited above which indicate that there are not gender differences in the magnitude of reaction to discord in nonclinical samples (Emery & O'Leary, 1984).

None of the hypothesized gender differences on total supporters nominated on emotional support, perceived incidence of emotional support, or satisfaction with emotional support were upheld. This is contrary to previous results of research on both adults' and children's networks which find that females have larger intimate support networks and are more satisfied with this support than are males (Cruise, 1987; Hirsch, 1979; Ingersoll & Depner, 1980; Kriegler, 1985). It is possible that members of this population--a population under stress--are not receiving

emotional support at "normal" levels and that this suppression of support in general washed out any gender differences that might otherwise be present. While family was perceived as providing more emotional support than any other source group, these people may still be more unavailable relatively speaking. The negation of other effects due to the high level stress effects discussed above could also explain the lack of gender differences. That is, the direct impact of stress may be strong enough to negate gender differences as well as potential buffering effects.

An alternative explanation for these results could be related to these girls' reported rates of "social incompetence" which is said to result in withdrawal and social isolation. Once again, given these circumstances, these girls simply may not have been able to access emotional support at desired or normative levels.

Given that there were no gender differences in perceived emotional support and that emotional support variables were directly related to stress, it was possible that emotional support would moderate the stress-adjustment relationship across gender; and that the focus taken in this study was too narrow. However, when post-hoc multiple regression analyses were run to test this hypothesis there were no significant buffering effects of either incidence of, or number of supporters available for, Emotional Support

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on the children's adjustment. The results of these analyses are presented in Table 8 in Appendix E.

Mediating Effects

Although the differences were not of a great magnitude the perceived incidence of emotional support did appear to mediate the gender differences on both Adjustment and Social Incompetence. Thus, while there was no evidence of emotional support moderating the stress-adjustment relationship, there was evidence suggesting that perceived incidence of emotional support can help explain the differences in boy's and girl's reactions to the stress of marital discord. Once again, with increased power these differences may have been more broadly and convincingly supported.

Methodological and Procedural Limitations: Considerations for Future Research

Sample size and recruitment. The one most obvious and already noted difficulty with this research was the lack of power due to a small sample size. A larger sample overall and particularly in the older age groups is necessary to adequately assess the questions proposed.

The primary reason for the lack of subjects was the immense difficulty of recruiting subjects in a nonclinic sample. Multiple recruitment strategies were employed. First, letters describing the study were mailed to over 500

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clergy, lawyers, and mental health professionals in the local metropolitan area. Enclosed with these letters of introduction were letters to be distributed by the professionals to individuals and their families who were potentially appropriate for the study. This procedure was unsuccessful, yielding no potential participants. This was most likely due to the fact that there was minimal personal contact involved in this process, and when dealing with such a sensitive topic people like to know who they are working with. However, even when personal phone calls and offers to meet to discuss the project were made to the professionals, this strategy was not a productive one.

A second solicitation strategy involved placing announcements in laundromats, grocery stores, and physicians' offices. At the same time, over 2,000 letters announcing the project were sent home with elementary school children in the local school districts. Again, this recruitment strategy was relatively unsuccessful.

The third solicitation effort involved low-cost media advertising through public service announcements on local television and radio stations, and announcements in the faculty and student newspapers. This led to calls by potential participants at the rate of one to two per week with approximately 30% of the callers filling the subject criteria. Many of these callers were hoping to receive low or no-cost marital or separation counseling, and were

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referred to local agencies for these services. This however, is another reason why this process was a difficult one. There was no remuneration available for participants and the only clinical service offered was referrals. The absence of services or remuneration might have significantly reduced participation.

Another and more successful strategy was to place a classified ad in the personal section of the local paper. This ad succeeded in increasing the number of phone calls to approximately three a day and 50% to 75% of the adults placing these calls were eligible for the larger Family Study Project. However, many of these callers did not have children or if they did they did not wish them to participate. Furthermore, the children could decline to participate, and did so, even when parents became involved in the larger study. This was especially true of adolescents, the direct result of which was demonstrated by the difficulties in analyzing age differences within this sample.

The final recruitment strategy used was to send out letters to the clientele of the local Friend of The Court office. Of the over 300 letters sent, there was approximately a 5% response rate, and of these responses 10 families (3%) were considered eligible for the study. It is believed that the major reason that these strategies were relatively unsuccessful was due to the stress and

disorganization experienced by these families at this time in their lives. Given this level of stress and the lack of any tangible "reward" for participating it is understandable why so many chose not to be involved. While the undesirable impact of the low number of families willing to participate under these conditions is clear, it was believed that offering services to participants would introduce further bias into the study. While the current sample must be considered a self-selected sample in its own right, conclusions based on a sample seeking clinical services were thought to be less generalizable than those available currently.

Methodology and design. One issue that must be addressed is that of cross-situational reliability and the fact that a child may be behaving or coping differently at school or elsewhere than s/he is at home. A teacher report (or other independent ratings) on child behavior such as collecting parallel Child Behavior Checklists (Achenbach, 1978) from parent and teacher would give us a greater understanding of the phenomenon we are investigating.

Within the confines of the present study, the ideal situation would have been to have a PIC completed by both of the parents. This was attempted, however in the majority of cases the custodial parents did not give their permission for us to contact the other parent. Thus, the small amount

of second parent data which was collected was not included in any of the analyses.

The problems inherent in self-report data such as "faking good" or "faking bad", and other sources of bias cannot be ignored. In addition, further bias may be introduced by the retrospective nature of these reports. In fact, the time frames of the various measures used in this study may have directly influenced the results. For example, the stronger relationships that were found for Current Stress and self-report outcome variables may be due to the mutual time frame within which these measures were cast. Past Stress is of course attained through retrospective report while Current Stress and the outcome variables are adapted to the present time. Understanding of these relationships might be further enhanced by work using parallel outcome measures based in both the past and present, similar to the format of the stress measures. One would still have to work within the limitations of retrospective reporting but the instruments themselves would be parallel, and immediate outcome as well as somewhat longer term outcome could be assessed.

Another concern related to the time frame of the measures used is the question of whether or not Past and Current Stress are, in fact, two different variables, or are actually one in the same. Although the response range on the two measures differed somewhat (see Table 9 in Appendix

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F for a distribution of the stress and outcome scores), the pattern of the relationships between these two scales and the outcome variables was similar. In addition, the correlation between the two stress scales was significant ($r = .82$, $p < .001$). These results suggest that Past and Current Stress may be measures of the same phenomenon, and not of two separate experiences. In order to investigate this possibility further, a reliability analysis of the composite stress scale (the two original scales combined) was conducted. This test of internal consistency yielded an alpha coefficient of .91, lending further support to the idea that the original two stress measures might be one single variable. There are several theoretical explanations for the significant statistical relationships found between Past and Current Stress. Two of these explanations support the notion of a single scale or stress construct, while the third offers an explanation supporting the existence of two separate, but related, scales.

The first explanation would suggest that there is only one stress construct because children cannot or do not distinguish between past and present efficiently. That is, this explanation would assert that children of this age cannot retrospectively report or recall events accurately, and therefore would not distinguish the stressful events experienced around the time of separation from those they are currently experiencing.

An alternate explanation, which also supports the idea that there is really only a single stress construct, is that stress occurring anywhere within the first two years of marital/familial disruption is, in fact, the same experience for the children. In other words, the first two years would be considered a "critical period" where stress and its impact are experienced at consistent levels throughout. Previous investigations provide some support for the existence of this two-year critical period, particularly in regards to highly conflicted families (e.g., Heatherington, Cox, & Cox, 1979). Applied to the current findings, this would indicate that the statistical relationship between Past and Current Stress was not due to inaccurate recall on the children's part, but would be seen as an accurate reflection of these children's experience.

Finally, it may be that Past and Current Stress are actually two different, but not unrelated, events. The stress of a major life event such as marital disruption does not dissapear instantaneously. In fact, in some ways it can be seen to be self-perpetuating. That is, if the experience starts out badly to begin with it is likely that the sequelae will be relatively worse later on. Therefore, the two experiences of Past and Current Stress would be expected to be related to, or even contingent upon, each other without necessarily being one in the same thing.

The experience of stress over time, or the impact of time on the children's adjustment, was another potential confound in this study. It was possible that "time heals," and that outcome would be directly related to length of marital separation, with longer separation being related to better adjustment. Therefore post-hoc analyses of the relationship between length of marital separation and outcome variables were completed. The relationship of time or length of separation with the outcome variables was inconsistent. A significant inverse relationship between length of separation and Adjustment on the PIC was found ($\underline{r} = -.26, p < .05$). Thus, psychosocial adjustment as rated by the children's parents improved over the course of separation. At the same time, while length of separation was unrelated to self-competence ($\underline{r} = .003, p < .49$), it was positively related to levels of depression ($\underline{r} = .31, p < .05$) and to ratings of Undisciplined on the PIC ($\underline{r} = .29, p < .05$). That is, the longer the period of separation the higher the levels of depression and acting out behavior were. In attempting to explain these results it once again appears important to define the sample with whom this work was done. These were distressed, but not necessarily divorced families. In over half of the families the parents were not legally divorced. Thus, these children were still experiencing the disruption and discord that often marks the preliminary stages of a dissolution of a relationship and of

a family. As this process proceeded, perhaps without resolution, these children became increasingly depressed and "out of control." These behaviors are not unexpected when children are experiencing prolonged conflict or unsettling changes within their families. Thus, while there certainly is not a direct unidirectional relationship between time and better adjustment, the precise impact of length of separation on children's adjustment to marital discord remains unclear. Furthermore, this relationship is more than likely influenced by the level of conflict between the parents and other interpersonal variables unavailable for analysis in this investigation.

In all, the long term consequences of marital discord seem to depend on the interaction of multiple stressors that surround the event. In order to more completely understand the complex interplay between the variables involved it would be helpful to have data on the parents themselves. The direction of the discord-behavior problem relationship is often treated as a unidirectional causal relationship, with marital discord "causing" the difficulties in children's behaviors. However, the actual relationship is probably much more complex than the statistical models proposed here. A more complete picture could be drawn if we included multiple perceptions of the same behaviors and variables such as having the parents perspectives on the level of discord or stress within their family. This is

especially true given findings such as those presented by Rutter (1971) which suggest that the type and extent of parental difficulties impact the relationship found between discord (stress) and child outcome.

Finally, this study assessed "support" and did not measure the potential toll that these or other relationships may have taken--what some investigators have called "negative support." That is, the impact of nonsupportive relationships that these children may be involved in may balance out the impact of the relationships that they perceive as supportive. This may also help to explain the universally high ratings for happiness with support in that "support" is something with which one should be relatively happy with. Including an assessment of the ways in which the children's networks adversely affect them would obviously yield different results. Thus, an average or absolute difference between the two might be a better or more accurate analysis of the situation than what was available through the present study. The results from the PPI lend support to this argument in that there were clearly differential relationships between parental negative behavior and outcome and parental positive behavior and outcome. These are two different measures and they co-exist. Both of these variables should be considered in future research.

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Implications for Intervention and Prevention

Although the methodological limitations of this study are evident, the results are meaningful in terms of potential interventions utilizing natural support systems that may be helpful for this population.

The importance of family support as a unique source of support for these children seems apparent. Family provided significantly more of three of the four types of support measured, and familial support was the only source of support that was significantly (inversely) related to stress levels. Furthermore, one of the significant direct effects found was that the ratio of family nominated on emotional support was inversely related to child report of depression. Therefore, strengthening the quality and quantity of familial support may be a way in which to aid children in coping with the stress of marital disruption. Given the stress and conflict which exists in these families, this may be a difficult goal to achieve. However, there are potential means by which it could be reached. Marital or more aptly "separation" counseling for the parents focusing on the least harmful ways in which to handle the discord within their family, family therapy, and parenting groups designed to educate parents as to their children's needs and problem solving ways of providing for these needs within a supportive environment, are all potential options for intervention at this level.

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In addition, emotional support appears to be a critical type of support. This study found that the children nominated a relatively low number of supporters in the area of emotional support. These findings, as well as results indicating that children from disrupted families are also relatively dissatisfied with their emotional support networks, have been replicated in other investigations. The absence of gender differences on emotional support found in this sample is non-normative. That is, as cited above, females across the life span are reported to nominate more supporters and to be more satisfied with intimate forms of support than are males. However, in the current study there were no gender differences found in terms of size of emotional support network, perceived incidence of emotional support, nor on satisfaction with this support. Boys were rated as having more difficulty on psychosocial adjustment which loads on a factor which measures acting out, undisciplined behaviors, whereas girls were rated as having significantly more difficulty on social incompetence including social withdrawal and isolation, as well as a relative lack of appropriate social skills.

The fact that girls may demonstrate behavior voids rather than the acting out behaviors that the boys demonstrate is important. Again, this would seem to indicate that girls' reactions are different but not necessarily less than boys; and when interventions are

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One option for these children might be group work both for support and understanding but also in terms of peer facilitated social skills development and perhaps relaxation and self control training for boys. This study provided evidence that peer support may buffer the stress -adjustment relationship, and there is an established literature on the efficacy of peer counseling and peer teaching of social skills, both of which would appear to support the efficacy of peer based intervention with these children. Thus, preventive work with this population would need to be primarily secondary in nature--providing supportive services to avoid further suffering or to help children adjust relatively better to the stressful experience of marital discord.

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References

- Achenbach, T. M. (1978). The child behavior profile: I. Boys aged 6-11. Journal of Consulting and Clinical Psychology, 46, 478-488.
- Anthony, E. J. (1970). Behavior disorders. In P. H. Mussen (Ed.), Charmichael's manual of child psychology, Vol. II, New York: John Wiley.
- Aronson, E. A. (1980). The social animal. W. H. Freeman: San Francisco.
- Belle, D. & Longfellow, C. (1984, August). Turning to others: Children's use of confidants. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.
- Block, J. H., Block, J., & Gjerde, P. F. (1986). The personality of children prior to divorce: A prospective study. Child Development, 57(4), 827-840.
- Bogat, G. A., Chin, R., Sabbath, W., & Schwartz, C. (1984). The Children's Social Support Questionnaire (Tech. Rep. No. 1). East Lansing: Michigan State University.
- Bogat, G. A., Caldwell, R. A., Rogosch, F., & Kriegler, J. A. (1985). Differentiating specialists and generalists within college students' social support networks. Journal of Youth and Adolescence, 14, 23-35.
- Caldwell, R. A., & Bloom, B. L. (1982). Social support--its structure and impact on marital disruption. American Journal of Community Psychology, 10, 647-667.
- Cochran, M. M. & Brassard, J. A. (1979). Child development and personal social networks. Child Development, 50, 601-616.
- Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 2, 310-357.
- Cohen, S. & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, J. E. Singer, & S. E. Taylor (Eds.), Handbook of psychology and health (Vol. 4, pp. 253-267). Hillsdale, NJ: Erlbaum.

- Christopolous, A. L., Westerman, M. A., & Tanaka, J. S. (1985, April). Relationships between parents' marital status, interparental discord, child mediators, and child outcomes. Paper presented at the Annual Meeting of the Society for Research in Child Development, Toronto, Canada.
- Cruise, K. A. (1987). A developmental analysis of children's use of social support. Unpublished master's thesis, Michigan State University, E. Lansing, Michigan.
- Eme, R. F. (1979). Sex differences in childhood psychopathology: A review. Psychological Bulletin, 86, 574-595.
- Emery, R. E. & O'Leary, D. (1982). Children's perceptions of marital discord and behavior problems of boys and girls. Journal of Abnormal Child Psychology, 10(1), 11-24.
- Emery, R. E. & O'Leary, D. (1984). Marital discord and child behavior problems in a nonclinic sample. Journal of Abnormal Child Psychology, 12(3), 411-420.
- Erikson, G. (1877). The concept of personal network in clinical practice. Family Process, 14, 487-498.
- Finney, J. W., Mitchell, R. E., Cronkite, R. C., & Moos, R. H. (1984). Methodological issues in estimating main and interactive effects: Examples from coping/social support and stress field. Journal of Health and Social Behavior, 25, 85-98.
- Franklin, M.R., Duley, S.M., Rousseau, E. W., & Sabers, D. L. (1981). Construction validity of the Piers-Harris Children's Self-Concept Scale. Educational and Psychological Measurement, 41, 439-443.
- Gore, S. (1978). The effects of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.
- Guidabaldi, J., Cleminshaw, H. K., Perry, J. D., & McLoughlin, C. S. (1983). The impact of parental divorce on children: Report of the nationwide NASP study. School Psychology Review, 12, 300-323.
- Hammond, J. M. (1979). The children of divorce: A study of self-concept, academic achievement, and attitudes. The Elementary School Journal, 2, 55-62.
- Hazzard, A., Christensen, A., & Margolin, G. (1983). Children's perceptions of parental behaviors. Journal of Abnormal Child Psychology, 11(1), 49-60.

- Heatherington, M. E., Cox, M., & Cox, R. (1979a). Family interaction and the social, emotional, and cognitive development of children following divorce. In V. Vaughn & T. Brazelton (Eds.), The family setting priorities. New York: Science and Medicine.
- Heatherington, M. E., Cox, M., & Cox, R. (1979b). Play and social interaction in children following divorce. Journal of Social Issues, 35, 26-49.
- Hirsch, B. J. (1979). Psychological dimensions of social networks: A multidimensional analysis. American Journal of Community Psychology, 7, 263-277.
- Hirsch, B. J. (1981). Social networks and the coping process: Creating personal communities. In B. H. Gottlieb (Ed.), Social networks and social support. Beverly Hills: Sage Publications.
- Hodges, W. F. & Bloom, B. L. (1984). Parents' report of children's adjustment to marital separation: A longitudinal study. Journal of Divorce, 8, 33-49.
- Holahan, C. J. & Moos, R. H. (1981). Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 90, 365-370.
- House, J. S. (1981). Work stress and social support. Reading, MA: Addison-Wesley.
- Ingersoll, B. & Depner, C. (1980, August). Support networks of middle-aged and older adults. Paper presented at the Annual Convention of the American Psychological Association, Montreal, Canada.
- James, L. R. & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. Journal of Applied Psychology, 69, 307-321.
- Kalter, N. (1977). Children of divorce in an outpatient psychiatric population. American Journal of Orthopsychiatry, 47, 40-41.
- Kovacs, M. (1981). Rating scales to assess depression in school-aged children. Acta Paedopsychiatrica, 46, 305-315.
- Kriegler, J. A. (1985). The developmental aspects of social support: A multidimensional analysis of children's social networks. Unpublished master's thesis, Michigan State University, E. Lansing, Michigan.

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- Kriegler, J. A. (1985). Separation and Divorce Stress (SADS). Department of Psychology, Michigan State University, East Lansing, MI.
- Kriegler, J. A. & Bogat, G. A. (1985, August). A developmental analysis of children's support networks. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles, California.
- Kriegler, J. A., Pearson, J. L., Weinstein, R. J., Caldwell, R. A., & Stollak, G. E. (1986, April). The intergenerational effects of marital discord and separation: Preliminary findings. Paper presented at the Annual Meeting of the American Orthopsychiatric Association, Chicago, Illinois.
- Lachar, D. & Gdowski, C. L. (1982). Problem-behavior factor correlates of the Personality Inventory for Children profile scales. Journal of Consulting and Clinical Psychology, 47, 39-48.
- Lachar, D., Gdowski, C. L. & Snyder, D. K. (1982). Broad band dimensions of psychopathology: Factor scales for the Personality Inventory for Children. Journal of Consulting and Clinical Psychology, 50, 634-642.
- Leavy, R. L. (1983). Social support and disorder: A review. Journal of Community Psychology, 11, 3-21.
- McLaughlin, R. E. (1970). Unpublished studies on self-concept, Milton Hershey School.
- Monroe, S. M. (1983). Social support and disorder--toward untangling of cause and effect. American Journal of Community Psychology, 11, 81-97.
- Mueller, D. P. (1980). Social networks: A promising direction for research on the relationship of the social environment to psychiatric disorder. Social Science and Medicine, 14A, 147-161.
- Nair, D. & Jason, L. A. (1984, May). An investigation and analysis of social networks among children. Paper presented at the Annual Convention of the Midwestern Psychological Association, Chicago, Illinois.
- Norbeck, J. S. & Tilden, V. P. (1983). Life stress, social support and emotional disequilibrium in complications of pregnancy--A prospective multivariate study. Journal of Health and Social Behavior, 24, 30-46.

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- Patterson, G. R. (1982). Coercive family process. Eugene, Oregon: Castilla Publishing.
- Phelps, R. E. & Huntley, D. K. (1985, August). Social networks and child adjustment in single-parent families. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles, California.
- Piers, E. V. (1984). Piers-Harris Children's Self-Concept Scale--Revised Manual. Los Angeles: Western Psychological Services.
- Piers, E. V. & Harris, D. B. (1964). Age and other correlates of self-concept in children. Journal of Educational Psychology, 55(2), 91-95.
- Pilisuk, M. (1982). Delivery of social support: The social inoculation. American Journal of Orthopsychiatry, 52, 20-31.
- Reznick, C., Mendick, B., Baker, R., & Hocevar, D. (1986, August). Long-term effects of divorce on adolescent achievement and psychosocial behavior. Paper presented at the Annual Conference of the American Psychological Association, Washington, DC.
- Rutter, M. (1971). Parent-child separation: Psychological effects on the children. Journal of Child Psychology and Psychiatry, 12, 233-260.
- Rutter, M. (1979). Protective factors in children's response to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), Primary prevention of psychopathology: Vol III, Social competence in children. Hanover, NH: University Press of New England.
- Sandler, I. N. (1980). Social support resources, stress, and maladjustment of poor children. American Journal of Community Psychology, 8, 41-52.
- Schreiber, M. D. (1985, August). Peer social support and coping in children of divorced and nondivorced families. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles, California.
- Shavelson, R. J. & Bolus, R. (1982). Self-concept: The interplay of theory and methods. Journal of Educational Psychology, 74(1), 3-17.

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Smith, M. B. & Hobbs, N. (1966). The community and the community mental health center. American Psychologist, 21, 499-509.

Smith, M. D. & Rogers, C. M. (1978). Reliability of standardized assessment instruments when used with learning disabled children. Learning Disabilities Quarterly, 1, 23-30.

Urbeg, K. A. & LaBouvie-Vief, G. (1976). Conceptualizations of sex roles: A life span developmental study. Developmental Psychology, 12, 15-23.

Wallerstein, J. S. (1983). Children of divorce: The psychological tasks of the child. American Journal of Orthopsychiatry, 53, 230-243.

Westerman, M. A., La Luz, E. J., Cavallaro, & Tanaka, J. S. (1986, August). Marital discord and children's behavior in school and academic achievement. Paper presented at the Annual Convention of the American Psychological Association, Washington, D. C.

Westerman, M. A., Tanaka, J. S., & Christopoulos, A. L. (1986, August). Child mediators of divorce/discord-behavior problems relationships: Two approaches. Paper presented at the Annual Convention of the American Psychological Association, Washington, D.C.

Whitehead, L. (1979). Sex differences in children's response to family stress: A re-evaluation. Journal of Child Psychology and Psychiatry and Allied Disciplines, 20, 247-254.

Wirt, R. D., Lachar, D., Klinedinst, J. K., & Seat, P. D. (1984). Multidimensional description of child personality: A manual for the Personality Inventory for Children (Revised Edition). Los Angeles: Western Psychological Services.

Wolchik, S. S., Rhuelman, L. S., Braver, S. L., & Sandler, I. N. (1985, August). Social support of children of divorce: Direct and stress buffering effects. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles, California.

Wolchik, S. A., Sandler, I. N., & Braver, S. L. (1984, August). The social support networks of children of divorce. Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Canada.

Zelkowitz, P. (1982). Children's support networks: Their role in families under stress. Unpublished Dissertation, Harvard Graduate School of Education.

APPENDICIES

APPENDIX A

TELEPHONE SCREENING INTERVIEW

Telephone Screening Interview

"Hello, I'm _____. I am with the Family Studies Project at Michigan State University. Thank you for contacting us about the project. I would like to ask you some questions to determine your eligibility for our program. After you answer the questions, I will answer any questions that you have. At the end of the conversation I will ask you if you would be willing to participate further.

Name:
Telephone Number:

Today's Date:
Interviewer:

1. Are you currently married? YES _____ NO _____
If divorced, when was the initial separation? _____

If separation was more than 2 years ago:
Thank you very much for your willingness to participate. However, our present project is focusinf on currently married people living together and in conflict, or persons recently separated. Thank you again.

If YES:

2. Is this your first marriage? YES _____ NO _____

If NO state:
Thank you very much for your willingness to participate. However, our current program is focusing only on persons in their first marriage. Thank you.

3. Are you currently separated from your spouse? That is, do you and your spoue live apart, under different roofs?
YES _____ NO _____

If NO go to question 5 If YES:

4. What was the date that you (your spouse) moved out?
DATE _____

5. Do you and your spouse have children? YES _____ NO _____
If YES:

6. What are the age and sex of each child? AGE SEX
Child 1:
Child 2:
Child 3:
Child 4:

7. Since our interest also includes how marital conflict affects all members of a family, we would like to know a little about your spouse and your children if there are any. Because our interest is in the study of the family if you don't object we would like to interview your children and your spouse. Do you object to our talking to or writing to your spouse and children? YES___ NO___

If YES go to question 10

8. If not separated from spouse: May we talk to or write to your spouse and ask him/her to participate?
YES___ NO___

9. If separated from spouse: What is the address of your spouse so that we may write to him/her to ask him/her to participate?

10. That's all the questions I have now. Based on your answers to the previous questions you are eligible to participate in our program. We would like to have members of our staff meet with you (and your family) to discuss your situation. That meeting would be schedule at your convenience in your home, or at our offices. Do you have any questions? If not, what are times that are most convenient for you (and your family) for us to talk with you? _____

Thank you for your willingness to help. We will call you in the next week to arrange a time for our visit.

APPENDIX B

INFORMED CONSENT FORM

Consent Form
Family Studies Project

If there are children in the family over six years of age:

I am willing to allow the child(ren) in my family to be interviewed by project personnel and for my child(ren) to fill out questionnaires.

I understand that my child(ren) is (are) free to decline to participate and may terminate participation at any time without any consequence.

I understand that any information collected will be for scientific and educational purposes only and in ways which will preserve my child(ren's) anonymity. His/her (their) name(s) will not appear on any document reviewed by present or future project personnel nor in any public reports or documents. The project will protect the confidentiality of all family members.

Your Name _____

Dated this _____ day of _____ 19 _____

APPENDIX C

CHILDREN'S SOCIAL SUPPORT QUESTIONNAIRES

NAME _____

BIRTHDATE _____

RACE _____

CODE # _____

CSSQ

QUESTION 1: WHO DO YOU HANG OUT WITH (FOR EXAMPLE, AT THEIR HOUSE, YOUR HOUSE, AROUND THE NEIGHBORHOOD, SCHOOL, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 2: WHO DO YOU THINK ARE FUN PEOPLE TO TALK WITH (FOR INSTANCE, ABOUT THINGS YOU LIKE TO DO OR T.V. SHOWS, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 3: WHO DO YOU GO OUT WITH (FOR EXAMPLE, TO MOVIES, PARTIES, VIDEO ARCADES, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 4: WHO ARE YOUR FRIENDS AT ORGANIZED ACTIVITIES? ORGANIZED ACTIVITIES ARE THINGS THAT YOU DO ONCE A WEEK OR ONCE A MONTH, FOR EXAMPLE, CLUBS, LITTLE LEAGUE, BOWLING TEAM, SCOUTS, ETC.

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 5: WHO GIVES YOU INFORMATION OR ADVICE ABOUT RELIGIOUS THINGS?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 6: WHO GIVES YOU INFORMATION OR ADVICE ABOUT PERSONAL THINGS (FOR EXAMPLE, PROBLEMS BETWEEN YOU AND YOUR PARENTS, HOW TO MAKE FRIENDS, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 7: WHO TEACHES YOU HOW TO DO THINGS (FOR EXAMPLE, FIX A BIKE, PLAY A GAME, COOK, MAKE EXTRA MONEY, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 8: WHO GIVES YOU INFORMATION OR ADVICE ABOUT FUN THINGS TO DO (FOR EXAMPLE, WHAT IS A GOOD MOVIE TO SEE, WHAT IS A GOOD RECORD TO LISTEN TO, WHAT IS A GOOD BOOK TO READ, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 9: WHO CAN YOU COUNT ON TO HELP YOU DO THINGS THAT NEED TO GET DONE (FOR EXAMPLE, HOMEWORK, FIXING A TOY, CHORES, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 10: WHO TAKES YOU PLACES YOU NEED TO GO?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 11: WHO LETS YOU BORROW A LITTLE BIT OF MONEY IF YOU NEED IT (FOR THINGS LIKE A COKE, SOME CANDY, A VIDEO GAME, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 12: WHO LETS YOU BORROW SOMETHING FROM THEM IF YOU NEED IT (LIKE A SWEATER, A JACKET, A TOY, A RECORD, A BOOK, ETC.)?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 13: WHO LISTENS TO YOU WHEN YOU NEED TO TALK ABOUT SOMETHING PERSONAL?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 14: WHO MAKES YOU FEEL BETTER WHEN YOU'RE UPSET?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 15: WHO CARES ABOUT YOU?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 16: WHO CAN YOU REALLY COUNT ON TO ALWAYS BE THERE FOR YOU?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 17: WHO DID YOU HANG OUT WITH (GO TO MOVIES AND PARTIES, AND/OR PARTICIPATE {BE} IN ORGANIZED ACTIVITIES) BEFORE YOUR PARENTS SEPARATED?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 18: WHO USED TO GIVE YOU INFORMATION AND/OR ADVICE ABOUT IMPORTANT THINGS (HOW TO DO THINGS, RELIGION, PERSONAL THINGS) BEFORE YOUR PARENTS SEPARATED?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 19: WHO USED TO HELP YOU GET THINGS DONE (GET PLACES YOU NEEDED TO GO, GIVE YOU MONEY FOR SOMETHING YOU NEEDED TO BUY, BEFORE YOUR PARENTS SEPARATED?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

QUESTION 20: WHO USED TO ALWAYS BE THERE FOR YOU (LISTEN TO YOU WHEN YOU NEEDED TO TALK, OR MADE YOU FEEL BETTER WHEN YOU WERE UPSET) BEFORE YOUR PARENTS SEPARATED?

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

| NAME _____ | | BIRTHDATE _____ | | CODE NO. _____ | |
|-----------------------|-------|--|--|--|--|
| YOUR SEX: MALE FEMALE | | | | | |
| NAME | AGE | What is (was) your relationship with this person? (Circle all that apply) | How often do (did) you have contact with this person? (Circle all that apply) | Who initiated (es) (make) contact in your relationship with this person? (Circle all that apply) | How happy are (were) you with your relationship with this person? (Circle all that apply) |
| | | 1. Parent.
2. Sibling (brother/sister).
3. Grandparent.
4. Other Relative (aunt, cousin, etc.).
5. Friend.
6. Neighbor.
7. Classmate.
8. Professional (e.g., teacher, doctor, minister, social worker). | 1. A few times a year or less.
2. Once a month.
3. A few times a month.
4. Once a week.
5. A few times a week.
6. Everyday. | 1. You initiate (make) contact all/most of the time.
2. They initiate (make) contact all/most of the time.
3. Both of you initiate (make) contact an equal amount. | 1. Very unhappy.
2. Unhappy.
3. Not happy or unhappy.
4. Happy.
5. Very happy. |
| 1. _____ | _____ | _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ | _____ | _____ |
| 9. _____ | _____ | _____ | _____ | _____ | _____ |
| 10. _____ | _____ | _____ | _____ | _____ | _____ |
| 11. _____ | _____ | _____ | _____ | _____ | _____ |
| 12. _____ | _____ | _____ | _____ | _____ | _____ |

APPENDIX D

SEPARATION AND DIVORCE STRESS QUESTIONNAIRES

Separation and Divorce Stress Questionnaire
(A1-S)

INSTRUCTIONS

I am going to read you a list of things that might or might not have bothered or upset some kids. When I read each one I want you to tell me if it has bothered (upset) or caused trouble for you since your mom and dad separated. In fact, I want you to tell me whether it really bothered you, just bothered you a little, or didn't bother you at all. You need to make a choice on each one O.K? Let's try the first one.

Read each item and repeat the the options each time (i.e. bothered you very much, bothered you...). Use the scale below to score each response.

Bothered/upset me
very much/caused
a lot of trouble.

1

Bothered/upset me
caused trouble
for me.

2

Only bothered/upset
me a little/caused
a litte trouble.

3

Didn't bother/upset or not bother/upset

4

Wasn't a problem/
did not happen.

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.

10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(A2-S)

INSTRUCTIONS

You will now repeat the items administered on form A1 in reference to the present. To do this, say: We talked about how some of these things bothered you when your mom and dad separated, some of them may still bother you. Let's go over them again and see which of these things bother you right now.

Read each item and repeat the options each time (does this bother you very much, bothers you, a little...). Use the scale below to score each response.

Bothered/upset me
very much/caused
a lot of trouble.

1

Bothered/upset me
caused trouble
for me.

2

Only bothered/upset
me a little/caused
a litte trouble.

3

Didn't bother/upset or not bother/upset

4

Wasn't a problem/
did not happen.

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.

10. We (I) didn't get to go to the places or do the things
we (I) used to do.

11. I felt bad/sad a lot of the time.

12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(Al-MD)

INSTRUCTIONS

Say: I am going to read you a list of things that might or might not have bothered or upset some kids. When I read each one I want you to tell me if it has bothered (upset) or caused trouble for you in the last six months (set time frame w/events). In fact, I want you to tell me whether it really bothered you, just bothered you a little, or didn't bother you at all. You need to make a choice on each one o.k.? Let's try the first one.

Read each item and repeat the options each time (i.e., this bothered you very much, a little...). Use the scale below to score each response.

| | | |
|---|--|---|
| Bothered/upset me
<u>very</u> much/caused
a lot of trouble. | Bothered/upset me
caused trouble
for me. | Only bothered/upset
me a little/caused
a litte trouble. |
|---|--|---|

1

2

3

| | |
|--|--------------------------------------|
| Didn't bother/upset
or not bother/upset | Wasn't a problem/
did not happen. |
|--|--------------------------------------|

4

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.

10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(A2-MD)

INSTRUCTIONS

You will now repeat the items administered on form A1 in reference to the present. To do this, say: We talked about how some of these things bothered you in the last six months, some of them may still bother you. Let's go over them again and see which of these things bother you right now.

Read each item and repeat the options each time (i.e., does this bother you very much, a little...). Use the scale below to score each response.

Bothered/upset me
very much/caused
a lot of trouble.

1

Bothered/upset me
caused trouble
for me.

2

Only bothered/upset
me a little/caused
a little trouble.

3

Didn't bother/upset
or not bother/upset

4

Wasn't a problem/
did not happen.

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.

10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Questionnaire
(SAD B1-S)

INSTRUCTIONS:

Below there is a list of some things that may or may not have bothered some people when their parents became separated. For each statement please check the number that indicates (tells) how bothered (upset) you were or were not when this happened. Base your answers on the following scale:

| | | |
|---|--|---|
| Bothered/upset me
<u>very</u> much/caused
a lot of trouble. | Bothered/upset me
caused trouble
for me. | Only bothered/upset
me a little/caused
a litte trouble. |
|---|--|---|

1

2

3

| | |
|--|--------------------------------------|
| Didn't bother/upset
or not bother/upset | Wasn't a problem/
did not happen. |
|--|--------------------------------------|

4

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.
10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(B2-S)

INSTRUCTIONS

On this form you are asked to evaluate/answer the same statements you read on the previous page. However, this time answer based on how these things affect you now (within the last two weeks) instead of how they affected you at the time of separation. Use the following scale to indicate how much each of these things bother or don not bother you presently.

Bothered/upset me
very much/caused
a lot of trouble.

1

Bothered/upset me
caused trouble
for me.

2

Only bothered/upset
me a little/caused
a litte trouble.

3

Didn't bother/upset
or not bother/upset

4

Wasn't a problem/
did not happen.

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.
10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(Bl-MD)

INSTRUCTIONS

Below there is a list of some things that may or may not have bothered some people in their lives. For each statement please check the number that indicates (tells) how bothered (upset) you were or were not by this in the last six months. Base your answers on the following scale:

| | | |
|---|--|---|
| Bothered/upset me
<u>very</u> much/caused
a lot of trouble. | Bothered/upset me
caused trouble
for me. | Only bothered/upset
me a little/caused
a litte trouble. |
|---|--|---|

1

2

3

| | |
|--|--------------------------------------|
| Didn't bother/upset
or not bother/upset | Wasn't a problem/
did not happen. |
|--|--------------------------------------|

4

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.
10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

Separation and Divorce Stress Questionnaire
(B2-MD)

INSTRUCTIONS

On this form you are asked to evaluate/answer the same statements you read (heard) on the previous page. However, this time answer based on how these things affect you now (within the last two weeks) instead of how they affected you in the last six months. Use the following scale to indicate how each of these things bother or do not bother you presently.

| | | |
|---|--|---|
| Bothered/upset me
<u>very</u> much/caused
a lot of trouble. | Bothered/upset me
caused trouble
for me. | Only bothered/upset
me a little/caused
a litte trouble. |
|---|--|---|

1

2

3

| | |
|--|--------------------------------------|
| Didn't bother/upset
or not bother/upset | Wasn't a problem/
did not happen. |
|--|--------------------------------------|

4

5

1. I had to move to a new school.
2. I had to move to a new neighborhood.
3. I didn't get to spend time with special people I used to spend time with.
4. I didn't get to be or play with special things (toys, animals, etc.) that I used to be with.
5. I lost a lot of friends.
6. Other kids treated me differently/badly.
7. I did not get to see my mom much/at all.
8. I did not get to see my dad much/at all.
9. I did not get to see my grandparents much.
10. We (I) didn't get to go to the places or do the things we (I) used to do.
11. I felt bad/sad a lot of the time.
12. I didn't or couldn't do as well in school.

APPENDIX E

TABLE 8: POST-HOC ANALYSES OF THE POTENTIAL
BUFFERING EFFECTS OF EMOTIONAL SUPPORT

TABLE 8

Post-Hoc Analyses of the Potential Buffering Effects of Emotional Support. (N = 30)

| Time
Frame | Independent
Variables | Depression
R ² Change | Self-Concept
R ² Change | Personality Inventory for Children (PIC) | | | |
|------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--|---------------------------------------|--|---|
| | | | | Adjustment
R ² Change | Incompetence
R ² Change | Internalization
R ² Change | Cognitive
Development
R ² Change |
| Past (At
Separation | A. Stress | .229*** | .053 | .016 | 0 | .041 | .021 .017 |
| | Incidence of
Emotional
Support | .001 | .007 | .025 | .013 | .007 | .002 .140 |
| | Interaction
Term | .002 | .003 | .027 | .001 | .057 | .013 .005 |
| | Total R ² | .232* | .063 | .068 | .014 | .106 | .036 .162 |
| ----- | | | | | | | |
| | B. Stress | .229*** | .053 | .016 | 0 | .041 | .021 .017 |
| | Total # of
Emotional
Supporters | .001 | .004 | .034 | .018 | 0 | .006 .153* |
| | Interaction
Term | .039 | .001 | .002 | .007 | .075 | .018 .010 |
| | Total R ² | .269** | .058 | .052 | .025 | .116 | .045 .180 |
| ----- | | | | | | | |

TABLE 8

Post-Hoc Analyses of the Potential Buffering Effects of Emotional Support. (N = 30)

| Time Frame | Independent Variables | Depression
R ² Change | Self-Concept
R ² Change | Personality Inventory for Children (PIC) | | | |
|------------------------------|---------------------------------|-------------------------------------|---------------------------------------|--|---------------------------------------|--|---|
| | | | | Adjustment
R ² Change | Incompetence
R ² Change | Internalization
R ² Change | Cognitive
Undisciplined Development
R ² Change |
| Present (At Time of Testing) | A. Stress | .291**** | .129 | .003 | .007 | .020 | .020 |
| | Incidence of Emotional Support | 0 | .002 | .031 | .019 | .010 | .145* |
| | Interaction Term | .002 | .001 | .004 | .001 | .071 | 0 |
| | Total R ² | .293** | .132 | .038 | .027 | .101 | .165 |
| ----- | | | | | | | |
| | B. Stress | .291**** | .129* | .003 | .007 | .019 | .020 |
| | Total # of Emotional Supporters | 0 | .001 | .044 | .023 | 0 | .157** |
| | Interaction Term | .050 | .001 | .045 | .007 | .050 | .003 |
| | Total R ² | .341*** | .131 | .212 | .037 | .069 | .180 |

* P < .05
 ** P < .01
 *** P < .005
 **** P < .001

APPENDIX F

**TABLE 9: DISTRIBUTION OF SCORES ON
STRESS AND OUTCOME MEASURES BY SUBJECT**

Table 9
Distribution of Scores on Stress and Outcome Measures by Subject

| Past Stress | Curnt Stress | CDI | PH | Soc Incmp | Int | Cog Devel | Adjust | Undisp |
|-------------|--------------|-----|----|-----------|-----|-----------|--------|--------|
| 14 | 12 | 1 | 73 | 57 | 48 | 39 | 53 | 43 |
| 23 | 20 | 6 | 50 | 42 | 64 | 39 | 102 | 62 |
| 25 | 22 | 0 | 79 | 64 | 42 | 68 | 50 | 43 |
| 29 | 27 | 11 | 63 | 75 | 59 | 67 | 42 | 39 |
| 12 | 14 | 2 | 67 | 39 | 48 | 53 | 42 | 39 |
| 12 | 12 | 5 | 70 | 34 | 69 | 48 | 75 | 41 |
| 37 | 33 | 10 | 50 | 42 | 69 | 54 | 95 | 57 |
| 27 | 21 | 9 | 54 | 34 | 74 | 46 | 83 | 50 |
| 36 | 36 | 12 | 60 | 42 | 54 | 60 | 59 | 41 |
| 13 | 13 | 7 | 66 | 34 | 64 | 53 | 44 | 41 |
| 26 | 34 | 11 | 71 | 34 | 48 | 34 | 71 | 48 |
| 16 | 16 | 4 | 71 | 34 | -0 | 21 | 85 | 46 |
| 35 | 0 | 7 | 72 | 38 | 64 | 39 | 68 | 44 |
| 21 | 21 | 8 | 66 | 71 | 48 | 60 | 46 | 45 |
| 29 | 27 | 0 | 63 | -0 | -0 | -0 | -0 | -0 |
| 19 | 17 | 3 | 75 | 64 | 48 | 53 | 57 | 45 |
| 20 | 17 | 12 | 66 | 45 | 69 | 48 | 75 | -0 |
| 27 | 24 | 3 | 69 | 30 | 53 | 41 | 71 | 48 |
| 16 | 15 | 1 | 74 | 60 | 54 | 46 | 44 | 52 |
| 41 | 42 | 4 | 36 | -0 | -0 | -0 | -0 | -0 |
| 0 | 0 | 5 | 61 | 34 | 69 | 25 | 72 | 51 |
| 25 | 28 | 14 | 44 | 49 | 48 | 53 | 48 | 45 |
| 17 | 17 | 2 | 36 | 83 | 64 | 53 | 40 | 62 |
| 17 | 17 | 10 | 36 | 42 | 48 | 34 | 77 | 57 |
| 16 | 13 | 5 | 67 | 45 | 48 | 68 | 44 | 41 |
| 34 | 27 | 9 | 65 | 64 | 48 | 67 | 48 | 39 |
| 36 | 20 | 2 | 74 | 38 | 69 | 41 | 83 | 49 |
| 32 | 38 | 11 | 49 | 45 | 80 | 46 | 96 | 56 |
| 27 | 28 | 16 | 54 | 45 | 54 | 39 | 72 | 45 |
| 25 | 23 | 6 | 66 | 64 | 48 | 60 | 44 | 43 |
| 23 | 22 | 8 | 60 | 45 | 48 | 54 | 65 | 57 |
| 31 | 30 | 5 | 76 | 60 | 59 | 60 | 46 | 41 |
| 27 | 24 | 6 | 66 | 64 | 59 | 54 | 38 | 54 |
| 51 | 45 | 10 | 60 | 38 | 85 | 34 | 75 | 67 |
| 41 | 45 | 15 | 51 | 49 | -0 | -0 | -0 | -0 |
| 43 | 40 | 18 | 64 | 53 | -0 | -0 | -0 | -0 |
| 28 | 31 | 14 | 64 | 42 | 69 | 27 | 63 | 57 |
| 18 | 15 | 1 | 78 | 53 | 43 | 53 | 40 | 39 |
| 43 | 45 | 10 | 59 | 57 | 64 | 46 | 55 | 39 |
| 33 | 27 | 6 | 64 | 34 | 48 | 41 | 79 | 61 |
| 45 | 46 | 15 | 52 | 49 | 48 | 60 | 42 | 57 |
| 26 | 21 | 7 | 55 | 60 | 48 | 53 | 57 | 56 |
| 21 | 18 | 8 | 70 | 34 | 69 | 53 | 81 | 85 |
| 30 | 18 | 12 | 58 | 42 | 42 | 48 | 53 | 44 |

Key to Table 9

| | |
|--------------|--|
| Past Stress | Past level of stress on the Separation and Divorce Questionnaire. |
| Curnt Stress | Current level of stress on the Separation and Divorce Questionnaire. |
| CDI | Level of depression on the Child Depression Inventory. Scores of 19 and above are considered to be in the clinical range. |
| PH | Self-concept score on the Piers-Harris Children's Self Concept Scale Scores of 36 and below are considered to be in the clinical range. |
| Soc Incmp | Social Incompetence Factor score on the Personality Inventory for Children. Scores of 70 and above are considered to be in the clinical range. |
| Int | Internalization Factor score on the Personality Inventory for Children. Scores of 70 and above are considered to be in the clinical range. |
| Cog Devel | Cognitive Development Factor score on the Personality Inventory for Children. Scores of 70 and above are considered to be in the clinical range. |
| Adjust | Adjustment score on the Personality Inventory for Children. Scores of 70 and above are considered to be in the clinical range. |
| Undiscp | Undisciplined Factor Score on the Personality Inventory for Children. Scores of 70 and above are considered to be in the clinical range. |

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