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The Relationship of Parental Conflict and Parent-Child Relationship to the Sense of Coherence of Young Adult Children of Divorce

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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ABSTRACT

Early investigations of children and adolescents of divorce focused on the short-term negative influence of divorce on children and adolescents from "broken homes." Divorce is still seen as an important mediator in children's development, but other variables dealing with the family dynamics have been shown to be significant factors in the response of children to parental divorce. Few studies have considered the long-term influences of parental conflict and the parent-child relationship on young adults, and no studies have examined their relationship with the development of sense of coherence (SOC).

This study investigated the long-term relationship of parents' marital status, parental conflict, and parent-child relationship to the SOC of young adults. The subjects for the study were 231 undergraduate students 18 to 23 years of age. The SOC (measured by the Orientation To Life Questionnaire) of adult children of divorce was not significantly different than the SOC of their peers from intact homes. A significant negative relationship (r = -.23, p < .001) was found between parental conflict and SOC. Significant positive correlations were found between SOC and the quality of the father-child relationship (r =.36, p < .001) and mother-child relationship (r =.35, p < .001). A multiple regression was conducted with SOC used as the dependent variable and father-child relationship, mother-child relationship, parental conflict, gender, number of moves, and parent's marital status serving as the independent variables. The parent-child relationships were the only variables to enter the equation with a multiple R of .46 obtained (p < .001).

Among the adult children of divorce, the men had a significantly higher SOC than the women ($p < .05$). Also, in this group the father-child ($r = .45$, $p < .01$) and stepparent-child ($r = .51$, $p < .05$) relationships were positively related to SOC, but the mother-child relationship did not correlate significantly ($r = .06$, $p = .72$). The possible benefits of working in therapy toward decreased parental conflict and addressing the parent-child relationships are discussed.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Studies of the effects of parental divorce on children's development began in the 1960s. Research conducted prior to the 1960s involved children of divorce, children growing up in homes with unwed mothers, and children whose fathers had deserted the family, but the focus of this research was on the economic disadvantages encountered in these fatherless homes (Levitin, 1979).

The number of divorces began to increase in the 1960s and resulted in the onset of studies examining children's personality development following their parent's divorce. Initially the absence of the father from the home was the primary emphasis, with children who had experienced a father's death or prolonged absence included with those who had experienced parental divorce. Although the research moved away from the economic issues encountered with parental divorce, it still did not solely address the impact of divorce on children's development.

In 1971 Wallerstein and Kelly (1979; 1980) began the California Children of Divorce Project, which focused exclusively on children who had experienced parental divorce. This project is considered to be the pioneering work in the area. Research on children of divorce flourished in the 1970s with the continued growth in the divorce rate. The initial studies, conducted close to the time of the divorce, focused primarily on parent's marital status. Later studies have found the number of variables influencing the children's

adjustment to increase with the time passed between the divorce and the research. This multiplicity of factors has made studies considering the long-term implications of divorce difficult. Now researchers are giving consideration to variables outside the divorce itself that may influence the short and long-term differences observed between children of divorce and other children (Emery, 1988). While much of the literature of the 1960s focused on the negative effects of "broken homes," there is a growing body of literature suggesting that children's development is mediated by factors other than family intactness. The present investigation will examine variables outside the divorce that influence the well-being of young adults who experienced parental divorce.

The divorce rate began to climb dramatically in the 1960s, with the peak occurring in 1979. The children of those divorced couples are now in or approaching adulthood. Numerous studies have examined the impact of parental divorce on the development of children and adolescents, but few studies have focused on the long-term impact of that childhood experience of parental divorce into adulthood. These young adults, whose parents divorced when they were children, need to be examined to identify possible long-term implications of that childhood experience. Information gained in this area should be beneficial to clinicians working with adult children of divorce and in developing programs for children at the time of the divorce.

Review Of The Literature

The literature review will consist of an historical overview of the research on children's adjustment to parental divorce, highlighting the initial longitudinal studies in the field. Following this historical survey, the contrasting perspectives on the importance of physical versus psychological

well-being will be presented before focusing on the implications of parental conflict and the parent-child relationship. The final section will examine the definition and development of the sense of coherence.

History

The divorce rate in the United States has had several periods of upward and downward fluctuations. During the depression years, divorce rates dropped to 1.3 divorces per 1,000 people in 1933, and climbed to 4.3 per 1,000 people following World War II in 1946 (Glick & Sung-Ling, 1986). After this peak the rates dropped to approximately 2 divorces per 1,000 people until the 1960s and 1970s when divorce rates climbed to a peak of 5.3 per 1,000 people in 1979 (United States Bureau of the Census, 1991). Glick and Sung-Ling (1986) predicted that at least 40% of all children born in the late 1970s and early 1980s were likely to experience a divorce before reaching adulthood and leaving the parental home.

When considering the history of research on children of divorce, two studies are frequently cited as the first ones that specifically considered the adjustment of children of divorce. Both of the studies, one by Hetherington, Cox, and Cox (1978) and the other by Wallerstein and Kelly (1979), began in the early 1970s. The Virginia longitudinal study of divorce and remarriage, (Hetherington, Cox, & Cox, 1982), involved 48 white, middle class families with preschool children who had undergone recent divorce, and a matched group of 48 intact families. The typical child was four years of age at the beginning of the study, with data gathered at two months, one year, two years, six years and eleven years following the divorce (Hetherington, 1993). Wallerstein and Kelly's (1980) study consisted of 60 single parent families (all but one having a mother with custody) with 131 children ranging from three

to eighteen years of age. Interviews were conducted at the time of parental separation, 18 months (Wallerstein & Kelly, 1976), 5 years (Wallerstein & Kelly, 1980), and 10 years after the marital separation (Wallerstein, 1987).

Both studies found the initial response of children to their parents divorce to be acute distress (Hetherington, 1989; Wallerstein, 1985). Eighteen months after the divorce, the children who originally did not appear to be having problems were experiencing psychological decline. The preadolescent boys, in particular, were having trouble with performance and behavior in school and at home, while the girls appeared to be recovering from the initial distress (Wallerstein, 1985). Hetherington, Cox, and Cox (1972) also found that two years after the divorce, problems in the relationship between boys and their mothers were common. In contrast, the girls reported positive relationships with their mothers. They suggested that the relationship between the mothers and their daughters may be enhanced following the divorce because of the positive same gender identification, whereas the relationship mothers have with their sons may be a reflection of the relationship they had with their ex-husbands.

At the 5-year mark, Wallerstein and Kelly (1980) found the well-being of the children to be strongly influenced by the quality of the parenting, the continuity of the relationship with the visiting parent, and the extent to which the conflict between the divorced parents had subsided. As the children of divorce reached adulthood, the relationship with their parents continued to increase in importance (Wallerstein & Corbin, 1989).

Hetherington (1989) found three clusters of children at the six year mark: aggressive-insecure children, opportunistic-competent children, and caring-competent children. Three times more boys than girls were in the

aggressive-insecure group. The boys were typically from families that had not or had only recently remarried and the girls from families who had experienced remarriage.

Both the opportunistic-competent and caring-competent groups had high self-esteem, were popular with peers and teachers, and had a low incidence of behavioral problems. The opportunistic-competent group had an equal number of boys and girls, who were typically from divorced and remarried families, or intact families with high conflict. The caring-competent group was composed almost totally of girls, who were less manipulative, and tended to be less concerned with prestige and power than the opportunistic-competent group. Half of the girls in this last group were from divorced homes where the custodial parent had not remarried, whereas none of the boys in this group had experienced parental divorce.

Physical and Psychological Well-Being

Research considering parental divorce and children's adjustment can be divided into two perspectives regarding the implications of divorce: physical well-being and psychological well-being (Dancy & Handal, 1984). The physical well-being position views divorce as an important variable when considering children's later adjustment to the dissolution of the two-parent family. This is in contrast to the psychological well-being position that considers the perceived family conflict as more important than family status (Enos & Handal, 1986).

The intact nuclear family was portrayed as the ideal model for children's development before the 1970s. The divorce research before this period reflected this belief, with research focusing on the relationship between divorce and psychopathology (Kraus, 1979). The emphasis on the

importance of physical well-being led to the use of terms like broken versus intact homes and research that grouped together all children who did not live in the two-parent home (Enos & Handal, 1986).

The grouping of all children not living with both parents and use of samples from primarily clinical populations has been suggested as the reason for the initial support of the physical well-being perspective. Father absence became a focus of research with early studies considering the effects of father loss supportive of the physical well-being position (Enos & Handal, 1986). In an extensive review of 60 studies published in the 1950s and 1960s, Herzog and Sudia (1973) concluded that the effects of father absence on children's development was less uniformly handicapping than initially assumed. The intact nuclear family had been portrayed as the ideal model but this emphasis on physical well-being was not supported when additional variables and better designed studies were employed. Past proponents of the physical well-being position are now accepting the need to identify home environment factors that contribute to children's development beyond the change in their parent's marital status (Guidubaldi, Cleminshaw, Perry, Nastasi, & Lightel, 1986).

Support for the psychological well-being position was found as early as 1957 (Nye, 1957). In their longitudinal study, Hetherington, Cox, and Cox (1978; 1979) found that the separation effects (physical well-being) were time-limited, whereas responses to parental conflict (psychological well-being) were more enduring. Although they suggested that the implications of parental conflict were more long lasting, Wallerstein (1983b) found that if parents could resolve their conflicts following divorce, the children were likely to have few emotional adjustment problems. In his review of the studies

involving children of divorce, Emery (1982) concluded that current parental conflict was a major influence on children's adjustment, the perception of current, high family-conflict being related to measures of psychological adjustment, regardless of marital status.

Parental Conflict

There continues to be evidence in the literature that parental conflict, in both divorced and intact homes, affects children's adjustment. Parental discord appears to have a more negative impact on children than divorce or father loss. Reviews of the research examining the effect of divorce on children indicate that the conflict associated with divorce, rather than the breakup of the family, is the primary factor responsible for many of the problems seen in children whose parents divorce (Emery, 1982; Emery, 1988; Grych & Fincham, 1992; Long & Forehand, 1987). Regardless of parental marital status, parental conflict has been found to impact social adjustment negatively (Atkeson, Forehand, & Rickard, 1982; Block, Block, & Gjerde, 1986; Forehand, McCombs, Long, Brody, & Fauber, 1988; Lupenitz, 1979; McCord, McCord, & Thurber, 1962; Raschke & Raschke, 1979). The negative implications are present in children of all ages. Children (Hess & Camara, 1979; Rutter, 1971) and adolescents (Long, Forehand, Fauber, & Brody, 1987) in high-conflict, two-parent families have been found to show more emotional and behavioral problems than children in low-conflict, one-parent families.

Dimensions of Conflict

Several different ways of characterizing parental conflict have been suggested. Emery (1982) proposed three aspects to consider when defining marital conflict: the process of the conflict (hitting, arguing, avoidance); its content (sex, child rearing, money); and the time it lasts. Grych and Fincham

(1990) considered marital conflict a multidimensional construct that can be overt or covert, varying in frequency, intensity, content, and resolution. Both agree that all marriages have some degree of conflict, and it is unlikely that all expressions of conflict are problematic for children. Because of the variety of ways that marital conflict can occur, the dimensions of conflict and their implications are reviewed next.

Grych and Fincham (1990) have suggested that frequency of exposure to parental conflict may have contrasting effects—fewer behavioral problems as children become desensitized to conflict, or greater incidence of adjustment problems as children become sensitive to conflict. The latter seems to be more often the case with increased open conflict associated with increased behavior problems (Johnston, Gonzales, & Campbell, 1987; Long & Forehand, 1987; Porter & O'Leary, 1980; Wierson, Forehand, & McCombs, 1988). Long (1988) found that adolescents from recently divorced families where conflict continued at a high level after the divorce exhibited greater anxiety/withdrawal problems and conduct disorders than adolescents from divorced families where conflict had substantially decreased. Decreased behavior problems associated with decreased conflict was also observed in children removed from their homes as a result of family discord and placed in harmonious homes. The children separated from the high conflict environment were at decreased risk for emotional and behavioral problems compared to those who continued to stay in homes characterized by conflict (Rutter, 1980). This decrease in problems associated with reduced conflict has also been found by others (Hetherington, et al., 1982; Long & Forehand, 1987; Long, et al., 1988; Wallerstein & Kelly, 1980).

The intensity of marital conflict can vary from calm discussion to physical violence. Children's problems were found to be more highly associated with unhappy marriages that were quarrelsome, tense, and hostile than to unhappy marriages characterized by apathy and indifference (Rutter, Yule, Quinton, Rowlands, Yule, & Berger, 1974). Johnston, Gonzales, and Campbell (1987) reported that the degree of verbal and physical aggression between divorcing parents was directly related to parental reports of behavior problems in their children assessed two years after the divorce.

Content itself has not been considered in regard to parental conflict, but both verbal and nonverbal forms of anger have been shown to cause distress in children (Cummings, Pellegrini, Notarius, & Cummings, 1989). The few studies considering content have focused on problems in children associated with parental disagreement regarding child rearing. Snyder, Klein, Gdowski, Faulstich, and LaCombe (1988) suggest that the problems seen in children of divorce are a reflection of the inconsistent discipline that accompanies parental disagreement regarding child rearing. Patterson (1982) also suggested that parental conflict increases the risk of children's antisocial or cohersive behavior by reducing the consistency or effectiveness of parental discipline practices. Block, Block, and Morrison (1981) did find that parental disagreement on child-rearing values predicted adjustment problems in children one to four years later.

Only one study was found that examined the effect of conflict resolution on children's response to marital conflict. Cummings et al. (1989) found that 6- to 9-year-old children reported less negative affect when conflict between adults resulted in clear resolution rather than remaining unresolved.

Age of the Child

There has been little research on the implications of children's age regarding vulnerability to marital conflict, but in a review of the existing data, Grych and Fincham (1990) indicate that no one age group is particularly vulnerable to the effects of marital conflict. Hetherington (1979; 1989) suggested that children of different ages differ in their awareness of and ability to cope with parental conflict. She believes that young children may be less able to cope with conflict, but also are less likely to be aware of conflict. Older children have a larger repertoire of coping resources but are likely to be more aware of the causes and consequence of conflict.

Studies attempting to determine the age when children are the most vulnerable to parental divorce have not yielded consistent findings. Children's reactions to divorce have been found to vary: preschool children regressing behaviorally, fearing abandonment, and blaming themselves for the divorce; grade school children displaying symptoms of depression while fearing rejection and being replaced; and adolescents developing somatic symptoms and blaming and/or expressing anger toward one of their parents (Wallerstein, 1983a). Allison and Furstenberg (1989) found the effects of parental divorce to be most severe for children who were preschoolers when their parents divorced. Marital dissolution during the first two-and-a-half years of life is associated with separation related difficulties during latency for girls and boys (Kalter & Rembar, 1981). Although these studies report differences based on the age of the children others have either not found age differences (Dancy & Handal, 1984; Enos & Handal, 1986; Guidabaldi, Cleminshaw, Perry, & McLaughlin, 1983; Kalter & Rembar, 1981; Stolberg, Camplair, Currier, & Wells, 1987) or believe the time since the divorce

accounts for the differences observed in the children's response (Emery, 1988; Hetherington, 1989). There appears to be a consensus that children display different reactions at different times, but not on whether children are more vulnerable during certain ages.

Porter and O'Leary (1980) found that specific behavior problems were associated with marital conflict at different ages for the boys in their sample but not for the girls. Their findings are limited by their sample (64 children referred to a child psychological clinic) and their failure to test the differences between the correlations for statistical significance. There have been a number of other studies that have also examined differences in children's response to parental conflict based on gender.

Gender

Gender differences in perception, the amount of fighting they were exposed to, and the awareness of parental conflict have been studied. Both sexes are equally exposed to and aware of marital conflict (Emery & O'Leary, 1982; Porter & O'Leary, 1980; Wierson, et al., 1988); parents reported an equal amount of fighting in front of both sexes (Porter & O'Leary, 1980); and both boys and girls reported a similar awareness of discord between their parents (Emery & O'Leary, 1982). However, early studies examining marital conflict and children's adjustment found that conflict was linked to behavior problems in boys more so than in girls in both intact (Block, et al., 1981; Emery & O'Leary, 1982; Hetherington, et al., 1982; Porter & O'Leary, 1980; Rutter, 1971) and divorced families (Guidabaldi & Perry, 1985; Hess & Camara, 1979; Wallerstein & Kelly, 1980). Girls from divorced families have better post-separation emotional adjustment than boys (Guidabaldi & Perry, 1985; Hess & Camara, 1979; Tschann, Johnston, Kline, & Wallerstein, 1989),

and the social and emotional development problems initially found in daughters disappears within two years of the divorce (Hetherington, 1979).

Marital conflict is associated with antisocial and emotional disorders in children of both sexes. In her study of 2,775 seven-year-old children, Whitehead (1979) found an increased incidence of emotional disturbance associated with marital disharmony in both girls and boys. She suggested that the increased behavioral problems of boys may be a reflection of the fact that children of a broken marriage tend to remain with their mother and may be at increased risk as a result of the loss of a same sex role model. Zaslow (1989) found more negative reactions in boys living in the custody of mothers who did not remarry. She contended that the gender differences found in children's response to divorce were primarily in clinic samples. The results from samples involving nonclinic samples were divided between those that did and those that did not support findings of more negative effects for sons of divorce.

Living with the opposite sex parent appears to be a factor in the behavior of girls as well. When children live with a custodial father or in a remarried family, girls exhibit poorer adjustment than girls in intact homes (Peterson & Zill, 1986; Santrock & Warshak, 1979), whereas boys in remarried or father-custody homes fare better than those in mother-custody homes (Hetherington, 1989; Peterson & Zill, 1986; Santrock & Warshak, 1979). Kurdek, Blisk, and Siesky (1981) did not find that children with opposite-gender custodial parents were less well adjusted, but their sample contained few custodial fathers. In general, they did not find children's sex to be a significant variable in considering adjustment to parental divorce.

When focusing on social behavior and cognitive functioning, neither sex of the adolescent nor marital status of the parents were mediating variables in adolescents, but parental conflict did exert a significant effect (Forehand, et al., 1988; Long, et al., 1987). Associations between marital conflict and girls' adjustment, suggesting that both sexes are adversely affected by exposure to parental conflict, have been found by others (Emery & O'Leary, 1984; Johnson & O'Leary, 1987; Jouriles, Pfiffner, & O'Leary, 1988; Long & Forehand, 1987; Peterson & Zill, 1986). Emery and O'Leary (1984) concluded that although there may be gender differences in their responses to conflict, the differences concern how, rather than if, the girls respond.

Questions have also been asked regarding the implications of age on gender differences in children of divorce. Between-sex differences observed in younger children have been found to decrease in children five years after the divorce (Wallerstein & Kelly, 1980). Block, Block and Morrison (1981), in their study of gender-related personality characteristics and parental agreement-disagreement, found that earlier differences in ego-control and resiliency were diminished in 11 year old children. They questioned whether the differences initially found would continue into adolescence. However, Peterson and Hamburg (1986) found adjustment problems during adolescence in girls of divorced parents. The increased adjustment problems from parental divorce in girls during adolescence may be why gender alone has not been found to mediate the effects of divorce in adolescents following parental divorce possibly because as the girls enter adolescence relationships with boys take on more importance and the lack of parental role models becomes problematic (Amato & Keith, 1991a; Dancy & Handal, 1984; Forehand, et al., 1988)

Differences between the sexes in use of overcontrol and undercontrol to adjust to parental conflict and divorce have also been examined. The studies have suggested that boys have more behavioral disturbances and problems of undercontrol (Emery & O'Leary, 1984; Hess & Camara, 1979; Rutter, 1971), whereas girls have less noticeable problems of overcontrol in situations of marital discord (Block, et al., 1981; Peterson & Zill, 1986; Whitehead, 1979). Emery and O'Leary (1984) believe that the increased behavioral disturbances and undercontrol found in boys is because the studies were based on clinic samples; children are more likely to be referred to clinics for undercontrol than overcontrol problems. Problems in both boys and girls related to marital discord have been found in nonclinic samples of intact marriages (Block, et al., 1981; Whitehead, 1979).

The belief that gender differences are due to the utilization of undercontrol in boys and overcontrol in girls has not been supported by others. Johnson and O'Leary (1987) found that girls did develop behavioral problems and mirrored the conflict in their parents. Also, Long, Slater, Forehand, and Fauber (1988) found adolescent boys from divorced families with high parental conflict displayed more covert anxiety than overt conduct problems.

There are other discrepancies in the findings of studies on gender differences. The hypothesis that boys show more adverse responses to parental divorce has been supported in some studies. Boys respond more negatively to parental divorce if they are living with a mother who has not remarried, whereas if living with a stepfather or in cases of father custody, they display no more adjustment problems than girls. As mothers remarry, the gender differences between children of divorce seem to dissipate.

Furstenberg and Allison (1985) found that the outcomes for children of divorced parents did not differ greatly by gender when not considering whether the parents remarried. In an attempt to combine the findings Amato and Keith (1991a) conducted a meta-analysis of studies dealing with the long-term consequences of parental divorce on adult development and did not find support that parental divorce had more detrimental consequences for males than females. They also found that for women parental divorce was linked to lower educational attainment (non-custodial fathers are more likely to provide child support payments for sons than daughters) and an increased incidence of divorce.

Parent-Child Relationship

The quality of the marital relationship and that of the parent-child relationship are interdependent (Belsky, 1981; Belsky, 1984; Goldberg & Easterbrooks, 1984; Parke, 1979). The dilemma is in determining the nature of this association. The quality of the parent-child relationship has been purported to be more important than parental conflict in the adjustment of children to parental divorce. Marital conflict before the divorce results in more problematic parent-child relationships after the divorce—the poorer relationship leading to increased adjustment problems for children of divorce (Tschann, et al., 1989). The decreased ability to parent is associated with the increased stress experienced as part of the divorce process, and emotionally stressed parents have been found to be less affectionate, more inconsistent in their discipline (Brody, Pillegrini, & Sigel, 1986), more rejecting of their children (Hetherington, et al., 1982), and less emotionally open and available (Emde & Easterbrooks, 1986). Hetherington et al. (1976) found that during the first two years following divorce, parents made fewer demands, showed

less affection, communicated less effectively, gave more commands, and were more inconsistent in their discipline than married parents. Two years after the divorce the interaction between parent and child was improved, but continued to differ from the non-divorced parents.

Loyalty conflicts between parents following divorce can result in problems for the parent-child relationship (Kelly & Wallerstein, 1976; Wallerstein & Kelly, 1976). The loyalty conflicts may result in polarizing children's view of their parents, although a good relationship with one parent does seem to decrease the negative implications of parental conflict (Amato, 1986; Hess & Camara, 1979; Rutter, 1971; Wallerstein & Kelly, 1980). When the children enter into adolescence the loyalty conflicts decrease as they disengage from both parents through the normal development process of adolescence. Although the conflicts decrease, the differences found in the parent-child relationship continue to have an impact on children's postdivorce adjustment (Kelly & Wallerstein, 1976; Wallerstein & Kelly, 1976).

Maccoby, Buchanan, Mnookin, and Dornbusch (1993) found that when considering contact with both the custodial and noncustodial parent the maternal and dual custody children's contact with their mother was the primary factor relating to their adjustment. The contact with the father had only a small relation and no significant relation when controlling for the mother-child contact. For those children residing with their father the contact with both the father and mother significantly related, but adolescents maintaining contact with their mother in the father custody families had better post-divorce adjustment.

Hess (1979) believed that children's continuing relationship with their parents was the most powerful influence on their social and school

adjustment after the divorce. Jenkins and Smith (1991) hypothesized that the parent-child relationship would be a mediating variable between parental conflict and children's emotional and behavioral problems, but they found that the influence of the parent-child relationship on children's behavior problems was mediated by the parental conflict. Their study involved children 9 to 12 years of age, whereas other studies involving infants 6 to 24 months old (Easterbrooks & Emde, 1988) and adolescents 11 to 15 years of age (Fauber, Forehand, McCombs Thomas, & Wierson, 1990; Forehand, Wierson, Thomas, & Armistead, 1991) have found that the role of parental conflict was mediated by the parent-child relationship. Parental conflict does seem to have more of a role than the parent-child relationship in mediating externalizing versus internalizing problems in adolescents (Fauber, et al., 1990). The relationships between parental divorce, conflict, and the parent-child relationship and children's well-being as they approach adulthood needs continued investigation before the relationships of the variables will be clearly understood.

Sense of Coherence

The sense of coherence (SOC) does not focus on environmental stressors, but on the individual factors that move individuals towards the healthy end of the sickness-health continuum (Antonovsky, 1979). Antonovsky (1987, p. 19) defines the SOC as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable (comprehensible); (2) the resources are available to meet the demands posed by these stimuli (manageable); and (3) these demands are

challenges, worthy of investments and engagement (meaningful)." The sense of coherence then is composed of three factors: comprehensibility, manageability, and meaningfulness.

Comprehensibility is the extent to which people perceive the stimuli that confront them as making sense. The environment is seen as making sense, being ordered, consistent, and clear versus chaotic, disordered, random, and accidental. Thus, viewing the world as predictable is consistent with high comprehensibility (Antonovsky, 1987).

The manageability component is the extent to which people perceive the resources that are available (theirs or others) as adequate to meet the demands of the environment. A high sense of manageability is reflected in those who do not feel victimized by events or unfairly treated in life. People with a high sense of manageability believe that bad things may happen, but when they do occur they will be able to cope with them (Antonovsky, 1987).

Meaningfulness is considered the emotional counterpart of comprehensibility, a feeling that life makes sense emotionally. Problems and demands encountered in life are viewed as being worthy of commitment and engagement. People high on meaningfulness are willing to take up a challenge, determined to seek meaning in it, and do their best to overcome it with dignity (Antonovsky, 1987). Antonovsky (1987) believes that the motivational component of meaningfulness is the most crucial element of the three components. Without motivation, comprehensibility and management are likely to be short lasting.

Hence, sense of coherence is a generalized way of seeing the world and one's life. This long-lasting view involves both cognitive and affective components and reflects the basic personality structure of the individual. A

strong SOC does not imply that the person is impervious to stressors, but there is an expectation that life will remain meaningful—a general faith that things will work out.

Relationship to other models

Kobasa's (1979) concept of hardiness has been compared to the SOC (Antonovsky, 1979). Kobasa (1982) describes her concept of personality-based hardiness as a combination of three components: commitment, control, and challenge. Commitment is similar to the concept of meaningfulness and involves the extent to which people believe what they are and what they are doing is interesting and important (Kobasa, 1982). Kobasa's (1979) concept of control has been linked to Antonovsky's (1987) manageability component. The concept of control involves people believing and acting as though they can influence their environment—feeling capable of taking action on their own (Kobasa, 1982). Challenge involves the belief that life changes are the norm rather than the exception and are seen as opportunities for growth (Kobasa, 1982). This orientation to change versus stability is in contrast to Antonovsky's comprehensibility.

Sense of coherence refers to an internalized sense of control that guides orientation to forthcoming events. SOC aids in understanding the various facets of control and its consequences, thus is similar to the concept of locus of control (Rotter, 1966). Locus of control involves a component with two poles; internal locus of control and external locus of control. Rotter's (1966) fundamental distinction is between an internal and an external locus of control. External locus of control involves the belief that rewards and punishments are not based on one's own action, but rather on forces outside one's control such as fate, luck, chance, or the power of others. The belief that

life is in the individual's hands is reflective of an internal locus of control. Antonovsky (1979, 1987) refutes the comparison on the grounds that Rotter's (1966) scale suggests only two alternatives; either the individual or someone else is in control. Antonovsky (1987) feels that this results in a general mistrust of others who have greater power, whereas the SOC allows people to comprehend others as being in positions of power while continuing to maintain a sense of personal control.

The sense of permanence (Boyce, Schaefer, & Uitti, 1985), suggested as being similar to the SOC (Antonovsky, 1987), involves the belief that the central, valued factors in life are stable and enduring. Antonovsky (1987) likens this to the concept of comprehensibility—stability, ritual, and routine resulting in a view of the world as being comprehensible. The sense of permanence, like the SOC, is believed to give meaning to life that promotes better health in individuals.

Antonovsky (1987) believes that Bandura's (1977) theory of self-efficacy is very similar to SOC. The belief that the intended outcome of a given behavior is of value is analogous to meaningfulness, that performing the behavior will lead to that outcome is analogous to comprehensibility, and that one can successfully perform the behavior is similar to manageability.

Development of Sense of Coherence

Antonovsky (1979) states that SOC is developed by the end of young adulthood (around age 30) and remains relatively fixed from that time. He believes that the SOC is stronger in a person who has grown up in a setting where there was stability in the house, the ability to participate in decision making, and a balance between the underload-overload of stimuli. The person who has not experienced a balance in stimuli or an ability to

participate in the decision-making process may adopt a pattern of withdrawal. This pattern of withdrawal becomes habitual and results in a failure to understand the balance between activity and withdrawal. The world is experienced as being indifferent to what one does and devoid of meaning leading to a life-long pattern of withdrawal, helplessness, and a weaker SOC (Antonovsky, 1979).

Antonovsky (1979) also compares the development of SOC and learned helplessness. The link between the two concepts is that helplessness is a psychological state that results when events are uncontrollable. Seligman's (1975) theory is summarized as involving two factors that are necessary for the development of helplessness; a response to events in a forced rather than voluntary manner, and a cognitive set that success or failure is independent of the person's actions.

Life experiences are crucial in shaping a SOC. As people experience challenges and respond to them, their ability to participate in shaping the consequences becomes the initial groundwork for developing a strong SOC. Antonovsky (1979) believes that radical change and instability are not conducive to a strong sense of coherence. The more consistent the stimuli and response to that stimuli the more the world is seen as coherent and predictable. Experiences do not need to be consistently rewarding, as some measure of frustration and punishment is necessary for the development of a strong SOC. Antonovsky (1987) summarizes this in the definition of SOC: "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic, feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected" (p. xiii).

This confidence is based on the person's Generalized Resistance Resources (GRRs). Generalized Resistant Resources involve ego strength, social supports, and anything else that people use to make sense of the stimuli they encounter (Antonovsky, 1987). The ability of the GRRs to make sense of the stressors people encounter is the basis for the development of the SOC over time.

Antonovsky (1987) concludes that the development of SOC requires: consistent experiences for the comprehensibility component; a balanced load for the manageability component; and participation in shaping the world around them for the meaningfulness component. During infancy and childhood, comprehensibility is provided through the stable and consistent interaction of children and their parents. Antonovsky (1987) likens this to the attachment process that occurs between infants and parents as they behave in ways that promote closeness and contact with their parents (Bowlby, 1969; Boyce, et al., 1985; Rutter, 1981). Antonovsky (1987) infers that this need for stability discussed within the attachment theory is akin to the consistency necessary for the development of the comprehensibility component. Manageability is fostered in infants and children when there is a balance of responses to the children. Antonovsky (1987) suggests that there are four ways that children are responded to: ignored, refused, channeled, or encouraged and approved. A strong SOC is developed when there is a balance of these four responses. The participation in decision-making is important to the development of meaningfulness in children, but the nature of the response to input is crucial. The central message from those around needs to encourage and value input rather than just tolerate it (Antonovsky, 1987).

Adolescence is a time of flux in which a previously established SOC is tested (Antonovsky, 1987). Younger adolescents have not had the time to develop this more mature self-identity so their SOC is not as well developed (Antonovsky & Sagy, 1986). The relationship adolescents have with their parents is likely to influence the development of their SOC. Children who have a relationship that involves close emotional ties and an openness in the communication patterns are more likely to view the world as predictable and coherent than those who do not sense a closeness and openness in the parent-child relationship (Antonovsky & Sagy, 1986).

The stability of the community is also influential in the development of a strong SOC. Adolescents who have grown up in the same community, plan to stay in that community, and view the community as stable are likely to develop a stronger SOC (Antonovsky & Sagy, 1986). This development is compatible with Cattell's (1977) model of the impact of ecogenic factors on trait change. In a study of 418 adolescents the stability of the community and age were found to be related to SOC (Antonovsky & Sagy, 1986).

Upon entering adulthood people have acquired a picture of what the world is like—a tentative level of SOC. The way that the world is viewed influences the decisions made and interpretations of experiences so that by the end of young adulthood the SOC is formed (Antonovsky, 1979; Antonovsky, 1987).

Relationship to this study

Sense of coherence can be perceived as a personality characteristic or coping style—a tendency to see life as ordered, predictable, and manageable (Antonovsky & Sagy, 1986). Sense of coherence addresses the overall quality of people's behavior and their cognitive appraisals of environmental demands.

Those with a strong SOC see environmental stressors as challenges worth facing whereas people with a weak SOC will see changes as overwhelming and stressful. The impact of life changes during childhood on SOC has not been investigated although Antonovsky (1986) has recommended such research. Studies are needed of personal and family experiences that are conducive to the development of a view of the world as being predictable, manageable, and meaningful. The present study of the relationship of selected family variables, including divorce, on SOC attempts to address this need.

Summary of the Literature

Numerous studies have been conducted since Wallerstein and Hetherington began their longitudinal studies with children of divorce. The early unidimensional focus on how father loss disrupted the family's physical well-being has been replaced with multidimensional studies that have attempted to define the factors that influence the family's psychological well-being. These studies have documented that there is an initial acute period of distress during which children may have emotional, behavioral, and health problems (Hetherington, 1989; Wallerstein, 1985). With time, the acute distress dissipates and the dynamics within the family (gender of the child and custodial parent, parental conflict, and relationship between the parent and child) become more important (Hetherington, 1989; Wallerstein, 1985).

Emery (1982) highlighted the need to consider parental conflict when studying children's response to parental divorce. A plethora of research based on his recommendation indicates that parental conflict, regardless of the parent's marital status, is a key factor in children's development. Although there is a general consensus that parental conflict is problematic for

children's development, defining parental conflict has been difficult. A multidimensional construct of parental conflict has been proposed (Grych & Fincham, 1990) that consists of four constructs—frequency, intensity, content, and resolution. Research findings have supported the role of frequency (Hetherington, et al., 1982; Johnston, et al., 1987; Long & Forehand, 1987; Long, et al., 1988; Porter & O'Leary, 1980; Rutter, 1980; Wallerstein & Kelly, 1980; Wierson, et al., 1988) and intensity (Johnston, et al., 1987; Rutter, et al., 1974) in children's adjustment problems. The content and resolution dimensions have not been specifically studied but there is general support for their role in children's development.

Children's age influences their understanding of the parental conflict they observe before and after their parent's divorce. The variations in developmental levels was a concern regarding the possible differences in children's adjustment to parental conflict due to age. Children of all ages have been found to have more adjustment problems as the level of parental conflict observed increases (Wallerstein, 1983a), but studies attempting to determine if there is a more vulnerable age have produced mixed results. Many have found no particularly vulnerable ages (Dancy & Handal, 1984; Enos & Handal, 1986; Guidabaldi, et al., 1983; Kalter & Rembar, 1981; Stolberg, et al., 1987), but other studies have suggested that preschool children may be at the most risk for adjustment problems (Allison & Furstenberg, 1989; Kalter & Rembar, 1981).

Developmental differences between boys and girls have also been the focus of studies. Girls and boys have been found to be similar in how they perceive conflict but possibly different in how they respond to the conflict. Studies have produced opposing findings, some suggesting that there are

gender differences in children's adjustment to parental divorce and others that the differences are a reflection of the different ways that girls and boys adjust to parental conflict and divorce. A recent meta-analysis of the findings across studies resulted in a conclusion that both genders are adversely affected by parental divorce, with the specific factors that were harmful varying between the boys and girls (Amato & Keith, 1991b). The gender of the custodial parent, remarriage, and time since the divorce all appear to be factors to consider.

Parental divorce forces changes in the relationship between children and their parents, yet few studies have considered the long-term implications of changes in the parent-child relationship on children's adjustment. Problems in the parent-child relationship lead to increased adjustment problems (Tschann, et al., 1989). The specific nature of the problems and changes have been addressed by several researchers. The stress parents experience during and following the divorce (Hetherington, et al., 1976; Hetherington, et al., 1982) and the loyalty conflicts of children who are polarized between their parents (Amato, 1986; Kelly & Wallerstein, 1976; Wallerstein & Kelly, 1976) have been implicated in the increased parent-child problems. A good relationship with at least one parent appears to decrease the negative consequences of a problematic parent-child relationship (Amato, 1986; Hess & Camara, 1979; Wallerstein & Kelly, 1980). The long-term implications of a problematic relationship have not been assessed, but studies involving adolescents have found that the parent-child relationship continues to be related to difficulties in the adjustment to parental divorce (Kelly & Wallerstein, 1976; Wallerstein & Kelly, 1976).

The sense of coherence (SOC) is a relatively stable dispositional orientation that influences people's cognitive appraisals of environmental demands (Antonovsky, 1979; Antonovsky, 1987). People with a high SOC feel that the world makes sense and the challenges posed by living can be handled. This global orientation is primarily developed before adulthood and relatively fixed by age 30 (Antonovsky, 1979). Throughout childhood stability in the home and community, ability to participate in decision making, and balance between resources and stressors play a role in the development of SOC. The Generalized Resistance Resources (GRRs) have been proposed; now studies are needed that test the role of life changes on SOC (Antonovsky & Sagy, 1986).

CHAPTER II

METHOD

Statement of the Problem

Initial studies of children of divorce focused on the short-term negative influence of divorce in children and adolescents from "broken homes." These early investigations of the physical well-being of families are now being superseded by studies including the psychological well-being of families. Divorce is still seen as an important mediator in children's development, but other variables dealing with the family dynamics (parental conflict and the parent-child relationship) have been shown to be significant factors in the response of children and adolescents to parental divorce. However, few studies have considered the long-term influences of these variables on young adults, and no study was found in any age group that has examined their relationship with the development of sense of coherence. The sense of coherence, with its global orientation regarding how the world is perceived as being comprehensible, manageable, and meaningful, was selected for three reasons: its emphasis on the well-being of people; its origination in the study of the response of people to life stressors (of which parental divorce is surely one); and the factors that lead to its development—consistency in one's environment, balance between demands, and the ability to make a difference in what happens. Therefore, this study investigated the long-term relationship of the parent's marital status, parental conflict, and parent-child relationship to the sense of coherence of young adults.

Hypotheses

This study tested the following hypotheses:

1. Young adult children of divorce have a lower sense of coherence than their peers who grew up in intact homes.

2. Parental conflict while growing up is negatively associated with the sense of coherence of young adults.

3. The quality of the parent-child relationship while growing up is positively associated with the sense of coherence of young adults.

4. Differences found in the sense of coherence of young adults are most strongly associated with the parent-child relationship, followed by the parental conflict observed and the parents' marital status.

Subjects

Students enrolled in one of four undergraduate courses at a medium-sized university in the upper-midwest participated in the study. A total of 263 students returned their questionnaires; 129 from one Introduction to Sociology course, 59 from a second Introduction to Sociology course, 37 from an Introduction to Personality course, and 38 from an Introduction to Clinical Psychology course. The courses were selected partly because of the diverse range of students typically enrolled in sociology and psychology courses. Only the 231 students who were 18 to 23 years of age and specified their parents as either married or divorced were used in this study. Of the 231 subjects included in this study there were 138 women, 92 men, and one subject who did not respond to the question on gender. The demographic information is summarized in Table 1.

Table 1

Demographic Variable Frequencies

Variable	Parents Married	Parents Divorced	Total
Class			
First Sociology	99	16	115
Second Sociology	46	11	57
Psychology of Personality	20	7	27
Intro. to Clinical Psych.	27	5	32
Total	192	39	231
Age			
18	28	4	32
19	61	8	69
20	38	7	45
21	31	7	38
22	18	10	28
23	16	3	19
Total	192	39	231
Gender			
Female	116	22	138
Male	75	17	92
Total	191[a]	39	230
Subject's Academic Status			
Freshman	78	15	93
Sophomore	41	6	47
Junior	33	6	39
Senior	40	11	51
Graduate		1	1
Total	192	39	231
Parents' Marital Status			
Married	192		192
Divorced		39	39
Total	192	39	231

Note. [a] One subject omitted gender information

Instruments

Family Information Questionnaire

The Family Information Questionnaire (FIQ) was developed specifically for this study and consists of 60 items designed to gather basic demographic information regarding the subjects and their parents, their parent-child relationship, and the parental conflict they remember from their childhood (Appendix A). After formulating the general areas of interest, items that addressed the topics were written, reviewed and administered to samples of college students; 60 items were selected to be included in the questionnaire. The FIQ is divided into the six sections discussed below.

1. General Demographics (Items 1-6). This group of questions addresses the age, gender, and academic status of the subjects, marital status of their parents, and the number of moves experienced before beginning college.

2. Parent-Child Relationship (Items 7-22). The parent-child relationship has been cited as a key factor in the development of children. These items attempt to assess the participants' memories of the relationship with their parents (biological or adoptive). Eight questions pertain to the relationship between the mother and child, and eight to the father-child relationship.

The sixteen questions in this subscale were adapted from the Attitude toward Parents Scale developed by Itkin (1952) discussed in Shaw and Wright's (1967) review of scales for the measurement of attitudes. The original scale had two forms; one measuring attitude toward father, and one measuring attitude toward mother. The forms are identical with the exception of the substitution of the words "father" for "mother." The Attitude

toward Parents Scale is composed of 35 items (11 true-false, 8 multiple choice, and 16 personality traits that are rated on a five-point scale). Due to the focus of this study and concerns regarding the length of the questionnaire, only the eight multiple choice items were retained. Alterations were made in the wording of the items from the present verb tense in the original instrument to the past verb tense in the FIQ.

The Attitude toward Parents Scale has not been widely used but is recommended as a reliable and valid measure (Shaw & Wright, 1967). A sample of 323 college students yielded corrected split-half reliabilites of .85 (males) to .92 (females) and validity coefficients of -.70 (females) to -.80 (males) when using the entire 35 item instrument. The validity estimates were obtained by correlating item scores with self-ratings—low self-ratings and high scores indicating favorable attitudes towards parents. A reliability estimate of .85 was obtained for the 16 items used in this study.

3. Parental Conflict (Items 23-33). Parental conflict can be detrimental to the development of children, and is a primary variable of interest in studies considering the post-divorce adjustment of children. The items in this subscale were written to reflect the dimensions of parental conflict proposed by Grych and Fincham (1990): frequency, intensity, and resolution. After identifying the three domains, 5-point rating scale items were written and reviewed until a pool of 12 items was established. These items were administered to a pilot sample of college students. After reviewing their feedback, eliminating items they found difficult to interpret or redundant, and rewriting the remaining items, 11 items were included in the final FIQ.

The estimated alpha reliability for the 7-item conflict scale was .82; an alpha estimate of .68 was obtained for the 4 resolution items. After a closer review of the items the first two resolution items (Items 30 and 31) were eliminated due to problems regarding the direction of their scoring. The removal of these two items resulted in an estimated alpha reliability of .85 for the remaining 9 item scale.

4. Adult Children of Divorce Demographics (Items 34-41). Only the subjects whose parents had divorced completed the eight questions in this subscale to provide information regarding the length of their parent's marriage, their age when parents separated and divorced, the current marital status of parents, the parent with whom they lived the most (custodial parent), and the frequency of visitation from the parent they lived with the least (non-custodial parent).

Only subjects whose custodial parent had remarried completed the next two subscales (Items 42-60).

5. Relationship Between the Step-Parent and Child (Items 42-49). The items in this subscale parallel the items in the Parent-Child Relationship subscale but substitute "step-parent" for "mother"/"father." This study yielded an estimated alpha reliability of .93 for this subscale.

6. Conflict Between Parent and Step-parent (Items 50-60). The items from the Parental Conflict subscale are repeated in this section with word changes made to reflect the conflict between the parent and step-parent. Alpha reliability estimates of .87 for the 7 conflict item scale and .58 for the 4 resolution item scale were obtained with the original 11 items. The first two 2 resolution items (Items 57 and 58) were removed from the final subscale for the same reasons that they were eliminated from the parental conflict

subscale. The remaining 9 items had an estimated reliability of .89. Upon completion of this section, subjects completed the Orientation to Life Questionnaire.

Orientation to Life Questionnaire

The Orientation to Life Questionnaire (Antonovsky, 1979) was designed to measure the three components included in sense of coherence (SOC)—comprehensibility, manageability, and meaningfulness (Appendix B). It consists of 29 items, each rated on a 7-step scale ranging from never to always. Persons with high scores on the OTLQ are presumed to have a high SOC and view the world as manageable, comprehensible, and meaningful. Those individuals with low scores on the OTLQ are presumed to have a low sense of coherence and view the world as unmanageable, uncomprehensible, and unmeaningful (Antonovsky, 1979).

The total Orientation to Life Questionnaire (OTLQ) score was used in this study. Antonovsky (1983) recommended against using the individual component scores. Factor analyses extracted three factors that explained of 36%, 7.5%, and 5.3% of variance respectively, led to the recommendation to consider the OTLQ as a single factor (Flannery & Flannery, 1990).

Normative data for the instrument has been collected from research in Israel, Canada, and the United States. Studies estimating the reliability of the OTLQ have yielded Cronbach alphas ranging from .81 to .93 (Antonovsky, 1987; Antonovsky & Sagy, 1986; Chamberlain & Zika, 1988; Magen, Birenbaum, & Ilovich, 1992; Margalit, 1985; Sagy, Antonovsky, & Adler, 1990). The current study yielded Cronbach alphas of .90 for the entire OTLQ, .80 for the 11 comprehensibility items, .74 for the 10 manageability items, and .82 for the 8 meaningfulness items.

The stability of SOC is of importance in a study considering long-term trait development. A study of SOC stability across three different testings over an 18 month period in medical students 17 to 28 years of age found that SOC was stable over time and that the SOC scores were negatively related (-.77, -.69, and -.59) to the medical students trait-anxiety (Carmel & Bernstein, 1989; Carmel & Bernstein, 1990). These findings are consistent with the .63 test-retest reliability reported by Antonovsky (1987). The coefficients found in earlier studies indicate adequate reliability and support the use of the SOC in the present study.

Criterion validity has been measured using a coherence scale developed by Rumbaut and the Internal-External Locus of Control Scale developed by Rotter. The three scales, OTLQ, Rumbaut Coherence Scale, and Rotter's Internal-External Locus of Control Scale were administered to 336 undergraduates. The following Pearson correlations were reported: .64 (SOC and Rumbaut's scale), .39 (SOC and the Internal-External Locus of Control), .43 (Rumbaut's scale and the Internal-External Locus of Control). The criterion instrument had not previously been validated but the correlation was viewed as an indication that both instruments were measuring the same construct. A separate study (Dana, 1985), cited by Antonovsky (1987), involving 179 undergraduates yielded a correlation of .72 between the SOC scale and Rumbaut's scale.

Antonovsky (1987) hypothesized that a person with high anxiety would see the world as unmanageable and chaotic thus Rumbaut also administered the Sarason Test Anxiety Scale to the original sample of 336 undergraduates sample as a measure of discriminant validity. Correlations of -.21 with the OTLQ and -.20 with the twenty-two-item SOC scale were consistent with

Antonovsky's hypothesized relationship between SOC and anxiety. Discriminant validity has also been tested with the Spielberg State-Trait Anxiety Inventory using a shortened version of the OTLQ. The sample consisted of 14-18 year old boys and girls with correlations of -.56 to -.79 between the OTLQ and the Trait scale reported (Antonovsky, 1987). Carmel and Bernstein (1989) also found a negative relationship (-.59 to -.77) between the OTLQ and the State-Trait Anxiety Inventory trait scale. The follow-up in their longitudinal study continued to support the relationship between the two tests with trait anxiety increasing and the sense of coherence decreasing in both women and men in their sample of medical students (Bernstein & Carmel, 1991; Carmel, Anson, Levenson, & Bonneh, 1991). They questioned if the two scales were measuring the same phenomenon although derived from different conceptual approaches. Antonovsky and Sagy (1986) described the relationship between SOC and A-trait anxiety as being akin to the opposite sides of a coin, opposite ends of the same continuum. This is consistent with Antonovsky's (1979) original belief that trait anxiety expresses a pathological orientation and the sense of coherence a wellness orientation.

Procedure

The Family Information Questionnaire (FIQ) and Orientation to Life Questionnaire (OTLQ) were administered to students enrolled in one of four undergraduate courses at the University of North Dakota during the 1993 spring semester. The Research Information Form (Appendix C), FIQ, and OTLQ were distributed at the beginning of each class period in the first sociology course, and the psychology courses. The students were instructed to read through the Research Information Form which provided information

regarding their informed consent and complete the questionnaire if they agreed to participate. If they did not wish to participate they were asked to return the uncompleted questionnaire. All of the students present in the three classes consented. After completing the questionnaires the students were dismissed from class.

A different method was employed with the second sociology course. The Research Information Form, FIQ, and OTLQ were distributed at the end of the class period with this group. All 133 students present were instructed to read the Research Information Form and, if they agreed to participate, return the completed questionnaires two days later during the next scheduled lecture. Forty-four percent of the 133 students returned the questionnaires. Fifty-two of the students returned the questionnaires during the next class period and 7 students brought them to their lab discussion group.

Analysis of Data

The Statistical Package for the Social Sciences (SPSS-X) version 3.1 (SPSS Inc., 1988) was used for the statistical operations. Alpha coefficients were computed for the FIQ and OTLQ to estimate the reliability of the instruments. Next, analysis of variance (ANOVA), as performed using SPSS-X Oneway subprogram, were conducted to determine if there were differences in the scores on the OTLQ, parental conflict subscale, parent-child relationship subscale and divorced/non-divorced groups associated with the subject's age (18, 19, 20, 21, 22, 23), academic status (freshman, sophomore, junior, senior, graduate student), and marital status (single, married, separated, divorced) were computed. The significant associations were then further defined through Scheffé tests.

The first hypothesis was that young adult children of divorce have a lower SOC than those who grew up in intact homes. A *t*-test was computed on the OTLQ total score with parent's marital status as the independent variable to test this hypothesis. The second and third hypotheses involved the association between SOC, and parental conflict and the parent-child relationship. Both of these hypotheses were tested by computing the product-moment correlations between the OTLQ, and the parental conflict and parent-child relationship subscales. A hierarchical multiple regression (SPSS-X forward method) was then used to test the fourth hypotheses; that differences in the SOC of young adults are best described by the parent-child relationship, followed by parental conflict and the parent's marital status.

Additional correlations and ANOVA's were conducted with those subjects who experienced parental divorce. The items and subscales specific to adult children of divorce were included along with the primary independent variables.

CHAPTER III

RESULTS

Demographic Variables

Initially, reliability estimates were obtained for the Family Information Questionnaire (FIQ) and Orientation to Life Questionnaire (OTLQ). All the individual subscales demonstrated adequate reliability with estimates ranging from .80 to .92. The individual estimates of reliability are presented while discussing the subscales.

Analysis of variance (ANOVA) procedures were conducted to determine if mean score differences on sense of coherence, parental conflict, and the parent-child relationships were associated with the class sampled, subjects' age, academic status, marital status, gender, and their parent's marital status.

A reliability estimate of .90 for the 29 items of the OTLQ was obtained. Item response scores on the OTLQ were added for each subject to produce their total sense of coherence (SOC) score; the items were coded so that higher scores reflected higher SOC. The mean scores of subjects from the four classes differed significantly (F [3, 225] = 3.51, p = .02), but a Scheffé test was unable to detect significant differences between any of the classes. A less strict Tukey procedure was then run and differences were found between the second sociology class (M = 130.82, SD = 23.36), and the Psychology of Personality (M = 143.64, SD = 19.75) and Introduction to Clinical Psychology (M = 142.47, SD = 20.15) classes. Significant differences were not found

between subjects' SOC scores and their age, academic status, gender, or parent's marital status (see Table 2).

The reliability estimate for the 9 item FIQ parental conflict subscale was .85. Parental conflict scores were obtained by adding the responses for each subject with the items coded to render higher scores for greater reported

Table 2

Mean Sense of Coherence Scores by Demographic Group

Variables	*n*	*M*	*SD*	*F*	*p*
Class					
First Sociology	115	136.13	18.41		
Second Sociology	57	130.82	23.36		
Psychology of Personality	25	143.64	19.75		
Intro. to Clinical Psych.	32	142.47	20.15		
Total	229			3.51	.02
Age					
18	32	136.53	24.24		
19	69	133.96	19.73		
20	45	138.27	18.16		
21	36	134.39	18.90		
22	28	139.86	21.15		
23	19	140.74	23.84		
Total	229			.67	.65
Academic Status					
Freshman	93	133.91	21.47		
Sophomore	47	134.60	18.11		
Junior	38	139.50	22.47		
Senior	50	140.66	18.68		
Graduate	1	148.00			
Total	229			1.28	.28
Gender					
Female	138	136.70	21.19		
Male	90	136.26	19.51		
Total	228			.03	.87
Parents' Marital Status					
Married	190	137.44	19.98		
Divorced	39	132.00	22.36		
Total	229			2.30	.13

conflict. The parental conflict reported differed between subjects with divorced (M = 23.28, SD = 7.58) versus married (M = 17.96, SD = 5.45) parents (F [1, 225] = 25.20, p < .001). Significant differences in parental conflict were not found to be associated with any of the other demographic variables (see Table 3).

Table 3

Mean Parental Conflict Scores by Demographic Group

Variables	n	M	SD	F	p
Class					
First Sociology	112	18.38	5.51		
Second Sociology	57	19.26	7.22		
Psychology of Personality	27	19.11	6.10		
Intro. to Clinical Psych.	31	19.23	6.35		
Total	227			.36	.78
Age					
18	32	17.84	5.27		
19	69	18.46	6.54		
20	44	19.93	6.39		
21	37	16.76	4.59		
22	26	19.92	6.01		
23	19	21.47	7.11		
Total	227			2.27	.05
Academic Status					
Freshman	93	18.44	6.27		
Sophomore	46	18.11	5.48		
Junior	38	19.53	6.15		
Senior	49	19.63	6.53		
Graduate	1	16.00			
Total	227			.63	.64
Gender					
Female	137	19.09	6.38		
Male	89	18.42	5.77		
Total	226			.64	.42
Parents' Marital Status					
Married	191	17.96	5.45		
Divorced	36	23.28	7.58		
Total	227			25.20	< .001

Reliability estimates of .80 for the mother-child relationship subscale, .90 for the relationship with the father subscale, and .85 for the combined parent-child relationship subscales were obtained. The scores were coded to result in higher scores depicting a better parent-child relationship. The item scores on the two subscales were added to produce the mother-child and father-child relationship subscale scores, then multiplied for the total parent-child relationship score. Differences in the combined parent-child relationship mean scores were found between the subjects with divorced (M = 777.64, SD = 249.51) and married (M = 916.53, SD = 219.42) parents (F [1, 228] = 13.40, $p < .001$). No other significant differences were found between any of the demographic variables and the combined parent-child relationship scores (see Table 4).

Differences were also considered for the mother-child and father-child relationships. No significant mean differences were found for any of the background variables with respect to scores on the mother-child relationship(see Table 5). Scores did differ (F [1, 228] = 20.57, $p < .001$) on the father-child relationship variable between subjects whose parents were married (M = 28.97, SD = 5.04) and those with divorced parents (M = 24.56, SD = 7.54). There were no significant mean score differences found on any of the other demographic variables and the father-child relationship (see Table 6).

Mean scores on the parental conflict, combined parent-child relationship, and father-child relationship variables differed between the subjects with married and divorced parents. Differences between the subject's parents marital status was to be further analyzed while testing the hypothesis so all subjects were retained. Sense of coherence scores from the

four classes also varied significantly. The individual differences could only be determined when a less strict Tukey procedure was used, thus the subjects from all four classes were combined resulting in a total of 231 subjects 18 to 23 years of age (see Table 1).

Table 4

Mean Combined Parent-Child Relationship Scores by Demographic Group

Variables	*n*	*M*	*SD*	*F*	*p*
Class					
First Sociology	114	877.56	221.61		
Second Sociology	57	862.53	255.96		
Psychology of Personality	27	915.11	207.86		
Intro. to Clinical Psych.	32	983.50	215.62		
Total	230			2.27	.08
Age					
18	32	837.63	250.20		
19	69	930.07	217.20		
20	45	895.33	227.15		
21	38	939.08	155.26		
22	27	836.89	262.56		
23	19	833.47	298.99		
Total	230			1.63	.15
Academic Status					
Freshman	93	879.44	239.97		
Sophomore	47	903.25	227.79		
Junior	39	921.36	217.57		
Senior	50	881.92	227.92		
Graduate	1	1,116.00			
Total	230			.51	.73
Gender					
Female	138	893.16	238.06		
Male	91	894.95	219.40		
Total	229			.003	.95
Parents' Marital Status					
Married	191	916.53	219.42		
Divorced	39	777.64	249.51		
Total	230			12.37	< .001

Table 5

Mean Mother-Child Relationship Scores by Demographic Group

Variables	*n*	*M*	*SD*	*F*	*p*
Class					
First Sociology	115	31.45	4.11		
Second Sociology	57	30.56	4.30		
Psychology of Personality	27	31.96	3.02		
Intro. to Clinical Psych.	32	32.75	2.69		
Total	231			2.35	.07
Age					
18	32	30.72	4.96		
19	69	31.71	4.15		
20	45	31.84	3.39		
21	38	31.50	3.06		
22	28	31.61	3.13		
23	19	30.74	4.91		
Total	231			.51	.77
Academic Status					
Freshman	93	31.48	4.27		
Sophomore	47	31.32	4.12		
Junior	39	31.36	3.75		
Senior	51	31.69	3.24		
Graduate	1	31.00			
Total	231			.07	.99
Gender					
Female	138	31.45	4.51		
Male	92	31.52	2.83		
Total	230			.02	.89
Parents' Marital Status					
Married	192	31.41	3.99		
Divorced	39	31.79	3.53		
Total	231			.32	.57

Table 6

Mean Father-Child Relationship Scores by Demographic Group

Variables	*n*	*M*	*SD*	*F*	*p*
Class					
First Sociology	114	27.73	5.11		
Second Sociology	57	28.02	6.73		
Psychology of Personality	27	28.70	6.18		
Intro. to Clinical Psych.	32	29.97	5.68		
Total	230			1.35	.26
Age					
18	32	27.09	5.68		
19	69	29.28	5.15		
20	45	27.91	5.47		
21	38	29.82	3.98		
22	27	26.37	7.55		
23	19	26.53	7.68		
Total	230			2.26	.05
Academic Status					
Freshman	93	27.83	5.88		
Sophomore	47	28.64	5.19		
Junior	39	29.13	5.73		
Senior	50	27.72	6.08		
Graduate	1	36.00			
Total	230			.96	.43
Gender					
Female	138	28.25	5.73		
Male	91	28.24	5.85		
Total	229			< .01	.99
Parents' Marital Status					
Married	191	28.97	5.04		
Divorced	39	24.56	7.54		
Total	230			20.57	< .001

Hypothesis One

The first hypothesis was that young adult children of divorce have a lower sense of coherence than their peers who grew up in intact homes. The hypothesis was not supported, with mean scores between the married and divorced parent groups not significantly differing (t [227] = 1.52, p = .13, see Table 7). Because of the interest in the long-term relationship between SOC and parent's marital status a second t-test was computed excluding the subjects whose parents had divorced during the past five years. These groups also did not differ significantly (t [219] = 1.62, p = .11).

Table 7

Sense of Coherence Scores by Parent Marital Status

Parent Marital Status	*n*	*M*	*SD*	*t*	*p*
Married Parents	190	137.44	19.98		
Divorced Parents	39	132.00	22.36	1.52	.13

The SOC was hypothesized to be associated with the parent's marital status because of the importance of stability in the home and community in the development of SOC. Student's t - tests were conducted to determine if significant differences existed in the number of moves and parent-child relationships between the adult children of divorce and their peers. The adult children of divorce were found to have experienced more moves (t [227] = -5.23, $p < .001$) and lower scores on the father-child relationship variable (t [228] = 4.54, $p < .001$) than those subjects growing up with married parents.

The scores did not significantly differ between the two groups on their relationship with their mothers (see Table 8).

Table 8

Number of Moves and Parent-Child Relationship by Parent's Marital Status

	Parent Married			Parent Divorced				
Variable	*n*	*M*	*SD*	*n*	*M*	*SD*	*t*	*p*
Moves	190	1.58	2.52	39	3.97	3.93	-5.22	< .001
Father-Child Relationship	191	28.97	5.04	39	24.56	7.54	4.54	< .001
Mother Child Relationship	192	31.41	3.99	39	31.80	3.53	-.56	.57

Parental Conflict

Hypothesis Two

The second hypothesis stated that parental conflict while growing up is negatively associated with the sense of coherence of young adults. A correlation of -.23 was found between SOC and parental conflict ($p < .001$) supporting the hypothesis. Parental conflict was also related to the mother-child relationship ($r = -.15$, $p = .03$), the father-child relationship ($r = -.32$, $p < .001$), and the combined parent-child relationship ($r = -.32$, $p < .001$; see Table 9).

Table 9

Correlations of Sense of Coherence, Combined Parent-Child Relationship, Mother-Child Relationship, Father-Child Relationship, and Number of Moves with Parental Conflict

Variable	*r*	*p*
Sense of Coherence	-.23	< .001
Combined Parent-Child Relationship	-.32	< .001
Mother-Child Relationship	-.15	.03
Father-Child Relationship	-.32	< .001
Number of Moves	.08	.25

Note. One-tailed *p* value

Parent-Child Relationships

Hypothesis Three

The third hypothesis stated that the quality of the parent-child relationship while growing up is positively associated with the sense of coherence of young adults. A positive relationship between SOC and the subjects' parent-child relationships was found supporting the hypothesis (see Table 10). The combined parent-child relationship score accounted for more of the variance ($r = .44$, $p < .001$) than either of the individual relationship subscales, but both the mother-child ($r = .35$, $p < .001$) and father-child ($r = .36$, $p < .001$) relationships correlated significantly with the total SOC.

As previously stated (see Table 9), the reported conflict between parents correlated with the combined and individual parent-child

relationships. The number of moves also correlated with the combined parent-child relationship (r = -.14, p = .03), but only with the father-child relationship (r = -.20, p = .003) when the subscales were considered individually (see Table 10). There was a difference (t [227] = -5.22, p < .001) in the number of moves between subjects whose parents were divorced (M = 3.98, SD = 3.93) versus married (M = 1.58, SD = 2.25), indicating the probability of an increased number of moves in the event of a divorce. Considering only subjects with married parents, no significant correlations existed between the number of moves and any of the parent-child relationship variables, but within the divorced group there were significant negative correlations between the number of moves and the subjects' combined (r = -.34, p = .03) and father-child (r = -.33, p = .04) relationships scores.

Table 10

Correlations of Sense of Coherence and Number of Moves with Combined Parent-Child Relationship, Mother-Child Relationship, and Father-Child Relationship

	Combined Parent-Child Relationship		Mother-Child Relationship		Father-Child Relationship	
Variables	*r*	*p*	*r*	*p*	*r*	*p*
Sense of Coherence	.44	< .001	.35	< .001	.36	< .001
Number of Moves	-.14	.03	-.01	.89	-.20	.003

Note. One-tailed p value

Relationships Among the Variables

Hypothesis Four

The fourth hypothesis stated that differences found in the sense of coherence of young adults are best described by the parent-child relationship, followed by the parental conflict observed and the parent's marital status. A series of multiple regressions were computed and the parent-child relationship entered the regression equation first, supporting the hypothesis. Initially a forward regression method was performed with the SOC score used as the dependent variable and gender, number of moves, parent's marital status, parental conflict, mother-child relationship and father-child relationship serving as independent variables. The first variable to enter the equation was the father-child relationship with a simple R of .36 (F [1, 220] = 32.75, $p < .001$). The only other variable that entered the equation with a limit of $p < .05$ was the mother-child relationship. The addition of the mother-child relationship variable significantly increased ($p < .001$) the multiple R to .46 (F [2, 219] = 29.95, $p < .001$). A second multiple regression was then performed with the combined parent-child relationship replacing the individual mother-child and father-child relationship variables. The parent-child relationship variable was again the only one to enter the equation with a simple R of .45 (F [1, 220] = 55.40, $p < .001$).

A simple regression was then performed to determine if including the other variables in the regression equation would significantly increase the variance explained. The multiple R increase of .46 to .47 when gender, parent's marital status, moves, and parental conflict were added was not significant (F [6, 215] = .71, $p = .58$). Excluding the parent-child relationship variables, the remaining variables yielded a multiple R of .24 (F [4, 217] =

3.17, p = .01), of which parental conflict was the only one to significantly account for any of the variance in SOC (p = .002). Adding the two parent-child relationship variables resulted in an R square change of .17 (F [6, 215] =23.54, p < .001).

Correlations between the two parent-child relationship variables and the other independent variables were also considered (see Table 11). Parental conflict was the only variable that significantly related to both the mother-child and father-child relationships, whereas the number of moves and parent's marital status also differed significantly in regard to the father-child relationship. Parental conflict correlated -.15 (p = .03) with the mother-child relationship and -.32 (p < .001) with the father-child relationship.

As mentioned previously, the number of moves was negatively associated with the father-child relationship (r = -.20, p = .003). When considering parent's marital status the mean scores for the father-child relationship were significantly higher for the subjects with married (M = 28.97, SD = 5.04) versus divorced (M = 24.56, SD = 7.54) parents (t [228]= 4.54, p < .001).

Adult Children of Divorce

The adult children of divorce group was composed of 22 females and 17 males 18 to 23 years of age. Although only a limited number of analyses could be run because of the small number of subjects, there are several relationships that warrant discussion.

Table 11

Correlation Matrix of the Primary Variables for All Subjects and Subjects Whose Parents Are Divorced

Variables	SOC	ParCon	PCRel	MCRel	FCRel	Moves	NYears	How Often	Time Spent	SPCon
SOC		-.23***	.44***	.35***	.36***	-.18				
ParCon	.01		-.32***	-.15*	-.32***	-.03				
PCRel	.48**	-.34*		.62***	.88***	-.34*				
MCRel	.06	.10	.24		.19**	-.12				
FCRel	.45**	-.38*	.93***	-.13		-.33*				
Moves	-.18	-.03	-.34*	-.12	-.33*					
NYears	-.17	-.07	-.08	-.14	-.04	.43**				
HowOften	.43**	-.01	.55***	-.12	.61***	-.34*	.10			
TimeSpent	-.04	-.19	.14	-.03	.16	.06	-.30	-.20		
SPCon	-.49*	-.24	-.22	-.26	-.14	.49*	-.66**	-.33	.02	
SCRel	.51*	-.23	.32	.43	.14	-.02	.44*	.05	-.39	-.39

Note. Top Half = Correlations for all Subjects
Bottom Half = Correlations for Subjects with Divorced Parents

One-tailed p value; * < .05, ** < .01, *** < .001

SOC = Sense of Coherence
ParCon = Parental Conflict
PCRel = Combined Parent-Child Relationship
MCRel = Mother-Child Relationship
FCRel = Father-Child Relationship
Moves = Number of Moves
NYears = Number of Years Since Divorce
HowOften = How Often the Noncustodial Parent Was Seen
TimeSpent = Amount of Time Spent Together When Seen
SPCon = Stepparent-Parent Conflict
SCRel = Stepparent-Child Relationship

Initially, estimates of reliability were established for the divorce subscales. An alpha of .92 was obtained for the eight item stepparent-child relationship subscale and .89 for the nine item stepparent-parent conflict subscale. Subscale scores for the step-parent relationship and conflict variables were computed by adding the items within each subscale.

The combined parent-child relationship (r = .48, p = .002) and father-child relationship (r = .45, p = .004) correlated with SOC, but neither the mother-child relationship nor parental conflict correlated significantly with SOC in the adult children of divorce. Several other variables also related to the SOC within this group; the frequency of visits with the noncustodial parent (r = .43, p = .007), parent-stepparent conflict (r = -.49, p = .03), and the stepparent-child relationship (r = .51, p = .02, see Table 11). There was also a difference between sexes in the adult children of divorce that did not exist with the larger group, the men scoring significantly higher (t [37] = -2.03, p < .05) on SOC (M = 139.94) than the women (M = 125.86).

This study was intended to consider the long-term relationship of divorce on SOC, therefore a second set of correlations were completed with those subjects whose parents had been divorced longer than five years. There were no additional variables that significantly related to SOC, but within this smaller group of 31 subjects the frequency of visits with the noncustodial parent no longer significantly related to SOC (see Table 12).

The small number of subjects in this group prevented any further analysis to explain the interrelationship of the variables, but it is interesting that the highest correlations were with the two variables involving the stepparent; the parent-stepparent conflict and the stepparent-child relationship.

Table 12

Sense of Coherence Correlations for Adult Children of Divorce

	All Subjects		Divorce Greater than 5 Years Ago	
Variables	*r*	*p*	*r*	*p*
Combined Parent-Child Relationship	.48	.002	.48	.005
Mother-Child Relationship	.06	.72	.09	.64
Father-Child Relationship	.45	.004	.45	.01
Stepparent-Child Relationship	.51	.02	.51	.02
Parental Conflict	.01	.96	.14	.50
Stepparent-Parent Conflict	-.49	.03	-.58	.008
Subject's Age	.27	.09	.34	.06
Frequency of Noncustodial Parent Visits	.43	.007	.32	.08
Length of Noncustodial Parent Visits	-.04	.80	.07	.72
Frequency and Length of Visits	.22	.18	.29	.12
Number of Years Divorced	-.16	.32	-.17	.37

Note. One-tailed *p* value

Summary

The first hypothesis was that the adult children of divorce would have a lower SOC than their peers who did not experience parental divorce. This hypothesis was not supported.

The second hypothesis was that children reporting increased parental conflict would have a lower SOC than those reporting less conflict. Negative correlations between parental conflict and the SOC score supported this hypothesis.

The third hypothesis was that the quality of the parent-child relationship while growing up woulb be positively associated with the sense of coherence of young adults.. This hypothesis was supported; positive correlations were found between the combined parent-child, mother-child, and father-child relationship variables and the SOC scores.

The fourth hypothesis was that differences found in the sense of coherence of young adults are most strongly associated with the parent-child relationship, followed by the parental conflict observed and the parent's marital status. This hypothesis was supported; the parent-child relationship was the only variable to significantly explain the variance in SOC when all the variables were considered. When the mother-child and father-child relationships were considered separately instead of multiplied together they continued to be the only variables to significantly contribute to SCC. None of the variables except parental conflict contributed significantly when the relationship variables were excluded.

The adult children of divorce were considered separately and the men in this group were found to have a significantly higher SOC than the women. Also of interest was that the father-child relationship, and the stepparent-

child relationship continued to relate to SOC, whereas the mother-child relationship did not significantly correlate with SOC in the adult children of divorce. The frequency of visits with the noncustodial parent was positively correlated to SOC and parent-stepparent conflict negatively correlated to SOC. Further analysis with this group regarding how the variables interacted with this group was not pursued due to the limited number of subjects.

CHAPTER IV

DISCUSSION

Studies considering divorce have flourished since the 1970s. As the number of studies grew so did the realization that a multitude of factors were related to children's response to parental divorce. This study attempted to explore how parental divorce related to the development of sense of coherence (SOC). The SOC concept originated from studies of people's responses to life stressors. Divorce is a stressful process for children that influences some of the same areas that are important in the development of SOC; the stability of the home and community, ability to participate in decision making, and the balance between stressors and resources available to cope with those stressors (Antonovsky, 1979; Antonovsky, 1985; Antonovsky, 1987). Through the process of divorce it was believed that the factors involved in the development of SOC would be disrupted and thus lower levels of SOC found in young adults who experienced parental divorce, who identified greater amounts of conflict between their parents, and who described a poorer relationship with their parents.

Hypothesis One

The first hypothesis stated that young adult children whose parents divorced would have a lower SOC than their peers. The adult children of divorce in this study were not significantly different in comparison to their peers from intact homes. This finding is consistent with other studies that have found the physical well-being of the family was not as crucial in

children's development as the psychological well-being of the family (Hess & Camara, 1979).

Although the physical well-being of the family is not purported as being a significant factor in children's development the changes that coincide with divorce were assumed to be significant in the development of the SOC in young adult children of divorce. Children's experiences of instability in the community and their relationships with parents, and the inability to participate in decision making has been purported to be negatively associated with the development of SOC (Antonovsky, 1979; Antonovsky, 1987; Antonovsky & Sagy, 1986). The adult children of divorce in this study did report more moves and poorer relationships with their fathers, but not with their mothers. Despite these differences between the two groups there were no differences in SOC scores. The absence of significant differences in SOC related to parent's marital status may be another example of how the psychological well-being of the family is of more importance than the physical well-being of the family in children's development.

Hypothesis Two

The second hypothesis stated that parental conflict reported by young adults would be negatively related to their SOC. The premise was that the conflict observed would be related to their sense of security and stability in the home and therefore to their development of SOC. The hypothesis was supported with a significant negative relationship between parental conflict and SOC. This study supports the findings of earlier studies which found that regardless of the parent's marital status, children are negatively impacted by parent's conflict (Atkeson, et al., 1982; Block, et al., 1986; Forehand, et al., 1988; Lupenitz, 1979; McCord, et al., 1962; Raschke &

Raschke, 1979). The negative association between children's adjustment and parental conflict has been found in children (Hess & Camara, 1979; Rutter, 1971), adolescents (Long, et al., 1987), and with this study extended into young adulthood.

The negative relationship between parental conflict and SOC found in this study supports the psychological well-being position that the perceived family conflicts are negatively associated with children's development (Enos & Handal, 1986). There were significant differences in the parental conflict subjects reported based on their parent's marital status, with the adult children of divorce reporting greater conflict, the differences persisting in both groups when splitting the subjects based on sex. This is consistent with earlier findings that both sexes are equally aware of and exposed to parental conflict (Emery & O'Leary, 1982; Porter & O'Leary, 1980; Wierson, et al., 1988), and negatively affected by parental conflict (Emery & O'Leary, 1984; Johnson & O'Leary, 1987; Jouriles, et al., 1988; Long & Forehand, 1987; Peterson & Zill, 1986; Whitehead, 1979).

The cross-sectional nature of this study did not allow analysis regarding the association of decreases in parental conflict with time since the divorce, but past studies have found that as the level of conflict decreased the problems in children of divorce also decreased (Hetherington, et al., 1982; Long & Forehand, 1987; Long, et al., 1988; Wallerstein & Kelly, 1980). Although the correlation between the SOC and parental conflict only accounted for 5% of the variance, practitioners working with children of divorce should consider the potential benefit of working toward decreased conflict between parents when working with children or families. This recommendation applies to families who have and have not experienced

divorce. Parental conflict is multidimensional (Grych & Fincham, 1990). Longitudinal studies are needed to determine if the potential benefits for children in decreasing parental conflict are specific to certain levels or dimensions of conflict and what magnitude of change is necessary.

Hypothesis Three

The third hypothesis stated that the quality of the parent-child relationship would be positively related to the SOC in young adults. This hypothesis was supported with a positive association found between the father-child and mother-child relationships, and their SOC.

During childhood (Antonovsky, 1987) and adolescence (Antonovsky & Sagy, 1986) the stability, consistency, close emotional ties, and openness in communication between parents and their children is related to the development of SOC. Antonovsky and Sagy (1986) tested this assumption that a positive association existed between the development of SOC and children's relationship with their parents, but their hypothesis was not supported. The findings of this study are consistent with the hypothesized relationship and with the findings of other studies that have found that, although there are more problems in parent-child relationships for children of divorce (Tschann, et al., 1989), as children reach adulthood there continues to be an association between the parent-child relationship and adjustment in children with both married and divorced parents (Hess & Camara, 1979; Wallerstein & Corbin, 1989).

Considering the variables in this study, the highest correlations were found between the parent-child relationship variables and SOC. Past studies supporting this finding and the possible mediating role of the parent-child relationship are discussed when considering the fourth hypothesis. For

clinicians, the findings of this and previous studies supports the inclusion of focusing on the parent-child relationship when working with children.

Hypothesis Four

The fourth hypothesis stated that considering the variables involved in this study the variance in SOC would best be described by the parent-child relationship, followed by the parental conflict, and then the parent's marital status; assuming that the parent-child relationship would mediate the relationship of the other variables on the SOC. This was supported through a series of multiple regressions in which the parent-child relationship variables were the only variables to enter the regression equations. Others have also hypothesized (Hess & Camara, 1979; Jenkins & Smith, 1991) and found (Easterbrooks & Emde, 1988; Fauber, et al., 1990; Tschann, et al., 1989) that the parent-child relationship was more significant than parental conflict or divorce in mediating children's emotional problems.

Jenkins and Smith (1991) suggested that the parent-child relationship would mediate the association of children's emotional and behavioral problems with parental conflict. There was a negative correlation between parental conflict and the parent-child relationships, but when the relationship variables were excluded only 5% of the variance in SOC was explained as compared to 21% explained by the relationship variables. The addition of all the other variables increased the explained variance in SOC less than 1%. Although parental conflict appears to be an important area to consider when working with children, the parent-child relationships seem to be of more importance. Studies are needed that further assess what factors are crucial in children's perception of a positive relationship with their parents.

Findings Related to the Adult Children of Divorce

Although the number of subjects in this group was small, three issues deserve mentioning in the adult children of divorce group: the role of the stepparent-child, mother-child, and father-child relationships; the relationship between SOC and the frequency of visits with the noncustodial parent; and the gender differences in the SOC scores.

The SOC scores correlated with the stepparent-child relationship, stepparent-custodial parent conflict, the father-child relationship, and frequency of visitation with their noncustodial parent. The most significant finding in this group was that the mother-child relationship did not correlate with the SOC. The combined parent-child and father-child relationship means significantly differed between the adult children of divorce and their peers from intact homes, but there were no significant differences between the two groups and the reported relationship with their mother. The lack of differences in the mother-child relationship may be explained two ways. The majority of the adult children of divorce in this sample lived with their mothers following the divorce possibly resulting in a closer parent-child relationship. Also, the instrument used to assess the relationship may have contributed to the lack of a correlation. The mean scores on the mother-child relationship were higher and had less variance than the scores on the father-child and stepparent child scales. An instrument that allowed for greater range in the high scores may have more accurately reflected changes in the mother-child relationship, if they do exist.

The current findings have importance clinically, suggesting that therapeutic work focusing on the relationship that children have with their stepparent and father may be beneficial. Future studies are needed that

assess the role of the relationships with parents and stepparents over a period of years before any definitive recommendations can be made as to the role of visits with the noncustodial father.

The second finding to further consider is the relationship between the frequency of visits with the noncustodial parent and the SOC. Some studies have found that in cases of maternal custody the children coped better with the divorce if they maintained contact with their fathers (Guidabaldi, et al., 1983; Hess & Camara, 1979; Hetherington, et al., 1982; Wallerstein & Kelly, 1980), whereas others have found no benefit in maintaining high contact with noncustodial fathers (Clingempeel & Seegal, 1986; Johnston, Campbell, & Mayes, 1985; Maccoby, et al., 1993; Peterson & Zill, 1986). The positive correlation between the frequency of visits and SOC in this study is consistent with the former of these earlier findings. The decreased frequency and importance of visits with the noncustodial parent six years after the divorce is consistent with previous findings (Hetherington, 1993). Maccoby, Buchanan, Mnookin, and Dornbusch (1993) suggested that the benefits of contact with the father (noncustodial parent) may be an artifact of a better relationship between the parents, parents who have less conflict in their relationship being more likely to encourage contact with the noncustodial parent, and also may result in less polarizing of the children between parents.

The variation of the results between this and other studies may be a reflection of the diversity of factors associated with the relationships children have with their parents and stepparents, the time span since the divorce, and the variety of outcome variables employed. There were no studies found that stated there was a negative correlation between children's adjustment and

contact with their noncustodial parent. When working with children of divorce, clinicians may not want to stress nor negate the potential benefit of contact with the noncustodial parent.

The third finding requiring further consideration is the higher SOC found in the men in the adult children of divorce group. The issue of whether or not there are gender differences in children's response to divorce has yielded inconsistent results, but no studies were found that suggested that boys well-being was greater than girls following parental divorce. Earlier studies have suggested that girls may begin to experience more problems than boys during adolescents when relationships begin to take on additional importance (Amato & Keith, 1991a; Dancy & Handal, 1984 218; Forehand, et al., 1988) and that girls display fewer overt behavioral problems because of their tendency to internalize problems (Block, et al., 1981; Peterson & Zill, 1986; Whitehead, 1979). The possibility that boys will generally score higher on the SOC instrument was considered, however, there was no significant difference in the SOC scores between the women and men in the total group and past research has found no significant differences in SOC between genders (Margalit & Eysenck, 1990).

The findings of this study may be a reflection of variables specific to children's adjustment to parental divorce, such as the gender of the custodial parent, remarriage, and/or changes in socioeconomic status. Boys have been found to have more negative reactions associated with divorce and girls with remarriage (Hetherington, 1991; Hetherington, et al., 1989), but this study did not have a large enough sample to assess the role of custodial parent's gender and remarriage. Also, past studies have reported that fathers are less likely to financially support their daughters following divorce (Amato &

Keith, 1991b) and the development of SOC has been hypothesized as being related to the financial resources available to the family (Antonovsky & Sagy, 1986). Longitudinal studies involving a multitude of variables are necessary to determine if the findings of this study can be replicated and to identify the variables that are associated with the gender difference found in this study.

Limitations of the Current Study

The goal of this study was to explore the long-term implications of parental divorce on children's development of SOC. Any cross-sectional design such as this will be limited by the numerous confounding variables when the intent is to assess retrospective information. The subjects were prevented from making anecdotal comments regarding their earlier experiences because of the questionnaire utilizing only objective items. Several subjects made phone contact after completing the questionnaire to clarify why they responded as they did. The use of a subjective component in the instrument may have facilitated the identification of additional variables that related to SOC.

The variables chosen for this study were the result of two factors: their relevance to the topic, and the ability to assess them in a brief questionnaire. These criteria eliminated additional variables that may have provided important information; including changes in socioeconomic status following divorce, the relationship with and presence of siblings, the support of the community and extended family, and the cultural and ethnic differences. Studies are needed that include a larger number of variables to further test the hypothesis of how the SOC develops.

The sample consisted of primarily Caucasian students. No demographic information was obtained regarding their ethnicity, nor a rural

versus urban upbringing. Studies are needed to assess the differences in children's response based on the demographic factors within their family, cultural heritage, and societal views of divorce. The development of children raised in an area where divorce is less common and views are conservative may be different than children raised in an area where divorce is a common occurrence and viewed as an acceptable event.

The final limitation is the small sample and the cross-sectional design employed in this study. Divorce cannot be viewed as a single event but rather should be considered in context of a series of changes and transitions that occur over the course of people's lives. The length of time since the divorce, and the multitude of factors that may come into play following divorce (remarriage, re-divorce, addition of stepparents, and custody battles) are likely to have an impact on children's adjustment following their parent's divorce. Large, longitudinal studies are needed that can follow children's development throughout their childhood and young adulthood to better understand how these variables interact.

Clinical Implications

Many of the early studies utilized clinical samples and believed that all children from "broken homes" would develop pathological problems. This study supports the subsequent studies indicating that parental divorce is just one factor, and possibly not the most significant factor, in the long-term development of children.

Based on the results of this study clinicians working with children and families may want to explore the relationships between the children and their parents. The relationship variables explained the most variance in SOC when considering all the subjects in the study. When considering just the

adult children of divorce the relationship with the father (predominately the noncustodial parent in this sample), frequency of visits with the noncustodial parent, relationship with the stepparent, and the conflict between the stepparent and custodial parent were the only variables that related to the SOC. The implications of this for therapy can not be definitively stated because of the error associated with such a small sample and the difficulty understanding why the mother-child relationship did not significantly correlate with SOC. However, therapist may want to consider these findings when they address children's views and needs in regard to their relationships with parents and stepparents.

This study was an attempt to explore the long-term relationship of parent's marital status, parental conflict, and the parent-child relationship on the development of SOC. Sense of coherence is a relatively new concept and few studies have been conducted that test the hypothesized factors necessary in its development. Although the parent's marital status did not differentiate the SOC of the young adults in this study, the role of parental conflict and the parent-child relationship was significant. Further studies are necessary to define the factors that relate to the development of SOC and its consequences for other aspects of adjustment in young adults.

APPENDICES

Appendix A

FAMILY INFORMATION QUESTIONNAIRE

THE FOLLOWING SURVEY ASKS QUESTIONS ABOUT YOU AND YOUR PARENTS. IF YOUR PARENTS (BIOLOGICAL OR ADOPTIVE) WERE NEVER MARRIED OR ONE OF THEM IS DECEASED PLEASE CHECK HERE AND RETURN THE SURVEY _____.

THE FIRST SECTION REFERS TO YOUR BIOLOGICAL OR ADOPTIVE AT BIRTH PARENTS. PLEASE RESPOND TO EACH QUESTION CHECKING THE ONE ANSWER THAT BEST DESCRIBES YOUR RESPONSE.

1. Your age: _____

2. Your gender:
   _____Female
   _____Male

3. Your parents marital status:
   _____Married
   _____Separated
   _____Divorced
   _____Other (please explain):_____

4. Your academic status:____Freshman
   _____Sophomore
   _____Junior
   _____Senior
   _____Graduate student

5. Your marital status:_____Single
   _____Married
   _____Separated
   _____Divorced

6. How many times did you move (change place of residence) prior to starting college?_____

FOR EACH OF THE FOLLOWING CHECK THE ONE THAT BEST DESCRIBES YOUR MEMORIES OF YOUR **MOTHER** (BIOLOGICAL OR ADOPTIVE) WHILE YOU WERE GROWING-UP.

7. My **mother**...
   _____took great interest in everything that concerned me
   _____took a moderate amount of interest in the things that concerned me
   _____did not take much interest in the things that concerned me
   _____took little interest in the things that concerned me
   _____took no interest in the things that concerned me

8. I got along with my **mother**...
   _____very well
   _____well
   _____fairly well
   _____not very well
   _____poorly

9. In regard to taking my **mother** into my confidence, I...
   _____always asked her personal questions
   _____often asked her personal questions
   _____sometimes asked her personal questions
   _____rarely asked her personal questions
   _____never asked her personal questions

10. Check the term that best described your feelings toward your **mother**.
    _____I idealized my mother
    _____I admired my mother
    _____I respected my mother
    _____I did not particularly respect my mother
    _____I did not respect my mother at all

11. Check the description that most nearly fits your **mother**.
_____was always critical of me, and never pleased with what I did
_____was usually critical of me, and seldom pleased with what I did
_____was sometimes critical of me, and sometimes pleased with what I did
_____was seldom critical of me, and usually pleased with what I did
_____was never critical of me, and always pleased with what I did

12. I considered my **mother**...
_____always willing to think only the best of me
_____generally inclined to think well of me
_____neither inclined to think only well or poorly of me
_____generally inclined to be critical of me
_____always ready to think only the worst of me

13. My **mother**...
_____never did little things for me to show affection or consideration
_____seldom did little things for me to show affection or consideration
_____sometimes did little things for me to show affection or consideration
_____often did little things for me to show affection or consideration
_____always did little things for me to show affection or consideration

14. In my opinion, my **mother**...
_____was so attached to me that she wanted me around all the time
_____enjoyed spending much of her time with me
_____liked to spend a little of her time with me
_____did not like to spend time with me
_____very much disliked spending any of her time with me

FOR EACH OF THE FOLLOWING CHECK THE ONE THAT BEST DESCRIBES YOUR OPINION OR FEELING REGARDING YOUR MEMORIES OF YOUR **FATHER** (BIOLOGICAL OR ADOPTIVE) WHILE YOU WERE GROWING-UP.

15. My **father**...
_____took great interest in everything that concerned me
_____took a moderate amount of interest in the things that concerned me
_____did not take much interest in the things that concerned me
_____took little interest in the things that concerned me
_____took no interest in the things that concerned me

16. I got along with my **father**...
_____very well
_____well
_____fairly well
_____not very well
_____poorly

17. In regard to taking my **father** into my confidence, I...
_____always asked him personal questions
_____often asked him personal questions
_____sometimes asked him personal questions
_____rarely asked him personal questions
_____never asked him personal questions

18. Check the term that best described your feelings toward your **father**.
_____I idealized my father
_____I admired my father
_____I respected my father
_____I did not particularly respect my father
_____I did not respect my father at all

19. Check the description that most nearly fits your **father**.
_____was always critical of me, and never pleased with what I did
_____was usually critical of me, and seldom pleased with what I did
_____was sometimes critical of me, and sometimes pleased with what I did
_____was seldom critical of me, and usually pleased with what I did
_____was never critical of me, and always pleased with what I did

20. I considered my **father**...
_____always willing to think only the best of me
_____generally inclined to think well of me
_____neither inclined to think only well or poorly of me
_____generally inclined to be critical of me
_____always ready to think only the worst of me

21. My **father**...
_____never did little things for me to show affection or consideration
_____seldom did little things for me to show affection or consideration
_____sometimes did little things for me to show affection or consideration
_____often did little things for me to show affection or consideration
_____always did little things for me to show affection or consideration

22. In my opinion, my **father**...
_____was so attached to me that he wanted me around all the time
_____enjoyed spending much of his time with me
_____liked to spend a little of his time with me
_____did not like to spend time with me
_____very much disliked spending any of his time with me

FOR THE NEXT GROUP OF QUESTIONS I WOULD LIKE YOU TO CONTINUE TO RESPOND BASED ON YOUR MEMORIES OF YOUR PARENT'S (BIOLOGICAL OR ADOPTED-AT-BIRTH) RELATIONSHIP WHILE YOU WERE GROWING-UP.

	Zero to one time/year	Once/six months	Once a month	Once a week	Daily
23. How often did your parents argue?	1	2	3	4	5

When your parents did argue, how often did it include (please circle one response for each item):

	Never	Seldom	Sometimes	Quite often	Very frequently
24. Raised voice	1	2	3	4	5
25. Verbal put-downs	1	2	3	4	5
26. Crying	1	2	3	4	5
27. Walking out	1	2	3	4	5
28. Physical pushing	1	2	3	4	5
29. Physical striking	1	2	3	4	5

After arguing, my parents (please circle one response for each item):

	Never	Seldom	Sometimes	Quite often	Very frequently
30. Identified the problem and resolved their differences	1	2	3	4	5
31. Discussed the problem but did not resolve their differences	1	2	3	4	5
32. Did not discuss the problem after the argument	1	2	3	4	5
33. Engaged in another argument over the same issue	1	2	3	4	5

IF YOUR PARENTS (BIOLOGICAL OR ADOPTIVE) ARE MARRIED PLEASE TURN TO THE ORIENTATION TO LIFE QUESTIONAIRE ON PAGE 7.

IF YOUR PARENTS ARE DIVORCED PLEASE RESPOND TO THE FOLLOWING QUESTIONS BASED ON YOUR MEMORIES SINCE THE TIME OF THE DIVORCE AND BEFORE YOU BEGAN COLLEGE.

34. How long were your parents married?_____

35. How old were you when your parents stopped living together?_____

36. How old were you when they divorced?_____

37. Has your mother remarried?
    Yes_____ How old were you when she remarried?_____
    No_____ Did she divorce again?_____yes _____no

38. Has your father remarried?
    Yes_____ How old were you when he remarried?_____
    No_____ Did he divorce again?_____yes _____no

39. Who have you lived with the most since your parents divorced?
    _____Mother
    _____Father
    _____Other (please explain):_____

40. Approximately how often did you see your less seen parent (check the one that best describes):
    _____daily
    _____weekly
    _____monthly
    _____every 3 months
    _____every 6 months
    _____yearly
    _____less than yearly

41. Approximately how much time did you spend with your less seen parent when you saw them?
    _____less than a day
    _____1 to 3 days
    _____4 to 7 days
    _____less than a month
    _____1 to 3 months
    _____greater than three months

IF THE PARENT YOU PRIMARILY LIVED WITH REMARRIED PLEASE TURN THE PAGE TO PAGE 5 AND ANSWER THE FOLLOWING QUESTIONS AS THEY RELATE TO YOUR MEMORIES OF YOUR PARENT AND STEP-PARENT BEFORE YOU STARTED COLLEGE.

IF THE PARENT YOU PRIMARILY LIVED WITH DID NOT REMARRY PLEASE TURN TO PAGE 7 AND COMPLETE THE ORIENTATION TO LIFE QUESTIONAIRE

FOR EACH OF THE FOLLOWING CHECK THE ONE THAT BEST DESCRIBES YOUR OPINION OR FEELING REGARDING YOUR MEMORIES OF YOUR **STEP-PARENT** WHILE YOU WERE GROWING-UP.

42. My **step-parent**...
_____took great interest in everything that concerned me
_____took a moderate amount of interest in the things that concerned me
_____did not take much interest in the things that concerned me
_____took little interest in the things that concerned me
_____took no interest in the things that concerned me

43. I got along with my **step-parent**...
_____very well
_____well
_____fairly well
_____not very well
_____poorly

44. In regard to taking my **step-parent** into my confidence, I...
_____always asked her/him personal questions
_____often asked her/him personal questions
_____sometimes asked her/him personal questions
_____rarely asked her/him personal questions
_____never asked her/him personal questions

45. Check the term that best described your feelings toward your **step-parent.**
_____I idealized her/him
_____I admired her/him
_____I respected her/him
_____I did not particularly respect her/him
_____I did not respect her/him at all

46. Check the description that most nearly fits your **step-parent.**
_____was always critical of me, and never pleased with what I did
_____was usually critical of me, and seldom pleased with what I did
_____was sometimes critical of me, and sometimes pleased with what I did
_____was seldom critical of me, and usually pleased with what I did
_____was never critical of me, and always pleased with what I did

47. I considered my **step-parent**...
_____always willing to think only the best of me
_____generally inclined to think well of me
_____neither inclined to think only well or poorly of me
_____generally inclined to be critical of me
_____always ready to think only the worst of me

48. My **step-parent**...
_____never did little things for me to show affection or consideration
_____seldom did little things for me to show affection or consideration
_____sometimes did little things for me to show affection or consideration
_____often did little things for me to show affection or consideration
_____always did little things for me to show affection or consideration

49. In my opinion, my **step-parent**...
_____was so attached to me that she/he wanted me around all the time
_____enjoyed spending much of her/his time with me
_____liked to spend a little of her/his time with me
_____did not like to spend time with me
_____very much disliked spending any of her/his time with me

FOR THE NEXT GROUP OF QUESTIONS I WOULD LIKE YOU TO CONTINUE TO RESPOND BASED ON YOUR MEMORIES OF YOUR PARENT AND STEP-PARENT'S RELATIONSHIP WHILE YOU WERE GROWING-UP.

	Zero to one time/year	Once/six months	Once a month	Once a week	Daily
50. How often did your parent and step-parent argue?	1	2	3	4	5

When your parent and step-parent did argue, how often did it include (circle one response for each item):

	Never	Seldom	Sometimes	Quite often	Very frequently
51. Raised voice	1	2	3	4	5
52. Verbal put-downs	1	2	3	4	5
53. Crying	1	2	3	4	5
54. Walking out	1	2	3	4	5
55. Physical pushing	1	2	3	4	5
56. Physical striking	1	2	3	4	5

After arguing, my parent and step-parent (please circle one response for each item):

	Never	Seldom	Sometimes	Quite often	Very frequently
57. Identified the problem and resolved their differences	1	2	3	4	5
58. Discussed the problem but did not resolve their differences	1	2	3	4	5
59. Did not discuss the problem after the argument	1	2	3	4	5
60. Engaged in another argument over the same issue	1	2	3	4	5

Now please turn the page and complete the ORIENTATION TO LIFE QUESTIONAIRE

Appendix B

ORIENTATION TO LIFE QUESTIONAIRE

These questions relate to various aspects of your life. Each question has seven possible answers. Please circle the number that expresses your answer, with numbers 1 and 7 being the extreme answers.

1. When you talk to people, do you have the feeling that they don't understand you?

1	2	3	4	5	6	7
never have this feeling						always have this feeling

2. In the past, when you had to do something which depended upon cooperation with others, did you have the feeling that it:

1	2	3	4	5	6	7
surely wouldn't get done						surely would get done

3. Think of the people with whom you come into contact daily, aside from the ones to whom you feel closest. How well do you know most of them?

1	2	3	4	5	6	7
you feel that they're strangers						you know them very well

4. Do you have feelings that you don't really care about what goes on around you?

1	2	3	4	5	6	7
very seldom or never						very often

5. Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?

1	2	3	4	5	6	7
never happened						always happened

6. Has it happened that people whom you counted on disappointed you?

1	2	3	4	5	6	7
never happened						always happened

7. Life is:

1	2	3	4	5	6	7
full of interest						completely routine

8. Until now your life has had:

1	2	3	4	5	6	7
no clear goals or purpose at all						very clear goals and purpose

9. Do you have the feeling that you're being treated unfairly?

1	2	3	4	5	6	7
very often						very seldom or never

10. In the past ten years your life has been:

1	2	3	4	5	6	7
full of changes without your knowing what will happen next						completely consistent and clear

11. Most of the things you do in the future will probably be:

1	2	3	4	5	6	7
completely fascinating						deadly boring

12. Do you have that feeling that you are in an unfamiliar situation and don't know what to do?

1	2	3	4	5	6	7
very often						very seldom or never

13. What best describes how you see life:

1	2	3	4	5	6	7
one can always find a solution to painful things in life						there is no solution to painful things in life

14. When you think about life, you very often:

1	2	3	4	5	6	7
feel how good it is to be alive						ask yourself why you exist at all

15. When you face a difficult problem, the choice of a solution is:

1	2	3	4	5	6	7
always confusing and hard to find						always completely clear

16. Doing the things you do every day is:

1	2	3	4	5	6	7
a source of deep pleasure and satisfaction						a source of pain and boredom

17. Your life in the future will probably be:

1	2	3	4	5	6	7
full of changes without your knowing what will happen next						completely consistent and clear

18. When something unpleasant happened in the past your tendency was:

1	2	3	4	5	6	7
"to eat yourself up" about it						to say "ok that's that, I have to live with it," and go on

19. Do you have very mixed-up feelings or ideas?

1	2	3	4	5	6	7
very often						very seldom or never

20. When you do something that gives you a good feeling:

1	2	3	4	5	6	7
it's certain that you'll go on feeling good						it's certain that something will happen to spoil the feeling

21. Does it happen that you have feelings inside you would rather not feel?

1	2	3	4	5	6	7
very seldom or never						very often

22. You anticipate that your personal life in the future will be:

1	2	3	4	5	6	7
totally without meaning or purpose						full of meaning and purpose

23. Do you think that there will *always* be people whom you'll be able to count on in the future?

1	2	3	4	5	6	7
you're certain there will be						you doubt there will be

24. Does it happen that you have the feeling that you don't know exactly what's about to happen?

1	2	3	4	5	6	7
very often						very seldom or never

25. Many people—even those with a strong character—sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

1	2	3	4	5	6	7
never						very often

26. When something happened, have you generally found that:

1	2	3	4	5	6	7
you overestimated or underestimated its importance						you saw things in the right proportion

27. When you think of difficulties you are likely to face in important aspects of your life, do you have the feeling that:

1	2	3	4	5	6	7
you will always succeed in overcoming the difficulties						you won't succeed in overcoming the difficulties

28. How often do you have feelings that there's little meaning in the things you do in your daily life?

1	2	3	4	5	6	7
very often						very seldom or never

29. How often do you have feelings that you're not sure you can keep under control?

1	2	3	4	5	6	7
very often						very seldom or never

Are there any additional comments you would like to make?_____

_____

_____

_____

Thank you for participating in this study.

Appendix C

Research Information Form

You are invited to participate as a subject in a research study being conducted by Bruce Retterath, a doctoral student at UND. Your participation in the study will be beneficial in further describing the role of family relationships in a person's development.

Should you decide to participate in the study you will be asked to complete a survey asking questions about you and your family. All information obtained will be strictly confidential. You will not be asked to write your name or any other information that could be used to identify you. You may decide at any time to withdraw from the study. Should you decide to discontinue, simply return the survey unanswered, you will in no way jeopardize your standing in this class, your relation with UND, the principle investigator, or the department the class is offered through if you decide not to participate. Your willingness to complete the questionnaire indicates your consent to participate.

If you have any concerns regarding your involvement in this study or would like a summary of the results please contact Bruce Retterath at 777-2729 or 772-6540.

REFERENCES

Allison, P. D., & Furstenberg, F. F. (1989). How marital dissolution affects children: Variations by age and sex. Developmental Psychology, 25(4), 540-549.

Amato, P. R. (1986). Marital conflict, the parent-child relationship and child self-esteem. Family Relations, 35(3), 403-410.

Amato, P. R., & Keith, B. (1991a). Parental divorce and adult well-being: A meta-analysis. Journal of Marriage and the Family, 53, 43-58.

Amato, P. R., & Keith, B. (1991b). Parental divorce and the well-being of children: A meta-analysis. Psychological Bulletin, 110(1), 26-46.

Antonovsky, A. (1979). Health, stress and coping. San Francisco: Jossey-Bass.

Antonovsky, A. (1983). The sense of coherence: Development of a research instrument. W. S. Schwartz Research Center for Behavioral Medicine, Tel Aviv University, Newsletter and Research Reports.

Antonovsky, A. (1985). The life cycle, mental health and the sense of coherence. Israel Journal of Psychiatry and Related Sciences, 22(4), 273-280.

Antonovsky, A. (1987). Unraveling the mystery of health: How people manage stress and stay well. San Francisco: Jossey-Bass.

Antonovsky, H., & Sagy, S. (1986). The development of a sense of coherence and its impact on responses to stress situations. The Journal of Social Psychology, 126(2), 213-225.

Atkeson, B. M., Forehand, R., & Rickard, K. M. (1982). The effects of divorce on children. In B. B. Lahey & A. E. Kazdin (Eds.), Advances in clinical child psychology (pp. 255-281). New York: Plenum Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, 191-215.

Belsky, J. (1981). Early human experience: A family perspective. Developmental Psychology, 17, 3-23.

Belsky, J. (1984). The determinants of parenting: A process model. Child Development, 55, 83-96.

Bernstein, J., & Carmel, S. (1991). Gender differences over time in medical school stressors, anxiety and the sense of coherence. Sex-Roles, 24(5-6), 335-344.

Block, J. H., Block, J., & Gjerde, P. F. (1986). The personality of children prior to divorce. Child Development, 57, 827-840.

Block, J. H., Block, J., & Morrison, A. (1981). Parental agreement-disagreement on childrearing orientations and gender-related personality correlates in children. Child Development, 52, 965-974.

Bowlby, J. (1969). Attachment and loss. New York: Basic Books.

Boyce, W. T., Schaefer, C., & Uitti, C. (1985). Permanence and change: Psychological factors in the outcome of adolescent pregnancy. Social Science and Medicine, 21, 1279-1287.

Brody, G. H., Pillegrini, A. D., & Sigel, I. E. (1986). Marital quality and mother-child and father-child interactions with school aged children. Developmental Psychology, 22, 291-296.

Carmel, S., Anson, O., Levenson, A., & Bonneh, D. Y. (1991). Life events, sense of coherence and health: Gender differences on the kibbutz. Social Science and Medicine, 32(10), 1089-1096.

Carmel, S., & Bernstein, J. (1989). Trait anxiety and sense of coherence: A longitudinal study. Psychological Reports, 65(1), 221-222.

Carmel, S., & Bernstein, J. (1990). Trait anxiety, sense of coherence and medical school stressors: Observations at three stages. Anxiety-Research, 3(1), 51-60.

Cattell, R. B. (1977). Structural learning theory applied to personality change. In R. B. Cattell & R. H. Dreger (Eds.), Handbook of modern personality theory New York: Wiley.

Chamberlain, K., & Zika, S. (1988). Measuring meaning in life: An examination of three scales. Personality and Individual Differences, 9(3), 589-596.

Clingempeel, W. G., & Seegal, S. (1986). Stepparent-stepchild relationships and the psychological adjustment of children in stepmother and stepfather families. Child Development, 57, 474-484.

Cummings, J. S., Pellegrini, D. S., Notarius, C. I., & Cummings, E. M. (1989). Children's responses to angry adult behavior as a function of marital distress and history of interparental hostility. Child Development, 60, 1035-1043.

Dana, R. H. (1985). Sense of coherence: Examination of the construct. Paper presented at the meeting of the Southwestern Psychological Association, . Austin, Texas:

Dancy, B. L., & Handal, P. J. (1984). Perceived family climate, psychological adjustment, and peer relationship of black adolescents: A function of

parental marital status or perceived family conflict. Journal of Community Psychology, 12, 222-229.

Easterbrooks, M. A., & Emde, R. N. (1988). Marital and parent-child relationships: The role of affect in the family system. In R. A. Hinde & J. Stevenson-Hinde (Eds.), Relationships within families: Mutual influences (pp. 83-103). Oxford: Clarendon Press.

Emde, R. N., & Easterbrooks, M. A. (1986). Perinatal risk, attachment, and the transition to parenthood. In W. K. Frankenburg, R. N. Emde, & J. Sullivan (Eds.), Early identification of children at risk: An international perspective. New York: Plenum.

Emery, R. E. (1982). Interparental conflict and the children of discord and divorce. Psychological Bulletin, 92(2), 310-330.

Emery, R. E. (1988). Marriage, divorce, and children's adjustment. Newbury Park, CA: Sage Developmental Clinical Psychology and Psychiatric Series.

Emery, R. E., & O'Leary, K. 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, K. D. (1984). Marital discord and child behavior problems in a non-clinic sample. Journal of Abnormal Child Psychology, 12(3), 411-420.

Enos, D. M., & Handal, P. J. (1986). The relation of parental marital status and perceived family conflict to adjustment in white adolescents. Journal of Consulting and Clinical Psychology, 54(6), 820-824.

Fauber, R., Forehand, R., McCombs Thomas, A., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent

adjustment in intact and divorced families: The role of disrupted parenting. Child Development, 61, 1112-1123.

Flannery, R. B., & Flannery, G. J. (1990). Sense of coherence, life stress, and psychological distress: A prospective methodological inquiry. Journal of Clinical Psychology, 46(4), 415-420.

Forehand, R., McCombs, A., Long, N., Brody, G., & Fauber, R. (1988). Early adolescent adjustment to recent parental divorce: The role of interparental conflict and adolescent sex as mediating variables. Journal on Consulting and Clinical Psychology, 56, 624-627.

Forehand, R., Wierson, M., Thomas, A. M., & Armistead, L. (1991). The role of family stressors and parent relationships on adolescent functioning. Journal of the American Academy of Child and Adolescent Psychiatry, 30(2), 316-322.

Furstenberg, F. F., & Allison, P. D. (1985). How marital dissolution affects children: Variations by age and sex. University of Pennsylvania.

Glick, P. C., & Sung-Ling, L. (1986). Recent changes in divorce and remarriage. Journal of Marriage and the Family, 48(4), 737-747.

Goldberg, W. A., & Easterbrooks, M. A. (1984). Role of marital quality in toddler development. Developmental Psychology, 20, 504-514.

Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. Psychological Bulletin, 108(2), 267-290.

Grych, J. H., & Fincham, F. D. (1992). Interventions for children of divorce: Toward greater integration of research and action. Psychological Bulletin, 111(3), 434-454.

Guidabaldi, J., Cleminshaw, H. K., Perry, J. D., & McLaughlin, C. S. (1983). The impact of parental divorce on children: Report on the nationwide NASP study. School Psychology Review, 12(300-323).

Guidabaldi, J., & Perry, J. D. (1985). Divorce and mental health sequelae for children: A two-year follow-up of a nationwide sample. Journal of the American Academy of Child Psychiatry, 24(5), 531-537.

Guidubaldi, J., Cleminshaw, H. K., Perry, J. D., Nastasi, B. K., & Lightel, J. (1986). The role of selected family environment factors in children's post-divorce adjustment. Family Relations, 35, 141-151.

Herzog, E., & Sudia, C. (1973). Children in fatherless families. In B. M. Caldwell & H. N. Ricciuti (Eds.), Review of child development research (pp. 141-232). Chicago: University of Chicago Press.

Hess, R., & Camara, K. (1979). Post-divorce family relationships as mediating factors in the consequences of divorce for children. Journal of Social Issues, 35(4), 79-96.

Hetherington, E. M. (1972). Effects of father absence on personality development in adolescent daughters. Developmental Psychology, 7, 313-326.

Hetherington, E. M. (1979). Divorce: A child's perspective. American Psychologist, 34(10), 851-858.

Hetherington, E. M. (1989). Coping with family transitions: Winners, losers, and survivors. Child Development, 60(1-14).

Hetherington, E. M. (1993). An overview of the Virginia longitudinal study of divorce and remarriage with a focus on early adolescence. Journal of Family Psychology, 7(1), 39-56.

Hetherington, E. M., Cox, M., & Cox, R. (1976). Divorced fathers. Family Coordinator, 25, 417-428.

Hetherington, E. M., Cox, M., & Cox, R. (1978). The aftermath of divorce. In J. H. Stevens & M. Mathews (Eds.), Mother/child, father/child relationships (pp. 149-176). Washington, DC: National Association for the Education of the Young.

Hetherington, E. M., Cox, M., & Cox, R. (1982). Effects of divorce on parents and children. In M. E. Lamb (Ed.), Nontraditional families: Parenting and child development (pp. 233-288). Hillsdale, NJ: Lawrence Erlbaum Associates.

Hetherington, E. M., Stanley-Hagen, M., & Anderson, E. R. (1989). Marital transitions: A child's perspective. American Psychologist, 44(2), 303-312.

Itkin, W. (1952). Some relationships between intra-family attitudes and preparental attitudes toward children. Journal of Genetic Psychology, 80, 221-252.

Jenkins, J. M., & Smith, M. A. (1991). Marital disharmony and children's behavior problems: Aspects of a poor marriage that affect children adversely. Journal of Child Psychology and Psychiatry and Allied Disciplines, 32(5), 793-810.

Johnson, P. L., & O'Leary, K. D. (1987). Parental behavior patterns and conduct disorders in girls. Journal of Abnormal Child Psychology, 15(4), 573-581.

Johnston, J. R., Campbell, L. E. G., & Mayes, S. S. (1985). Latency children in post-separation and divorce disputes. Journal of the American Academy of Child Psychiatry, 24(5), 563-574.

Johnston, J. R., Gonzales, R., & Campbell, L. E. G. (1987). Ongoing post-divorce conflict and child disturbance. Journal of Abnormal Child Psychology, 15, 493-509.

Jouriles, E. N., Pfiffner, L. J., & O'Leary, S. G. (1988). Marital conflict, parenting, and toddler conduct problems. Journal of Abnormal Child Psychology, 16(2), 197-206.

Kalter, N., & Rembar, J. (1981). The significance of a child's age at the time of parental divorce. American Journal of Orthopsychiatry, 51(1), 85-100.

Kelly, J. B., & Wallerstein, J. S. (1976). The effects of parental divorce: Experiences of the child in early latency. American Journal of Orthopsychiatry, 46(1), 20-32.

Kobasa, S. C. (1979). Stressful life events, personality, and health. Journal of Personality and Social Psychology, 37(1), 1-11.

Kobasa, S. C. (1982). The hardy personality: Toward a social psychology of stress and health. In G. S. Sanders & J. Suls (Eds.), Social psychology of health and illness. Hillsdale, NJ: Lawrence Erlbaum Associates.

Kraus, S. (1979). The crisis of divorce: Growth promoting or pathogenic? Journal of Divorce, 3(2), 107-119.

Kurdek, L. A., Blisk, D., & Siesky, A. E. (1981). Correlates of children's long-term adjustment to their parent's divorce. Developmental Psychology, 17(5), 565-579.

Levitin, T. E. (1979). Children of divorce: An introduction. Journal of Social Issues, 35(4), 1-25.

Long, N., & Forehand, R. (1987). The effects of parental divorce and parental conflict on children: An overview. Developmental and Behavioral Pediatrics, 8, 292-296.

Long, N., Forehand, R., Fauber, R., & Brody, G. H. (1987). Self-perceived and independently observed competence of young adolescents as a function of parental marital conflict and recent divorce. Journal of Abnormal Child Psychology, 15(1), 15-27.

Long, N., Slater, E., Forehand, R., & Fauber, R. (1988). Continued high or reduced interparental conflict following divorce: Relation to young adolescent adjustment. Journal of Consulting and Clinical Psychology, 56(3), 467-469.

Lupenitz, D. A. (1979). Which aspects of divorce affect children. Family Coordinator, 28, 79-85.

Maccoby, E. E., Buchanan, C. M., Mnookin, R. H., & Dornbusch, S. M. (1993). Postdivorce roles of mothers and fathers in the lives of their children. Journal of Family Psychology, 7(1), 24-38.

Magen, Z., Birenbaum, M., & Ilovich, T. (1992). Adolescents from disadvantaged neighborhoods: Personal characteristics as related to volunteer involvement. International Journal for the Advancement of Counseling, 15(1), 47-59

Margalit, M. (1985). Perception of parent's behavior, familial satisfaction, and sense of coherence in hyperactive children. Journal of School Psychology, 23(4), 355-364.

McCord, J., McCord, W., & Thurber, E. (1962). Some effects of parental absence on male children. Journal of Abnormal and Social Psychology, 64, 361-369.

Nye, F. (1957). Child adjustment in broken and in unhappy unbroken homes. Marriage and Family Living, 19, 356-361.

Parke, R. D. (1979). Perspectives on father-infant interaction. In J. D. Osofsky (Ed.), Handbook of infant development (pp. 549-590). New York: Wiley.

Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia.

Peterson, A. C., & Hamburg, B. A. (1986). Adolescence: A developmental approach to problems and psychopathology. Behavior Therapy, 17, 480-499.

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

Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems. Journal of Abnormal Child Psychology, 8(3), 287-295.

Raschke, H., & Raschke, V. (1979). Family conflict and children's self concepts: A comparison of intact and single-parent families. Journal of Marriage and the Family, 41(367-374).

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80.

Rutter, M. (1971). Parent-child separation: Psychological effects on the children. Journal of Child Psychology and Psychiatry and Allied Disciplines, 12, 233-260.

Rutter, M. (1980). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), Primary prevention: III. Promoting social competence and coping in children. Hanover, NH: University Press of New England.

Rutter, M. (1981). Attachment and the development of social relationships. In Rutter (Ed.), Scientific foundations of developmental psychiatry. Baltimore: University Park Press.

Rutter, M., Yule, B., Quinton, D., Rowlands, O., Yule, W., & Berger, M. (1974). Attainment and adjustment in two geographical areas: III. Some factors accounting for area differences. British Journal of Psychiatry, 125, 520-533.

Sagy, S., Antonovsky, A., & Adler, I. (1990). Explaining life satisfaction in later life: The sense of coherence model and activity theory. Behavior, Health, and Aging, 1(1), 11-25.

Santrock, J. W., & Warshak, R. A. (1979). Father custody and social development in boys and girls. Journal of Social Issues, 35(4), 112-125.

Seligman, M. E. P. (1975). Helplessness: On depression, development, and death. San Francisco: W. H. Freeman.

Shaw, M. E., & Wright, J. M. (1967). Scales for the measurement of attitudes. New York, St. Louis, San Francisco: McGraw-Hill Book Company.

Snyder, D., Klein, M. A., Gdowski, C. L., Faulstich, C., & LaCombe, J. (1988). Generalized dysfunction in clinic and nonclinic families: A comparative analysis. Journal of Abnormal Child Psychology, 16, 97-109.

SPSS Inc. (1988). SPSS-X user's guide. (Third ed.). Chicago, IL: Author.

Stolberg, A. L., Camplair, C., Currier, K., & Wells, M. (1987). Individual, familial and environmental determinants of children's post-divorce adjustment and maladjustment. Journal of Divorce, 11, 211-218.

Tschann, J. M., Johnston, J. R., Kline, M., & Wallerstein, J. S. (1989). Family process and children's functioning during divorce. Journal of Marriage and the Family, 51, 431-444.

United States Bureau of the Census (1991). Statistical abstract of the United States: 1991. (111 ed.). Washington, DC: Author.

Wallerstein, J. S. (1983a). Children of divorce: Stress and developmental tasks. In N. Garmezy & M. Rutter (Eds.), Stress, coping, and development in children (pp. 265-302). New York: McGraw-Hill.

Wallerstein, J. S. (1983b). Children of divorce: The psychological tasks of the child. American Journal of Orthopsychiatry, 54(3), 444-458.

Wallerstein, J. S. (1985). Children of divorce: Preliminary report of a ten-year follow-up of older children and adolescents. Journal of the American Academy of Child Psychiatry, 24(5), 545-553.

Wallerstein, J. S. (1987). Children of divorce: Report of a ten-year follow-up of early latency-age children. American Journal of Orthopsychiatry, 57(2), 199-211.

Wallerstein, J. S., & Corbin, S. B. (1989). Daughters of divorce: Report from a ten-year follow-up. American Journal of Orthopsychiatry, 59(4), 593-604.

Wallerstein, J. S., & Kelly, J. B. (1976). The effects of parental divorce: Experiences of the child in later latency. American Journal of Orthopsychiatry, 46(1), 256-269.

Wallerstein, J. S., & Kelly, J. B. (1979). Children and divorce: A review. Social Work, 24, 468-475.

Wallerstein, J. S., & Kelly, J. B. (1980). Surviving the breakup: How children actually cope with divorce. New York: Basic Books.

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

Wierson, M., Forehand, R., & McCombs, A. (1988). The relationship of early adolescent functioning to parent-reported and adolescent-perceived interparental conflict. Journal of Abnormal Child Psychology, 16(6), 707-718.

Zaslow, M. J. (1989). Sex differences in children's response to parental divorce: 2. Samples, variables, ages, and sources. American Journal of Orthopsychiatry, 59(1), 118-141.