

A Longitudinal Examination of
Father-Adolescent Relations

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Abstract

Despite the growing recognition that the father-child relationship is vital to the development of the child and of the father (Lamb, 1987), little systematic research has addressed changes in father-child relations during adolescence. To overcome this shortcoming, the present study charted changes in aspects of father-adolescent relations over a period of two and one-half years. In addition, this study examined concurrent and reciprocal linkages between father-adolescent relations and the personal characteristics (specifically, the psychological well-being) of fathers and adolescents.

Data for the present study consisted of adolescent and father ($N = 71$) self-reports from a longitudinal questionnaire study spanning 30 months. Data collection occurred on four occasions when the adolescents were 11.6, 12.1, 12.6 and 14.1 years of age (in February 1988, August 1988, February 1989, and August 1990). Measures of father-adolescent relations, father psychological distress, and adolescent self-image were obtained at each time of measurement.

Data analysis proceeded in three steps. First, the results showed that fathers decreased their mean level of

involvement in child care as their adolescents matured. Fathers' expressions of acceptance toward their adolescents also decreased over the two and one-half years, as did the level of conflictual interactions. Second, fathers who experienced higher distress were likely to experience more conflict with their adolescents as compared to fathers who experienced lower distress. Adolescents who held positive views about themselves were more likely to have accepting father-adolescent relations and to experience less conflict with their fathers. These results remained after controlling for marital adjustment and socioeconomic status. Third, the results of two stage-least squares analyses (2SLS) suggested that the effects between father distress and father-adolescent conflict were unidirectional rather than bi-directional with father distress affecting conflict. Adolescent self-image was reciprocally linked to father-adolescent relations. A positive adolescent self-image appeared to increase the likelihood of more accepting and less conflictual father-adolescent relations. In turn, higher acceptance and lower conflict contributed to more positive adolescent self-image. These results are discussed in terms of the changing functions of fathers in the lives of their adolescent children.

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DEDICATION

This dissertation is dedicated to Kenneth Alameda,
whose warmth and presence in my life
are always felt.

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CHAPTER I
INTRODUCTION

The interactions that a child has with a parent form an evolving relationship that plays an important role in both of their lives. The frequency and diversity of interactions as well as the qualitative aspects of these interactions (e.g., degree of affection, joy, openness, antagonism, withdrawal) are likely to vary considerably according to circumstance and over time (Martin, 1975). Furthermore, this unfolding drama between child and parent may be shaped by the personal characteristics that each parent and child brings to the relationship. Thus, the relationship continues to evolve as a result of a continuing dynamic influence between individual characteristics and relationship characteristics (Hinde & Stevenson-Hinde, 1987; Maccoby, 1984).

Developmental psychologists have long been interested in interpersonal relationships within the family as part and parcel of a child's development. Almost 90 years ago Hall (1904) argued that biological and social changes that occur during adolescence result in stormy and stressful relations between parents and children. Although the ubiquity of this Sturm und Drang hypothesis has not found empirical support (e.g., Hill, 1987; Offer, 1987), there has been a proliferation of studies documenting the significance of familial relationships for healthy child and adolescent

development (for reviews see Maccoby & Martin, 1983; Steinberg, 1990).

The importance of familial relationships continues to be a central component of contemporary theories of life-span developmental psychology (Lerner, 1991; Lerner & Kreppner, 1987; Lerner, Spanier, & Belsky, 1978), ecological theories of human development (Bronfenbrenner, 1979), and ethological theories of development (Hinde, 1979; Hinde & Stevenson-Hinde, 1987). Common to these contemporary theories is the idea that human ontogeny both drives, and is driven by, the dynamic interplay between developing individuals within developing relationships. In other words, personal and age-related characteristics of individuals shape the nature and extent of relationships in which they are involved. In turn, the nature and extent of interpersonal relationships influence individuals' personal growth. With regard to child development, Hinde and Stevenson-Hinde (1987) have argued that interpersonal relationships are a vital part of a child's environment, thus "making it necessary to treat the child not as an isolated entity but as a social being, formed by and forming part of a network of relationships which are crucial to its integrity" (pp. 2-3).

The relationship that children have with their fathers is one such vital relationship. The past two decades has seen an increase in scholarly work devoted to fathers' contributions to children's development. The steady

increase of mothers entering the paid labour market and the women's movement have persuaded social scientists to re-evaluate fathers' role in the family. Thus, fathers are no longer viewed only as breadwinners and disciplinarians but as nurturing participants in child-rearing (Bronstein, 1988; Lamb, 1987). In contrast to being the forgotten parent in earlier child development literature (e.g., Bowlby, 1951), there are now volumes documenting the nature and extent of father-child relations and the impact of father-child relations on children's development (Bronstein & Cowan, 1988; Lamb, 1976, 1981, 1986, 1987; Lamb & Sagi, 1981; Lewis & Salt, 1986; Russell, 1983).

Despite a growing recognition among social scientists of the importance of fathers in the lives of their children, much remains to be learned. In particular, the majority of research has focused on the relations between fathers and their infants or toddlers. Less is known about fathers' relations with their adolescent children. The study of father-adolescent relations is important given the extant literature documenting the functional significance of parent-child relations for healthy development during middle childhood and early adolescence. Interactions that are characterized by expressions of warmth, firm discipline, and low levels of psychological control (i.e., authoritative parenting) have been shown to be associated with social competence and positive self-regard in children (Maccoby &

Martin, 1983). Authoritative parent-child relations seem to enhance adolescents' school performance (Dornbusch, Ritter, Leiderman, & Roberts, 1987) and to limit their engagement in problem behaviour (Baumrind, 1985, 1991; Galambos & Maggs, 1991; Kandel, 1991; Patterson, 1986). Furthermore, the positive consequences of warm and firm parent-child relations seem to be similar across socioeconomic groups, family structures, sex, and age (Baumrind, 1985; Steinberg, 1990). However, the majority of studies have examined either mothers and/or younger children (e.g., Dornbusch et al., 1987; Patterson, 1986). Further research is needed to determine the extent to which father-adolescent relations contribute to healthy psychosocial development in adolescents.

The study of father-adolescent relations is also particularly important given the rapid and pronounced physical, behavioural, and social changes that children experience during adolescence (Collins, 1990; Hill, 1987; Petersen, 1988). Such change is believed to herald a change in the nature and extent of father-child relations. For example, Steinberg (1987) found that pubertal maturation was associated with increased distance and increased conflict in parent-adolescent relations. In addition to changes experienced by children during adolescence, parents also experience changes that can influence their relations with their adolescent children. For instance, Hill (1987) argued

that parents' midlife development may be associated with how they treat their adolescent children. In other words, the age-related transitions that adolescents and fathers experience are likely to co-occur with changes in father-adolescent interactions. Some argue that adolescence may be a time during which parents and children "renegotiate" their relationship, shifting from unilateral authority toward peer-like mutuality (Grotevant & Cooper, 1988). The social, psychological, and physical changes that fathers and adolescents are experiencing are likely to influence this process.

Our understanding of father-adolescent relations, however, is hampered by a lack of longitudinal research. In other words, most work has sought only to explain age differences in father-child relations, not intraindividual change in this relationship. Early longitudinal studies of parenting showed that mother-child relations change as a function of the age of the child (Baldwin, 1946; Schaefer & Bayley, 1963). Recent work has pointed to both continuity, reflected by moderate rank-order stability, and change, indicated by mean-level shifts in certain aspects of parent-child relations from early childhood to early adolescence (McNally, Eisenberg, & Harris, 1991; Roberts, Block, & Block, 1984). In general these studies suggest that as children grow older, parents show less physical affection, become less protective, and spend less time with their

children. These authors and others (e.g., Maccoby, 1984) contend that changes in parent-child relations reflect changes in child competencies and needs as well as changes in parents' needs and expectations. Because this research has focused on either younger children (Roberts et al., 1984) or only mothers (McNally et al., 1991), little is known about the mechanisms underlying change in father-adolescent relations.

In addition to age-related influences on father-adolescent relations (e.g., physical and social changes associated with adolescent transitions), contextual and personal characteristics of fathers and adolescents may influence father-adolescent relations. Belsky (1984) proposed a process model of parenting in which parenting behaviour was determined by three forces: (a) personal and psychological resources of the parent (e.g., psychological well-being); (b) characteristics of the child (e.g., temperament); and (c) contextual sources of stress and support (e.g., work stress). Following Belsky's lead, researchers have begun to propose and test models linking personal and contextual factors with constructive and destructive parenting behaviour (Simons et al., 1990; Small & Eastman, 1991). This work represents an important step in recognizing that parent-child relations are not mutable and fixed but rather, are influenced by relations and events internal and external to parent-child interactions. Little

research, however, has examined both the adolescent's and the father's contribution to the father-adolescent relationship. In this regard, we might expect both partners' psychological well-being to shape the course of father-adolescent relations.

In summary, contemporary developmental theories view evolving interpersonal relations within the family as a central aspect of human development. Despite the growing recognition that the father-child relationship is vital to the development of the child and of the father, little systematic research has addressed changes in father-child relations during adolescence. To overcome this shortcoming, the present study charted changes in aspects of father-adolescent relations over a period of two and one-half years. In addition, this study examined concurrent and reciprocal linkages between father-adolescent relations and the personal characteristics (specifically, the psychological well-being) of fathers and adolescents. It is believed that both fathers and adolescents contribute to change in their relationship and, in turn, are affected by this relationship. The following questions were addressed:

- 1) To what extent do selected aspects of father-adolescent relations (quantity of interactions, quality of interactions, and interpersonal perceptions) change during early adolescence?

2) To what extent are father-adolescent relations associated with personal characteristics of fathers (psychological distress) and of adolescents (self-image)?

3) Are the linkages between father-adolescent relations and personal characteristics of fathers and adolescents reciprocal?

CHAPTER II

LITERATURE REVIEW

The purpose of this chapter is to review the relevant literature regarding father-adolescent relations. First, an overview of Hinde's (1979, 1987; Hinde & Stevenson-Hinde, 1987) perspective on interpersonal relationships is presented to introduce the conceptual underpinning of the present study. Second, literature concerning change in father-adolescent relations is presented to provide empirical evidence of transformations in father-adolescent relations. Third, literature linking fathers' psychological distress and adolescents' sense of well-being (e.g. self-image) with father-adolescent relations is reviewed in order to illustrate how individual characteristics are associated with this relationship. Finally, predictions that guided the present study are presented.

Hinde's Interpersonal Relationships Perspective

Hinde's recent formulations for studying interpersonal relationships provide a useful framework for examining changes in father-child relations during adolescence (Hinde, 1979, 1987; Hinde & Stevenson-Hinde, 1987). According to this perspective, interpersonal or close relationships may be characterized by: (a) interactions between two individuals on successive occasions over time; in which (b) the nature of the interactions depends on both of the individuals involved; and (c) the relationship affects both

individuals over a considerable period of time. This perspective views relationships as multidimensional and continually changing over time. In addition, relationships influence and are influenced by characteristics of the individuals involved. The following sections examine each of these issues in turn.

Relationships are Multidimensional

Simply speaking, a relationship may be defined as two individuals interacting on successive occasions over time (Hinde, 1979, 1987; Hinde & Stevenson-Hinde, 1987). In order to describe any particular relationship, however, it is useful to consider the multiple ways that individuals interact. For example, Hinde (1987) posited several aspects of relationships that included content of interaction, diversity of interaction, reciprocity of interactions, intimacy, interpersonal perceptions of each other, and commitment to the relationship. Collins and Russell (1991) described parent-child relations in terms of three global domains: quantity of interactions, quality of interactions, and interpersonal perceptions pertinent to the relationship.

Quantity of interactions refer to the frequency of interchanges in the relationship. With regard to father-child relations, the quantity of interaction has usually been assessed through the absolute and relative (as compared to mothers) frequency and time that fathers interact with their children. The frequency and time fathers spend

interacting with their children have been considered to be important for father-adolescent relations in that they afford opportunities for fathers to display and receive warmth and affection and thus develop a closer bond with their children (Lamb, 1987). Indeed, Almeida and Galambos (1991) found that fathers who spent more time with their children expressed higher levels of acceptance toward their children than fathers who spent less time with their children.

The quality of the relationship can be viewed in terms of the positive and negative tenor of the interactions (i.e., affective quality) and the content of the interactions. Common affective qualities of a relationship include the degree of warmth and acceptance expressed by the father and child toward each other. The content of interactions (e.g., caregiving versus physical play, and instrumental versus achievement-oriented activities) has also been examined (see Collins & Russell, 1991 for a review). The level of conflict between fathers and their adolescents is another important quality of father-child relations. It is a popular belief that the level of bickering and disagreements between parents and children increases during early adolescence (Montemayor, 1982). However, the scarcity of longitudinal investigations precludes a high degree of confidence in the degree or even the direction of change in father-adolescent conflict during

adolescence (Galambos & Almeida, 1992).

Third, according to Collins and Russell (1991), interpersonal perceptions pertinent to father-adolescent relations refer to discrepancies between how fathers and adolescents view their relationship. For example, to what extent do fathers see their relationship as the adolescents see the relationship and vice-versa? Fathers and adolescents may not perceive their relations with each other in similar ways. A father's reports of warm and accepting behaviour toward his adolescent child may not be perceived as accepting behaviour by the adolescent but rather as attempts to assert control. A high discrepancy between fathers' and adolescents' perceptions of their relations may be indicative of a lack of understanding for the other's point of view. This, in turn, may foster feelings of apathy, resentment, or insensitivity toward the other individual (Hinde, 1987).

Change in Relationships

Relationships are not only multidimensional but are also in a state of flux. Indeed, a primary consideration of the interpersonal relationships perspective is that relationships continually evolve. According to Hinde (1987):

In whatever way it is described, it must be remembered that a relationship is not a static entity but a process in continuous creation through time. Thus any

description must refer to a limited time span, and we must not forget that the future course of a relationship may be affected by events before the period in which it was studied. Indeed changes in dimensions may be as important for prognosis as the dimensions themselves. (p. 38)

Thus, in order to understand any particular relationship emphasis must be placed not only on multiple aspects of the relationship but also on how and to what extent the aspects of the relationship change over time. Furthermore, special attention needs to be given to the reciprocal influence between changes in relationships and changes in individuals.

Individuals and Relationships

A fundamental tenet of the interpersonal relationships perspective is that the evolving relationship is continually formed and shaped by the personal characteristics and experiences that the two individuals bring to the dyad (Hinde, 1987; Hinde & Stevenson-Hinde, 1987; Kelly et al., 1983). Hinde and Stevenson-Hinde (1987) argued:

Since interactions and relationships depend on both participants, data obtained from observations of interactions cannot be ascribed solely to the characteristics of one or the other participant. Thus how quickly a mother goes to a crying baby is not solely a measure of her sensitivity, but depends in part on how often the baby has cried recently. And how

often a baby cries depends in part on how quickly the mother goes to it when it does so. (p. 2)

Similarly, a father's warmth and responsiveness expressed toward his adolescent child is not only indicative of the father's fondness for and acumen of his child but also depends on characteristics of the child that may elicit such feelings. In addition, the father's expression of warmth may also depend on his characteristics and past experiences. Elder, Van Nguyen, and Caspi (1985), for example, found that fathers who experienced dramatic income loss during the years of the Great Depression were more likely to express rejecting behaviour towards their daughters (but not their sons). This effect was even greater if the daughter was physically unattractive.

Not only does the nature of the relationship depend on the characteristics of the individuals involved, but individuals' characteristics are also influenced, to a certain extent, by the relationships that they experience. In this way individuals transform and become transformed by their relations with others. It is this dynamic interplay of influence between individuals and relationships that is at the core of the relationships perspective (Hinde & Stevenson-Hinde, 1987). Given the reciprocal influence between individuals and relationships, it is important to consider how individual characteristics contribute to change in a relationship and how change in a relationship

contributes to change in individual characteristics.

In sum, Hinde's perspective of interpersonal relationships describes relationships as multidimensional and continually evolving. In addition, special consideration is given to the dynamic interplay between characteristics of individuals and aspects of relationships in which they are involved. The proposition that individuals shape, and are shaped by, their evolving relations with others is consistent with current life-span and ecological theories of human development (Baltes, 1987; Bronfenbrenner, 1979; Lerner, 1991). According to these perspectives, psychological change is not restricted to childhood and adolescence, but continues throughout adulthood. Hence, adolescents' and fathers' psychological development is open to change. Furthermore, an emphasis is placed on the dynamic interplay between the developing individual and the changing context in which the developing person is embedded. Activities and interactions within the family are considered to be a primary context for individual development (Bronfenbrenner, 1982; Lerner et al., 1978). Consistent with these assertions is the idea that changes in the individual always occur in dynamic connection with changes in the context of which that individual is a part (e.g., family relations). Thus individuals, through their interactions and influence over their physical and social contexts, are believed to shape their own development.

Indeed, it has been argued by life-span psychologists that change in individual-context relations form the basic unit of change for development (Lerner, 1991).

Interpersonal Relationship Perspective and Father-Adolescent Relations

Applied to the study of father-adolescent relations, an interpersonal relationships perspective focuses on multiple aspects of father-adolescent relations. Accordingly, the present study examined three domains of father-adolescent relations. The quantity of interaction was measured by the time and frequency that fathers were involved in child care. The quality of interaction was assessed via father and adolescent reports of the father's expression of acceptance and warmth toward his adolescent child and father reports of the level of father-adolescent conflict. Interpersonal perceptions associated with the relationship were measured by the discrepancy between the father's report and the adolescent's report of the father's expression of acceptance.

Second, to more fully understand these three domains of father-adolescent relations, it is useful to examine the extent to which they change during the adolescent years. Hence, mean-level and rank-order changes in quantity, quality, and perceptual discrepancy of father-adolescent relations were charted over a period of two and one-half years from Grades 6 to 8.

Finally, an interpersonal relationships perspective draws attention to the dynamic interplay between individual characteristics and aspects of the relationship. With regard to changes in father-adolescent relations, the present study examined whether individual characteristics of fathers (i.e., psychological distress) and adolescents (i.e., self-image) contributed to aspects of father-adolescent relations. In turn, this study explored the extent to which aspects of father-adolescent relations contributed to father psychological distress and adolescent self-image. To gain a better understanding of these issues the following sections review literature that addresses: (a) change in father-adolescent relations; and (b) linkages of father-adolescent relations with fathers' psychological distress and adolescents' psychological well-being.

Change in Father-Adolescent Relations

It is a common assumption among developmental psychologists that the ways that parents and children interact undergo transformations as the child matures (Maccoby & Martin, 1983). Obviously, father-toddler relationships differ from father-adolescent relationships quite substantially. Early in a child's development, father-child interactions are likely to revolve around doing things for the child (e.g., changing, feeding, bathing). As the child develops, these interactions shift toward doing things with the child (e.g., playing games, doing chores,

helping with homework). By the time the child reaches adolescence, father-child relations may reflect the fact that the child is increasingly involved in relations outside of the family. Decreased frequency of interactions and expression of support are indicative of relations between parents and children during this time (Csikszentmihalyi & Larsen, 1984; Montemayor & Brownlee, 1987; Steinberg, 1987, 1988). Thus, changes in father-child relations from infancy to adolescence may reflect a shift in unilateral authority and regulation from parent to child toward a system of coregulation between parent and child (Maccoby, 1984).

In this way the changes that occur in father-adolescent relations can be viewed as part of an adaptational process in which both father and adolescent adjust to changes in the characteristics of the adolescent. Such adjustments are believed to be manifested in father-child relations in terms of increased emphases on independent behaviour, responsibility, and achievement (Maccoby, 1984; Martin, 1975; Roberts, Block, & Block, 1987). Thus, rapid and pronounced physical, behavioural, and social changes that children experience during adolescence are believed to create opportunities for change in the nature and extent of father-adolescent relations (Collins & Russell, 1991; Hill, 1987; Petersen, 1988).

Despite these speculations regarding developmental aspects of parent-adolescent relations, relatively little

research has examined changes in parent-child relations during adolescence longitudinally. Fewer studies have addressed changes in father-adolescent relations across time. To date research has focused on either younger children (Roberts et al., 1984) or mothers (Baldwin, 1946; McNally et al., 1991; Schaefer & Baley, 1963). Thus, empirical evidence regarding change in father-adolescent relations is either inferred from studies using cross-sectional data obtained from fathers and/or adolescents (different ages at one point in time) or from longitudinal studies of mother-adolescent relations. The following sections present empirical findings that imply changes in father-adolescent relations in terms of changes in quantity of interaction, quality of interactions, and interpersonal perceptions pertinent to the relationship.

Changes in the Quantity of Interactions

Changes in the quantity of father-adolescent interactions seem to reflect adolescents' increasing autonomy. As children become more involved in relations and experiences outside of the family, the opportunities for interactions between fathers and adolescents might diminish. Thus, there may be a general trend toward less contact between father and child as the child matures. In an early longitudinal study using home observations of 153 mothers with younger children, Baldwin (1946) observed that mothers maintained less physical contact with their children when

they were nine than when they were three. Similarly, DeLuccie and Davis' (1990) cross-sectional data consisting of the reports of 177 fathers on the frequency of their participation in child-related activities showed that fathers of 16-year-olds were less involved in child care (frequency of caregiving, recreational involvement, school-related involvement) than fathers of 8-year-olds or fathers of 4-year-olds. In another study, Montemayor and Brownlee (1987) interviewed 61 adolescents over the telephone asking them to recall the previous day's events. They found that older adolescents (Grades 8 to 12) reported spending less time with their fathers than younger adolescents (Grades 6 to 7). These findings are consistent with other studies showing a general decrease in adolescents' participation in family activities during early and middle adolescence (Csikszentmihalyi & Larsen, 1984; Hill, Holmbeck, Marlow, Green, & Lynch, 1985a, 1985b).

Changes in the Quality of Interactions

Changes in father-adolescent relations may also be seen in the quality of interactions. On average, relations between fathers and their adolescents are positive and remain positive during adolescence (Hill, 1987; Offer, 1987; Petersen, 1988; Steinberg, 1990). At the same time, age-related variations in the expression of affect and control can be found. Indeed, McNally et al. (1991) used longitudinal data from 32 mothers who provided self-reports

of child rearing behaviours; the results showed that mothers reported increasing levels of negative affect toward sons and decreasing levels of warmth and increasing assertions of control toward sons and daughters from ages 7 to 16. However, there were no mean-level changes in mothers' reports of allowing independence, using non-physical punishment, providing rational guidelines, or enjoying their child. In addition, mothers' reports of affect demonstrated a high degree of stability while their expressions of control showed instability across the nine years.

With respect to age differences in affect and control in father-child relations, DeLuccie and Davis' (1990) cross-sectional study found that fathers of preschoolers (age 4) were more accepting of their children than fathers of school-aged children (age 8) or adolescents (age 16) based on fathers' self-reported parental behaviours as measured by Schaefer's (1965) Children's Report of Parental Behavior Inventory (CRPBI). These fathers did not differ in their expressions of psychological control nor their expressions of firm discipline. However, fathers of the adolescent children reported being more satisfied with their parenting performance than fathers of younger children. Higher parenting satisfaction among fathers of older children may be indicative of increasing mutuality between parents and adolescents that occurs over time (Grotevant & Cooper, 1985).

The level of father-adolescent conflict (e.g., disagreements and bickering) is also expected to change during early adolescence. It is a popular belief that conflicts between parents and adolescents peak during early adolescence and later decline (Montemayor, 1983). Some cross-sectional studies have supported this notion (Clark-Lempers, Lempers, & Ho, 1991; Steinberg & Hill, 1978), while other cross-sectional studies have not found age differences in parent-adolescent conflict (e.g., Smetana, 1989). Findings from longitudinal studies are also inconsistent with respect to change in parent-adolescent conflict during early adolescence. Steinberg (1989) found that pubertal maturation during early adolescence was associated with increases in father-daughter conflict over the span of one year. In contrast, in previous analyses conducted on the present sample, parent-adolescent conflict over household chores, appearance, and politeness decreased from the time adolescents were 11 1/2 to 14 years old (Galambos & Almeida, 1992).

Evidence of age-related changes in the quality of interactions between fathers and adolescents is also provided by a series of studies examining the linkage between pubertal maturation and emotional distance in parent-adolescent relations (Hill et al., 1985a, 1985b; Steinberg, 1987). Steinberg's (1987) "distancing hypothesis" asserted that adolescents' biological and

physical maturation involves adaptations within the family system that may result in increased assertiveness and decreased supportiveness among family members. To test this hypothesis, 204 mothers, fathers, and adolescents completed self-report measures of closeness, conflict, and adolescent autonomy. In addition, observer estimates of pubertal status and pubertal timing based on observable secondary sex characteristics (e.g., facial hair, chest and hip development) were obtained. Although the associations between pubertal maturation and parent-adolescent relations were larger in magnitude and number for mother-adolescent relations, significant linkages were also found between adolescent's physical maturation and father-adolescent relations. For boys, pubertal maturation was associated with decreased paternal acceptance, less calm communications with fathers, and fathers granting more permissive decision-making. For girls, pubertal maturation was linked to decreased paternal acceptance, less cohesion with fathers, and more restrictive decision-making. This study was important in showing how one age-related phenomenon, pubertal maturation, may be associated with aspects of father-adolescent relations. However, the findings of increased emotional distance and decreasing acceptance between fathers and their adolescents during early adolescence could be due to a variety of factors associated with the numerous transitions of adolescence (Armentrout &

Burger, 1972; Brooks-Gunn & Zahaykevich, 1989; Collins, 1990). In particular, adolescents' increasing autonomy and individuation--the degree to which adolescents assert their individuality--is a prime candidate. As adolescents' activities begin to move away from the family the opportunities for interactions with parents might diminish (Hill & Holmbeck, 1987).

Changes in Interpersonal Perceptions of Father-Adolescent Relations

Interpersonal perceptions of father-adolescent relations may also change over time. Researchers interested in the development of social-cognitive processes during childhood and adolescence have pointed to an increasing complexity in the ways children view themselves and social relationships from middle childhood through adolescence (Damon & Hart, 1982). Accordingly, the ways in which adolescents view their relationships with fathers may also change during the adolescent years. As adolescents refine their social-cognitive abilities and understanding of the rules that govern relationships, adolescents' perceptions of their fathers are likely to change. Although changes in children's perceptions of parent-child relations have been studied extensively (see Maccoby & Martin, 1983 for a review), relatively little research has focused on adolescents and their parents.

Alessandri and Wozniak (1987) examined the agreement

between 42 parents and pre-adolescents (age 10 to 11) and older adolescents (age 15 to 16) concerning beliefs about the child's likely behaviour in 15 hypothetical situations. Their findings indicated that older adolescents more accurately perceived their fathers' beliefs about them than did pre-adolescents. The results of a two-year follow-up study of these children and their parents showed that, in the younger group (then age 12 to 13), the congruency between fathers and their children had significantly increased over the two years (Alessandri & Wozniak, 1989). The older group of adolescents (then age 17 to 18), however, did not change in their awareness of their fathers' beliefs about their behaviour. Taken together, these findings suggest that the period of early adolescence (age 11 to 13) may be a time of change in cognitive markers of father-child relations and that by later adolescence this change may have stabilized.

Additional evidence of changes in cognitive perceptions of father-adolescent relations is provided by Smetana's (1988, 1989) studies of adolescents' and parents' perceptions of parental authority. Based on interviews of 104 parents and adolescents, these studies examined parents' and adolescents' (ages 10-18) views of the legitimacy of parental authority over moral issues (e.g., stealing money); social conventional issues (e.g., performing chores); personal issues (e.g., watching television, choosing

friends); and multifaceted issues (i.e., pertaining to a combination of social conventional and personal issues). The results showed that families of young adolescents were more likely to view all domains as being under the jurisdiction of parental authority than were families of older adolescents. With increasing age of the adolescent, however, both parents and adolescents were more likely to consider personal and multifaceted issues as falling under the jurisdiction of the adolescent. Across all ages, adolescents were more likely to view personal and multifaceted issues as under their own personal jurisdiction than did parents. However, fathers were more likely to relinquish parental authority over personal issues than were mothers.

In a different study of fifth through twelfth graders, Smetana (1989) found that the number of situations that adolescents viewed as falling under their own jurisdiction increased with age while parents continued to view the situations as falling under parental control. Thus, the mismatch between adolescents and parents increased with each adolescent age group. At the same time, however, older adolescents (grade 12) and parents were more likely to recognize each other's opinions than younger adolescents and their parents. Thus, Smetana's work implies that many adolescents and fathers are aware of each other's opinions but may still disagree with each other's point of view.

In sum, developmental theorists have asserted that parent-child relations change as a function of the age of the child. For example, Maccoby (1980) argued that, "the development of the child is a powerful force, enabling or even requiring parents and children to take on new joint agendas and to adapt increasingly to new forms of interaction with each other" (p. 326). Although empirical data on changes in father-adolescent relations are only beginning to appear and are drawn from cross-sectional designs, these findings suggest that quantitative, qualitative, and perceptual aspects of father-adolescent relations undergo transformations during adolescence. These transformations are believed to be concomitant with the physical, cognitive, and social development of the adolescent (Collins, 1990). However, the unique pathways along which different relationships travel depend not only on the age-related characteristics of the adolescent. Personal characteristics of both father and adolescent are likely to play a significant role in the determining the evolution of any particular father-adolescent relationship. The following sections explore how characteristics of fathers and adolescents may contribute to change in father-adolescent relations.

Personal Characteristics and Father-Adolescent Relations

A fundamental tenet of the interpersonal relationships perspective is that the evolving relationship is continually

formed and shaped by the personal characteristics and experiences that the two individuals bring to the dyad (Hinde, 1987; Hinde & Stevenson-Hinde, 1987; Kelly et al., 1983). Likewise, developmental theorists have recently become interested in identifying predictors of individual differences in family relations. Belsky (1984) suggested a number of factors that influence the ways parents and children interact including personal characteristics of parents and children as well as contextual sources of stress and support.

With regard to personal characteristics, it appears that parents' level of psychological distress is a primary factor in predicting parent-child relations. That is, parents are more likely to provide for the optimal development of their children (e.g., providing developmentally appropriate and flexible care) when they are psychologically healthy. Indeed, Forehand, McCombs, and Brody (1987) proposed that diminished parental well-being compromises parents' tolerance for inappropriate child behaviours and thus increases the likelihood of coercive parent-child interchanges. Patterson (1986) argued that stress may reduce mother's ability to provide effective discipline. Parents with a positive sense of well-being are more likely to be aware of the needs of others and should thus have more positive relations with their children (Small, 1988). Children's own adjustment may be another

important contributor to parent-child relations. Children who view themselves as happy and well-adjusted are more likely to elicit and maintain positive relations with their parents (Bell, 1979; Bell & Chapman, 1986), whereas if children exhibit coercive behaviours they put themselves at risk for parental rejection (Patterson, 1986).

Empirical data concerning personal well-being and parent-adolescent relations in non-clinical samples, however, are only beginning to emerge. The majority of these studies have typically focused on attributes of one individual in the dyad. Moreover, few studies have examined the association between individual well-being and change in family relations. The next sections describe how fathers' level of psychological distress and adolescents' personal sense of well-being may play important roles in the nature of the father-adolescent relationship. Although the data are all correlational, evidence is marshalled for both an effect of father psychological distress on father-adolescent relations (father psychological distress --> father-adolescent relations) and of father-adolescent relations on father psychological distress (father-adolescent relations --> father psychological distress).

Father Psychological Distress --> Father-Adolescent Relations

Psychological distress refers to a general affective state of emotional upset (Pearlin & Schooler, 1978). How

might fathers' psychological distress be associated with father-adolescent relations? Several studies (Belsky, 1984; Conger, McCarty, Yang, Lahey, & Kropp, 1984; Longfellow, Zelkowitz, & Saunders, 1982; Patterson, 1986; Weissman & Paykel, 1974) suggest that when parents are experiencing psychological distress they are likely to be unresponsive, inattentive, and even hostile toward their children. Using observations of mothers and their children, Longfellow et al. (1982) found that mothers who reported higher levels of depression were less affectionate towards their children, and less likely to meet their children's demands for communication and attention. Similarly, Conger et al. (1984) found that mothers' reports of emotional distress were related to lower observed positive emotional affect (e.g., hugs and praise) and higher observed negative emotional affect (e.g., derogatory statements, slaps, and threats) directed towards their children.

Thus, it appears that mothers' psychological distress affects mother-child relations. A number of investigators have examined the connections between aspects of fathers' feelings of distress and father-child relations. For example, several studies have looked at variables that tap fathers' feelings of anxiety. Hamill (1988) showed that a high degree of midlife anxiety (concern over personal adult development) was associated with father and adolescent reports of poor communication with each other. Similarly,

DeLuccie and Davis (1991) found that fathers who reported high anxiety over adult life concerns also reported exhibiting less positive childrearing practices and less confidence in their parental role. Grossman, Pollak, and Golding (1988) observed that the time fathers spent with their five-year-old children was positively related to their life adaptation (ability to cope with the major tasks of adulthood) and negatively related to their job satisfaction. In addition, this study showed that the quality of interaction with their children--measured by fathers' support for children's autonomy and affiliation--was positively linked to their life adaptation, job satisfaction, and job involvement.

Similar results have been found in studies examining fathers' depressive mood. McBride (1989) found that fathers of young children (ages 2 to 4) who reported higher levels of physical and psychological distress (depression, isolation, poor health) felt less competent as parents and were more likely to perceive their children as demanding, moody, and exhibiting unacceptable behaviour. In a study of fathers and adolescents, Small (1988) showed that fathers who reported negative self-esteem were more likely to report using physical punishment than fathers with positive self-esteem.

Further evidence of the impact of fathers' psychological distress on father-adolescent relations comes

from research examining the spillover of work strains (e.g., physical and emotional overload due to the work situation and work conditions) into the family. For instance, Galambos, Sears, Almeida and Kolaric (1993) showed that the fathers' self-reported work overload contributed to more conflicted interactions between fathers and their young adolescent children as a result of fathers' psychological distress. Ho (1991), studying families experiencing the Iowa farm crisis, found that diminished economic well-being disrupted fathers' nurturance and discipline of their daughters which in turn predicted adolescent delinquency and problem behaviour. Similarly, in a sample of rural American midwestern families, Conger et al., (1993) found that family economic pressure contributed to fathers' feelings of depression, which, in turn disrupted observed father involvement with and nurturance of their adolescents. Taken together, these studies illustrate how some aspects of fathers' psychological distress may influence father-child relations.

Father-Adolescent Relations --> Father Psychological Distress

It is important to note that the correlational nature of these studies precludes conclusions regarding the direction of effects between fathers' distress and father-adolescent relations. Although it is common to assume that fathers' psychological distress is antecedent to father-

adolescent relations, the way that fathers and their adolescents interact may have a profound impact on fathers' psychological health. Indeed, the relationship that parents have with their children may be vital to shaping parents' emotional development. For example, Erikson (1963) argued:

The fashionable insistence on dramatizing the dependence of children on adults often blinds us to the dependence of the older generation on the younger one. A mature adult needs to be needed, and maturity needs guidance as well as encouragement from what has been produced and must be taken care of. (pp. 266-267)

Thus, parenting can be a vehicle for stimulating the parents' emotional growth and may enhance feelings of value and well-being through the significant role that the parent plays in the child's life (Newman & Newman, 1988).

Studies have shown that parenthood contributes to adults' sense of meaningfulness (Uberson & Gove, 1989) and helps to satisfy their needs for love, companionship, fun, and stimulation (Hoffman, McManus, & Brackbill, 1987).

Clearly being a parent is important to individuals.

However, the behaviours and experiences of being a parent, rather than parenthood *per se*, provide the impetus for psychological change. Umberson (1989) showed that self-reported positive interaction with one's children was associated with a variety of measures of well-being including higher life satisfaction, higher feelings of

meaningfulness, lower agitation, and fewer reports of psychiatric symptoms. These linkages appeared to be independent of socioeconomic status (e.g., education and income) and family composition (e.g., number of children in the home).

A series of longitudinal studies has begun to elucidate the impact of aspects of father-child relations on fathers' distress. With regard to the quantity of interactions, Hawkins and Belsky (1989) examined the impact of father involvement on psychological change in 50 men expecting their first-born child. They observed that fathers who were more involved with their children reported decreases in self-esteem over time. Baruch and Barnett (1986) found that the time fathers spent in sole charge of their children was predictive of feelings of job-family role strain. Almeida and Galambos (1991), however, showed that fathers' involvement with their children was associated with subsequent increases in warmth and acceptance of their children over a six-month period indicating that spending time with children may also contribute to a positive state of mind (i.e., accepting feelings).

Evidence for the influence of qualitative aspects of father-adolescent relations on fathers' distress comes from a series of studies by Silverberg (1989, 1992; Silverberg & Steinberg, 1987, 1990). These studies asked: how do changes in parent-adolescent relations affect parents' own

well-being? Over the course of one year, sons' emotional autonomy (realistic perception of parents, de-idealization of parents) was predictive of fathers' reports of more intense self-appraisal, lowered self-esteem, and decreased life satisfaction. These relationships were not found for fathers of daughters. There were no reported linkages between father-adolescent conflict and fathers' well-being.

No research to date has examined how the perceptual discrepancy between fathers' and adolescents' views of their relations may affect fathers' distress. The degree of mismatch between fathers' and adolescents' perceptions of each other may determine the extent to which this aspect of father-adolescent relations affects fathers individually. For example, if a father's warm and accepting behaviour is not viewed as such by the adolescent, the father may feel unappreciated, devalued, and perhaps resentful.

In summary, not only may fathers' personal sense of emotional upset contribute to aspects of father-adolescent relations, but father-adolescent relations may have influences on fathers' well-being. The limited number of longitudinal investigations have not investigated explicitly these reciprocal linkages. In addition, it is important to note that personal characteristics of adolescents also play an important role in the evolution of father-adolescent relations. This issue is explored in the next sections in two ways. First, evidence consistent with an effect of

father-adolescent relations on adolescent psychological well-being is examined. Second, the possibility of effects of adolescent psychological well-being on father-adolescent relations is explored.

Father-Adolescent Relations --> Adolescent Psychological Well-Being

The previous sections illustrated the bidirectional linkages between individual characteristics of fathers (i.e., aspects of psychological distress) and aspects of father-adolescent relations. The discussion now turns to the linkages between father-adolescent relations and adolescent psychological well-being. The nature and extent of father-adolescent relations are likely to be crucial to how adolescents view and feel about themselves (e.g., their ability to cope with difficult situations, degree of positive affect). Numerous sources have suggested that parent-child relations that are characterized by warmth and fair, consistent discipline predict cognitive, behavioural, and social competence in adolescents (Baumrind, 1971, 1991; Maccoby & Martin, 1983; Patterson, 1986; Steinberg, 1990). For example, a recent American study of 10,000 adolescents showed that adolescents who perceived their parents as warm and firm with respect to discipline scored highest on measures of psychological competence and lowest on measures of psychological and behavioural dysfunction as compared to adolescents who perceived their parents as rejecting,

permissive, or neglectful (Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

How may specific aspects of father-adolescent relations be related to adolescents' sense of psychological functioning? With regard to the quantity of father-adolescent relations, the frequency and time that fathers and adolescent interact may be particularly important in facilitating adolescent autonomy. Some researchers have argued that, compared with mothers, fathers are more likely to spend time with their adolescents outside of the family (e.g., engaging in outdoor physical activities, Montemayor, 1983) and to discuss matters such as politics that represent the outside world (Shulman & Posen, 1992). In this way fathers may serve as an intermediary between adolescents and the world at large. Furthermore, Shulman and Posen (1992) found that the more time spent and the greater number of calm father-adolescent communications were positively related to adolescents' sense of independence. Thus, fathers' behaviours and interests may promote adolescents' penchant for involvement outside the family.

Qualitative aspects of father-adolescent relations also seem to be associated with healthy adolescent functioning. Warm and close relations between fathers and adolescents have been shown to be linked to adolescents' higher self-esteem (Barber, 1992; Paulson, Hill, & Holmbeck, 1991), positive self-image (Miksell & Sorenson, 1989), and self-

restraint (Feldman & Wentzel, 1990). Papini, Rogman, and Anderson (1991) found that adolescents who reported being attached to their fathers (e.g., mutual trust, positive communication, feelings of connectedness) were less depressed and less socially anxious than adolescents who were less attached to their fathers. Also, the use of appropriate discipline (not overly firm and low levels of psychological control) combined with parental acceptance was linked to higher adolescent self-esteem and self-restraint (Feldman & Wentzel, 1990; Litvosky & Dusek, 1985).

Further evidence of the influence of qualitative aspects of father-adolescent relations on adolescent psychological functioning is provided by a longitudinal study comprised of 385 young adolescents reporting on their parents' behaviour (measured by Schaefer's CRPBI) and their own self-esteem (Johnson, Shulman, & Collins, 1991). These findings indicated that accepting relations with fathers combined with psychological autonomy granting predicted a higher level of adolescent self-esteem one year later.

There appear to be no studies examining the link between discrepancies in fathers' and adolescents' perceptions of their relationship, on the one hand, and adolescent functioning, on the other. However, Holmbeck and O'Donnell (1991) found that discrepancies between adolescents' desire for autonomy and mothers' granting autonomy predicted decreases in adolescents' self-esteem

over a one-year period.

Adolescent Psychological Well-Being --> Father-Adolescent Relations

It appears that aspects of father-adolescent relations --particularly warmth and fair discipline (i.e., authoritative parenting)--are associated with social competence and positive self-regard in adolescents (Maccoby & Martin, 1983). We do not know, however, whether authoritative father-adolescent relations lead to adolescents' enhanced psychological well-being or whether adolescents' competence and positive self-regard enable fathers to have warm yet firm relations with them. For example, the notion that authoritative parenting promotes self-control and social responsibility can be reinterpreted such that self-controlled and responsible children foster warm relations and fair discipline practices (Bell, 1979; Lewis, 1981). Indeed, Simons et al. (1990) observed that when parents perceived their child as being difficult to raise, they were more likely to engage in destructive parenting behaviours (e.g., angry and sarcastic interactions) and less likely to engage in constructive parenting behaviours (e.g., showing care and concern for the child).

Although much energy has been devoted to examining how parents' relations with their children shape and influence their children's development, researchers are increasingly

questioning how variations in parent-child relations may be shaped and formed by characteristics of the child. Bell (1979), in his classic treatise on reciprocal influences between parent and child, commented, "Demonstrated child effects are especially needed to complement and put into perspective findings from the preponderance of studies for over 40 years identifying parent effects (p. 823)". Indeed, numerous correlational and experimental studies have shown that individual differences in children's assertiveness, activity, and person orientation explain differences in the ways parents and children interact (Bell, 1977; Bell & Chapman, 1986). Although developmental psychologists have traditionally investigated parental effects (e.g., authoritative parenting style) on adolescents' well-being, adolescent psychological adjustment may also influence the relations and interactions that they have with their fathers. Thus, a bidirectional influence should exist between father-adolescent relations and adolescent well-being.

Examining Characteristics of Fathers and Adolescents

Simultaneously

So far the discussion of individuals' characteristics and father-adolescent relations has highlighted characteristics of fathers and adolescents separately. However the linkage of any individual's characteristics to aspects of father-adolescent relations may depend on the

characteristics of the other individual. Lerner and Lerner (1983) suggested that it may not be that particular characteristics of parent and/or child are important but rather, what is important is the "goodness-of-fit" between child and parent characteristics. For example, the relation between adolescent self-image and father-adolescent relations may vary depending on the psychological distress of the father. If a father is experiencing distress, he may be less likely to tolerate and accept the adolescent's feelings of irritability or social withdrawal. This lack of tolerance could result in more conflictual and less warm interactions. Although investigators have considered concurrent relations between father-adolescent relations and adolescents' or fathers' psychological well-being, the present study examined both individuals at four times over a period of two and one-half years. In this way it was possible to explore the possible dynamic interplay between personal characteristics of two individuals and their evolving relations with each other.

Design and Hypotheses

The previous sections of this chapter presented research on changes in father-adolescent relations during adolescence and on the linkages between father-adolescent relations and personal characteristics of fathers and adolescents. Three general conclusions can be drawn. First, father-adolescent relations appear to undergo

transformations during the adolescent years, but the majority of findings come from cross-sectional studies. It is not yet clear whether these findings will replicate in longitudinal studies. Second, personal characteristics of fathers and adolescents are associated with aspects of father-adolescent relations. Third, the direction of influence between aspects of father-adolescent relations and personal characteristics of fathers and adolescents seems to be reciprocal, but most studies assume a unidirectional effect without testing for the possibility of reciprocity. The purpose of the present study was to overcome these shortcomings by examining longitudinal change in specific aspects of father-adolescent relations over a period of 30 months. A longitudinal focus also allowed for an examination of the reciprocal linkages between father-adolescent relations and personal characteristic of fathers and adolescents.

Design

Data for the present study consisted of adolescent and father self-reports from a longitudinal questionnaire study spanning 30 months. Data collection occurred on four occasions when the adolescents were 11.6, 12.1, 12.6 and 14.1 years of age (in February 1988, August 1988, February 1989, and August 1990). Measures of father-adolescent relations, father psychological distress, and adolescent self-image were obtained at each time of measurement.

Hypotheses

The present study considered three general questions regarding father-adolescent relations, centering around changes in father-adolescent relations and the reciprocal linkages between father-adolescent relations and personal characteristics that fathers and adolescents bring to the relationship. Based on an examination of the literature relevant to these issues, several hypotheses were postulated.

Question 1. To what extent do certain aspects of father-adolescent relations (quantity of interaction, quality of interactions, and interpersonal perceptions) change during early adolescence? Findings drawn from longitudinal studies of mother-adolescent relations and cross-sectional studies of father-adolescent relations have shown that certain aspects of parent-child relations appear to change during adolescence. With respect to mean-level change, these studies have revealed a decline in the amount of interactions with increasing age of the adolescent (DeLuccie & Davis, 1990; Montemayor & Brownlee, 1987). Mean-level change has also been documented within certain domains of father-adolescent interaction, such as increased negative affect (McNally et al., 1991) and decreased acceptance (DeLuccie & Davis, 1990). The findings for interpersonal perceptions, however, have been equivocal. Some studies have showed an increasing congruity over time

between fathers' views of their adolescent and adolescents' perceptions about their fathers' beliefs about them (Alessandri & Wozniak, 1987, 1989). Other studies have indicated a decreasing congruity between fathers' and adolescents' views over issues of parental authority (Smetana, 1988, 1989). With respect to rank-order variability in father-adolescent relations, longitudinal studies have pointed to stability in certain qualitative aspects of parent-adolescent relations such as the expression of positive and negative affect (McNalley et al., 1991) and instability in such quantitative aspects of relations such as frequency of communication (Steinberg, 1987, 1988).

Hypothesis 1. Individual differences within domains of father-adolescent relations and interpersonal perceptions of father-adolescent relations are expected to demonstrate moderate stability (across time r range: .30 to .50), whereas the quantity of interactions will show greater rank-order change over time (across time r range: .10 to .30).

Hypothesis 2. On average, the quantity of interaction between fathers and adolescents (e.g., frequency and time spent doing things together) will decrease during the early adolescent years.

Hypothesis 3. The mean level of fathers' expression of acceptance will evidence minor but significant decreases. Given the previous analyses in this data set demonstrated

decreases in conflict over time, as measured by combined reports of mothers, father, and adolescents (Galambos & Almeida, 1992), it was expected that father reports of conflict used alone would also demonstrate decreases. In view of the equivocal nature of past research findings on interpersonal perceptions, analyses examining this aspect of father-adolescent relations are exploratory.

Question 2. To what extent are father-adolescent relations associated with personal characteristics of fathers (psychological distress) and of adolescents (self-image)? Self-image refers to how individuals perceive themselves with reference to relations and experiences in their lives (Petersen, Schulenberg, Abromowitz, Offer, & Jarcho, 1984) with positive self-image one indicator of adolescents' psychological health or well-being. Developmental theorists have suggested that parents' psychological distress and children's positive sense of functioning (i.e., self-image) are primary factors in predicting individual differences in family relations (Belsky, 1984; Maccoby, 1980; Simons et al., 1990). In addition, numerous studies have shown that these personal characteristics of fathers and adolescents are linked to various aspects of father-adolescent relations (e.g., Maccoby & Martin, 1983; Steinberg, 1990). That is, parents with a positive sense of well-being are more likely to be aware of the needs of others and should thus have more

positive relations with their children (Small, 1988). Similarly, children who perceive themselves as happy and well-adjusted are more likely to elicit and maintain positive relations with their parents (Bell, 1979; Bell & Chapman, 1986).

Hypothesis 4. Within-time, fathers' psychological distress will be correlated with less frequent interactions with adolescents, lower levels of father acceptance, and higher levels of conflict.

Hypothesis 5. Within-time, adolescents' positive self-image will be correlated with more frequent interactions with fathers, higher levels of paternal acceptance, and lower levels of conflict.

Question 3. Are the linkages between father-adolescent relations and personal characteristics of fathers and adolescents reciprocal? Previous theories (Hinde & Stevenson-Hinde, 1987; Lerner, 1991) suggest that the psychological distress of fathers and the self-image of adolescents are not only expected to have an impact on father-adolescent relations, but aspects of father-adolescent relations are also likely to contribute to individual differences in these characteristics (Maccoby & Martin, 1983; Silverberg & Steinberg, 1987; Steinberg, 1990).

Hypothesis 6. Father acceptance and conflict will each be reciprocally linked to father psychological distress.

That is, higher levels of acceptance and lower levels of conflict will predict lower levels of father psychological distress and, in turn, lower levels of father psychological distress will predict higher levels of acceptance and lower levels of conflict.

Hypothesis 7. Father acceptance and conflict will each be reciprocally linked to adolescent self-image.

Hypothesis 8. Frequency of father-adolescent interactions will be reciprocally linked to father psychological distress.

Exploratory Hypotheses

Hypothesis 9. Fathers' psychological distress will predict change over time in the quantity of interactions, father acceptance, and father-adolescent conflict. Specifically, father distress will be inversely related to the direction of change in the frequency of interactions and the level of acceptance, and directly related to the direction of change in conflict.

Hypothesis 10. Adolescents' self-image will predict change over time in the quantity of interaction, father acceptance, and father-adolescent conflict. That is, adolescents' self-image will be directly related to the direction of change in interaction frequency and father acceptance and inversely related to the direction of change in conflict.

Hypothesis 11. The contributions of father distress and adolescent self-image to father-adolescent relations are expected to be interactive. That is, the combination of father distress and adolescent self-image (e.g., dyads characterized by low distress and high self-image) will be associated with changes in father-adolescent relations.

CHAPTER III

METHOD

Participants

The subjects were adolescents and their fathers who participated in a longitudinal study of two-parent families in which both parents were employed ($N = 112$; 60 girls, 52 boys). Data collection began in the winter of 1988 (Time 1) when the adolescents were in the sixth grade (mean age 11.6 years; $SD = 5$ months), and continued on three more occasions: the summer after sixth grade (Time 2), the winter of seventh grade (Time 3) and the summer after eighth grade (Time 4). Adolescents made the transition from elementary school (K-7) between seventh and eighth grade with about two-thirds going to middle schools (Grades 8-10) and the rest going to high schools (Grades 8-12).

When the adolescent was in sixth grade, the mean number of children per family was 2.4 ($SD = .9$; range: 1 to 4) and 11% of the families had at least one child under the age of 6. Forty-nine percent of the adolescents were firstborns, 43% were second-borns, and 8% had a higher birth order. About half of their siblings were older and half were younger. The fathers were on average 40 years old and had completed 13.8 years ($SD = 2.9$) of education. The mean number of years that the parents were married was 14.7 ($SD = 4.5$) and in 8 of these couples one or both of the spouses reported being remarried.

At Time 1 the fathers had been employed for an average of 17.2 years ($SD = 7.4$) and worked an average of 41 hours a week ($SD = 9.1$). The mean occupational prestige of positions held by fathers was 50.01 ($SD = 15.18$) as assessed by the Blishen and McRoberts (1976) occupational index for Canadian samples. Examples of occupations and their prestige scores are: motor vehicle repair (32.8), real estate sales (50.1), and accounting (64.4). Table 1 presents the major occupational categories to which the fathers belonged. Seventy-three percent of the fathers held professional, skilled labour, or managerial occupations. According to the most recent figures (Statistics Canada, 1991), the distribution of fathers' occupations in the sample was very similar to that of the general population from which the sample was drawn.

Insert Table 1 about here

Procedure

To obtain the sample, letters soliciting participants were sent home with all sixth graders in 19 schools in a medium-sized Canadian city. Criteria for participation were that the household contained two parents (not necessarily biological parents) who were employed (i.e., they identified themselves as having jobs) and both parents and the adolescent wanted to participate. Families returned pre-stamped postcards indicating their desire to take part in

the study. Although the schools had no information on the percentage of sixth graders in dual-earner families, it was estimated, using census statistics, that at least 50% of dual-earner families responded to the letter. This response rate is in line with other studies in which parents and adolescents participate (e.g., Parsons, Adler, & Kaczala, 1982; Smetana, 1989). In addition, families were obtained through advertisements run in local newspapers.

Questionnaires were mailed to each parent and child individually. Family members were instructed not to discuss the questionnaires and were given separate return envelopes. Each family member received a token payment for completing the questionnaire. Of the 112 families who initially participated in February 1988, 90% returned the second questionnaire (distributed in August, 1988), 82% returned the third (distributed in February, 1989) and 62% returned the fourth (distributed in August, 1990). Comparisons of adolescents and fathers who participated at all four times with those who participated at Time 1 but did not participate at Time 4 revealed no differences between the groups on demographic characteristics (mother and father education, mother and father age, mother and father occupational status, and number of children), father-adolescent relation variables, father psychological distress, and adolescent self-image. The one exception was that fathers who dropped out of the study reported higher

job-family role strain at Time 1 ($t = 2.00, p < .05$). None of the families who remained in the study reported becoming divorced or separated during the study period.

Cases for the present investigation were selected on the basis of their pattern of missing data across time. Father-adolescent dyads were included in which: (a) either father or adolescent participated at all four occasions, and (b) both father and adolescent participated on at least three of the four occasions. Seventy-one father-adolescent dyads met these criteria. Still, the longitudinal pattern for some of these fathers and adolescents included missing data. Because the pattern of missing data was random (i.e., there was no systematic pattern of nonresponse), it was appropriate to estimate scores (see Little & Rubin, 1987). Estimated scores were generated for the nine fathers and five adolescents who had some missing data. Scores for missing data were estimated by weighting the group mean of the given variable for the individual on that occasion by the subject's average deviation from the group mean at the other complete data points. This method was performed separately for families of adolescent girls and families of boys. This procedure resulted in complete data for 71 father-adolescent dyads. The means and standard deviations of this subsample were comparable to those subjects present on any given occasion.

Measures

Data for the present study consisted of adolescent and father self-reports that were obtained on four occasions: February 1988, August, 1988; February 1989; and August 1990 (Times 1 through 4). Three general categories of variables were examined: father-adolescent relations, father psychological distress, and adolescent self-image. Table 2 lists the individual measures and their respective reliability estimates (coefficient alpha) at each time of measurement. Several of these measures were aggregated subsequently to form composite scores.

Insert Table 2 about here

Father-Adolescent Relations

Measures tapping three aspects of father-adolescent relations were obtained: (a) quantity of interaction; (b) quality of interaction; and (c) interpersonal perceptions of father-adolescent relations. These aspects of father-adolescent relations have been identified as three general domains of close relationships (Hinde & Stevenson-Hinde, 1987) and parent-child relations (Collins & Russell, 1990).

Quantity of Interaction

Quantity of interaction was assessed by: (a) fathers' frequency of child care; and (b) the weekly time spent by fathers carrying out child care responsibilities (e.g.,

chauffeuring children). These two child care measures were combined to form a composite measure of child care, which reflects a broad estimate of the level of interaction between fathers and their children. A more detailed description of the measures of quantity of interaction follows.

Child care frequency. Items on a family task-sharing scale designed by Bird, Bird, and Scruggs (1984) were adapted to measure the frequency of fathers' participation in child care. Fathers indicated on a five-point scale from Never (1) to Every Day (5) the frequency with which they performed daily care of children, chauffeured children, and attended functions with children (Almeida, 1991). Mean scores were computed in which higher scores represented more frequent participation in child care tasks. The internal consistency for the child care frequency items ranged from .58 to .70 across the four times of measurement (see Table 2). Two reasons for the relatively low internal consistency were the small number of items of the scale and little variance in the items. However, this measure evidenced a moderate degree of overlap with a 17-item frequency of father-adolescent activities scale (e.g., helping with homework; Almeida, 1993) that was obtained at Time 4 ($r = .49, p < .001$).

Child care hours. The second measure of quantity of father-adolescent interaction was from Pleck's (1983, 1985)

analysis of the Quality of Employment Survey. Each father was asked to estimate how much time in hours he spent on working and non-working days "taking care of and doing things with your child(ren)." Weekly hourly estimates of father involvement were derived by summing workday and non-workday estimates, appropriately weighted by each father's number of workdays or non-workdays per week. The number of workdays was taken from the fathers' self-reports of their weekly work schedules. Pleck (1983) found that this self-reported index was comparable to observer estimates of the level of child care reported in other studies. In the present sample, hours of child care were positively related to frequency of father-adolescent activities ($r = .44$, $p < .001$) at Time 4. Additional evidence of the validity of this instrument comes from its relationship with other measures of family work, including time diaries and proportional instruments (Pleck, 1985).

Child care composite. A composite measure of child care was created by aggregating child care frequency and child care hours. Because these two measures have different scales (i.e., child care frequency scores ranged from 1 to 5 and child care hours ranged from 0 to 30), it was necessary to standardize each measure before combining them. In order to maintain mean-level differences across time, each measure was standardized across-time by computing deviations from the grand mean (i.e., average of the scores across the times

of measurement) and dividing by the averaged across-time standard deviation. The composite score was then formed by computing the mean of the standardized child care frequency scores and the standardized child care hours. This composite score of child care demonstrated a high degree of overlap with the frequency of father-adolescent activities scale ($r = .61, p < .001$) at Time 4.

Quality of Interaction

The quality of interaction was assessed via fathers' and adolescents' reports of: (a) fathers' expressions of acceptance (i.e., warmth and understanding) toward their adolescents; and (b) level of father-adolescent conflict. These measures were chosen because they are global indicators of the quality of parent-adolescent relations and have been implicated as important predictors of adolescent and adult well-being (Maccoby & Martin, 1983; Montemayor, 1983; Schwarz, Barton-Henry, & Pruzinsky, 1985; Silverberg & Steinberg, 1989).

Father acceptance. The Acceptance subscale of the 56-item version (Burger & Armentrout, 1971) of the Child's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965) was used to assess the degree of warmth and acceptance directed toward the adolescent by fathers (see Appendix A). The Acceptance subscale consists of the mean of 24 items (e.g., "I always speak to my child with a warm and friendly voice") with responses on a five-point scale ranging from

Very much unlike me (1) to Very much like me (5). The response scale was expanded from the traditional three-point scale in order to increase variability. The adolescents completed the subscale about their fathers' behaviour; the fathers rated the same 24 items with respect to their behaviour toward their adolescent child. Higher scores indicated higher parental acceptance. Coefficient alpha ranged from .90 to .93 for father reports and from .95 to .97 for adolescent reports (see Table 2). The psychometric adequacy of the CRPBI has been demonstrated in previous studies (Litovsky & Dusek, 1985; Margolies & Weintraub, 1977; Steinberg, 1990).

Father-adolescent conflict. The Issues Checklist (IC) (Prinz, Foster, Kent, & O'Leary, 1979) was used to measure the frequency and intensity of conflict between fathers and adolescents (see Appendix B). For each topic that was discussed, the intensity of the discussion was rated with possible responses ranging from Very Calm (1) to Very Angry (5). Fathers completed the IC with reference to the target adolescent. Intensity of conflict was computed by calculating the mean level of intensity of all topics discussed. A higher score represented angrier conflicts. Frequency of conflict was computed by summing the number of topics with an intensity of "2" or above (cf. Steinberg, 1987b). Thus, higher scores reflected more frequent conflicts between fathers and adolescents. Coefficient

alpha ranged from .92 to .94 for conflict intensity and from .86 to .93 for conflict frequency across the four times of measurement (see Table 2). The intensity and frequency scores were standardized across time in order to preserve mean-level differences across time. Composite conflict scores were then computed at each time of measurement by obtaining the mean of the standardized conflict intensity and the standardized conflict frequency scores. Various forms of the IC have been used to measure conflict in several studies (Forehand, Long, Brody, & Fauber, 1986; Fuligni, 1993; Prinz et al., 1979; Steinberg, 1987b, 1988).

Interpersonal Perceptions of Father-Adolescent Relations

Interpersonal perceptions of father-adolescent relations were measured by the discrepancy between fathers' and adolescents' reports of fathers' acceptance. Unlike the other measures of father-adolescent relations which provide an individual's assessment of the relationship, interpersonal perceptions reflect the dyad's view of the relationship. Items from the 24-item acceptance subscale of the 56-item version (Burger & Armentrout, 1971) of the Child's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965) were used to assess the discrepancy between adolescents' reports and fathers' reports of father acceptance (see Appendix A). First, discrepancy scores were calculated for each of the 24 items by computing the absolute value of the difference between the adolescent's

response and the father's response. Second, a mean discrepancy score for the 24 items was computed. Accordingly, higher discrepancy scores represent a greater absolute difference between adolescents' and fathers' reports of paternal acceptance. Coefficient alpha for this measure ranged from .73 to .89 (see Table 2).

Father Psychological Distress

Psychological distress refers to a general affective state of emotional upset (Pearlin & Schooler, 1978). The present study used several measures of father psychological distress including: anxiety, depression, temperamental mood, and job-family role strain. A composite of these four measures was also computed. Cronbach alphas for the individual measures ranged from .81 to .93 across the four times of measurement (see Table 2).

Depression. The 20-item Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used to assess depressed mood (see Appendix C). The CES-D is a 20-item self-report measure that asks about the frequency of occurrence of symptoms in the previous week (e.g., "I felt bothered by things that usually don't bother me"). Responses ranged from Rarely or none of the time (1) to Most or all of the time (4). Mean scores were computed with higher scores representing higher levels of depressed mood. Other researchers who have used this instrument have found it useful for assessing depressive symptoms in employed

parents (Kandel, Davies, & Raveis, 1985).

Anxiety. Spielberger's 20-item measure of state anxiety (Spielberger, Gorsuch, & Kuhlenschmidt, 1970) was employed to assess the degree to which fathers currently felt anxious (e.g., "I am tense"; see Appendix D). Responses ranged on a scale from Not at all (1) to Very much so (5). Mean scores were computed with higher scores representing higher levels of anxiety. The usefulness of this scale has been documented in clinical and non-clinical samples (Buros, 1978).

Temperamental Mood. A seven-item mood subscale of the Dimensions of Temperament Survey-Revised (DOTS-R; Windle & Lerner, 1986) assessed fathers' quality of mood (see Appendix E). Fathers indicated the extent to which seven statements describe them (e.g., "I do not laugh or smile at many things"). Responses ranged from Usually false (1) to Usually true (4). Mean scores were computed with higher scores indicating higher negative mood.

Job-family role strain. A 16-item self-report scale developed by Bohen and Viveros-Long (1981) assessed how often fathers experienced discomfort, pressure, or worry associated with adequately accomplishing family and work role obligations (e.g., "I feel that I have more than I can handle comfortably"; see Appendix F). Responses ranged from Never (1) to Always (5). Mean scores were computed, with higher scores representing higher levels of role strain.

Composite distress. These four measures were similar in that they all assessed fathers' emotional upset. To examine the extent to which these indices overlapped, a principle components analysis was performed on the means of the four distress measures at each time of measurement (depression, anxiety, temperamental mood, and job-family role strain). These analyses revealed one underlying component of stress at each time of measurement with median (across time) component loadings of .75 for depression, .74 for anxiety, .51 for temperamental mood, and .55 for job-family role strain. This component accounted for an average of 60% of the variance in these variables across the four times of measurement. Given the considerable overlap among these measures, a composite measure of psychological distress was derived by computing the mean of across-time standardized scores of the four distress measures at each time of measurement. Across-time standardized scores were computed instead of component scores in order to maintain mean differences across time. The use of a composite score was desired over the use of the four separate measures because of the greater reliability of the composite score and the greater statistical power of using a single predictor rather than using multiple predictors that are potentially multicollinear.

Adolescent Self-Image

Self-image refers to the organization of individuals' self-perceptions regarding experiences and ideas about

themselves in all aspects of their lives (Petersen et al., 1984). For purposes of the present investigation, adolescents' reports of self-image regarding psychological functioning (i.e., coping, impulse control, and emotional tone) were obtained (see Appendix G). In addition a composite of these three measures was computed. Alphas for the individual measures ranged from .67 to .86 across the four times of measurement (see Table 2).

Impulse control. The impulse control subscale from the Self-Image Questionnaire for Young Adolescents (SIQYA; Petersen et al., 1984) measured the adolescent's resistance to impulsive, violent, or angry behaviour. Eight items (e.g., "Even under pressure I manage to remain calm") were rated on a 6-point scale ranging from Does not describe me at all (1) to Describes me very well (6). A mean score was computed with higher scores representing more impulse control.

Mastery and Coping. The mastery and coping subscale from the SIQYA (Petersen et al., 1984) assessed the adolescent's confidence in coping. This measure consisted of 10 items (e.g., "When I decide to do something I do it") rated in the same manner as the impulse control measure. Mean scores were computed with higher scores reflecting higher levels of mastery and coping.

Emotional Tone. This 11-item subscale from the SIQYA measured the degree of positive affect in the adolescent (e.g., "Most of the time I am happy"). Adolescents rated

these items in an identical manner to the items in the impulse control and mastery subscales. Higher mean scores indicated more happiness.

Composite self-image. These three measures were submitted to a principle components analysis at each time of measurement in order to examine the extent to which they overlapped. These analyses revealed one underlying component at each time of measurement. The median component loadings (averaged across time) were .74 for emotional tone, .70 for mastery and coping, and .55 for impulse control. This component accounted for an average of 67% of the variance among these variables over the four times of measurement. Given the high degree of overlap among these variables, a composite self-image score was derived by computing the mean of the three self-image scores at each time of measurement.

General Analytic Strategy

Measures of father-adolescent relations, father psychological distress and adolescent self-image were collected on four occasions over a period of two and one-half years, thereby permitting: (a) the analysis of change in father-adolescent relations over two and one-half years; (b) the assessment of the concurrent linkages between aspects of father-adolescent relations and individuals' psychological well-being (i.e., father psychological distress and adolescent self-image); and (c) the examination of reciprocal influences between father-adolescent relations

on the one hand and fathers' psychological distress and adolescent self-image on the other. Because there were several analyses examining several variables, steps were taken to reduce familywise error including: (a) reducing the number of variables by creating composite scores; (b) conducting multivariate significance tests before computing univariate tests; and (c) using a conservative alpha (e.g., $p < .01$) when deemed appropriate. The analyses proceeded in three steps, each corresponding to a research question. The following was the analytic plan for each of these steps.

Research Questions

Question 1. To what extent do selected aspects of father-adolescent relations change during early adolescence? How stable are father-adolescent relations across the early adolescent years? To address the "stability" question, auto-correlations across the times of measurement indicated the degree of rank-order stability in father-adolescent relations. Analyses addressing the "change" question examined mean changes in the three sets of father-adolescent relations variables by employing a series of repeated measures MANOVAs. The gender of the adolescent was used as a between-subjects factor to test whether mean change across time was different in father-daughter dyads versus father-son dyads.

Question 2. To what extent are father-adolescent relations associated with personal characteristics of fathers (psychological distress) and of adolescents (self-

image)? To answer this question, within-time correlations between aspects of father-adolescent relations and personal characteristics were computed.

Question 3. Are the linkages between father-adolescent relations and personal characteristics of fathers and adolescents reciprocal? To answer this research question, several two-stage least squares models tested: (a) the mutual effects between father-adolescent relations and father psychological distress; and (b) the mutual effects between father-adolescent relations and adolescent self-image.

Exploratory analyses

A final set of analyses explored whether personal characteristics of fathers and adolescents predicted change in father-adolescent relations. Variables representing father psychological distress and adolescent self-image and their interaction were used as continuous between-subjects variables in a repeated measures analysis assessing change in father-adolescent relations (cf. Wilkinson, 1989). This analysis determined whether change in father-adolescent relations were associated with father distress (Time X Distress interaction), adolescent self-image (Time X Self-Image interaction) or some combination of both distress and self-image (Time X Distress X Self-Image interaction).

CHAPTER IV

RESULTS

Various statistical techniques including correlation, multivariate analysis of variance (MANOVA), and two-stage least squares analyses were used to test the hypotheses that were presented in the final section of Chapter II. These analyses were applied to the concurrent and longitudinal examinations of the data.

Description of the Variables

Table 3 displays the means and standard deviations of the individual and composite measures of father-adolescent relations, father distress and adolescent self-image at each time of measurement. Scores for the child care variables were not available at Time 1. According to the individual measures of child care, fathers spent an average of 15 to 19 hours per week with their children and engaged in each child care task on average more than two times a week. The means for the individual measures of quality of interaction show that fathers expressed a relatively high level of acceptance toward their adolescents, according to both fathers and adolescents. Fathers also reported that they had, on average, between 8 and 12 conflicts with their adolescents in the previous two weeks. The average level of intensity of conflicts was relatively low, indicating that most discussions between fathers and adolescents were calm. Overall, the relations between fathers and their adolescents

appeared to be positive with relatively high levels of warmth and not too frequent conflict.

Insert Table 3 about here

The means and standard deviations for the variables tapping fathers' psychological distress and adolescent self-image indicated that, for the most part, fathers experienced relatively low levels of anxiety, depression, negative mood, and job-family role strain. The means for the measures of adolescent self-image showed that, on average, adolescents reported relatively positive self-images at each time of measurement. That is, they characterized themselves as having high levels of impulse control, coping skills, and positive affect or emotional tone.

In subsequent analyses the composite measures of child care, conflict, father distress, and adolescent self-image were used instead of the separate indicators of these variables. This reduced the number of variables used in the analyses and thereby increased the subject-to-variable ratio to an acceptable level.

Some researchers have shown that aspects of father-child relations, particularly the level of child care, may be related to socioeconomic status (SES), the number of children living in the household, and marital adjustment (Barnett & Baruch, 1987; Crouter, Perry-Jenkins, Huston, & McHale, 1987). In addition, lower SES and lower marital

adjustment have been associated with psychological distress and a negative adolescent self-image (Conger et al., 1982; Sears & Galambos, 1992). Accordingly, correlations were computed between father SES, number of children in the household, and father reports of marital adjustment at Time 1, and the Time 1 measures of father-adolescent relations, father distress, and adolescent self-image. Marital adjustment was assessed using Spanier's (1976) Dyadic Adjustment Scale (e.g., "In general, how often do you think that things between you and your partner are going well?"). The significant correlations were as follows: Higher SES was associated with lower involvement in child care ($r = -.28$, $p < .01$); and higher marital adjustment was related to less conflict ($r = -.51$, $p < .01$), a smaller interpersonal discrepancy of acceptance ($r = -.32$, $p < .01$), and lower father distress ($r = -.57$, $p < .001$). Number of children was not related to any of the variables. Given their significant relationships with some of the variables of interest, SES and marital adjustment were used as covariates in later analyses.

To provide a general picture of the interrelations within and between the three domains of father-adolescent relations (i.e., quantity, quality, and interpersonal perceptions), intercorrelations among the father-adolescent relations variables were computed at each time of measurement. Tables 4 and 5 show the intercorrelations

among the variables at each time of measurement. (Times 1 and 2 are presented in Table 4 and Times 3 and 4 are presented in Table 5.) The child care measures were not available at Time 1. Father-adolescent conflict was negatively related to father reports of acceptance at Times 1 and 2 and adolescents' reports of acceptance at Time 2, indicating that fathers who were more accepting experienced less conflict. At Times 2 and 3, a greater discrepancy in interpersonal perceptions of acceptance was associated with lower acceptance and higher conflict. At Time 3, higher involvement in child care was associated with higher father acceptance (as reported by fathers).

Insert Tables 4 and 5 about here

Next, correlations between father psychological distress and adolescent self-image measures were calculated at each time of measurement. None of these correlations were significant, indicating that father psychological distress and adolescent self-image were not related at any time of measurement.

Question 1: Change in Father-Adolescent Relations
Stabilities

To what extent do selected aspects of father-adolescent relations change over time? One question of interest in examining change over time pertains to the stability of scores. To assess stability, across-time correlations of

the measures of father-adolescent relations were computed for adjacent occasions of measurement. In addition, longer-term stabilities were computed for each of the measures by correlating Time 1 and Time 2 scores with the Time 4 scores. The longer-term stabilities reflect the degree of rank-order change in the father-adolescent relations variables across the 30-month and 24-month intervals, respectively. Because the child care variables were not available at Time 1, its longer-term stability was calculated only between the Time 2 to Time 4 interval. Longer-term stabilities for the other variables were assessed for the Time 1 to Time 4 and the Time 2 to Time 4 intervals. Table 6 presents these correlations.

Insert Table 6 about here

These correlations suggested a moderate to high degree of stability for the measures across occasions. Among the domains of father-adolescent relations, the quality of interaction variables (i.e., acceptance and conflict) were, on average, more stable than the quantity of interaction variables (i.e., child care). On average, the short-term stabilities (i.e., stability across the adjacent times of measurement), were higher than the long-term stabilities. These figures show that aspects of father-adolescent relations remain relatively stable even across intervals of 24 and 30 months.

Mean Level Change

A series of analyses examined the pattern of mean change in the domains of father-adolescent relations over time. Repeated measures MANOVAs were computed with Time as a within-subjects factor and Sex of Adolescent as a between-subjects factor. Linear and quadratic polynomial contrasts weighted for the unequal interval between the Time 3 to Time 4 interval (18 months) and the other adjacent intervals (6 months) tested hypotheses about change over time (cf. Wilkinson, 1988). Two separate analyses were performed: the first analysis examined mean change in child care from Time 2 to Time 4 and the second analysis examined mean changes in the other father-adolescent relations variables from Time 1 to Time 4. Figures 1 to 5 display the means of the variables across the times of measurement for the father-daughter and father-son dyads.

Mean changes in child care participation were examined using a 2 X 3 (Sex of Adolescent X Time) repeated measures ANOVA with composite child care as the dependent variable. This analysis examined only the Time 2, Time 3, and Time 4 occasions (covering a period of 24 months) because the child care measure was not available at Time 1. The results of this ANOVA showed that involvement in daily child care decreased over time, $F(2,138) = 13.35, p < .001$, with a significant linear trend, $F(1,69) = 20.41, p < .001$ (see Figure 1). The quadratic trend was not significant. The

Sex of Adolescent main effect and the interactions were also not significant. The absence of a main effect for Sex of Adolescent indicated that the level of child care for fathers of sons did not differ significantly from that for fathers of daughters.

Insert Figure 1 about here

Mean changes in the other four measures of father-adolescent relations were examined by computing a 2 X 4 (Sex of Adolescent X Time) doubly multivariate repeated measures MANOVA with fathers' report of acceptance, adolescents' report of acceptance, composite conflict, and interpersonal perceptions as the dependent measures. The term 'doubly multivariate' refers to the analysis of multiple dependent measures across multiple occasions. This analysis explored mean change across the four occasions of measurement (covering a period of 30 months).

The results showed a significant multivariate main effect for Time, Pillais = .73, $F(6,414) = 38.83$, $p < .001$. The univariate tests revealed that fathers' reports of acceptance decreased over time, $F(3,207) = 7.96$, $p < .001$, with a significant linear trend, $F(1,69) = 11.95$, $p < .001$ (see Figure 2). Adolescent reports of father acceptance, however, did not evidence significant change, $F(3,207) = 1.30$, ns (see Figure 3). Level of father-adolescent conflict decreased over time, $F(3,207) = 145.39$, $p < .001$,

with a significant linear trend, $F(1,69) = 209.63$, $p < .001$ (see Figure 4). The quadratic and cubic trends were not significant for these variables.

Insert Figures 2, 3, and 4 about here

The analysis of mean differences in perceptual discrepancy in father and adolescent reports of acceptance showed a univariate main effect for Time, $F(3,207) = 3.84$, $p < .01$, with a significant quadratic trend, $F(1,69) = 10.76$, $p < .01$. The linear and cubic trends were not significant. These results indicated that the discrepancy between fathers' and adolescents' perceptions of father acceptance initially declined and subsequently increased over time (see Figure 5).

Insert Figure 5 about here

According to the MANOVA, the multivariate and univariate main effect for sex of adolescent and the interactions were not significant. Thus, father-daughter dyads did not differ significantly from father-son dyads with respect to father and adolescent reports of acceptance, conflict, or interpersonal perceptions.

Question 2: The Association of Father-Adolescent Relations
with Father Distress and Adolescent Self-Image

To what extent are father-adolescent relations

associated with personal characteristics of fathers and adolescents? To initially answer this research question, the concurrent linkages of aspects of father-adolescent relations with father distress and adolescent self-image were examined. That is, at each time of measurement, correlations were computed between the father-adolescent variables and the composite father-distress variable. Similarly, correlations were computed between the father-adolescent relations variables and adolescent self-image at each time of measurement. These analyses were followed by two series of multiple regression analyses that examined the unique contribution of each of the father-adolescent relations variables to the prediction of father psychological distress and adolescent self-image.

Correlations

Table 7 displays the correlations between father-adolescent relations and father distress. In order to reduce the likelihood of committing a Type I error, only correlations that exceeded a significance level of $p < .01$ were interpreted. The quality of interaction variables exhibited four significant correlations out of a possible of twelve. At each time of measurement, lower conflict was linked to lower distress. Quantity of interaction (i.e. child care) and interpersonal perceptions were not associated with father distress at any time of measurement.

Insert Table 7 about here

The correlations between the father-adolescent variables and the composite adolescent self-image variable at each time of measurement are presented in Table 8. With the exception of father reports at Time 1, higher acceptance was linked to a more positive adolescent self-image at each time of measurement. Higher conflict was related to a less positive adolescent self-image at Time 3. Interpersonal perceptions of acceptance were not significantly related to adolescent self-image.

Insert Table 8 about here

Earlier analyses showed that some of the father-adolescent relations variables and father distress were related to SES and marital adjustment. Accordingly, the next analysis addressed whether the observed correlations of father-adolescent relations with father distress and adolescent self-image remained after controlling for SES and marital cohesion. Partial correlations were computed between father-adolescent relations and father psychological distress and adolescent self-image while controlling for SES and marital cohesion. In each case, the partialled correlations were nearly identical to the correlations displayed in Table 7 and Table 8. In no case did the

correlation of father-adolescent relations with father distress and adolescent self-image change after controlling for SES or marital adjustment (Fisher's z , all not significant; cf. Cohen & Cohen, 1983).

Multiple Regressions

Two series of multiple regressions were conducted to examine the unique contributions of each of the father-adolescent relations variables to father psychological distress and adolescent self-image at each time of measurement. Table 9 presents the results of the multiple regressions that predicted father distress. At each time of measurement, the conflict composite variable made a unique contribution to the prediction of father distress. In each case, higher conflict was associated with higher distress. At Times 3 and 4, fathers' lower acceptance (father reports) was uniquely associated with higher distress. The full set of father-adolescent variables accounted for a significant amount of variance in father distress at each time of measurement.

Insert Table 9 about here

Table 10 presents the results of the multiple regressions that predicted adolescent self-image. At three of the four times of measurement, father and adolescent reports of higher acceptance were each uniquely associated with more a positive adolescent self-image. At Times 2 and

3, involvement in child care made a unique and significant contribution to the prediction of adolescent self-image. A higher level of child care was associated with lower self-image. At Time 3, conflict also made a unique contribution to the prediction of adolescent self-image, indicating that higher conflict was associated with lower self-image. At each time of measurement, the full set of father-adolescent variables accounted for a significant amount of variance in adolescent self-image.

Insert Table 10 about here

Question 3: Reciprocal Linkages of Father-Adolescent Relations with Father Distress and Adolescent Self-Image

Are the linkages between father-adolescent relations and personal characteristics of fathers and adolescents reciprocal? The previous analyses showed that adolescent self-image and father distress were associated with accepting and conflictual father-adolescent relations. The analyses now turn to an examination of the reciprocal linkages between these variables. The statistical procedure used to evaluate the reciprocity of these relations was two-stage least squares analysis. Prior to the presentation of the results, a brief overview of two-stage least squares analysis is provided.

Two-Stage Least Squares Analysis

Two-stage least squares analysis (2SLS) provides one meaningful method for estimating structural parameters which, given appropriate assumptions, may be used to indicate the linkages between two or more variables that are thought to be reciprocally related (Berry, 1984; James & Singh, 1978). In the present study, it was hypothesized that fathers' and adolescents' individual characteristics and father-adolescent relations mutually impact upon one another. For example, the relationship between fathers' psychological distress and father-adolescent conflict was postulated to be reciprocal. In order for these two variables to be reciprocally related, unmeasured causes of distress should not be associated with conflict, just as unmeasured causes of conflict should not be associated with distress (Miller, 1971). The bivariate correlation between distress and conflict does not differentiate between the effect of distress on conflict and a spurious relationship between distress and conflict caused by an unmeasured variable. The same rationale holds true for the effect of conflict on distress. The method of 2SLS is an approach that attempts to control for the influence of unmeasured causes of one variable on its relationship with another variable (Steinberg, 1986).

Figure 6 shows a 2SLS model for testing the reciprocal linkages between father distress and father-adolescent

conflict. Time 2 father distress (Distress_{T2}) and Time 2 father-adolescent conflict (Conflict_{T2}) are considered endogenous variables that are explained by the model. Time 1 distress (Distress_{T1}) and Time 1 conflict (Conflict_{T1}) are predetermined or exogenous variables and are treated as givens that provide explanatory power but are not explained by the model. Predetermined variables are used to measure or control for the influence of unmeasured causes of the endogenous variables. The arrows represent the causal inferences in the model and the \underline{cs} and \underline{bs} represent unstandardized regression coefficients.

Insert Figure 6 about here

The initial step in 2SLS is to isolate variance in the endogenous variables (e.g., Conflict_{T2}) that is not related to the unmeasured causes of the other endogenous variables (e.g., Distress_{T2}). In order to accomplish this task, each exogenous variable serves as an instrument for an endogenous variable (James & Singh, 1978). For example, Distress_{T1} is an instrument for Distress_{T2} . Distress_{T1} is presumed to meet four criteria of an instrumental variable. It should: (a) be a direct cause of Distress_{T2} ; (b) not affect Conflict_{T2} directly; (c) be unrelated to the unmeasured causes of Conflict_{T2} ; and (d) not be caused by Distress_{T2} or Conflict_{T2} . Next, both of the endogenous variables are regressed onto the exogenous variables to obtain predicted

scores for Distress_{T2} and Conflict_{T2} ($\text{Distress}_{\text{pred}}$ and $\text{Conflict}_{\text{pred}}$). This step is referred to as the reduced form and is illustrated in the following regression equations in which c_{ie} are unstandardized regression weights:

$$(1) \text{Distress}_{\text{pred}} = \text{constant} + c_{11}(\text{Distress}_{T1}) + c_{12}(\text{Conflict}_{T1})$$

$$(2) \text{Conflict}_{\text{pred}} = \text{constant} + c_{21}(\text{Distress}_{T1}) + c_{22}(\text{Conflict}_{T1})$$

The predicted scores have the property of being unrelated to the unmeasured causes of the other endogenous variables because they are functions of variables that, by assumption, are unrelated to the unmeasured causes of the endogenous variables (James & Singh, 1978). Thus, the first stage of 2SLS accomplishes the important goal of purging Distress_{T2} of its relationship with the unmeasured causes of Conflict_{T2} and purging Conflict_{T2} of its relationship with the unmeasured causes of Distress_{T1} .

The second stage of 2SLS involves regressing each endogenous variable (e.g., Conflict_{T2}) on the other reduced form endogenous variable (e.g., $\text{Distress}_{\text{pred}}$). This is illustrated in the following equations:

$$(3) \text{Conflict}_{T2} = \text{constant} + b_{12}(\text{Distress}_{\text{pred}})$$

$$(4) \text{Distress}_{T2} = \text{constant} + b_{21}(\text{Conflict}_{\text{pred}})$$

The significance levels of b_{12} and b_{21} imply the mutual effects of distress and conflict on each other.

A major advantage of the 2SLS approach to evaluating reciprocal relationships is that, unlike other causal modeling techniques (e.g., LISREL), it specifies assumptions that are logically consistent with the meaning of reciprocity and provides tests of these assumptions. In particular, reciprocity assumes that instrumental variables are unrelated to the unmeasured causes of endogenous variables. For example, if Distress_{T1} were related to the unmeasured causes of Conflict_{T2} , then part of this unmeasured cause would be fed into $\text{Distress}_{\text{pred}}$ by way of Distress_{T1} (see equation 1). The same is true if Conflict_{T1} were related to the unmeasured causes of Distress_{T2} . Should either of these conditions exist, then it would be impossible to rule out the possibility that the mutual effects between Distress_{T2} and Conflict_{T2} were due to unmeasured causes.

James and Singh (1978) recommend performing additional tests of logical consistency of the assumptions that instrumental variables are unrelated to the unmeasured causes of endogenous variables. Basically, the residual scores from equation 3 should not be related to Distress_{T1} . Similarly, residual scores from equation 4 should not be related to Conflict_{T1} . This test is performed by solving two regression equations:

$$(5) \text{ Conflict}_{T2} - b_{12}(\text{Distress}_{T2}) = \text{constant} + X_{11}(\text{Conflict}_{T1}) + X_{12}(\text{Distress}_{T1})$$

$$(6) \text{Distress}_{T2} - b_{21}(\text{Conflict}_{T2}) = \\ \text{constant} + X_{21}(\text{Conflict}_{T1}) + X_{22}(\text{Distress}_{T1})$$

If X_{12} is not significantly different from zero, then it can be inferred that Distress_{T1} is related neither directly to Conflict_{T2} nor to the unmeasured causes of Conflict_{T2} . The same holds true if X_{21} is not significantly different from zero with respect to Conflict_{T1} and Distress_{T2} .

Father-Adolescent Conflict and Personal Characteristics

Figure 7 shows a 2SLS model that examined the mutual linkages between father psychological distress and father-adolescent conflict at Time 2. The Time 1 scores of these variables served as the instrumental variables. The results of the analysis showed that distress and conflict at Time 1 were significant predictors of their respective scores six months later. The significant coefficients linking Time 2 distress and Time 2 conflict imply that distress predicted conflict and conflict predicted distress.

Insert Figure 7 about here

The assertion of reciprocity was unwarranted, however, because Time 1 distress failed to meet two of the criteria for being an instrumental variable (James & Singh, 1978). First, Time 1 distress had a significant direct effect on Time 2 conflict (illustrated by the dotted line connecting these two variables in Figure 7). Second, the test of

logical consistency showed that Time 1 distress was related to the unmeasured causes of Time 2 conflict. Time 1 conflict, however, did meet the assumptions for being an instrumental variable. Thus, these results imply a unidirectional effect of distress on conflict and that the effect of conflict on distress is spurious.

The reciprocal linkages between adolescent self-image and father-adolescent conflict were also tested using 2SLS. These results are shown in Figure 8. Both Time 1 self-image and Time 1 conflict were significant predictors of their respective Time 2 scores. At Time 2, higher conflict predicted a lower positive self-image and a lower positive self-image predicted higher conflict. Time 1 conflict and self-image met the criteria for being instrumental variables, including the tests of logical consistency. Thus, these results provide evidence for reciprocal effects between father-adolescent conflict and adolescent self-image.

Insert Figure 8 about here

Next, a model was tested that examined the reciprocal linkages of father-adolescent conflict with father distress and adolescent self-image. The results of this analysis are presented in Figure 9. The results were very similar to the previous 2SLS analyses. Father distress had a unidirectional effect on father-adolescent conflict for the

same reasons mentioned above. Also, there appeared to be bidirectional influences between father-adolescent conflict and adolescent self-image.

Insert Figure 9 about here

Father Acceptance and Individual Characteristics

A series of 2SLS analyses also examined the reciprocal relations between fathers' and adolescents' individual characteristics and father acceptance. Figure 10 shows the model that tested whether fathers' psychological distress and fathers' reports of acceptance were reciprocally related. This analysis showed no evidence for an effect of father distress on acceptance or for an effect of acceptance on father-distress, as indicated by the nonsignificant regression coefficients linking Time 2 father distress and Time 2 acceptance.

Insert Figure 10 about here

Figure 11 shows a 2SLS model that examined reciprocity between adolescent self-image and father acceptance. This analysis showed that Time 1 self-image and Time 1 acceptance were significant predictors of their respective Time 2 Scores. At Time 2, a higher positive self-image significantly predicted higher acceptance and higher acceptance significantly predicted a higher positive self-

image. Time 1 self-image and acceptance passed the tests of logical consistency (i.e., they were not associated with the unmeasured causes of the endogenous variables). Thus, this analysis provides support for the reciprocal effects between adolescent self-image and father acceptance.

Insert Figure 11 about here

Finally, a 2SLS model was tested that examined the reciprocal linkages between father distress and adolescent self-image, on the one hand, and father acceptance, on the other. The results of this analysis are presented in Figure 12. These results were consistent with the previous models. Father acceptance was found to be reciprocally related to adolescent self-image but not related to father distress. This model was also tested using adolescent reports of father acceptance. A similar pattern of findings emerged. That is, acceptance was reciprocally linked to self-image but was not associated with father distress. All of these models were tested on other intervals (i.e., Time 2 to Time 3; Time 3 to Time 4). The results of these analyses replicated the findings reported in Figures 7-12.

Insert Figure 12 about here

Exploratory Analyses

The results, thus far, have shown that aspects of

father-adolescent relations change over time and that qualitative aspects of father-adolescent relations (i.e., acceptance and conflict) were associated either reciprocally or unidirectionally to personal characteristics of fathers and adolescents. The final analysis represented an attempt to synthesize these sets of findings by exploring whether father distress and adolescent self-image at Time 1 were associated with the pattern of mean change in acceptance and conflict over the four times of measurement. Only acceptance and conflict were examined because previous analyses showed that these variables were associated with father psychological distress and/or adolescent self-image.

These analyses amounted to computing repeated measures ANOVAs with Time of Measurement as a within-subjects variable and Father Distress and Adolescent Self-Image as continuous between-subjects variables (cf. Cohen & Cohen, 1983; Wilkinson 1988). The father-adolescent relations variables (father and adolescent reports of acceptance, conflict, and interpersonal perceptions) were the dependent variables. Accordingly, this approach determined: (a) whether the dependent variables, averaged across time, were associated with father distress at Time 1 (between-subjects main effect of Distress), adolescent self-image at Time 1 (between-subjects main effect of Self-Image), or a combination of distress and self-image (between-subjects interaction: Distress X Self-Image); and (b) whether

change in the dependent variables was related to father distress (Distress X Time interaction), adolescent self-image (Self-Image X Time interaction), or a combination of father distress and adolescent self-image (Distress X Self-Image X Time interaction).

The first repeated measures analysis examined patterns of change in father reports of acceptance. The results showed that, as found in earlier analyses, father acceptance decreased over time, $F(3,201) = 3.60, p < .01$, with a significant linear trend, $F(1,67) = 11.95, p < .001$ (see Figure 2). There was also a significant main effect for self-image, $F(1,67) = 3.05, p < .05$. The Distress main effect, Time main effect, Self-Image X Distress interaction, and the interactions with Time did not attain significance. The lack of significant findings for the interactions involving Time suggested that the pattern of change for acceptance did not differ according to adolescent self-image or father distress.

The nature of the self-image main effect was explored by placing father-adolescent dyads into two groups on the basis of a median split of the Time 1 adolescent self-image scores. The first group of dyads represented adolescents who had self-image scores above the median (positive self-image). The second group represented adolescents who had self-image scores below the median (negative self-image). Fathers of adolescents with a positive self-image at Time 1

reported higher acceptance (averaged across time) than fathers of adolescents with a negative self-image.

Similar results were found when the adolescents' reports of acceptance were used as the dependent variable. There was a significant main effect for self-image, $F(1,67) = 19.36$, $p < .01$. Based on a median split of self-image, adolescents with a more positive self-image at Time 1 reported a higher level of acceptance (averaged across time) than adolescents with a more negative self-image. As shown in earlier analyses, adolescents' reports of acceptance did not change significantly over time (see Figure 3). The Distress main effect and the interactions with Time were also not significant.

The final repeated measures analysis examined patterns of change in conflict. As shown in previous analyses, conflict decreased over time, $F(3,201) = 3.89$, $p < .01$, with a significant linear trend, $F(1,67) = 6.28$, $p < .01$. The results also showed a significant main effect for Distress, $F(1,67) = 8.10$, $p < .001$. Higher distress at Time 1 was associated with higher conflict (averaged across time). The Distress X Self-Image interaction was also significant, $F(1,67) = 5.73$, $p < .05$, as was the three-way-interaction (Distress X Self Image X Time), $F(3,201) = 3.00$, $p < .05$, with a significant linear trend, $F(1,67) = 5.08$, $p < .05$.

In order to illustrate the nature of these interactions the dyads were placed into one of four groups based on

median splits of father distress scores and adolescent self-image scores at Time 1. The four groups represented fathers and adolescents who reported, respectively: (a) high distress and positive self-image; (b) high distress and negative self-image; (c) low distress and positive self-image; and (d) low distress and negative self-image. Figure 13 depicts the mean change in conflict for these four groups. On average, dyads in which fathers reported high distress and adolescents reported a negative self-image had a higher level of conflict than the other three groups. Although all four groups showed decreases in conflict over time, the overall level of conflict was moderated by the level of father distress in combination with adolescent self-image. In other words, when both of the individuals in the relationship reported emotional upset (i.e., high father distress and negative adolescent self-image), the level of conflict was higher and decrease in conflict over time was not as great as when one or both of the individuals reported higher psychological adjustment. The average decrease in conflict from Time 1 to Time 4 in the high distress and negative self-image dyads was 1.30 and the average decrease in conflict in the three other groups was 1.54.

Insert Figure 13 about here

These three analyses were recomputed including sex of adolescent as a predictor and in interaction with the father

distress and adolescent self-image variables in order to determine whether the association of father distress and adolescent self-image with changes in father-adolescent relations varied according to the sex of the adolescent. In no case was sex of adolescent a significant predictor as a main effect or in interaction with the other variables.

CHAPTER V

DISCUSSION

The present investigation charted changes in three domains of father-adolescent relations: quantity of interaction, quality of interaction, and interpersonal perceptions of interactions. In addition, the concurrent and reciprocal linkages between personal characteristics of fathers (psychological distress) and adolescents (self-image) were examined. Finally, the association between patterns of change in father-adolescent relations and personal characteristics of fathers and adolescents were explored. This chapter is a discussion of the findings as they relate to these issues. Limitations of the present study as well as suggestions for future research also will be presented.

Change in Father-Adolescent Relations

The first research question asked whether aspects of father-adolescent relations changed during early adolescence. The quantity of interactions between father and adolescents, on average, was expected to decline. Age-related decreases in qualitatively different domains assessing the quality of interactions--levels of acceptance and conflict--also were hypothesized.

The results of the repeated measures MANOVAs indicated that, as hypothesized, fathers decreased their level of involvement in child care as their adolescents matured.

With respect to changes in the quality of father-adolescent interactions, the results of the MANOVA showed that, according to fathers, their expressions of acceptance decreased over the two and one-half years, as did the level of conflictual interactions.

The findings for child care are similar to other studies that show a general trend toward less contact between fathers and adolescent during early adolescence (Montemayor & Brownlee, 1978; DeLuccie & Davis, 1990). These studies suggest that, as adolescents become more involved in relations outside of the family, the opportunities for interactions with their fathers might diminish.

The findings for acceptance are consistent with previous longitudinal research on mother-adolescent relations (McNally et al., 1991) and cross-sectional research on father-adolescent relations (DeLuccie & Davis, 1990). In general, these previous studies found a slight decrease in parents' reports of positive affect towards adolescents during early adolescence. It is important to note that in the present study, as in other studies (e.g., DeLuccie & Davis, 1990), the average level of acceptance remained relatively high throughout adolescence despite this slight decrease. In the present sample, fathers' average level of acceptance was well above the midpoint of the scale at every time of measurement. For example, fathers' lowest

mean score on acceptance was 3.51 out of a possible 5. This score indicated that, on average, fathers and adolescents described accepting behaviours (e.g., "I speak to my child in a warm and friendly voice") to be between "somewhat like father" (i.e., score of 3) and "like father" (i.e., score of 4). Furthermore, adolescent reports of father acceptance were consistently higher than father reports of their acceptance and adolescents' reports of father acceptance did not change significantly over time. Thus, it appears that fathers continue to express warmth and acceptance towards their children during adolescence. Rather than being nonsupportive or hostile toward their children, the slight decrease in fathers' reports of acceptance may be indicative of fathers' expectations for more independent and responsible behaviour on the part of their adolescents (Maccoby & Martin 1983; Roberts et al., 1984).

The present findings of a decrease in fathers' reports of conflict (see also Galambos & Almeida, 1992) refute the notion of a general increase in conflictual interactions during early adolescence (cf., Montemayor, 1983). One major difference between the present study and other studies of parent-adolescent conflict is the use of a longitudinal design. This study of intra-individual change indicated decreases in conflict whereas other studies of inter-individual age differences suggested a somewhat different picture. It may be that decreases in conflict are, in part,

due to less frequent interactions between fathers and adolescents. A decrease in the amount of contact between fathers and adolescents may reduce the opportunity for conflict between them. It is important for future longitudinal research to replicate these findings and to explore possible mechanisms that might account for increases or decreases in parent-adolescent conflict.

Given the paucity of previous research on interpersonal perceptions of father-adolescent relations, the analyses of change in this domain were exploratory. Over the two and one-half years studied, the absolute discrepancy between fathers' and adolescents' reports of father acceptance initially decreased and then evidenced a slight increase. To a certain degree, these findings are consistent with Alessandri and Wozniak's (1989) contention that early adolescence may be a period marked by cognitive changes in adolescents' perceptions of their familial relations and after this period of change, perceptions may become somewhat more stable. In the present study, the discrepancy between fathers' and adolescents' reports of fathers' acceptance decreased between the ages of 11.6 and 12.6 years. However, in the 18 months that followed, there was a slight increase in the discrepancy between fathers' and adolescents' reports. Smetana (1989) also found an increase over time in the mismatch between adolescents' and parents' views of issues falling under parental authority. In the present

study the slight increase in discrepant perceptions of father acceptance reflects the decrease in father reports of acceptance in combination with the adolescent's unchanging views of father acceptance.

Taken together, the mean-level analyses demonstrated that as a group, the relations between fathers and adolescents underwent change during early adolescence. As for change among the rank ordering of individual dyads, the examination of the stabilities showed a different picture. That is, aspects of father-adolescent relations (acceptance and conflict) demonstrated moderate stability even over the two and one-half year interval. These results indicate that, despite mean-level changes in father-adolescent relations, fathers and adolescents evidenced considerable continuity in the rank-order of their relations over time. The quantity of interaction variable were less stable than the quality of interaction variables. One reason for this difference is that the quality of interaction variables may reflect more fundamental and enduring childrearing values (Roberts et al., 1984) whereas the quantity of interactions may be more indicative of behavioural characteristics that are more dependent on situations and contexts (Grusec & Kuczynski, 1980).

The overall picture of the results addressing change in father-adolescent relations points to both change and continuity. Change in the quantity and quality of

interactions appeared to depict decreases in provisional care and acceptance in the relationship, as well as decreases in conflict. This pattern of relationship change may be accounted for by the changing functions of fathers in the lives of their adolescent children from providing basic care to promoting independence and responsibility. At the same time, adolescents may be seeking their own sense of identity in the family. Grotevant and Cooper (1985) describe individuation as the process of establishing one's own sense of independence and responsibility. Part of this process involves asserting separateness in the family and at the same time remaining connected to family members. These dual agendas appeared to be evident in the present findings in terms of decreased contact (i.e., child care involvement) and increased connectedness (i.e., decreased conflict).

Personal Characteristics and Father-Adolescent Relations

The next two research questions addressed how personal characteristics of fathers (psychological distress) and adolescents (self-image) shape and are shaped by the interactions that fathers and adolescents have with each other. In order to better understand this process the concurrent linkages of father-adolescent relations variables with father distress and adolescent self-image were examined. These analyses were followed by a series of 2SLS analyses to determine whether the observed linkages were reciprocal.

Concurrent Linkages

Within-time correlations showed that personal characteristics of fathers and adolescents were associated with the quality of father-adolescent interactions. At each time of measurement, fathers who experienced higher distress were more likely to experience more conflict with their adolescents as compared to fathers who experienced lower distress. As for adolescent characteristics, adolescents who held positive views about themselves were more likely to experience accepting father-adolescent relations at each time of measurement and to experience less conflict with their fathers at Time 3. These results remained after controlling for marital adjustment and SES.

Why were personal characteristics associated with the quality of interactions and not to the quantity of interaction? Quantity of interactions may be more dependent on situational factors. For example, fathers' level of involvement in child care may depend more on family needs and demands such as the extent to which mothers are employed outside the home (Almeida, Maggs, & Galambos, in press). The tenor and intensity of interactions may be more salient for individuals than frequency and or time spent in interaction. Personal characteristics might also play a more important role in shaping the quality rather than the quantity of interactions between fathers and adolescents.

Reciprocal Effects

The third research question asked whether the observed linkages of father-adolescent relations with father psychological distress and adolescent self-image were reciprocal. With regard to father distress, the results of the 2SLS analyses suggested that the effects between father distress and father-adolescent conflict were unidirectional rather than bi-directional. Psychological distress may diminish fathers' patience and tolerance with their adolescents which could lead to elevated tension and conflictual interactions between fathers and adolescents. Father-adolescent conflict, however, does not appear to be a source of father distress. One reason for this is the relatively low average level of conflict that fathers reported. In addition, there are perhaps many other sources of strain in fathers' lives that contribute to fathers' psychological distress, such as stressful working conditions or strained marital relations. Given the more chronic and pervasive strains that fathers potentially face, low levels of conflict with one's adolescent may not be a very important contributor to fathers' feelings of psychological distress.

Personal characteristics of adolescents were also hypothesized to be reciprocally linked to father-adolescent relations. The results of the 2SLS analyses supported this assertion for acceptance and conflict. A positive

adolescent self-image appeared to increase the likelihood of more accepting and less conflictual father-adolescent relations. In turn, higher acceptance and lower conflict contributed to more positive adolescent self-image.

It was expected that aspects of father-adolescent relations may play an important role in shaping personal characteristics of adolescents and fathers. In this study only adolescents' psychological well-being appeared to be affected by father-adolescent relations. These findings are consistent with other studies that point to a link between warm and accepting parent-adolescent interactions and adolescent well-being (Simons et al., 1990; Steinberg, 1990). These studies contend that pleasant and nurturing interactions convey to adolescents that they are persons of worth and value and thus, contribute to their sense of well-being. Although some studies have found significant linkages between father-adolescent relations and fathers' well-being, (e.g., Silverberg, 1989), the results of this study suggest that this effect is a unidirectional one with father distress shaping father-adolescent relations and not vice-versa. It is important to note that, in this study, only one type of personal characteristic was assessed. Father-adolescent relations may have an impact upon other characteristics of fathers such as life satisfaction, and feelings of meaningfulness (Silverberg, 1987; Umberson, 1989). Thus, the two plausible explanations for the lack of

reciprocity between father-adolescent and father characteristics are the restricted measures of father characteristics and the use of a sample of father-adolescent dyads that, on average, reported harmonious relations.

Exploratory Longitudinal Analyses

The final set of longitudinal analyses examined how fathers' and adolescents' well being contributed to change in father-adolescent relations. In the previous change analyses, acceptance and conflict decreased over the two and one-half year period. Results of the exploratory repeated measures analyses showed that differences in father acceptance (averaged across time) were associated with adolescent self-image at Time 1. However, the pattern of change in acceptance did not vary according to either adolescent self-image or father distress. As for conflict, the findings suggested that the pattern of change in conflict was associated with a combination of father distress and adolescent self-image. Although levels of conflict exhibited a general decrease over time, the extent of the decrease was not as great when both individuals were experiencing emotional upset (i.e., high distress and negative self-image).

These results point to the importance of considering both individuals in determining how personal characteristics may influence the evolution of any particular relationship. Indeed in the present study, conflict was likely to be

higher when both of the individuals reported upset. It may be that one psychologically healthy individual may buffer the relational consequences when the other individual is experiencing distress. These findings lend some support to the hypothesis that personal characteristics contribute to individual differences in change in father-adolescent relations, in particular father-adolescent conflict.

Limitations

Generalizations of these conclusions should be considered in light of some limitations of the data. First, the participants were fathers and adolescents in two-earner families. The results might differ for fathers with younger children or fathers in single-earner families. Because younger children are more dependent on their parents than are older children, fathers typically spend more time and engage in different types of activities with younger children as compared to older children (DeLuccie & Davis, 1991; Pleck, 1983). In addition, work and family obligations are more likely to conflict for parents in dual-earner families than in two-parent, single-earner families. Such demands may give fathers in the present sample fewer choices about their level of involvement with their children (i.e., they have to be involved to some extent; Crouter et al., 1987) which in turn may have implications for father-adolescent relations. Indeed, Crouter and Crowley (1990) found that fathers in dual-earner families spent similar

amounts of time alone with their school-aged daughters and sons but fathers in single earner-families spent more time with sons. This may help explain the lack of differences between fathers' relations with their daughters and sons in the present sample of dual-earner families.

Attention should also be paid to the cultural and social homogeneity of the present sample. The families in the present study were primarily stable, white working- to middle- class families living in the suburbs of a medium-sized Canadian city. The forms and meaning of the fathers' role in the family may vary considerably in different ethnic and social contexts. In addition, adolescents' attitudes and behaviours toward their fathers might also differ along these lines (Cooper & Backer, 1993; Feldman, Rosenthal, Mont-Reynaud, Leung, & Lau, 1991; Fuligni, 1993). For example, Fuligni (1993) found that age differences in father-adolescent conflict and feelings of closeness were different in Chinese-American families as compared to European-American families. Future research would benefit by incorporating families from diverse ethnic backgrounds in longitudinal designs of age changes in relationship patterns.

There are also limitations regarding the measures. In order to examine change in father-adolescent relations across early adolescence, the present study analyzed data from the longitudinal Two-Earner Family Study (Almeida &

Galambos, 1991; Galambos & Maggs, 1991). Although the use of an existing data set placed limits on the choice of measures, it made possible the analysis of intra-individual change. The measures in the present study were self-report instruments and hence open to subject bias and inaccuracy. A more complete and accurate picture of father-adolescent relations could be attained by using time diaries of interactions as well as behavioural observations. It is important to point out, however, that both fathers and adolescents reported on acceptance to provide a more balanced assessment of their relationship.

Directions for Future Research

The present study demonstrated that the relations between adolescents and their fathers change during early adolescence. Such change is believed to be concomitant with biological, psychological, and social transitions of adolescence. For instance, physical development associated with pubertal maturation may be a social stimulus for parents to treat adolescents more like adults (Brooks-Gunn & Warren, 1988; Hill, 1987; Petersen & Taylor, 1980). Adolescents' increasing independence from the family may also play an important role in facilitating changes in family relations. As adolescents' activities shift from the family to the peer group, the frequency and forms of interactions within the family may also change (Hill, 1987). Physical and social changes of early adolescence often

coincide with transferring from a usually small and intimate elementary school to a larger and sometimes impersonal middle school or high school. Multiple transitions may be stressful for adolescents and, in turn, affect familial relations (Simmons & Blyth, 1987). Future research would benefit by incorporating multiple age-related transitions into longitudinal studies of relationship change in order to examine possible mechanisms underlying change in relationships.

Developmental change in father-adolescent relations may not be due solely to age-related transitions of adolescents. Changes in the frequency and form of father-adolescent relations may also be associated with developmental characteristics of the father. Fathers' own midlife development (e.g., career transitions) may be related to how they treat their children. Furthermore, adolescents' development may have special social meanings for fathers. As they recognize that their children are becoming adults, fathers may begin to evaluate their own adult development. Such self-appraisal might lead to feelings of anxiety or concern regarding one's own accomplishments (i.e., midlife anxiety) or to feelings of satisfaction and anticipation of a positive new period in their lives. These feelings may direct fathers to change their patterns of interacting with their adolescents.

In addition to the age of the adolescent, personal

characteristics of fathers and adolescents were shown to be associated with father-adolescent relations. Personal characteristics, however, are not the only factors that could potentially contribute to individual differences in father-adolescent relations. For example, Belsky's (1984) model of the determinants of parenting not only included characteristics of the parent and child but also incorporated intra- and extra-familial sources of stress and support. Workplace experiences are one example of how individuals activities outside the home may spill-over into the family. There is a growing research base that documents the importance of parental work conditions for family functioning (e.g., Conger et al., 1993; Galambos et al., 1993). In addition, a growing number of older adolescents are entering the labour force, thereby experiencing both positive and negative workplace experiences (Schulenberg & Bachman, 1993; Steinberg, Fegley, & Dornbusch, 1993). An interesting prospect for future studies would be to examine the effects of parents' and adolescents' work experiences on family relations.

Finally, future research needs to address the mutual impact of the variety of relationships within the home. The present study found that warmth and cohesion in marital relations were associated with accepting father-adolescent relations. By the same token, sibling relations and a father's relations with his other children may have

import for how fathers and adolescents interact. A focus on multiple relationships and their interrelations within the family will lead to a better understanding of fathers and adolescents.

The present study contributes to our understanding of father-adolescent relations by shifting from a static conception of their interactions to recognizing that the ways in which fathers and adolescents interact are continually evolving. In addition, personal characteristics that fathers and adolescents bring to their relationship may contribute to changes in their relationship. In turn, father-adolescent relations may contribute to personal characteristics of adolescents. Steps for future research include explicating mechanisms that underlie change in father-adolescent relations and incorporating individuals' experiences inside and outside the family that may account for further individual differences in change.

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Table 1

Occupational Classifications of Fathers in Percentages

Classification	
Professional, technical, and kindred	25%
Craftsmen and kindred	25%
Managers and administrators	23%
Sales workers	9%
Operatives	7%
Labourers	3%
Clerical and kindred	3%
Service workers	5%

Note. N = 112.

Table 2

Reliability Estimates for the Variables at each Time of Measurement

<u>Variables</u>	<u>Number of Items</u>	<u>Coefficient Alpha</u>			
		<u>Time 1</u>	<u>Time 2</u>	<u>Time 3</u>	<u>Time 4</u>
<u>Father-Adolescent Relations</u>					
Quantity of Interaction:					
Child Care Frequency	3	.60	.58	.66	
Child Care Hours	1				
Quality of Interaction:					
Acceptance (F)	24	.93	.92	.90	.93
Acceptance (A)	24	.95	.95	.97	.97
Conflict Intensity	44	.94	.95	.94	.92
Conflict Frequency	44	.90	.93	.86	.93
Interpersonal Perceptions:					
Acceptance (F) - Acceptance (A)	24	.73	.82	.89	.84
<u>Father Psychological Distress</u>					
Anxiety	20	.92	.93	.93	.90
Depression	20	.85	.88	.92	.82
Temperamental Mood	7	.90	.91	.88	.87
Job-Family Role Strain	16	.81	.87	.86	.88
<u>Adolescent Self-Image</u>					
Impulse Control	8	.67	.74	.70	.79
Mastery & Coping	10	.73	.71	.81	.83
Emotional Tone	11	.81	.79	.83	.86

Note. N = 71. F=Father report. A=Adolescent report.

Table 3
Means and Standard Deviations of the Variables

<u>Variables</u>	<u>Time 1</u>	<u>Time 2</u>	<u>Time 3</u>	<u>Time 4</u>
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<u>Quantity of Interaction:</u>				
Child Care Freq. ^a	--	2.60 (.99)	2.63 (.74)	2.22 (.78)
Child Care Hours ^b	--	19.3 (9.8)	18.45 (10.7)	15.1 (7.7)
Child Care Composite ^c	--	.16 (.94)	.13 (.76)	-.29 (.68)
<u>Quality of Interaction:</u>				
Acceptance (F) ^d	3.60 (.43)	3.59 (.46)	3.51 (.38)	3.43 (.48)
Acceptance (A) ^d	3.74 (.75)	3.64 (.68)	3.66 (.82)	3.59 (.72)
Conflict Intensity ^e	1.90 (.44)	1.92 (.43)	.72 (.40)	.79 (.47)
Conflict Freq. ^f	11.86 (7.2)	11.74 (7.9)	8.13 (5.8)	10.14 (7.8)
Conflict Composite ^g	.76 (.89)	.81 (.94)	-.87 (.85)	-.70 (1.1)
<u>Interpersonal Perceptions:</u>				
Accep(F) - Accep(A) ^h	1.05 (.30)	.92 (.36)	.93 (.43)	1.02 (.37)
<u>Father Psychological Distress</u>				
Anxiety ⁱ	1.80 (.49)	1.79 (.47)	1.72 (.50)	1.65 (.41)
Depression ⁱ	1.45 (.38)	1.46 (.40)	1.42 (.40)	1.36 (.29)
Temperamental Mood ⁱ	1.60 (.56)	1.70 (.57)	1.68 (.54)	1.55 (.49)
Job-Family Strain ^j	2.34 (.49)	2.33 (.48)	2.33 (.42)	2.30 (.46)
Distress Composite ^k	.00 (.79)	-.01 (.81)	.01 (.82)	.00 (.71)
<u>Adolescent Self-Image^l</u>				
Impulse Control	4.38 (.75)	4.45 (.74)	4.50 (.70)	4.34 (.78)
Mastery & Coping	4.76 (.68)	4.93 (.62)	4.86 (.67)	4.79 (.69)
Emotional Tone	4.50 (.85)	4.70 (.78)	4.52 (.89)	4.60 (.84)
Self-Image Composite	4.55 (.60)	4.69 (.59)	4.63 (.62)	4.58 (.64)

Note. N = 71. F=Father report. A=Adolescent report.

^aHigher scores indicate more frequent child care (possible range: 1 - 5). ^bScores reflect hours of child care per week. ^cAverage of child care frequency standardized across time and child care hours standardized across time. ^dHigher scores indicate higher acceptance (possible range: 1-5.). ^eHigher scores indicate more angry discussions (possible range: 1-5). ^fScore indicates the number of conflicts in the past two weeks (possible range: 0-44). ^gAverage of conflict intensity and conflict frequency standardized across time. ^hHigher scores indicate greater discrepancy. ⁱHigher scores indicate higher levels of distress (possible range = 1-4). ^jHigher scores indicate higher levels of role strain (possible range = 1-5). ^kAverage of anxiety, depression, temperamental mood, and job-family role strain standardized across time. ^lHigher scores indicate amore positive self-image (possible range = 1 - 6).

Table 4

Correlations among the Father-Adolescent Relations Variables
at Time 1 and Time 2

<u>Variables</u>	1.	2.	3.	4.	5.
Quantity of Interaction:					
1. Child Care Composite ^a		.12	.07	-.03	.09
Quality of Interaction:					
2. Acceptance (F) ^b	--		.20*	-.24*	-.20*
3. Acceptance (A) ^b	--	.24*		-.21*	-.08
4. Conflict Composite ^c	--	-.42**	-.09		.25*
Interpersonal Perceptions:					
5. Accep (F) - Accep (A) ^d	--	-.02	-.13	.02	

Note. N = 71. F=Father report. A=Adolescent report. Time 1 correlations are below the diagonal. Time 2 correlations are above the diagonal. Measures of child care were not available at Time 1.

^aHigher scores indicate higher level of child care. ^bHigher scores indicate higher acceptance. ^cHigher scores reflect higher level of conflict. ^dHigher scores indicate greater discrepancy.

*p < .05. **p < .01.

Table 5

Correlations among the Father-Adolescent Relations Variables
at Time 3 and Time 4

<u>Variables</u>	1.	2.	3.	4.	5.
Quantity of Interaction:					
1. Child Care Composite ^a		.39**	.06	.17	-.11
Quality of Interaction:					
2. Acceptance (F) ^b	.10		.04	-.11	-.08
3. Acceptance (A) ^b	-.18	.12		-.12	-.13
4. Conflict Composite ^c	.20*	-.13	-.18		.02
Interpersonal Perceptions:					
5. Accep(F) - Adol(A) ^d	.12	-.25*	-.37**	.22*	

Note. N = 71. F=Father report. A=Adolescent report. Time 3 correlations are below the diagonal. Time 4 correlations are above the diagonal. Measures of child care were not available at Time 1.

^aHigher scores indicate higher level of child care. ^bHigher scores indicate higher acceptance. ^cHigher scores reflect higher level of conflict. ^dHigher scores indicate greater discrepancy.

*p < .05. **p < .01.

Table 6

Across-Time Correlations of the Father-Adolescent RelationsVariables

	<u>Times of Measurement</u>				
	1-2	2-3	3-4	2-4	1-4
<u>Months Between Measurement:</u>	6	6	18	24	30
<u>Quantity of Interaction:</u>					
Child Care Composit	--a	.52**	.57**	.52**	--a
<u>Quality of Interaction:</u>					
Acceptance (F)	.68**	.74**	.81**	.72**	.66**
Acceptance (A)	.70**	.74**	.66**	.61**	.60**
Conflict Composite	.57**	.59**	.77**	.47**	.46**
<u>Interpersonal Perceptions:</u>					
Accep (F) - Accep (A)	.39**	.45**	.55**	.47**	.47**

Note. N = 71. F=Father report. A=Adolescent report.

^aVariable not available at Time 1.

**p < .01.

Table 7

Correlations between Father-Adolescent Relations Variables
and Father Distress

<u>Father-Adolescent Relations Variables</u>	<u>Father Psychological Distress^a</u>			
	Time 1	Time 2	Time 3	Time 4
Quantity of Interaction:				
Child Care Composite	--	-.02	.19	.01
Quality of Interaction:				
Acceptance (F)	-.22	-.22	-.24	-.25
Acceptance (A)	-.12	-.09	-.01	.01
Conflict Composite	.39**	.40**	.31**	.38**
Interpersonal Perceptions:				
Accep(F) - Accep(A)	.02	.14	.21	-.06

Note. N = 71. F=Father report. A=Adolescent report.

^aComposite father distress variable. Higher scores indicate higher levels of distress.

**p < .01.

Table 8

Correlations between Father-Adolescent Relations Variables
and Adolescent Self-Image

<u>Father-Adolescent Relations Variables</u>	<u>Adolescent Self-Image^a</u>			
	Time 1	Time 2	Time 3	Time 4
<u>Quantity of Interaction:</u>				
Child Care Composite	--	-.19	-.25	.01
<u>Quality of Interaction:</u>				
Acceptance (F)	.18	.37**	.31**	.29**
Acceptance (A)	.40**	.26**	.26**	.32**
Conflict Composite	-.20	-.11	-.33**	-.12
<u>Interpersonal Perceptions:</u>				
Accep(F) - Accep(A)	-.14	-.19	-.06	-.01

Note. N = 71. F=Father report. A=Adolescent report.

^aComposite adolescent self-image variable. Higher scores indicate higher positive self-image.

** $p < .01$.

Table 9

Multiple Regressions Predicting Father Psychological
Distress from the Father-Adolescent Relations Variables

<u>Father-Adolescent Relations Variables</u>	<u>Father Psychological Distress^a</u>			
	<u>Time 1 Beta</u>	<u>Time 2 Beta</u>	<u>Time 3 Beta</u>	<u>Time 4 Beta</u>
Quantity of Interaction:				
Child Care Composite	--	-.01	.16	.04
Quality of Interaction:				
Acceptance (F)	-.09	-.11	-.20*	-.21*
Acceptance (A)	-.19	-.03	.13	.05
Conflict Composite	.36**	.37**	.25*	.35**
Interpersonal Perceptions:				
Accep(F) - Accep(A)	.03	.05	.13	-.05
<u>R²</u>	.18*	.17*	.18*	.17*
<u>Adjusted R²</u>	.13*	.12*	.12*	.12*

Note. N = 71. F=Father report. A=Adolescent report. Beta = standardized regression coefficient.

^aComposite father distress variable. Higher scores indicate higher levels of distress.

** p < .05. ** p < .01.

Table 10

Multiple Regressions Predicting Adolescent Self-Image from
the Father-Adolescent Relations Variables

<u>Father-Adolescent Relations Variables</u>	<u>Adolescent Self-Image^a</u>			
	<u>Time 1 Beta</u>	<u>Time 2 Beta</u>	<u>Time 3 Beta</u>	<u>Time 4 Beta</u>
Quantity of Interaction:				
Child Care Composite	--	-.23*	-.22*	-.03
Quality of Interaction:				
Acceptance (F)	.03	.35**	.32**	.28*
Acceptance (A)	.38*	.17	.20*	.29*
Conflict Composite	-.14	.03	-.26*	-.09
Interpersonal Perceptions:				
Accep (F) - Accep (A)	-.08	-.10	.18	.05
<u>R²</u>	.20**	.23**	.27**	.18*
<u>Adjusted R²</u>	.15**	.17**	.22**	.11*

Note. N = 71. F=Father report. A=Adolescent report. Beta = standardized regression coefficient.

^aComposite adolescent self-image variable. Higher scores indicate higher positive self-image.

** p < .05. ** p < .01.

Figure 1

Mean Change in Child Care

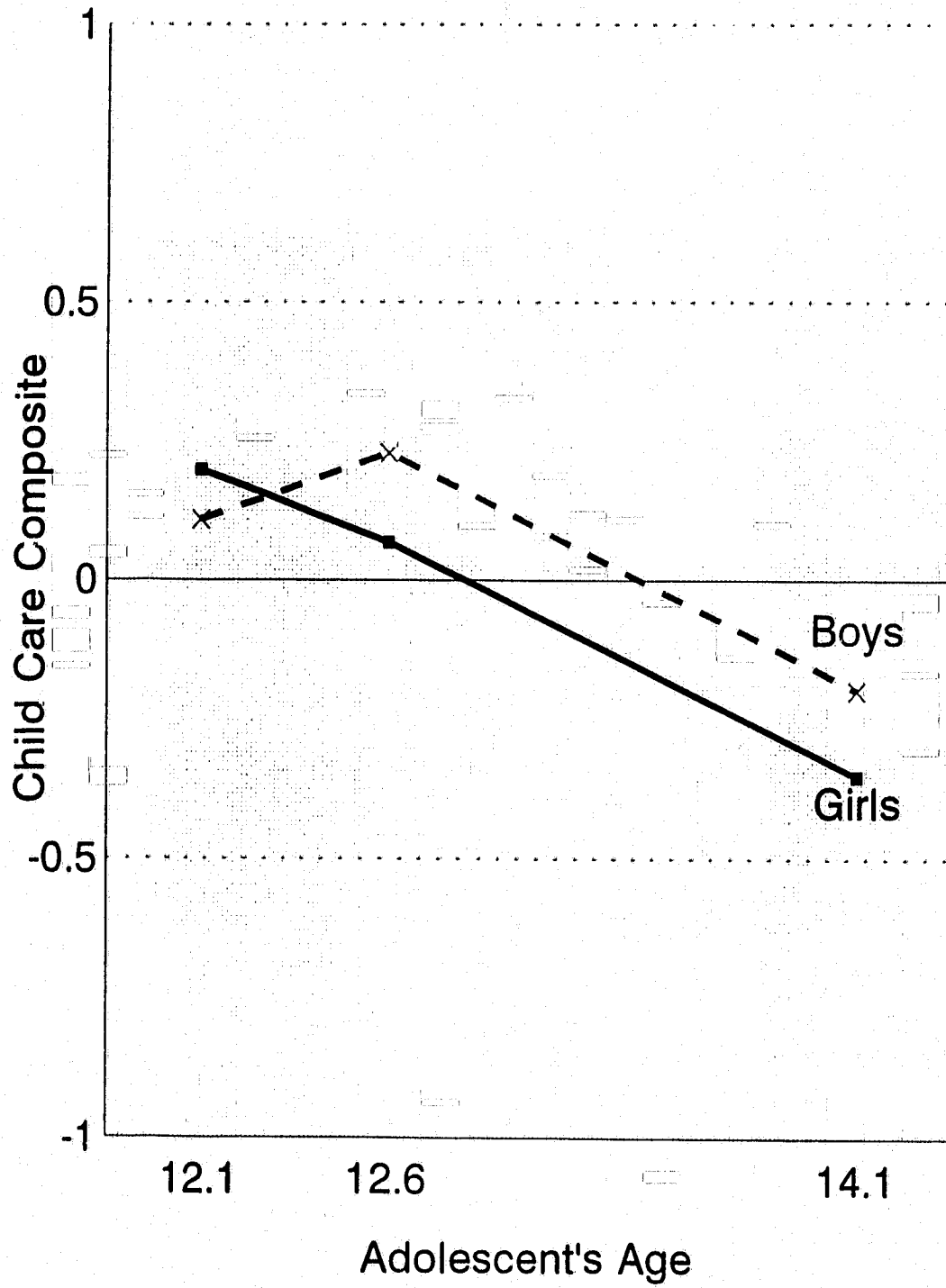


Figure 2
Mean Change in Acceptance (Father Reports)

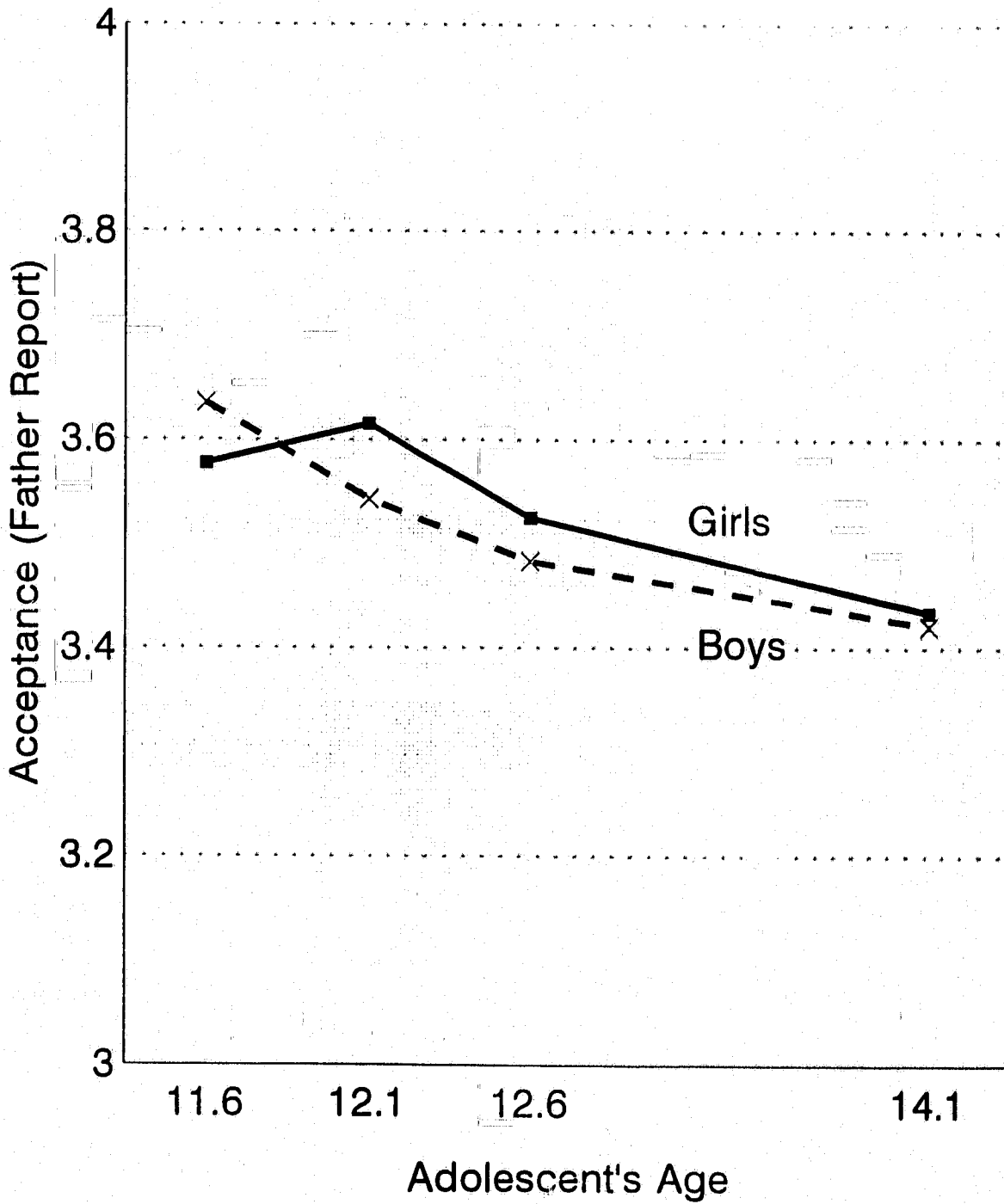


Figure 3
Mean Change in Acceptance (Adolescent Reports)

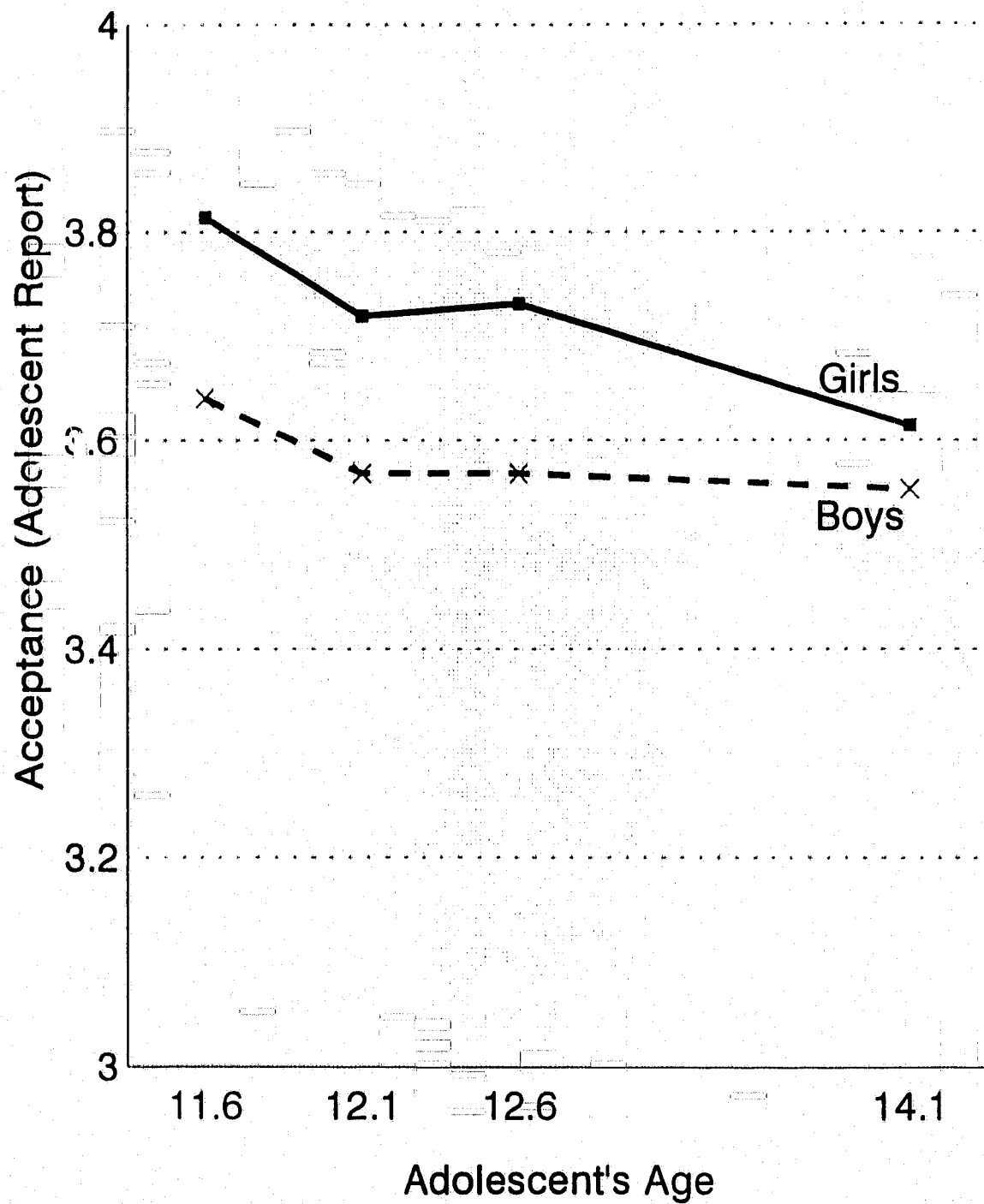


Figure 4
Mean Change in Conflict

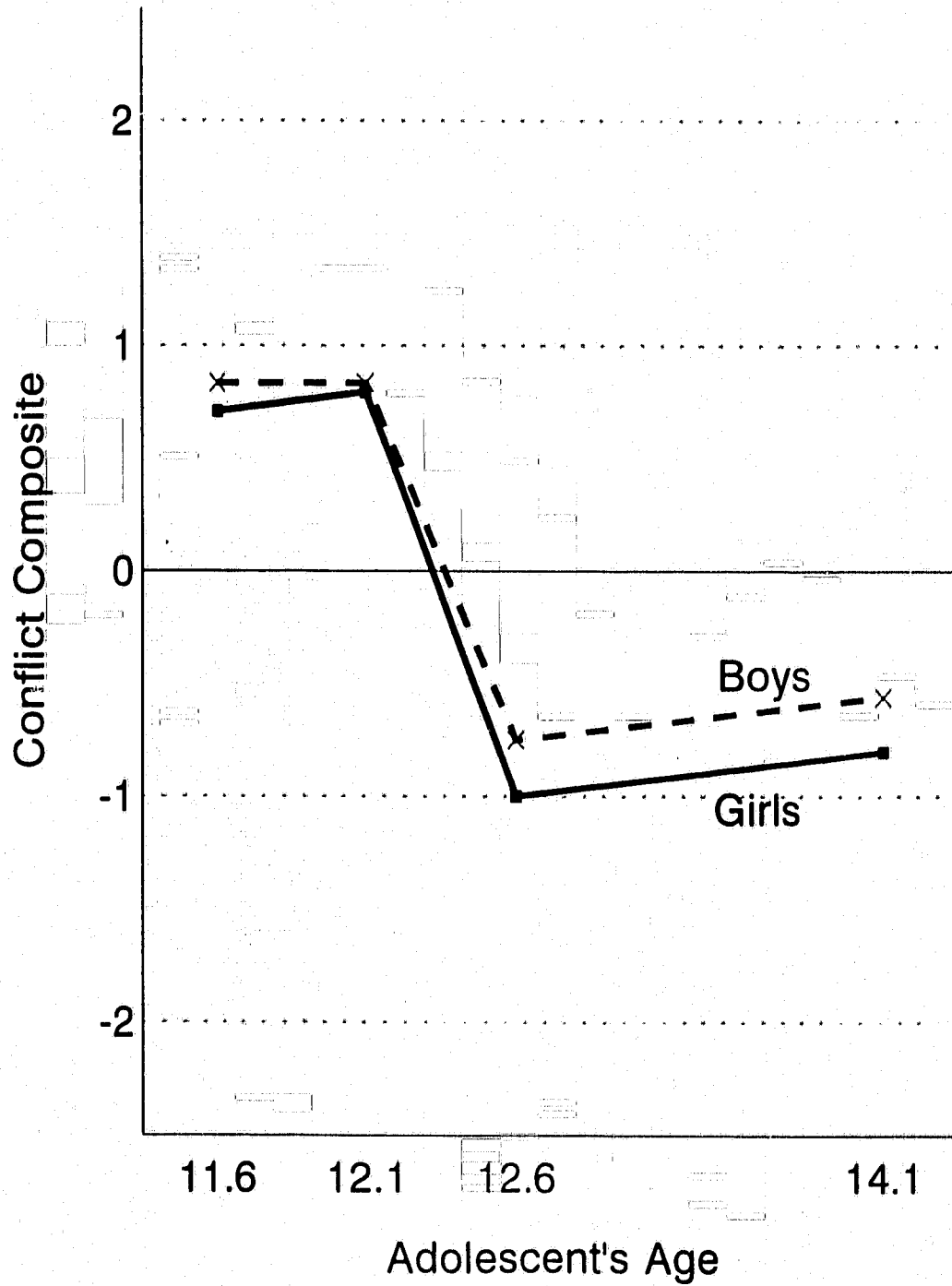


Figure 5

Mean Change in Interpersonal Perceptions

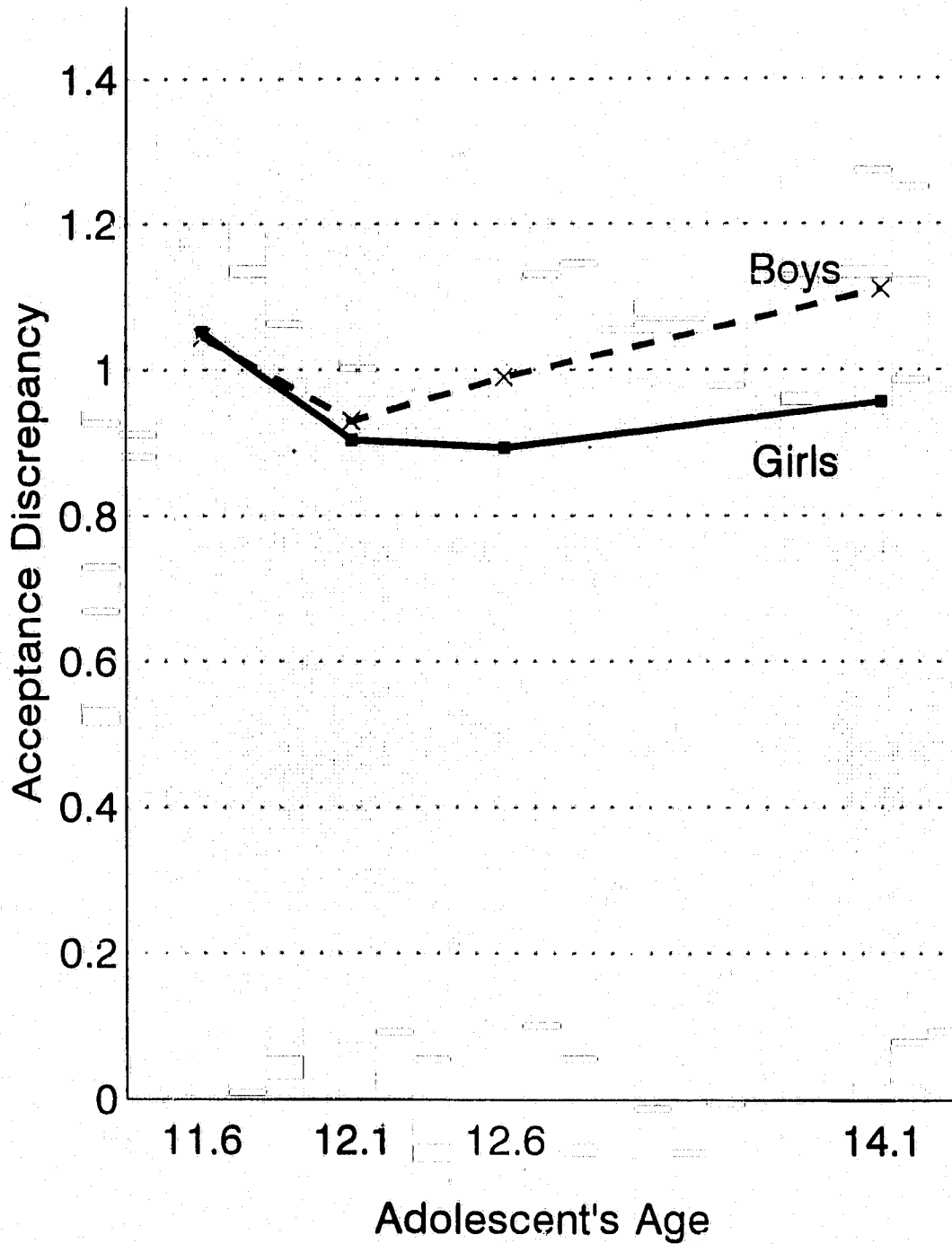


Figure 6
Example of a 2SLS Model

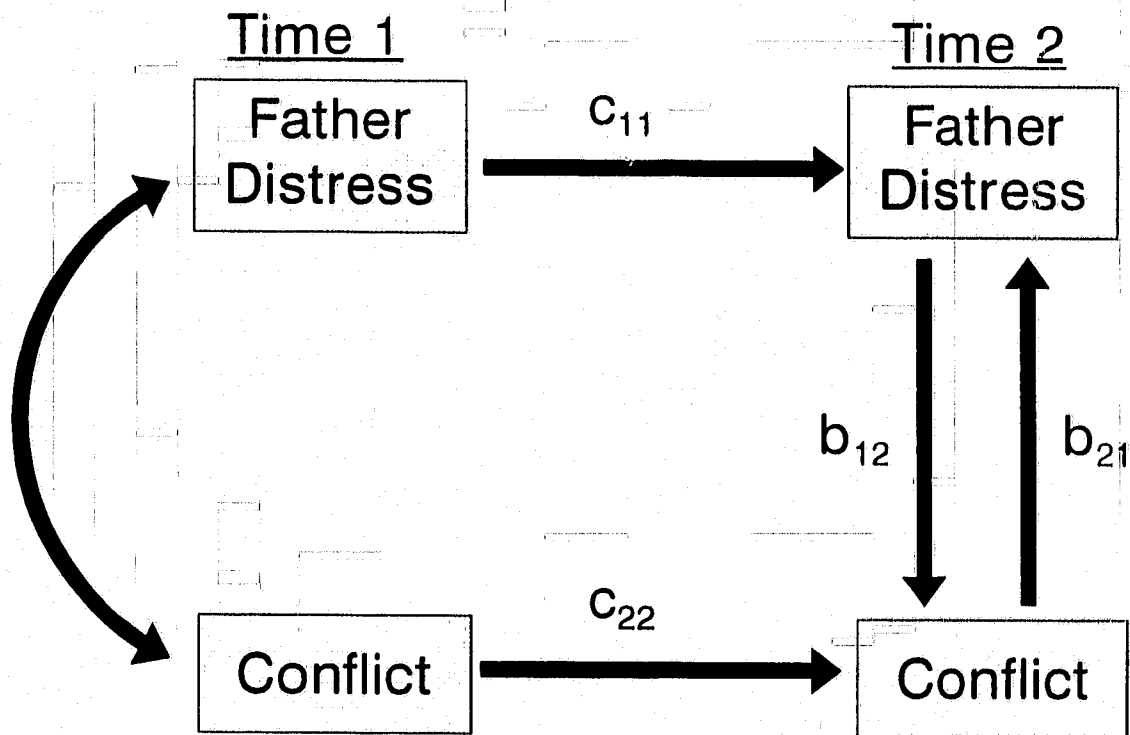
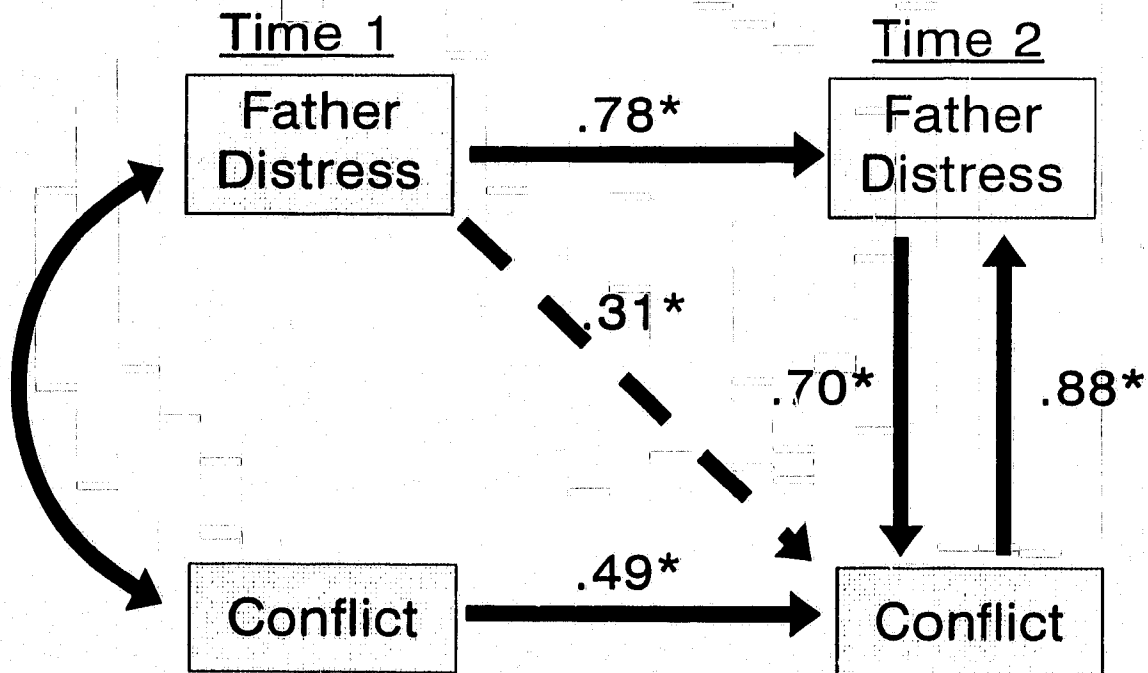


Figure 7

2SLS Model of the Reciprocal Linkages between Father Psychological Distress and Father-Adolescent Conflict

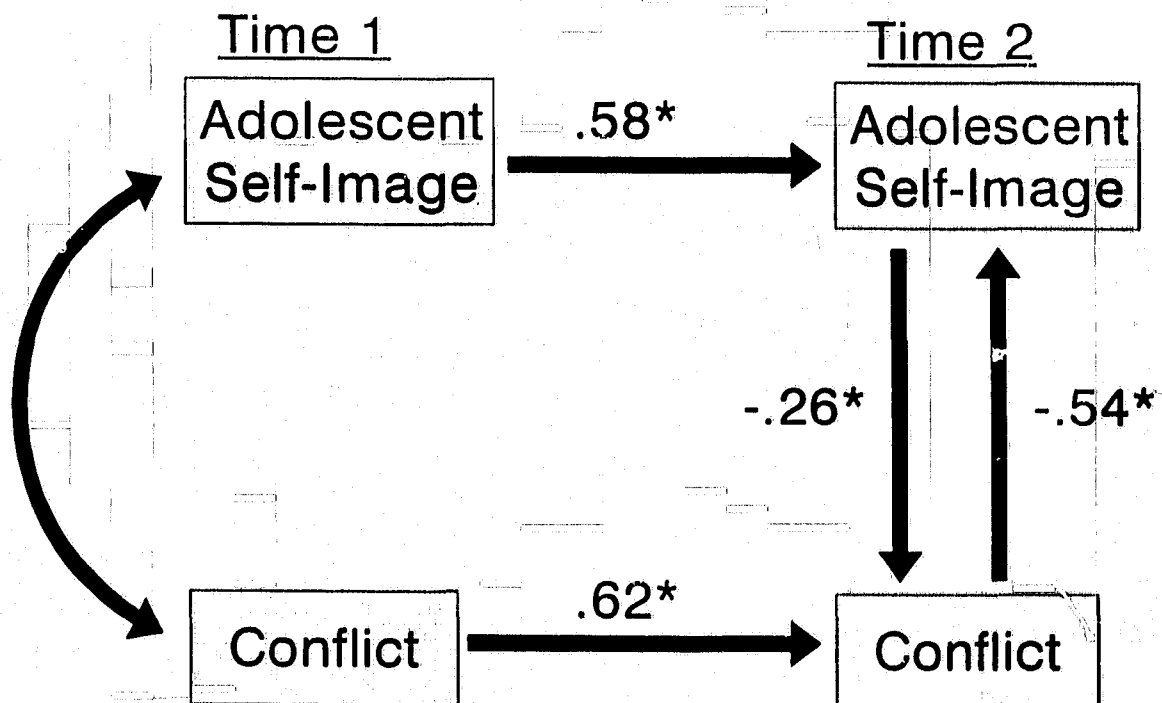


Note. $N = 71$.

* $p < .05$.

Figure 8

2SLS Model of the Reciprocal Linkages Between Adolescent Self-Image and Father-Adolescent Conflict

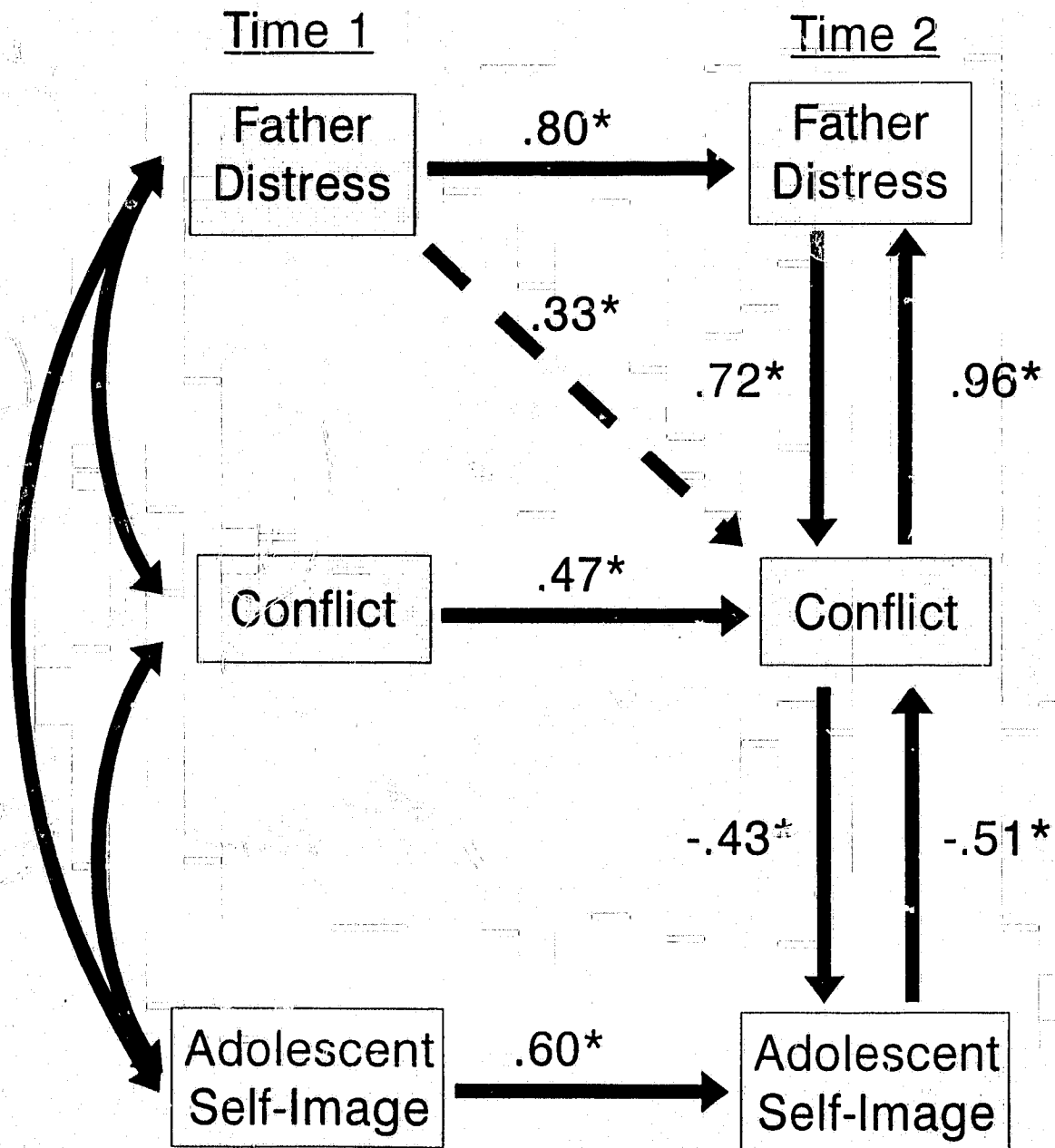


Note. $N = 71$.

* $p < .05$.

Figure 9

2SLS Model of the Reciprocal Linkages Between Father Psychological Distress, Father-Adolescent Conflict, and Adolescent Self-Image

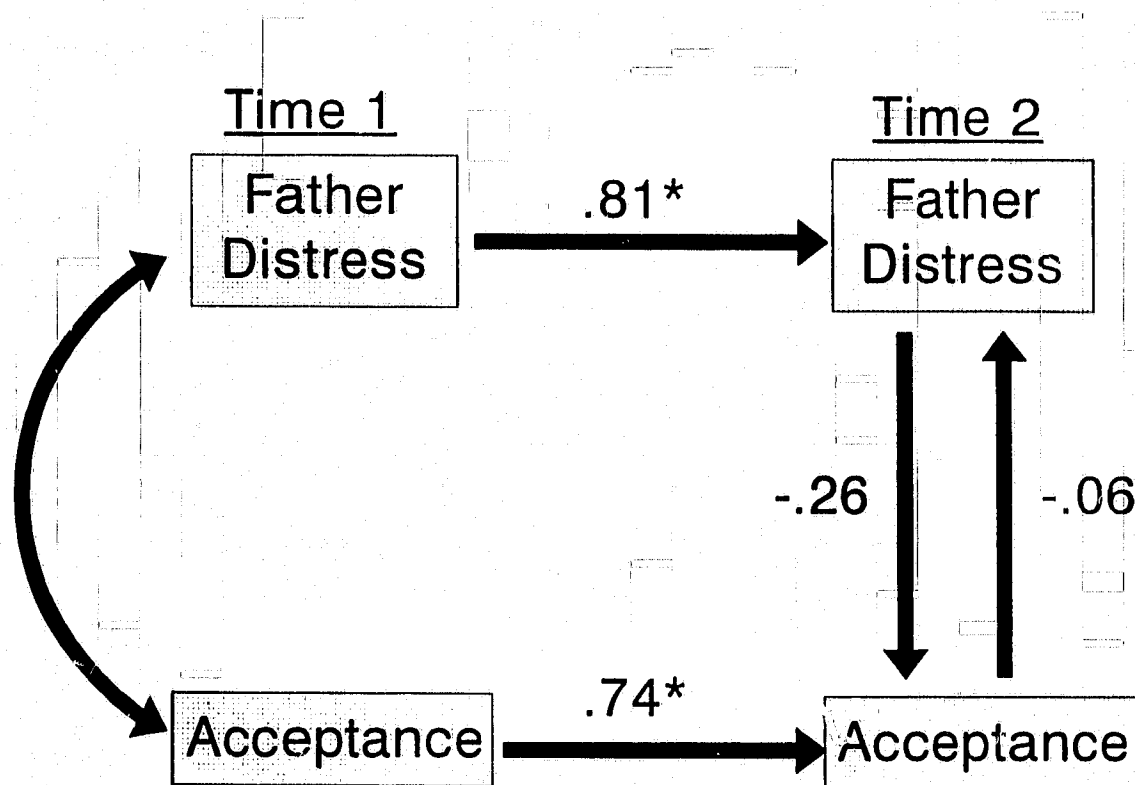


Note. $N = 71$.

* $p < .05$.

Figure 10

2SLS model of the Reciprocal Linkages Between
Father Psychological Distress and Father Acceptance

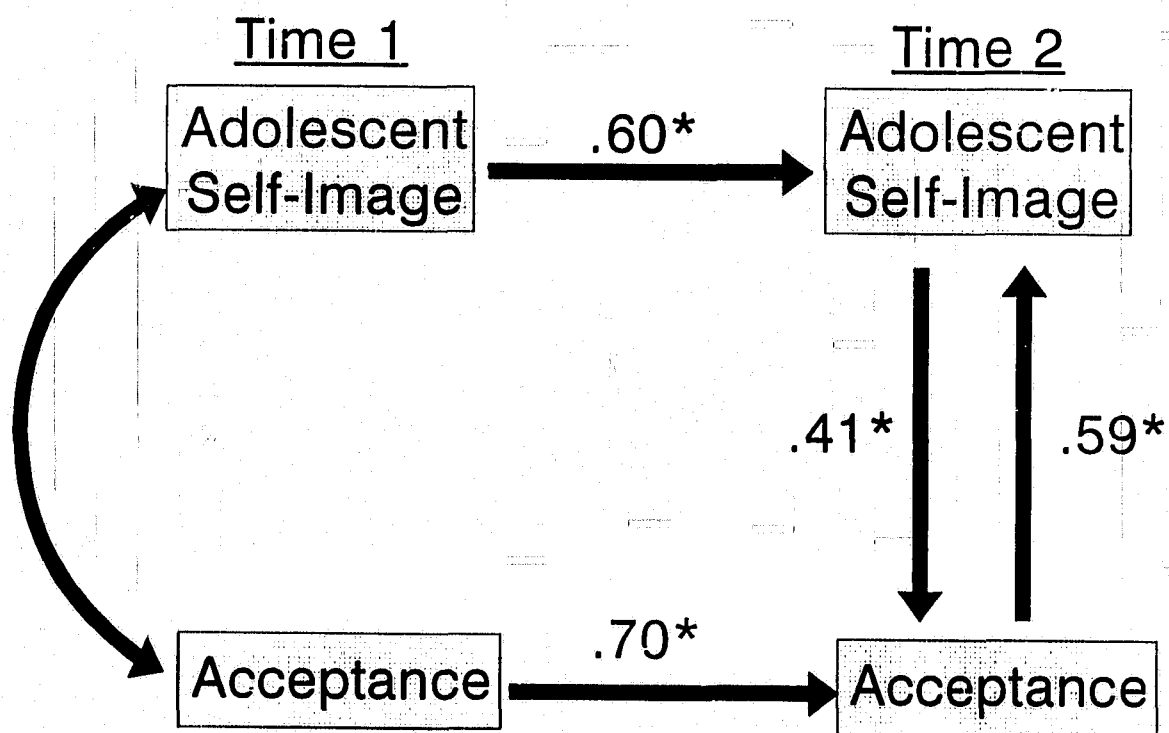


Note. $N = 71$.

* $p < .05$.

Figure 11

2SLS Model of the Reciprocal Linkages between Adolescent Self-Image and Father Acceptance

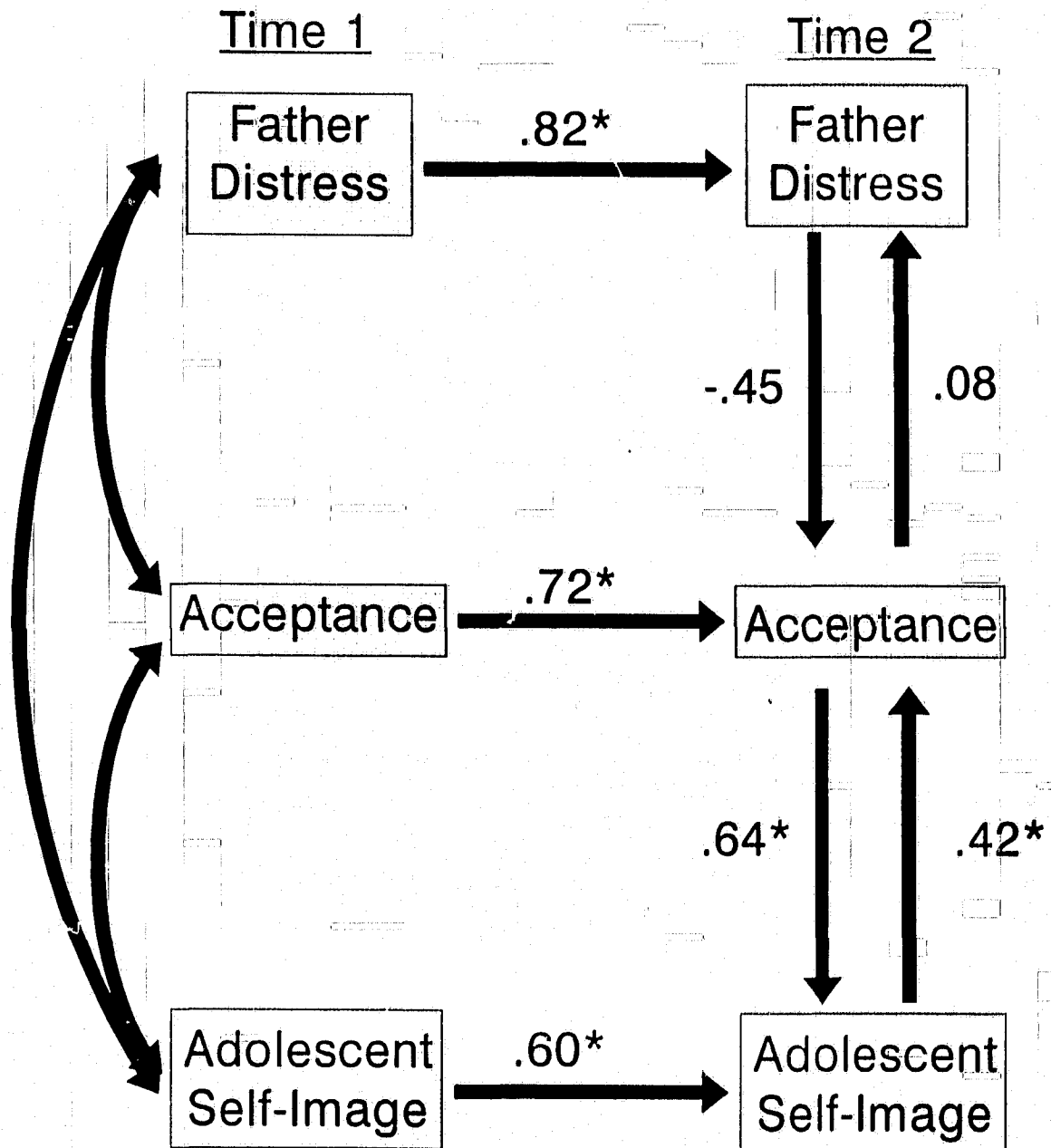


Note. $N = 71$.

* $p < .05$.

Figure 12

2SLS Model of the Reciprocal Linkages Among Father Psychological Distress, Acceptance, and Adolescent Self-Image

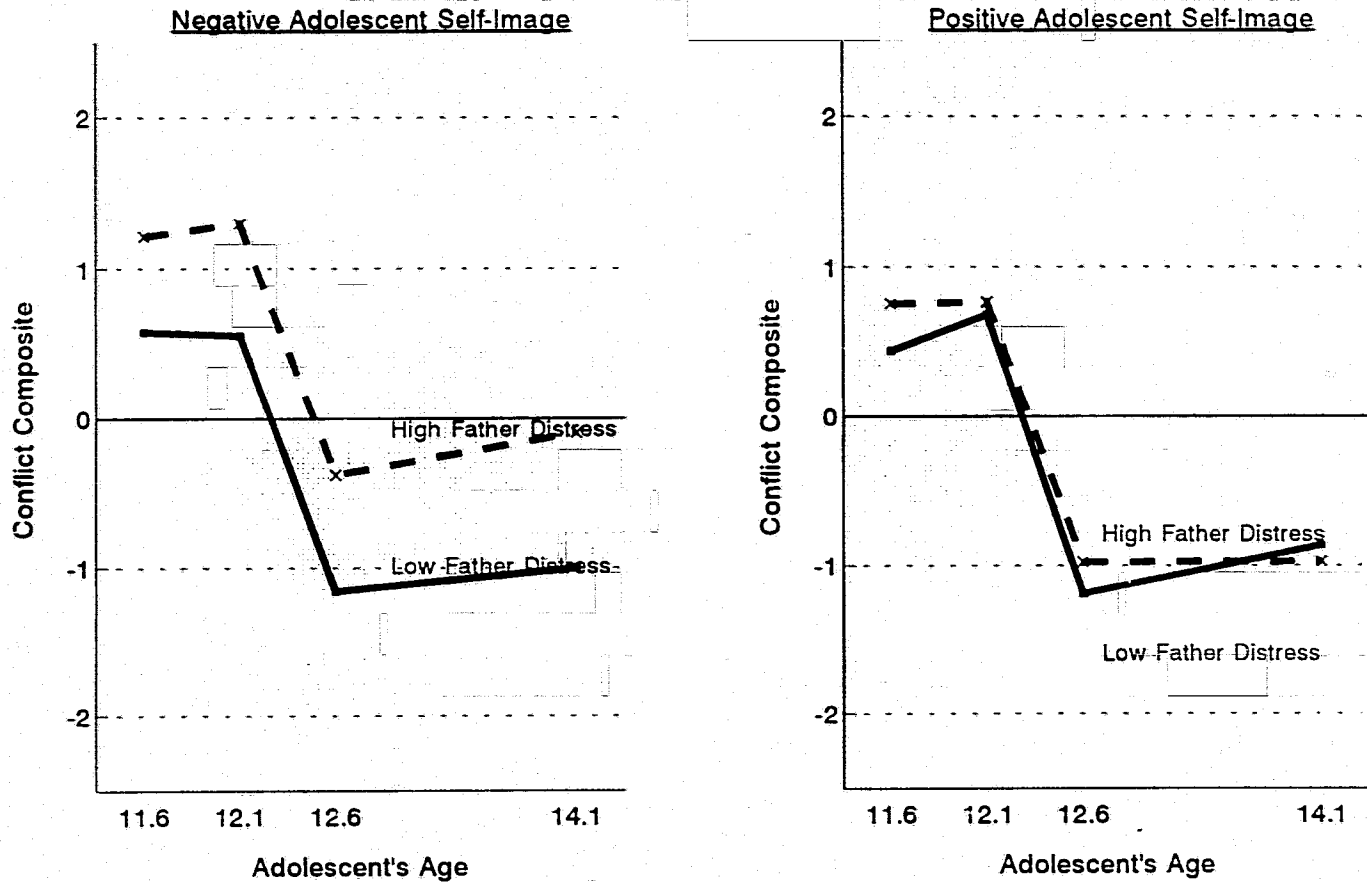


Note. $N = 71$.

* $p < .05$.

Figure 13

Mean Change in Conflict by Father Psychological Distress and Adolescent Self-Image



Appendix A

Fathers' Reports of Parental Acceptance (Schaefer, 1965)

On the following pages you will find a series of statements which a person might use to describe himself or herself as a parent. Read each statement and decide which answer most closely describes the way you have acted towards your sixth-grade child. Circle this answer using the following numbers:

Very Much Unlike Me = 1
 Unlike Me = 2
 Somewhat Like Me = 3
 Like Me = 4
 Very Much Like Me = 5

1. I make our child feel better when he/she talks over his/her worries with me. 1 2 3 4 5
2. I like to talk with our child and be with him/her much of the time. 1 2 3 4 5
3. I seem to see our child's good points more than his/her faults. 1 2 3 4 5
4. I almost always speak to our child with a warm and friendly voice. 1 2 3 4 5
5. I am always thinking of things that will please our child. 1 2 3 4 5
6. I understand our child's problems and worries. 1 2 3 4 5
7. I enjoy talking things over with our child. 1 2 3 4 5
8. I give our child a lot of care and attention. 1 2 3 4 5
9. I enjoy going on drives, trips, or visits with our child. 1 2 3 4 5
10. I smile at our child very often. 1 2 3 4 5
11. I often give up something to get something for our child. 1 2 3 4 5
12. I am able to make our child feel better when he/she is upset. 1 2 3 4 5

Very Much Unlike Me = 1
 Unlike Me = 2
 Somewhat Like Me = 3
 Like Me = 4
 Very Much Like Me = 5

13. I enjoy doing things with our child. 1 2 3 4 5
14. I make our child feel like he/she is the most important person in my life. 1 2 3 4 5
15. I enjoy working with our child in the house or yard. 1 2 3 4 5
16. I comfort our child when he/she is afraid. 1 2 3 4 5
17. I enjoy staying at home with our child more than going out with friends. 1 2 3 4 5
18. I cheer our child up when he/she is sad. 1 2 3 4 5
19. I often speak of the good things he/she does. 1 2 3 4 5
20. I make my whole life center about our children. 1 2 3 4 5
21. I have a good time at home with our child. 1 2 3 4 5
22. I'm proud of the things our child does. 1 2 3 4 5
23. I spend almost all of my free time with our children. 1 2 3 4 5
24. I'm not interested in changing our child, but like our child as he/she is. 1 2 3 4 5

Appendix B

The Issues Checklist (Prinz et al., 1979)

Below is a list of things that sometimes get talked about at home. For each topic that you and your sixth-grade child have discussed during the last 2 weeks, indicate how angry the discussions were. If a topic has not been discussed, leave the item blank.

TOPIC	<u>Very Calm</u>		<u>Angry</u>		<u>Very Angry</u>
1. Telephone calls	1	2	3	4	5
2. Time for going to bed	1	2	3	4	5
3. Cleaning up bedroom	1	2	3	4	5
4. Doing homework	1	2	3	4	5
5. Putting away clothes	1	2	3	4	5
6. Using the television	1	2	3	4	5
7. Cleanliness (washing, showers, brushing teeth)	1	2	3	4	5
8. Which clothes to wear	1	2	3	4	5
9. How neat clothing looks	1	2	3	4	5
10. Making too much noise at home	1	2	3	4	5
11. Table manners	1	2	3	4	5
12. Fighting with brothers or sisters	1	2	3	4	5
13. Cursing	1	2	3	4	5
14. How money is spent	1	2	3	4	5
15. Picking books or movies	1	2	3	4	5
16. Allowance	1	2	3	4	5
17. Going places without parents (shopping, movies, etc.)	1	2	3	4	5
18. Playing stereo or radio too loudly	1	2	3	4	5
19. Turning off lights in house	1	2	3	4	5
20. Drugs	1	2	3	4	5
21. Taking care of records, games, bikes, pets, and things	1	2	3	4	5
22. Drinking beer or other liquor	1	2	3	4	5
23. Buying records, games, toys, and things	1	2	3	4	5
24. Going on dates	1	2	3	4	5
25. Who should be friends	1	2	3	4	5
26. Selecting new clothing	1	2	3	4	5
27. Sex	1	2	3	4	5
28. Coming home on time	1	2	3	4	5
29. Getting to school on time	1	2	3	4	5
30. Getting low grades in school	1	2	3	4	5
31. Getting in trouble in school	1	2	3	4	5
32. Lying	1	2	3	4	5

TOPIC	<u>Very Calm</u>		<u>Angry</u>		<u>Very Angry</u>
33. Helping out around the house	1	2	3	4	5
34. Talking back to parents	1	2	3	4	5
35. Getting up in the morning	1	2	3	4	5
36. Bothering parents when they want to be left alone	1	2	3	4	5
37. Bothering sixth grader when he or she wants to be left alone	1	2	3	4	5
38. Putting feet on furniture	1	2	3	4	5
39. Messing up the house	1	2	3	4	5
40. What time to have meals	1	2	3	4	5
41. How to spend free time	1	2	3	4	5
42. Smoking	1	2	3	4	5
43. Earning money away from the house	1	2	3	4	5
44. What sixth grader eats	1	2	3	4	5

My sixth grader and I have not discussed any of these topics.

True False (circle one)

Appendix C

CES-D Scale (Radloff, 1977)

Below is a list of the ways you might have felt or behaved. Following each statement please write down the letter corresponding with how often you have felt this way during the past week.

- A = Rarely or None of the Time (Less than 1 Day)
- B = Some or a Little of the Time (1-2 Days)
- C = Occasionally or a Moderate Amount of Time (3-4 Days)
- D = Most or All of the Time (5-7 Days)

During the past week:

I was bothered by things that usually don't bother me. _____

I did not feel like eating; my appetite was poor. _____

I felt that I could not shake off the blues even with help from my family or friends. _____

I felt that I was just as good as other people. _____

I had trouble keeping my mind on what I was doing. _____

I felt depressed. _____

I felt that everything I did was an effort. _____

I felt hopeful about the future. _____

I thought my life had been a failure. _____

I felt fearful. _____

My sleep was restless. _____

I was happy. _____

I talked less than usual. _____

I felt lonely. _____

People were unfriendly. _____

I enjoyed life. _____

I had crying spells. _____

I felt sad. _____

I felt that people dislike me.

I could not get "going".

Appendix D

State Anxiety Scale (Spielberger et al., 1970)

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number beside each statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	<u>Not at</u> <u>all</u>	<u>Somewhat</u>	<u>Moderately</u> <u>so</u>	<u>Very much</u> <u>so</u>
I feel calm	1	2	3	4
I feel secure	1	2	3	4
I am tense	1	2	3	4
I am regretful	1	2	3	4
I feel at ease	1	2	3	4
I feel upset	1	2	3	4
I am presently worrying over possible misfortunes	1	2	3	4
I feel rested	1	2	3	4
I feel anxious	1	2	3	4
I feel comfortable	1	2	3	4
I feel self-confident	1	2	3	4
I feel nervous	1	2	3	4
I am jittery	1	2	3	4
I feel "high strung"	1	2	3	4
I am relaxed	1	2	3	4
I feel content	1	2	3	4
I am worried	1	2	3	4
I feel over-excited and "rattled"	1	2	3	4

	<u>Not at</u> <u>all</u>	<u>Somewhat</u>	<u>Moderately</u> <u>so</u>	<u>Very much</u> <u>so</u>
I feel joyful	1	2	3	4
I feel pleasant	1	2	3	4

Appendix E

Dimension of Temperament Scale-Revised (DOTS-R)

Mood Subscale (Windle & Lerner, 1986)

For each statement write an A if the statement is usually true for you, write a B if the statement is more true than false for you, write a C if the statement is more false than true for you, or write a D if the statement is usually false for you.

1. ___ I laugh and smile at a lot of things.
2. ___ I do not laugh or smile at many things.
3. ___ I smile often.
4. ___ I find that I do not laugh often.
5. ___ My mood is generally cheerful.
6. ___ I laugh several times a day.
7. ___ Generally I am happy.

Appendix F

Job-Family Role Strain Scale (Bohen & Viverous-Long, 1981)

Please circle the number corresponding with the appropriate answer. How often do you feel the following?

	<u>Always</u>	<u>Most of the Time</u>	<u>Some of the Time</u>	<u>Rarely</u>	<u>Never</u>
My job keeps me away from my family too much.	1	2	3	4	5
I feel that I have more to do than I can comfortably handle.	1	2	3	4	5
I have a good balance between my job and my family time.	1	2	3	4	5
I wish I had more time to do things with my family.	1	2	3	4	5
I feel physically drained when I get home from work.	1	2	3	4	5
I feel emotionally drained when I get home from work.	1	2	3	4	5
I feel that I have to rush to get everything done each day.	1	2	3	4	5
My time off from work does not match other family members schedules well.	1	2	3	4	5
I feel that I do not have enough time for myself.	1	2	3	4	5
I worry that other people at work think my family interferes with my job.	1	2	3	4	5
I worry whether I should work less and spend more time with my children.	1	2	3	4	5
I find enough time for the children.	1	2	3	4	5
I worry about how my kids are while I am working.	1	2	3	4	5

	<u>Always</u>	<u>Most of the Time</u>	<u>Some of the Time</u>	<u>Rarely</u>	<u>Never</u>
I am comfortable with the arrangements for my children while I am working.	1	2	3	4	5
Making arrangements for my children while I work involves a lot of effort.	1	2	3	4	5
I worry that other people feel I should spend more time with my children.	1	2	3	4	5

Appendix G

The Self-Image Questionnaire For Young Adolescents (SIQYA)
(Petersen et al., 1984)

Insert the appropriate number for your response in the space provided after each statement.

- Responses:
- 1 = describes me very well
 - 2 = describes me
 - 3 = describes me fairly well
 - 4 = does not quite describe me
 - 5 = hardly describes me
 - 6 = does not describe me at all

Impulse control:

1. I "lose my head" easily. _____
2. I become violent if I don't get my way. _____
3. Even under pressure I manage to remain calm. _____
4. I keep an even temper most of the time. _____
5. I am a calm person. _____
6. Usually I control myself. _____
7. There are people that I will never forgive for what they have done. _____
8. Sometimes I do things that I know I shouldn't but I can't stop myself. _____

Emotional Tone:

9. I feel nervous most of the time. _____
10. I feel that I am not as good as most people I know. _____
11. Most of the time I am happy. _____
12. My feelings are easily hurt. _____
13. I feel relaxed under most circumstances. _____
14. I feel empty emotionally most of the time. _____
15. I am so very nervous. _____
16. I feel so very lonely. _____

Responses: 1 = describes me very well
 2 = describes me
 3 = describes me fairly well
 4 = does not quite describe me
 5 = hardly describes me
 6 = does not describe me at all

17. I enjoy life. _____
18. Very often I think that I am not at all the person I would like to be. _____
19. I frequently feel sad. _____

Mastery and Coping:

20. If I put my mind to it, I can learn almost anything. _____
21. My work, in general, is at least as good as the work of most others. _____
22. When I decide to do something, I do it. _____
23. New situations are often difficult for me to cope with. _____
24. I find life an endless series of problems, without solutions in sight. _____
25. I feel that I am unable to make decisions. _____
26. I feel that I have no talent whatsoever. _____
27. I am looking forward to the years ahead. _____
28. I am fearful of growing up. _____
29. I feel that I cannot cope with difficult situations. _____