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MULTIPLE PERCEPTIONS OF THE PROCESSES INVOLVED IN DECISION MAKING AND THEIR RELATIONSHIP TO MORAL ATMOSPHERE IN FAMILIES WITH ADOLESCENTS

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MULTIPLE PERCEPTIONS OF THE PROCESSES INVOLVED IN DECISION MAKING AND
THEIR RELATIONSHIP TO MORAL ATMOSPHERE IN FAMILIES WITH ADOLESCENTS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Colleen I. Murray, B.S., M.A.

The Ohio State University
1984

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Background of the Problem

Continuing throughout early adolescence, one of the definitive elements of the family is the role of socialization of children (Weigert & Thomas, 1971). It is the family which is mainly responsible for the development of the adolescent into a competent, social, and moral person (Gecas, 1976). The values, beliefs, processes, and activities which exist within the family environment provide information for the adolescent to select and interact with in creating the social self (Weigert & Thomas, 1971). One such activity is family decision making, and one purpose of socialization is to prepare the adolescent to make decisions, at the present and later as adults.

It is during early adolescence that decision making is most likely to produce stress within the family environment. In fact, there appears to be an increase in parent-adolescent conflict and loss of mothers' power and influence over adolescents during this period (Montemayor, 1983). A plethora of biological, psychological, and social changes going on during adolescence influence the level of stress associated with family decision making. In terms of cognitive development, the attainment of formal operations enables the adolescent to role-take adults, questioning the legitimacy and
justification of parental rules and beliefs. Although the majority of arguments between parents and adolescents are related to normal everyday family matters pertaining to authority (Caplow, Bahr, Chadwick, Hill & Williamson, 1982; Douvan & Adelson, 1966; Montemayor, 1982; Offer, 1969), this challenging of rules and beliefs may force parents to rethink their own values and beliefs, contributing to disequilibrium within the family environment. Thus, it appears that here as in other areas (Belsky, 1981; Belsky, Lerner, & Spanier, 1984; Lerner, 1982) socialization is a dynamic, bi-directional process.

Other internal changes (Steinberg & Hill, 1978) compound family stress in decision making. It is during early adolescence that a strong bid for independence (Thornburg, 1982) and behavioral autonomy occurs (Douvan & Adelson, 1966). The young adolescent is generally not as compliant as the child, and previously established patterns of parental authority may not work as well. The direct influence of the family begins to lessen, while peers gain in importance. Parents may interpret these new forms of behavior as rejection of themselves (Thornburg, 1982). The picture is additionally clouded by the adolescent's ambivalent behaviors—maintaining secure childhood dependencies and the need for parental approval, yet wanting autonomy. Parents are caught in a somewhat disorganized environment, attempting to balance flexibility with consistency. Stresses involving family decision making are related to each individual's perception of the power distribution and his/her expectations of the relationship in general. Without an environment responsive to the adolescent's
efforts at attaining some power within the family, a sense of social competency does not adequately develop (Rollins & Thomas, 1979).

**Current Perspectives on Parent-Adolescent Power in Decision Making**

The study of power within the family has been most frequently viewed from a social exchange perspective in recent years (Edwards, 1969; McDonald, 1980; Richer, 1968; Scanzon, 1972). Exchange theorists, using an economic-like analysis, argue that people are always profit-oriented (Cromwell & Olson, 1975). Behaviors are dictated by perceptions of costs, rewards, and alternatives available to the participants (Thibaut & Kelly, 1959).

However, Burr, Leigh, Day and Constantine (1979) suggest that much of exchange theory can be easily incorporated into a symbolic interaction perspective. For example, although exchange theorists argue that people are always profit-seeking, symbolic interactionists acknowledge the profit motive as situationally specific and add that interactions can also be altruistic. Therefore, a symbolic interaction perspective may be just as useful in understanding parent-adolescent power, the family decision-making process, and adolescent socialization.

A symbolic interaction perspective is based on the processes and relationships occurring within a family (Burr et al., 1979). Along with personality, socialization is a primary concept highlighted by this perspective (Eshleman, 1981). Socialization is viewed as the life-long process by which individuals obtain information about specific behavior patterns, such as their role and power in decision
making situations, and later internalize those beliefs. In addition to needs and drives, the parent-adolescent interactions and internalized definition of the world are recognized as important in this perspective.

From a symbolic interaction perspective, the child is viewed as asocial at birth, developing through both actions as well as reactions (Burr et al., 1979). Parents and adolescents are not just involved in responding to stimuli, they also select and interpret those stimuli. Therefore, one's role in decision making is based upon one's interpretation of decision making experiences. Persons can use symbols (verbal and nonverbal) to organize interpretations and to communicate. With the aid of formal operations, they can role-take and anticipate one another's behavior. They choose to act in ways that provide the greatest potential for personal control which then results in the development of a sense of competence within the environment. The social self (Mead, 1934) is viewed as the organization of these internalized roles which continually develop through interactions with significant others and reference groups. Therefore, the nature of the parent-child relationship continues to influence the adolescent's image of self.

Although exchange theorists ultimately focus on power issues, a symbolic interactionist would view power as merely one of the processes useful in explaining the family system, its structure and interactions. Dynamic processes, such as power, communication, attraction, understanding, support, and induction may all be thought of as elements within the broader constructs of decision making.
(Scanzoni, 1979) or socialization. From a symbolic interaction perspective, the amount of power a parent employs in family decision making (as indicated by the pattern of parental authority) communicates to the adolescent the extent of power available to him/her (i.e., the potential amount of control over his/her environment). The family's encouragement of age-appropriate autonomy, also encouraged by society and the adolescent's peers, contributes to the adolescent's expectations of greater power and a stronger role in family decision making. Level of support underscores the responsiveness of the family decision making environment, whereas the use of induction provides information regarding causes and consequences of decisions made, enabling the adolescent to more fully understand the nature of the family or society. Together these processes enable the adolescent to both behave and view himself/herself as competent at decision making and in society at large.

With developmental changes that occur during adolescence, such as the attainment of formal operations, greater ability to reason, and physical maturity, the parents' perceptions of the adolescent's role in the family and in decision making may change. It would appear that with increased age the adolescent's perceptions of his/her own role in the family may change as well. These bi-directional changes could be expected to influence levels of parental authority, encouragement of autonomy, support, and induction. It appears that parents and adolescents each perceive that parents are more likely to use less authority or control and treat their older children permissively
whereas they perceived that parents of younger adolescents use greater
control (Elder, 1962, 1963; Weller & Luchtehand, 1977). In fact, in
Elder’s study (1962) younger adolescents expected and received less
freedom in the decision making realm. There was a trend toward
greater use of induction among parents with younger adolescents
(Elder, 1963). It may be that parents felt younger children were more
prone to misunderstanding, or they may have been attempting to aid the
child in internalizing general family principles. The relationship of
level of support and age of the adolescent is not so clear. Parental
support has been found to be positively related to a number of
socially competent behaviors (which one would assume develop with age)
but the direction of the relationship is not clear (Rollins & Thomas,
1979). Russell (1979) has suggested that in a family atmosphere in
which the child feels the support of others, there are certain
circumstances in which those children actually share the leadership in
making decisions. It could be expected that this pattern increases
during adolescence. On the other hand, in families where adolescence
is perceived as a time of “storm and stress”, parents may not feel
that their supportive comments are warranted and adolescents may see
supportive words as a form of manipulation.

Decision Making and Family Moral Atmosphere

In addition to the aforementioned influence of parental patterns
of authority, encouragement of autonomy, level of support, and
induction of the adolescent's participation in the family decision
making process and his/her feelings of competency, parental moral
judgment level had been found to relate to the level of adolescent participation encouraged in decision making (Buck, Walsh, & Rothman, 1981). While Kohlberg and Turiel (1971) differentiated between moral development and socialization, symbolic interactionists would disagree, seeing these processes as related within the adolescent's developing concept of self. In fact, Buck et al. (1981) found that parental methods of socialization were related to their own levels of moral judgment. For example, principled parents advocated the use of compromise and nonintervention, and in practice were most likely to use reasoning, compromise, and nonintervention as socialization methods. Conventional parents advocated the use of reasoning, but in actuality used much less than principled parents. Principled parents were also more likely to encourage their adolescents to express negative feelings, and participate in discussions, and they listened to their children's views more than conventional parents.

While acknowledging that moral development consists of more than mere judgment, Kohlberg (1971) has made a strong argument for focusing on moral judgment as the basis for moral development. Thus, moral decisions are likely to also be influenced by an interaction of factors such as society's values, one's position in society, strength to act on one's convictions, and whether the conflict is viewed as salient (Power & Reimer, 1978).

Kohlberg (1970) has speculated on this complex interaction in his discussion of the "hidden curriculum" of the moral atmosphere in schools. Power and Reimer (1978) have viewed this moral atmosphere as the bridge between moral judgment and action in schools. They assert
that "moral acts are undertaken within a certain ideological context and community atmosphere" (p. 107), rather than by individuals acting alone and relying only on their own inner principles. The actions of individuals are seen as operating within the group's collective normative value system and contingent upon one's sense of community.

Although Power and Reimer (1978) followed new members of a Cluster School for two years, it would seem that this principle of moral atmosphere could be readily applied to families, since they share in collective normative values and possess a sense of community. Kohlberg (1970) himself has said that establishing the link between moral judgment and moral behavior is much more difficult within schools than families. There is no reason to expect that analysis of the link between moral atmosphere and moral behavior within the family would be any different.

In addition, since it has already been shown that parental moral judgment influences the parent's actions in processes related to the socialization of adolescents (e.g., the previously mentioned decision making process), and since moral atmosphere has been viewed as the link between moral judgments and actions, there is reason to believe that family moral atmosphere is related to processes involved in family daily decision making.

It may be that moral atmosphere and its interpretation in terms of the social environment underlie already developed family atmosphere variables such as Reiss's (1981) family paradigm or Kantor and Lehr's (1975) family strategy. Turner's (1970) family decision making patterns which have been said to differentiate outcomes according to
the degree of acceptance and commitment of family members (cf. Galvin & Bommel, 1982) certainly seem similar to Power and Reimer's (1978) atmosphere based upon collective normative values and sense of community.

Using Power and Reimer's Four Stages of Moral Atmosphere, a family with a moral atmosphere of stage four would be most likely to encourage adolescent autonomy, and limit parental authority. Since families at this stage strive to maintain consistent practices in addition to respecting individuals, it would be expected that they provide an atmosphere high in support. Level of induction would be that which family members perceived as necessary for maintaining the whole group. Families that are at stage three could be expected to use democratic authority patterns, which focus on the relationship while still allowing the parent a final say in the decision. Level of support and induction would be expected to be high. Any extreme autonomy which threatened relationships would be discouraged. Persons in a family at stage two would be most likely to provide support, induction and autonomy at levels most beneficial to themselves, without concern for the other person or the family group. Parenting style would most likely involve extensive control (autocratic) or no control (laissez faire).

From the cognitive-developmental perspective of Piaget and Kohlberg, family moral atmosphere could be expected to increase with the age of the oldest adolescent, influenced by the adolescent's attainment of formal operations, increased opportunities to role-take, and interaction with the social environment. Although Power and
Reimer (1978) emphasized the increase in moral atmosphere because of the group's stage of collective normative values and sense of community, within a family it could also be expected to increase with the adolescent's increased level of moral judgment which allows him/her to question the existing level of moral atmosphere, producing conflict and then growth within the family system. Thus, reciprocal development occurs.

**Unexplored Areas of Research**

In addition to the failure to further study the processes involved in family decision making from a symbolic interaction perspective, research endeavors to date have neglected to pursue a number of other important issues.

One of the biggest concerns among family researchers is the conceptualization and measurement of properties or processes which apply to the family group rather than to its individual members, as exemplified by Safilios-Rothschild's (1969) concerns for misrepresentation of the family system by the reliance on responses of one family member, typically resulting in what she refers to as "wives' family sociology (p. 290)." Turk and Bell (1972) have also asserted that a researcher's findings are dependent upon which family member is considered to be the key informant, since respondents in different family positions (mother, father, oldest child, etc.) each respond from their own individual perception. A symbolic interactionist perspective is most useful in studying multiple perceptions. Although much research on parent-child relationships has
focused on the superiority of the mother-child relationship, the symbolic interaction perspective acknowledges that there can be many family figures perceived as significant to the child. Unfortunately, the majority of works in the study of the adolescent's role in family decision making (Elder, 1962, 1963; Enright, Lapsley, Drivas & Fehr, 1980; Harris & Howard, 1981) and parental power (Gecas, 1971; McDonald, 1977) have relied strictly upon the responses of adolescents as an indication of parental behavior.

Several authors have argued that the responses of adolescents most correctly represent the family's "reality" (Ferreira, 1963, 1964; Larson, 1974). Yet, there is a growing awareness that the nature of the data collected depends on who is asked the questions (Larson, 1974). This concern has provoked a call for research based upon data collected from two or more family members in order to obtain multiple perceptions of the phenomenon of interest (Klein, 1983; Larson, 1974; Safilios-Rothschild, 1969). This brings up the related methodological problem of how to assess multiple perceptions. It is not likely that there will be little or no discrepancy in the reports of several family members (Jessop, 1981). The particular strategy chosen for manipulating discrete reports into a family measure reflects the underlying theoretical assumptions of a particular study and the nature of the questions asked (Klein, 1983). Combining scores in any manner loses some information regarding different familial configurations. Ezell, Paolucci, Rettig, and Bubolz (1983) reported no significant differences in results from multiple perceptions on family division of household tasks using three of Klein's models.
(additive, discrepancy, and discrete), but it is not clear if this situation holds true for multiple perceptions of processes related to family decision making in general.

Another problem involved in parent-child relationship research, and family studies in general, is the failure to include a multi-method approach (Walters & Walters, 1980). Most information is gathered through the use of questionnaires alone. Yet, the combined information from questionnaires and observations of family process can provide greater explanatory power (Olson & Cromwell, 1975).

There has also been a neglect in examining the joint or combined additive effect of two or more variables or their multiplicative relationship to a third variable. Seldom are interaction effects directly tested (Murray & Galligan, 1983; Rollins & Thomas, 1979). The importance of assessing the joint effects of parental behavior in relation to child behaviors has been highlighted in review articles by Straus (1964) and Martin (1975). Other researchers have also suggested the importance of examining the joint effects of such variables as parental support and control attempts (Baumrind, 1966) or child-rearing structure and parental use of reasoning (Elder, 1963). The symbolic interaction perspective suggests the possible interaction between processes involved in decision making. It also assumes that social reality cannot be described by unidirectional causal analyses nor by analysis of the individual in isolation (Rollins & Thomas, 1979). Instead, reciprocal causation (Rheingold, 1969) and whole family interaction analyses are suggested.

The issue of assessing power processes in addition to power
outcomes has also been raised (Olson & Cromwell, 1975; McDonald, 1980; Scanzoni, 1979). Olson and Cromwell (1975) identified three domains of family power: bases of power, processes, and outcomes. Studies frequently focus on outcomes such as who makes final decisions or who wins, failing to look at the interaction of family members during discussions, problem-solving or conflict resolution. Concepts such as family moral atmosphere take into account both the efforts of the individual and the family's response to those efforts.

Finally, research on decision making in families with adolescents has failed to account for developmentally related differences. Elder (1962) discussed differing perceptions of younger (grades 7-9) and older (grades 10-12) adolescents but did not explain those differences in terms of adolescent development. Changes in the adolescent's physical stature, increased social competence, and the attainment of formal operations could be assumed to contribute to the adolescent's power within the family decision making process (Newman, 1981, 1982, 1983; Peterson, 1977). In addition to changes within the adolescent, societal norms which encourage behavioral autonomy through privileges such as legally driving an automobile or the emphasis on peers and dating, could also be expected to promote adolescent power in family decision making.

Statement of the Problem

Literature concerning the socialization of adolescents has tended to be static and unidirectional, focusing specifically on parental variables such as support and power (cf. Rollins & Thomas, 1979;
Walters & Walters, 1980). The adolescent's role in decision making, family power, and other processes/interactions which influence the family system and child socialization has been largely ignored. The role of adolescent developmental differences in family decision making has also been overlooked. The use of multiple family perception data as well as multivariate analysis and the study of interactions of two independent variables upon the dependent variable have also been neglected.

This study attempted to analyze multiple perceptions of family processes involved in decision making as they relate to one another for three different age groups of early adolescents. Independent variables included the family decision making processes of perceived child rearing environment, level of adolescent autonomy, relationship support, and frequency of induction provided by the parents. Child rearing environment described the balance of parental and adolescent power. Items included in the autonomy variable were related to behavioral autonomy as measured by level of compliance to parental disapproval and rules regarding choice of friends. Level of relationship support included items related to desirability of the parent as a role model, level of participation in family decision making, and perceptions of love and understanding within the relationship. The dependent variable was family moral atmosphere, assumed to be another process at work in family decision making. Multivariate analysis (including interaction terms) then assessed the relationship of family moral atmosphere to child rearing environment, autonomy, support, and induction. For each statistical procedure a
comparison of results from the three models of data manipulation was made for each of the independent variables, including the use of adolescent data only, whole family additive, and whole family discrepancy models. In questions concerned with how each of these forementioned variables differ throughout adolescent development, the independent variable was age of the adolescent and the dependent variables included family moral atmosphere and the four processes involved in family daily decision making.

**Research Questions**

1. Is there a significant difference between and among the three age groups in family moral atmosphere scores?
2. Is there a significant difference between and among the three age groups in child rearing environment, and does this relationship differ as a function of data manipulation models?
3. Is there a significant difference between and among the three age groups in level of induction, and does this relationship differ as a function of data manipulation models?
4. Is there a significant difference between and among the three age groups in environment of behavioral autonomy, and does this relationship differ as a function of data manipulation models?
5. Is there a significant difference between and among the three age groups in level of support, and does this relationship differ as a function of data manipulation models?
6. What combination of variables best explains the family moral
atmosphere for each of the three age groups, and does this differ as a function of data manipulation models?

Assumptions

1. Family processes include interactions among family members in addition to multiple perceptions of family interactions and their properties that may fluctuate over time, such as support, induction, encouragement of autonomy, and pattern of parental authority. Although these processes are measured at one point in time, they are believed to be dynamic and bi-directional aspects of the family system.

Definition of Terms

Adolescent--A person between and including the ages of 11 to 18. In this study, consisting of three groups: age 11 years, 14 years and 17 years. Also termed "early adolescent."

Autonomy--Adolescent's ability to direct his own behavior (in this case, decisions). Answers were measured on an ordinal scale adapting Elder's (1963) question on behavioral autonomy, measured by level of expectation of adolescent's compliance with a parental rule regarding an issue of parent-peer conflict. When asked what the adolescent would do if his/her parents were to object strongly to some friends, the answers were measured on a scale ranging from stop going with them, see them less, see them secretly, to keep going with them openly. Adolescents were also asked what each parent would expect them to check. Parents were each asked the
question in terms of what they expected would be the most likely way their child would respond.

**Child rearing environment**—Type of parent-adolescent interdependence within the decision making process. Answers were measured on an ordinal scale assessing the adolescent's power relative to that of the parents. For adolescents the answers ranged from my (mother/father) just tells me what to do (Autocratic), my (mother/father) makes the decisions but not without considering my opinions (Democratic), we arrive at decisions together (Equalitarian), I can make my own decisions but my (mother/father) would like me to consider (his/her) opinions (Permissive), to I can do what I want regardless of what my (mother/father) thinks (Laissez Faire). These categories were adapted from those of Elder (1962, 1963). Corresponding questions for the parents used similar wording but were aimed at the parents' perceptions of their own child rearing styles.

**Induction**—Explanations and reasoning provided by parents to aid an adolescent's understanding of rules and decisions (Elder, 1963) and gain compliance by avoiding a direct conflict of wills (Rollins & Thomas, 1979). Frequency of induction was measured by an ordinal scale ranging from never, once in a while, sometimes, usually, to yes, always.

**Moral atmosphere**—The stage of the moral judgments of the family group. An interval scale ranging from 100 (pure stage 1) to 400 (pure stage 4) was calculated using Gibbs and Wldaman's (1983) scoring method. The whole family's moral judgments were
determined by 1) the judgments agreed upon by the whole family, or 2) the judgments of the dominant family member for each decision.

*Multiple family perceptions*—Responses from the mother, father and oldest child on similar items related to areas of child rearing environment, autonomy, support, and induction. Three methods were then used to assess these data including 1) a discrete model which uses the adolescent's data alone, 2) an additive model which combines scores on related items to produce an aggregate family score, and 3) a discrepancy model which assesses the differences in answers from adolescents and their parents on related items and then combines these differences into an aggregate score.

*Power*—One of the dynamic generally diffuse, family systems properties influencing family decision making, situationally dependent, and consisting of the ability (potential or actual) of individual members to produce intended effects on the behavior of other family members, which may entail change, maintaining the status quo, or a mixture of the two (Cromwell & Olson, 1975; Scanzoni, 1979; Winter, 1973). This term is not specifically operationally defined in this study, but is assumed to be one of the principles underlying child rearing environment (or pattern of parental authority).

*Support*—An environment in which one feels comfortable with other family members and believes he/she is basically accepted and approved of as a person by other family members. This scale consists of items related to four areas of support including 1) participation in family decision making--an ordinal scale
assessing whether family daily decisions are said to be reached by one parent, both parents, or both parents in addition to adolescents and their siblings, 2) desirability of parents as role models--using the adolescent data alone, this variable consists of the degree to which the adolescent would like to be the kind of person (mother/father) is. An ordinal scale ranging from not at all, in many ways, in most ways, to yes completely was used for measurement (Elder, 1963). Parental responses were based on the above scale for items asking whether they would like their child to be the kind of person they are and whether they would like to be the kind of person their adolescent is, 3) love--an ordinal measure of perceived closeness of relationship provided in each person's description of his/her relationship with the (parent/child), ranging from right now my (son/daughter/mother/father) and I have few loving moments, there is a growing sense of distance between me and my (child/parent), sometimes I worry that my (son/daughter/mother/father) and I are not as close as we might be, to I am absolutely confident of my (son's/daughter's/mother's/father's) love, and 4) level of perceived understanding within the relationship--an ordinal scale provided by each person's description of how well they understand the (child/mother/father) and how well the (child/mother/father) understands them. Scale ranges from I never understand (him/her), sometimes I understand (him/her), I usually understand (him/her), to I understand (him/her) perfectly.
Early Adolescence

Early adolescence (defined in this study as ages 11 through 17) has been viewed as a period of transition across differing areas of human development (Newman 1981, 1982, 1983). Assessing the nature and extent of this transition is particularly relevant, given the large numbers of families involved. Nearly sixty percent of families in the United States include children under the age of 25 (U. S. Bureau of the Census, 1982). Of those families with children, nearly 14% contain a child ages 12 to 17 and an additional 11% contain a child age 6 to 11. Population projections suggest that the number of families containing children ages 10 to 14 will decrease from 18,241,000 in 1980 to 16,776,300 in 1990, and then increase to 19,518,600 in the year 2000 (U. S. Bureau of the Census, 1983). Families containing children ages 15 to 19 will also show a decrease from 21,162,000 in 1980 to 16,352,100 in 1990, and then an increase to 18,887,700 in the year 2000. If this period of transition in the family system is stressful, as G. S. Hall (1904) has suggested, then assessing those factors which might minimize the negative aspects of the impact of this transition would be helpful for a large number of families. Since this transition occurs within the adolescent and...
within the family system—both the intra- and interpersonal dimensions need to be addressed.

In terms of physical development, ages 10 to 14 have been viewed as the period during which growth spurts begin, but maturation is not yet complete (Eichhorn, 1980; Tanner, 1973; Thornburg, 1983). During early adolescence there is a substantial amount of comparison of oneself to peers (Boxer, Tobin-Richards, & Peterson, 1983) and against a social clock (Neugarten & Datan, 1976). The effects of different aspects of physical development on self image during early adolescence is unclear (Blyth & Traeger, 1983). Yet, it does appear to influence changing relationships of adolescents with their parents and peers.

Qualitative changes in adolescents' self-concept are also affected by the degree of abstract thinking early adolescents have at their disposal (Blyth & Traeger, 1983). Inhelder and Piaget (1958) identified cognitive development for the early adolescent (ages 11 to 13) as transitional thought. Formal thought emerges around age 15, but may be issue specific, only present in some areas of thought (Elkind, 1980).

In terms of social development, early adolescents attempt to confirm or validate their earlier social learnings (Thornburg, 1973). The importance of peers continues to increase (Thornburg & Gould, 1980). Early adolescents also engage in many behaviors typical of their older adolescent counterparts (Thornburg & Gould, 1980). Adams (1983) has identified early adolescence as a period of "new and extensive changes ... in personality and behavior". (p. 37)

With the great number of developmental areas in transition it is
easy to see how G. Stanley Hall (1904) identified adolescence as a period of "storm and stress". However, empirical findings have failed to present evidence to support this position, especially for the "typical adolescent" (Bandura, 1964; Douvan & Adelson, 1966; Offer, 1969). This may be due in part to inadequate conceptualization (Berzonsky, 1982). This lack of evidence also suggests the need to recognize diversity in adolescence (Blyth, 1983) and explain individual differences (Berzonsky, 1982).

**Early Adolescence and the Family**

Throughout adolescence the family continues to play a special role (Lerner & Spanier, 1978). Family interaction, particularly in the form of parental communication, has been shown to serve a nutritive function (Rashkis & Rashkis, 1981a), in addition to influencing ego development (Hauser, Powers, Noam, Jacobson, Weiss, & Follansbee, 1983; Rashkis & Rashkis, 1981a), and readiness of the adolescent to leave home (Rashkis & Rashkis, 1981b).

The role of family has recently received considerable attention for its connection with assessment of adolescent problems (Ackerman, 1962; Bell, 1975). Several studies have suggested that delinquents have less favorable family relationships than nondelinquent adolescents (Bandura & Walters, 1958; Bowlby, 1946; Jaffee, 1963; Nye, 1957). Recently Weller and Luchterhand (1983) in a study of boys from lower social class backgrounds, found a general pattern in which "problem" youth had less favorable family relationships than "promising" youth.
There has been a movement away from unidirectional explanations of causality in adolescent socialization to descriptions of parent-adolescent interaction or family system interaction (Belsky, Lerner, & Spanier, 1984; Newman & Murray, 1983; Rollins & Thomas, 1979; Walters & Walters, 1980). Not only do parents seek to influence adolescents, but early adolescents seek changes in their relationships with parents (Hill, 1980). This change is exemplified by the adolescent's increased assertiveness during family interactions (Jacob, 1974; Steinberg, 1981) and in the socialization process (Buck, Walsh, & Rothman, 1981). Ackerman (1980) has suggested that this interactional perspective also includes the reciprocal effects of the extended family and the nuclear family.

The belief that conflict is the predominant feature of the parent-adolescent relationship, as so often projected by the mass media, has been widely accepted by clinicians, theorists, parents, and adolescents (Montemayor, 1983). However, this widespread belief is not supported by recent research (cf. Belsky et al., 1984; Coleman, 1978). Findings regarding the increase in conflict around the time of puberty are inconsistent (Montemayor, 1983). This picture is complicated by a lack of comparison with rates of conflict involving children under age 12 and a lack of longitudinal study. There does appear an inverted U-shaped relationship between conflict and adolescence, with an increase during early adolescence, relative stability during middle adolescence, and a decrease when adolescents move away from home (Montemayor, 1983). Together with an increase in family power (especially for the adolescent male) and a decrease in
maternal power (Jacob, 1974; Steinberg, 1981), the picture is painted of a worsening parent-child relationship during early adolescence.

It has been suggested that this stress during adolescence is related to the coinciding developmental crises of the parent and child (Toews, Prosen, & Martin, 1981). Each crisis involves a period of review, a reordering of life and relationships, reworking of identities, and planning for the future. If either person has problems with his/her crisis, the other is affected. This situation is characterized by parent and adolescent ambivalence toward one another (Prosen, Toews, & Martin, 1981).

This period of the family life cycle can also be stressful because of the greater economic burden upon the family—especially in working-class families where plateaus of income occur earlier than in middle-class families (Hill, 1980). In addition, the adolescent's developing abstract processes enable him/her to challenge family norms and values (Elkind, 1967). New behaviors may confront the family with new styles, language, and mannerisms (Ackerman, 1980).

Other research does not support the idea of a generation gap (Manning, 1983). Although there are behavioral differences, there is a predominance of continuity and solidarity (Bengston, 1970). In fact, Thornburg and Burpeau (1980) suggested that there is a high degree of mutual understanding in families with adolescents. In a study of adolescents, ages 13 to 19, Weller and Luchterhand (1977) found that as youth move through school they become less estranged from their parents. Montemayor (1983) has stated that the majority of family arguments are about everyday family matters related to
socialization that continues through adolescence. Most of these conflicts were with mothers and usually involved mothers and daughters (Montemayor, 1982).

Authors from a variety of disciplines have recognized that early adolescence is a transitional period which requires a renegotiation of family rules and roles (Aldous, 1978; Blos, 1979; Erikson, 1968; Inhelder & Piaget, 1958; Turner, 1970). Adolescence is the period most likely to test the flexibility of the family's organization (Ackerman, 1980). The family that cannot change in response to the early adolescent's increased autonomy may inhibit the adolescent's exploration of options and result in early foreclosure on life choices (Grotevant, 1983), unless these beliefs are challenged when the adolescent leaves home (Adams & Fitch, 1982).

This bid for increased autonomy does not imply total detachment or freedom from parental influence. Rather, it suggests a transformation in the emotional bond with parents (Hill & Steinberg, 1976). Thus, as one progresses into late adolescence, beneficial family interaction includes a sense of connectedness and the opportunity to express individuality in family disagreements.

Child Rearing Environment

One aspect of the child rearing environment is the type of social structure in the child rearing relationship (Elder, 1962). Baldwin, Kalhorn, and Breese (1945) developed a classification based upon the child rearing practices of parents. Their typology of forms of parental power included: 1) autocratic—in which parents either
rarely allowed the adolescent to express views regarding behavior or
did not permit the adolescent to regulate his/her own behavior, 2)
democratic—in which the adolescent was encouraged to participate in
the discussion of issues relevant to behavior, while the final
decision was made or approved by the parent, and 3) permissive—in
which the adolescent had greater influence in making decisions which
were relevant to him/herself than did the parents.

Elder (1962) based his classification of child rearing structures
on the relative involvement of the parent and adolescent in decision
making concerning rules which regulated the adolescent's behavior.
His study involved the responses of 7359 adolescents and originally
utilized seven different types of parent-adolescent interdependence in
the decision making process, ranging from complete parental domination
(autocratic) to complete self-direction (laissez faire and ignoring).
Later, Elder (1963) collapsed these categories to three types,
generally reflecting the original work of Baldwin et al. (1945).
Elder (1962) has suggested that either extreme involves parental
rejection of the child. Kelly and Goodwin (1983) have stated that
patterns of parenting may be interpreted by the adolescent as pure
power, and influential in the adolescent's perception of the adult as
positive or negative.

Studies involving the relationship of child rearing practices
flourish (Walters & Stinnett, 1971), particularly those focusing on
the impact upon young children's occurrences of dependency,
competency, and autonomy (cf. Walters & Stinnett, 1971), social
aggression (Hoffman, 1960), and preschool behavior (Baumrind, 1967).
Yet, these relationships also seem to exist for adolescents (Elder, 1962, 1963). Adolescents with democratic parents have been found to be most satisfied with parental rules. Those with extremely permissive or dominant parents expressed the least satisfaction (Elder, 1962). Unexpectedly, Elder (1962) found no age differences in satisfaction. Yet, younger adolescents expected less freedom in the decision-making realm. Sixty percent of the adolescents reported that they were favorable of their parents' rules, regardless of the extent to which they were involved. These findings suggested the presence of other related factors.

The relationship of child rearing structure to various adolescent variables seems to be mediated by the frequency of induction, explanation, or reasoning provided by parents in an attempt to legitimate their power (Baumrind, 1968; Elder, 1962, 1963; Hill, 1980). Frequency of explanation has been found to be inversely related to parental power. Without induction parental rules were seen as arbitrary and the environment viewed as unpredictable by the adolescents in Elder's study (1963). Adolescents had less favorable attitudes toward this coercive power than toward legitimated parental power (Pikas, 1961). Thus, it appeared that legitimation of power may lead to a strengthening of the affective relationship between parents and their adolescents (Elder, 1962). In addition, a lack of explanation seemed to hinder the adolescent by being unable to understand the purpose of parental rules. This in turn has been seen as likely to undermine the adolescent's self-concept and weaken the desire for independence (Miller & Swanson, 1960).
Elder's (1962, 1963) work indicated that democratic and permissive parents were most likely to explain frequently. Autocratic parents were least likely to use high levels of explanation, but even the perceived reasonableness of the rules of autocratic parents was strongly enhanced by the use of frequent explanations.

Research by Harris and Howard (1981) suggested that adolescents are most likely to perceive their fathers as the family authority. Yet, there were no significant differences in the perceived reasonableness of mothers and fathers. Reasonable parents were perceived as highly involved with the family, objective, and enjoying of life. In addition, fathers were also seen as less rigorous in their expectations for child compliance and achievement.

Factors Related to Patterns of Authority

Elder (1962, 1963) found little variability between either age or sex groups in the proportion of parents who were perceived as democratic, laissez faire, or ignoring. Parents of older children were more likely to treat them permissively, which was supported by Weller and Luchtehand's (1977) finding that for adolescents ages 13 to 19, as age increased there was less parental control and less frequent turning to parents for advice. According to Elder's (1962, 1963) reports, the percentage of adolescents who saw their fathers as autocratic or authoritarian did not differ across ages. However, older adolescents were less likely to view their mothers as autocratic or authoritarian than younger persons. When considering the interaction of age and sex, younger boys were least likely to have a
considerable amount of influence in making decisions.

It has also been suggested that social class influences parental patterns of authority. Kohn (1969) suggested that parents of a lower social class were more likely to stress obedience and rely more heavily on physical punishment. Social class has also been found to be related to the adolescent's evaluation of parental power, with middle-class children seeing their fathers as more controlling and supportive than lower-class children (Gecas, 1971). Bronfenbrenner's (1958) work indicated that middle-class parents were more likely to be permissive with their preschool children than were either lower- or working-class parents. Yet, he added that this gap appeared to be narrowing. Elder (1962) found only slight social class differences in patterns of authority, with middle-class parents less controlling and lower-class parents more likely to be autocratic and authoritarian. These class differences were least in families with boys, but greatest among parents of girls.

A relationship between parents' level of formal education and child rearing environment has also been suggested. Rainwater (1960) hypothesized a positive relationship between empathic ability and years of education. Elder (1962) found a curvilinear relationship between child rearing structure and level of education, with democratic or equalitarian parents most likely to have had a college education. In contrast, autocratic parents of younger adolescents and permissive fathers of older adolescents (grades 10 through 12) were most likely to have less than 10 years of formal education.
Factors Influenced by Patterns of Authority

Several factors have been associated with patterns of authority in the child rearing environment. Elder's (1963) work indicated that the desire to model one's parents was most typical of adolescents who had democratic parents that provided frequent explanations for rules. Non-explaining autocratic or permissive parents (using his later three category typology) were least likely to be modeled. Parents in all categories who provided frequent explanations were more likely to be modeled than those parents who seldom gave explanations. Yet, adolescents were most likely to prefer to model their same sex parent, regardless of the level of parental power and frequency of explanation.

Kelly and Goodwin (1983) also used a three category system, and found that only fifty percent of adolescents with autocratic parents described their parents negatively but most said they would not adopt their parental models with their own children. Sixty-eight percent of adolescents with permissive parents described them negatively, suggesting that they would have preferred some form of discipline to none. However, sixty-eight percent of adolescents with democratic parents described them positively and said they would repeat these methods of discipline with their own children.

Level of compliance with parental rules also has appeared to be influenced by the child rearing environment. With regard to a question concerning conformity to a parental rule regarding choice of friends or dates, forty-five percent of adolescents with democratic parents stated that they would comply (Kelly & Goodwin, 1983). Only
twenty-eight percent of those with autocratic parents and fourteen percent of adolescents with permissive parents would comply. Elder (1963) reported that compliance with parental rules was most common among adolescents with democratic parents who frequently explained their rules. The frequency of parental explanation seemed more crucial in producing compliance than did level of power. According to Elder (1963), level of parental power appeared to be a more significant factor in regulating observable behavior while the use of induction was related to the adolescent's adoption of parental rules.

Baumrind (1983) has questioned the usefulness of measures of desire to model and compliance with parental rules in assessing the benefits of particular child rearing environments. She challenged the idea that the prime objective of socialization is or should be the internalization of parental norms. It may be that preferred measures would involve internal issues of the self, such as self-evaluation or autonomy.

Elder (1963) examined the role of the child rearing environment in relation to adolescent autonomy as measured by self-reliance or independence, and confidence in problem-solving and decision making. Highest levels of autonomy were reported by adolescents who perceived their parents as both permissive and frequent explainers. Lowest levels of autonomy were reported by adolescents who seldom received explanations, regardless of the level of parental power. While adolescents with autocratic parents who frequently explained rules were reported as dependent and self-confident, as the level of parental power decreased the frequency of explanations had a different
effect, fostering self-confidence and independence.

Not all reports have agreed with the importance of child rearing environment on adolescent development. A study by Gecas (1971) assessed the role of parental control on adolescent self-evaluation and did not find a positive relationship as had been hypothesized. In two studies, Enright, Lapsley, Drivas, and Fehr (1980) found that sex role socialization was more influential on autonomous development than either the level of parental power or adolescent's age.

**Child Rearing Environment and Moral Development**

Kohlberg (1969, 1976) has asserted that moral development is influenced by discipline methods. He based his argument on the high correlation between socio-economic class and discipline styles (Hess, 1970; Hoffman, 1970). Specifically, lower-class families have been found to use more power assertion, whereas middle-class families have been found to use more democratic or equalitarian methods. These latter methods have been thought to be rich in role-taking opportunity, which Kohlberg has claimed to be premier in moral development. Kohlberg (1976) clarified this relationship between social class, child rearing environment, and moral development in his statement that "... middle-class children have more opportunity to take the point of view of the more distant, impersonal, and influential roles in society's institutions (law, economy, government, economics) than do lower-class children". (p. 50) While the importance of induction in explaining the family and social environment is not stated directly, its role can certainly be implied.
Holstein's (1969) research disagreed with this position in her examination of family discussions of moral dilemmas. She found no significant relationship between parent's moral judgment level and method of discipline. However, parental moral judgment level was positively related to encouragement of the child's participation in the moral dilemma discussion.

Buck, Walsh, and Rothman (1981) sought to clarify the relationship between child rearing environment, parental moral judgment, and socialization of the early adolescent. In their study of thirty urban parents and their sons, social class (both educational and occupational level) was significantly related to moral judgment level of the parents. The moral judgment stage of the parents and their sons was significantly correlated, while level of the father accounted for much of the relationship.

Socialization practices which differed between principled and conventional parents were mainly concerning parent-child reciprocity or compromise, the use of reasoning and parental respect for the child's independence (Buck et al., 1981, pp. 98-99). Principled parents preferred nonintervention while conventional parents preferred reasoning. The choice of modeling or reinforcement as child rearing methods was infrequent for each group. These aforementioned differences in preference were partially accounted for by social class with upper- and upper-middle-class parents preferring compromise and nonintervention, and middle- and lower-middle-class parents preferring reasoning.

In terms of practice, principled parents generally used more
reasoning than conventional parents, encouraged their sons to express their feelings, held longer discussions, and listened to their son's views more. Rationales used by the parents also differed with principled parents stressing parent-child trust and the child's freedom to express himself, and conventional parents stressing respect for the parents and the child's responsibility. Principled parents also showed greater understanding of their child and reported that they almost always involved their sons in family decisions, while mixed-level and conventional couples said they as parents had the final family decision.

In the family moral dilemma discussion, consideration of the child's views, use of reasoning, and parental warmth were all significantly related to the son's moral judgment level, regardless of the parents' levels. High encouragement of the child's views approached significance. Discussions which involved high tension did not occur in families with preconventional sons. Parents who reported that they generally worked out mutual problems with their sons and those who expressed a moderate degree of confidence in their methods had higher stage sons—regardless of the parents' moral judgment levels—than did parents who did not involve their adolescents in working out mutual problems or those with very high or low levels of confidence in their child rearing methods.

Thus, it appears that parents at higher stages of moral judgment use different child rearing methods in everyday socialization situations. Social class differences occurred in parental moral judgment levels and in child rearing preferences and methods,
suggesting that social class alone is not adequate for predicting the child's moral judgment level. This study (Buck et al., 1981) also questioned Kohlberg's (1969) position that there may be a difference between parental approaches to moral issues and to ordinary socialization issues.

The Role of Support in Adolescent Socialization

Two variables have repeatedly been identified as critical in accounting for parental influence in the socialization of the child. These are parental power or control and parental support (Becker, 1964; Rollins & Thomas, 1975, 1979; Symonds, 1939; Thomas, Gecas, Weigert, & Rooney, 1974). Parental support (also referred to as nurturance, warmth, and acceptance-rejection) consists of behaviors labelled as positive social reinforcing stimuli (Ferster & Skinner, 1957) or diffuse positive social sanctions (Parsons & Bales, 1955). Rollins and Thomas (1975, 1979) viewed support as a continuous quantitative variable.

Symbolic interactionists have assumed that supportive behaviors transmit information to adolescents regarding their worth (Rollins & Thomas, 1979; Thomas et al., 1974). This information confirms (in the adolescent's mind) that his/her parents are accepting and see him/her as competent. Interaction which confirms this parental support then enables the adolescent to feel competent and worthwhile. This approach is supported by Hoffman's (1970) finding that there is a positive relationship between parental support and induction, and a negative relationship between parental support and parental power.
assertions.

While the role of parental control in adolescent socialization (Rollins & Thomas, 1979; Schaefer, 1965) and self-evaluation (Gecas, 1971) is not always clear, the influence of parental support has been much more consistent throughout research. Rollins and Thomas (1979) efficiently summarized the role of parental support in child socialization as follows:

1. Parental support is positively related to socially competent behaviors such as cognitive development, conformity, internal locus of control, moral behavior, self-esteem, and instrumental competence.

2. There is a curvilinear relationship between creativity and parental support.

3. Parental support is inversely related to less desirable factors such as antisocial aggression, behavior problems, drug abuse, learning disability, and incidence of schizophrenia.

Additional reviews of the impact of supportiveness on child and adolescent characteristics are provided by Walters and Stinnett (1971) and Forisha-Kovach (1983).

The need to assess the interactive effects of parental power and support has been advocated for more than four decades (Symonds, 1939). Yet, little systematic empirical investigation has resulted (Schaefer, 1972; Walters & Stinnett, 1971). Heilbrun and Waters (1968) have suggested that this interactive relationship exists, but have failed to explain the relationship adequately (Rollins & Thomas, 1975). Thomas et al. (1974) systematically evaluated the interaction of
parental support and control attempts, but produced no statistically significant findings.

**Multiple Perceptions of Family Power**

Family research has traditionally relied upon the responses of one family member--typically the mother (Blood & Wolfe, 1960; Fox, 1973; Szinovacz, 1979). Justification for this procedure has been based upon cost, accessibility, and the assumption of basic agreement among family members' perceptions (Larson, 1974). Safilios-Rothschild (1969) has cautioned researchers with regard to this reliance on selected views that typically result in "wives' family sociology" (p. 290) and has challenged family researchers to conceptualize family analysis as being composed of the perspectives and actions of all family members.

While the issues of cost and accessibility favor the choice of a single subject to represent the family unit, the assumption of interpersonal family agreement has been well-challenged. Larson (1974) found that intrafamily system perception is actually multidimensional. In his study of 571 family units agreement on the general measure of power was found to exist in only 56% of the families. Only 24% of families agreed on family problem-solving processes. With regard to family roles in tasks, highest agreement was obtained from the father-mother dyad (as high as 77% on certain task areas) and least agreement was found in mother-son dyads (as low as 27%). Ferreira (1963, 1964) also indicated differences in perceptions by stating that children were more perceptive than adults. Using various research techniques Turk and Bell (1972) and Olson and
Rabunsky (1972) have also documented that differences in perception exist among family members. There is a growing awareness that the nature of the data collected depends on which family member provides the responses (Klein, 1983; Larson, 1974; Safilos-Rothschild, 1969).

Conceptualizing and measuring properties of the family group provides greater difficulty than assessing characteristics of individuals as separate units. Klein (1983) has suggested five models of data manipulation for assessing group properties that involve collective action or interaction. In particular, Klein's measures are aimed at the study of multiple perceptions of family properties or interactions involving such phenomena as power, communication, affection, and the division of labor. Klein's suggested models for assessment of multiple perceptions include 1) an additive model, which utilizes the property of central tendency and simply involves taking the sum or average of the multiple reports; 2) a discrepancy score model, which utilizes the mathematical property of dispersion by taking the sum of the discrepancies between the individuals' reports; 3) a disjunctive model, which assumes there are multiple and discrete realities in a family and analyzes various reports independently; 4) a weighted model, which argues that biases in reporting or other measurement errors vary systematically and that some reports are more adequate reflections of reality than others; and 5) a conjunctive model, which combines reports according to the degree to which they converge and utilizes a covariance-based scoring technique. The weighted model is a generalized version of the additive model while the conjunctive model is similar to the
discrepancy score model. A researcher's choice of model should be related to the underlying theory behind the research. Models 1, 2, 4, and 5 possess the problem of loss of some information about particular family configurations because of their aggregate nature.

Ezell, Paolucci, Rettig, and Bubolz (1983) utilized Klein's additive, discrete, and discrepancy models in a study of family perceptions of responsibility for household production and quality of life from reports of 107 families. Husband's, wife's, and child's perceptions were attained. Ezell et al. concluded that all three models indicated a relationship between perceptions of household responsibilities and perceptions of quality of life. While triadic perceptions of more specific tasks, such as child's household responsibilities, were congruent among family members, perceptions of more general issues, such quality of life, were not congruent. This supported Larson's (1974) claim that perceptual agreement is easier to obtain concerning specific family tasks rather than general or global family roles or properties.

Summary

A review of the literature suggested that early adolescence may be a time of increased stress among family members, owing to changes within the adolescent, parents, and the family system. As the adolescent ages it could be expected that he/she would have increased power in family decision making. As the adolescent ages his/her level of moral development would also be expected to increase, aided by the attainment of formal operational thought and parental socialization.
practices which provide support and allow for increased role-taking experiences. Since the family system influences--and is influenced by--the adolescent, the adolescent's increased questioning and challenging of the system's rules and values would be expected to produce disequilibrium and growth within the family system's moral development--named "family moral atmosphere" in this study. Collecting responses from several family members would be expected to enhance understanding of this relationship between processes involved in family decision making and family moral atmosphere. Since each of the forementioned aggregate models for manipulating data from multiple perceptions contain some limitations, the comparison of results using several models is preferred.
CHAPTER III
METHODOLOGY

Sample Selection
This study is part of a larger project entitled "Changing Characteristics of the Parent-Child Relationship during Adolescence" under the direction of Dr. Barbara M. Newman and funded by the Ohio Agricultural Research and Development Center (H-713). The purposive sample obtained in this study consisted of the mothers, fathers, and oldest children in each of 100 white families residing in a large midwestern metropolitan area. This study analyzed the internal relationships among perceptions of processes involved in decision making in families with oldest adolescents in one of three age groups. By limiting the study to families with oldest adolescents in these age groups, the problems related to varied levels of prior experience of parents were minimized. For inclusion in this study the oldest child must have been in one of three age groups; 11 years (ranging from 10 years, 10 months to 12 years, 2 months); 14 years (13 years, 10 months to 15 years, 2 months); or 17 years (16 years, 10 months to 18 years, 2 months). For each age group a minimum of 15 families with oldest males and 15 families with oldest females were included. Only intact families or those in which a stepparent had been present for five years or more were included in this sub-sample. This non-random sample was selected from church and school directories, sports team
lists, and suggestions made by graduate students and other participants in the study. These data were collected from August 1, 1982 through April 1, 1984.

Data Collection Procedures

The research proposal was approved by the Human Subjects Review committee of the Ohio State University (Appendix A). Following this approval, the questionnaires were pretested on several families with adolescents who were not members of the final sample. This was done in order to identify and correct potentially troublesome questions.

Each family was mailed a letter of introduction, inviting them to participate in the study (Appendix B). This letter was followed by a telephone call from one of several graduate students involved in the project to give families the opportunity to ask further questions, and to set up a time for an interview. Interviews were conducted within the families' own homes with all three members present. Graduate students were trained in conducting these interviews through the use of practice sessions with this author and by listening to sample tapes.

The complete interview took an average of two hours for completion. Interviews generally were conducted during a weekday evening or on a weekend. Prior to the interview consent forms were completed (Appendix C). During the interview, questionnaires were administered to both the adolescent and his/her parents by a graduate student (Appendices D & E). Sex of the adolescent and interviewer were matched to minimize the anxiety level of the adolescent (cf.
Olson & Cromwell, 1975). Family members were usually seated at a table and requested to keep their written answers confidential. The interviewer's presence assured responses would not be shared between and among family members. Questionnaires were individually collected upon completion. This seating arrangement was also advantageous when tape recording the family moral dilemma discussion following the questionnaire (Appendix F).

**Subjects**

The sample consisted of 39 families with 11 year old children (21 males and 18 females); 31 families with children 14 years old (16 males and 15 females); and 30 families with children 17 years old (15 males and 15 females). Salient demographic descriptions of each age group of the sample are presented in Table 1. The descriptive characteristics for the demographic variables were similar for each of the three age groups. Analysis of variance techniques indicated that no significant differences existed between the three age groups as a function of either parents' ages at the birth of the child or parents' level of education. Two variables did appear to be related to the three age groups of adolescents. These included the years of marriage at the time of the child's birth ($p < .02$) and family occupational level ($p < .04$) as measured by the higher of husband's or wife's occupational level using the revised Duncan scale (Stevens & Featherman, 1980). However, caution is warranted in interpretation of these findings. Since six ANOVAs were computed, the significance level of .05 would be more accurately interpreted through an alpha
Table 1
Descriptive Statistics of Demographic Variables

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLES</th>
<th>11 YEARS (n=39)</th>
<th>14 YEARS (n=31)</th>
<th>17 YEARS (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Adolescent:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Years Married at</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birth of Child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\bar{x}$ 3.08</td>
<td>$\bar{x}$ 2.68</td>
<td>$\bar{x}$ 1.83</td>
</tr>
<tr>
<td></td>
<td>S.D. 2.12</td>
<td>S.D. 1.70</td>
<td>S.D. 1.37</td>
</tr>
<tr>
<td>Age at Birth of Child:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\bar{x}$ 27.24</td>
<td>$\bar{x}$ 27.74</td>
<td>$\bar{x}$ 25.53</td>
</tr>
<tr>
<td></td>
<td>S.D. 4.38</td>
<td>S.D. 4.31</td>
<td>S.D. 3.81</td>
</tr>
<tr>
<td></td>
<td>$\bar{x}$ 25.54</td>
<td>$\bar{x}$ 25.77</td>
<td>$\bar{x}$ 23.77</td>
</tr>
<tr>
<td></td>
<td>S.D. 4.13</td>
<td>S.D. 4.02</td>
<td>S.D. 4.93</td>
</tr>
<tr>
<td>Years of Education:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>55.3% (n = 21)</td>
<td>48.4% (n = 15)</td>
<td>46.7% (n = 14)</td>
</tr>
<tr>
<td>College Degree</td>
<td>15.8% (n = 6)</td>
<td>29.0% (n = 9)</td>
<td>23.3% (n = 7)</td>
</tr>
<tr>
<td>3-4 Years College</td>
<td>10.5% (n = 4)</td>
<td>3.2% (n = 1)</td>
<td>3.3% (n = 1)</td>
</tr>
<tr>
<td>1-2 Years College</td>
<td>18.4% (n = 7)</td>
<td>6.4% (n = 2)</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>--</td>
<td>12.9% (n = 4)</td>
<td>10.0% (n = 3)</td>
</tr>
<tr>
<td>9-12th Grade</td>
<td>--</td>
<td>--</td>
<td>10.0% (n = 3)</td>
</tr>
<tr>
<td>Years of Education (continued)</td>
<td>11 YEARS (n=39)</td>
<td>14 YEARS (n=31)</td>
<td>17 YEARS (n=30)</td>
</tr>
<tr>
<td>--------------------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>12.8% (n = 5)</td>
<td>35.5% (n = 11)</td>
<td>20.0% (n = 6)</td>
</tr>
<tr>
<td>College Degree</td>
<td>48.7% (n = 19)</td>
<td>29.0% (n = 9)</td>
<td>20.0% (n = 6)</td>
</tr>
<tr>
<td>3-4 Years College</td>
<td>2.6% (n = 1)</td>
<td>6.4% (n = 2)</td>
<td>10.0% (n = 3)</td>
</tr>
<tr>
<td>1-2 Years College</td>
<td>23.1% (n = 9)</td>
<td>9.7% (n = 3)</td>
<td>13.3% (n = 4)</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>10.2% (n = 4)</td>
<td>16.1% (n = 5)</td>
<td>33.3% (n = 10)</td>
</tr>
<tr>
<td>9-12th Grade</td>
<td>2.6% (n = 1)</td>
<td>3.2% (n = 1)</td>
<td>3.3% (n = 1)</td>
</tr>
<tr>
<td>Occupations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional and Technical</td>
<td>73.7% (n = 28)</td>
<td>51.6% (n = 16)</td>
<td>43.3% (n = 13)</td>
</tr>
<tr>
<td>Managers and Administrators</td>
<td>18.4% (n = 7)</td>
<td>19.4% (n = 6)</td>
<td>20.0% (n = 6)</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>7.9% (n = 3)</td>
<td>16.1% (n = 5)</td>
<td>16.7% (n = 5)</td>
</tr>
<tr>
<td>Clerical and Kindred Workers</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>--</td>
<td>3.2% (n = 1)</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Occupation (continued):</td>
<td>11 YEARS (n=39)</td>
<td>14 YEARS (n=31)</td>
<td>17 YEARS (n=30)</td>
</tr>
<tr>
<td>-------------------------</td>
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<tr>
<td>Father (continued):</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Operatives, except</td>
<td>--</td>
<td>3.2% (n = 1)</td>
<td>--</td>
</tr>
<tr>
<td>Transport</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Transport Equipment</td>
<td>--</td>
<td>--</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Operatives</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Laborers, except Farm</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Farmers and Managers</td>
<td>--</td>
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<td>--</td>
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<tr>
<td>Farm Laborers and Farm</td>
<td>--</td>
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</tr>
<tr>
<td>Foremen</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Service Workers, except</td>
<td>--</td>
<td>6.4% (n = 2)</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Private Household</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Private Household</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Workers</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Mother:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional and</td>
<td>23.1% (n = 9)</td>
<td>38.7% (n = 12)</td>
<td>26.7% (n = 8)</td>
</tr>
<tr>
<td>Technical</td>
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</tr>
<tr>
<td>Managers and</td>
<td>2.6% (n = 1)</td>
<td>9.7% (n = 3)</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Administrators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Workers</td>
<td>2.6% (n = 1)</td>
<td>--</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Occupation</td>
<td>11 YEARS (n=39)</td>
<td>14 YEARS (n=31)</td>
<td>17 YEARS (n=39)</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Clerical and Kindred Workers</td>
<td>15.4% (n = 6)</td>
<td>9.7% (n = 3)</td>
<td>23.3% (n = 7)</td>
</tr>
<tr>
<td>Craftsmen</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Operatives, except Transport</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Transport Equipment Operatives</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Laborers, except Farm</td>
<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>Farmers and Managers</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Farm Laborers and Foremen</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Service Workers, except Household</td>
<td>--</td>
<td>--</td>
<td>6.7% (n = 2)</td>
</tr>
<tr>
<td>Private Household Workers</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Homemakers (full-time)</td>
<td>56.4% (n = 22)</td>
<td>41.9% (n = 13)</td>
<td>23.3% (n = 7)</td>
</tr>
<tr>
<td>Student (full-time)</td>
<td>--</td>
<td>--</td>
<td>6.7% (n = 2)</td>
</tr>
</tbody>
</table>
level of .008 per analysis, which reflects control for experiment-wise error. Given this criterion, none of the demographic variables differed significantly by age of the adolescent.

The mean number of years of marriage at the birth of the first child for parents with 11 year-old children was 3.08 years (S.D. = 2.12), for parents with 14 year-old children it was 2.68 years (S.D. = 1.70), and for parents with 17 year-old children it was 1.83 years (S.D. = 1.37). Parents of the older adolescents were generally married a shorter time prior to the child's birth than parents of either of the younger groups.

When comparing the parents' mean age at time of the child's birth, fathers of the 11 year-old adolescents (\(\bar{X} = 27.24\) years, S.D. = 4.38) and fathers of 14 year-old adolescents (\(\bar{X} = 27.74\) years, S.D. = 4.31) were very similar, while fathers of the 17 year-old adolescents were somewhat younger (\(\bar{X} = 25.53\) years, S.D. = 3.81). A similar pattern was obtained for mother's mean age at time of the child's birth, with mothers of youngest subjects having a mean age of 25.54 years (S.D. = 4.13), mothers of 14 year-olds having a mean age of 25.77 years (S.D. = 4.02) and mothers of 17 year-old subjects having a mean age of 23.77 years (S.D. = 4.93).

In general, the majority of fathers in this study had received at least a college degree. In families with older children, there were more fathers who had not attended college or completed high school. Among fathers of 11 year-old children the highest level of education obtained was a graduate degree for 55.3%; a college degree for 15.8%; 3-4 years of college for 10.5%; and 1-2 years of college for 18.4%;
whereas none had less than some college education. Fifteen fathers of 14 year-old adolescents (48.4%) had terminated their education with a graduate degree; nine (29.0%) had completed a college degree; one (3.2%) had attended 3-4 years of college; and two (6.4%) had attended 1-2 years of college; whereas four (12.9%) had terminated their formal education at this time with a high school diploma. Among the fathers of 17 year-old adolescents 46.7% had received graduate degrees; 23.3% had received a college degree but not a post-graduate degree; 3.3% had attended 3-4 years of college; 6.7% had attended 1-2 years of college; 10.0% had obtained high school diplomas but did not go on to college; and 10.0% had completed 9-12 years of education without receiving a high school degree.

Although the mothers in this study tended to be well-educated, there were fewer women with graduate degrees than men. The highest level of education achieved by mothers of 11 year-old adolescents was that of a graduate degree for 12.8%; a college degree for 48.7%; 3-4 years of college for 2.6%; 1-2 years of college for 23.1%; a high school diploma for 10.2%; and 9-12 years of education for 2.6%. Mothers of 14 year-old adolescents had levels of education similar to those mothers of younger adolescents, although they were more likely to have completed a graduate degree. Eleven mothers (35.5%) had completed a graduate degree; nine (29.0%) had a college degree as their highest level of education; two (6.4%) attended 3-4 years of college; three (9.7%) had attended 1-2 years of college; five (16.1%) had completed high school without attending college and one mother had left school during 9-12th grade (3.2%). Among mothers of 17 year-old
adolescents, the highest level of education received for 20.0% was that of a graduate degree; for an additional 20.0% the highest level was a college degree. Ten percent had attended 3-4 years of college; 13.3% had attended 1-2 years of college; 33.3% had completed a high school diploma; and 3.3% had completed 9-12th grade but not received a diploma.

The majority of fathers of adolescents of each age group were classified as professional or technical workers, using the 1970 Census Occupational Code (U.S. Bureau of the Census, 1973). Among fathers of 11 year-old adolescents, 73.7% of fathers could be classified as professional or technical workers; 18.4% were managers and administrators; and 7.9% were sales workers. Among fathers of 14 year-old subjects, 51.6% were classified as professional or technical; 19.4% were managers and administrators; 16.1% were sales workers; 3.2% were craftsmen; 3.2% were employed as operatives; and 6.4% were service workers. Fathers of 17 year-olds were also most frequently employed as professionals or technical workers (43.3%); 20.0% were employed as managers or administrators; 16.7% were employed as sales workers; and 6.7% were employed in each of three occupational categories: craftsmen, transport equipment operatives, and service workers.

Mothers of 11 year-old children were most likely to be homemakers (56.4%), although 23.1% were employed in professional or technical positions; 2.6% were employed as managers or administrators; 2.6% were employed as sales workers; and 15.4% were employed as clerical workers. Mothers of 14 year-old subjects were also most likely to be
full-time homemakers (41.9%), although 38.7% were employed as professional or technical workers; 9.7% were employed as managers or administrators; and 9.7% were employed as clerical workers. Among mothers of 17 year-old subjects, approximately equal numbers were full-time homemakers (23.3%), employed as professional-technical workers (26.7%), or clerical workers (23.3%). The four categories of managers and administrators, sales workers, service workers, and students each were comprised of 6.7% of mothers of oldest adolescents.

**Instruments and Measures**

Data were collected from the adolescents and their parents through a paper and pencil questionnaire designed by Dr. Barbara M. Newman. The questionnaire used in this study was composed of standard demographic and family background questions, fixed alternative questions from Elder's (1962, 1963) work on decision making, family authority, and child rearing structure, as well as questions to determine accuracy of person perception and family supportiveness. An interview based on Kohlberg's Moral Dilemmas (1963, 1968, 1969; cf. Colby, Kohlberg, Gibbs, & Lieberman, 1983) was also included as the dependent variable measure.

**Moral Atmosphere Measure**

and justifications (i.e., reasoning) indicative of the subject's stage of moral thought. The particular form of the MJI used in this study is an adaptation of form A which includes "Joe's" dilemma and the "Heinz" dilemma. Joe's dilemma details a conflict between a father who breaks his promise to his son by asking the son for money to take a fishing trip and the son who has worked for this money and who had been promised a visit to summer camp via the money he had earned. This dilemma contrasts issues such as contract (abiding by an agreement) versus family affiliation and authority. The Heinz dilemma describes an impasse between a druggist who refuses to lower his price for a drug which might save Heinz's wife's life and Heinz who must then steal the drug or let his wife die. This dilemma pits issues such as life versus law and affiliation (Heinz's love for his wife) versus property.

The MJI has been shown to have high test/retest reliability ($r = .96$), high interrater reliability ($r = .98$) and good validity ($r = .78$ with age).

In order to assess the moral atmosphere of families, the MJI adaptation was administered to the family triad and an interviewer stimulated discussion on each probe question. This method is an adaptation of the procedure described in Power and Reimer's (1978) report on assessing the moral atmosphere of the Cluster School.

Scoring of the moral atmosphere of the family is based on rules and theory developed by Power and Reimer (1978) and Kohlberg (1970). The first step in the scoring process was to determine what reasoning to score. The following algorithms were used to make this decision.
1. If the family mutually agreed on a reason for an action decision, then that reasoning is scored for the stage of the atmosphere.

2. If the family mutually agrees on an action decision but not on a reason, then the reasoning of the family member who has ascertained the power in the decision outcome (e.g., whomever's action decision the other members adopt) is scored for the stage of the atmosphere.

3. If no family action decision is reached, then the reasoning each family member used is scored and differences between stages are averaged, yielding a transitional stage score.

4. If no family action decision is reached and no reasons are given, or if the reasons given are discrepant beyond adjacent stage levels, the item is rated as unscorable.

The scoring of the stage of the family's moral atmosphere is based on Gibb's theoretical revisions (1979) and Gibbs and Widaman's (1982) scoring revisions of Kohlberg's work. Gibbs and Widaman have developed a concise scoring method based on a reworking of Kohlberg's issues-into-conflicts method which is based on sociomoral normative values (or norms). The scoring technique has been shown to be highly reliable ($r = .87$ test-retest, $r = .98$ interrater) when used with Gibbs' adaptation of the MJI, the Sociomoral Reflection Measure. Use of the Gibbs and Widaman normative technique on these data is further warranted when one considers the strong correlation between the MJI and the Sociomoral Reflection Measure ($r = .85$).

The Gibbs and Widaman technique classifies the probe questions
into one of the following eight norms: Affiliation (marriage and friendship), life, law and property, legal justice, conscience, family affiliation (obeying parents and parents keeping promises), contract, and property. The MJJI items used in this study have been classified into one of these eight norms on the basis of 1) probe question similarity and 2) the norm involved in the probe. The reasoning for each norm was then scored for moral stage by a rater trained in both Kohlberg's technique and Gibbs and Widaman's technique and who has been shown to be highly reliable in his use of the Gibbs and Widaman method (cf. Gibbs, Widaman, & Colby, 1982). Using these norm scores, an overall Moral Atmosphere Maturity Score (MAMS) was calculated using the weighted-means method prescribed by Gibbs and Widaman. It should be noted that the MAMS is a continuous, interval scale ranging from 100 (pure stage 1) to 400 (pure stage 4). MAMS is then the measure of the family's moral atmosphere maturity rating.

Elder's Questionnaire on Child-Rearing Relationships

Elder's (1962, 1963) testing procedure is a brief fixed alternative inventory developed to measure parental power in child rearing practices and its effect on the adolescent. Responses have typically been collected from adolescents alone, without inclusion of parental reports. Items address such areas as child rearing structure, frequency of parental explanation for rules, compliance with parental requests, desire to role model the parents, behavioral autonomy, and adolescent self-confidence and self-reliance in decision making.

Reliability estimates of this testing procedure have not generally
been calculated because of its nominal structure and small number of items (Enright et al., 1980: 532). However, Enright et al., argue that it seems to possess considerable face validity. Elder's procedure has been extensively used as an index of parenting style (Elder 1962, 1963, 1965, 1971; Enright et al., 1980; Lesser & Kandel, 1969) and is frequently cited as the classic work on patterns of authority (Forisha-Kovach, 1983; Newman & Murray, 1983; Rollins & Thomas, 1979).

Items from Elder's work were included in this study as measures of child rearing environment, level of induction, and autonomy. Other items from Elder's inventory were used in part to create a measure of support. These four measures were assessed using each of the three models for manipulating multiple perception data (adolescence alone, additive and discrepancy scores) as follows:

**Child Rearing Environment**

Using only the adolescent's perceptions, the measure of child rearing environment consisted of two five-point items, one assessing the mother's power in child rearing and one assessing the father's power (Elder, 1962, 1963). Child rearing environment involving each parent was originally measured by Elder on two items (one in relation to the father and one in relation to the mother) using a seven-point scale ranging from "autocratic" to "ignoring" (1962) but later (1963) condensed to three points ranging from "autocratic" to "permissive". For the purposes of this study an intermediate range for assessing child rearing structure (environment) was used, consisting of a five-point scale ranging from "autocratic" to "permissive." This...
method eliminated the "ignoring" category in which Elder (1962) found very small percentages of parents and which exhibited no meaningful differences in analyses. The item indicating a democratic pattern was rephrased as "my (mother/father) makes the decisions but not without considering my opinions," which incorporates Elder's two original items for authoritarian and democratic styles and reflects his later categorization. The equalitarian style was rephrased as "we arrive at decisions together." Since reliability estimates of this testing procedure have not generally been calculated, an internal reliability coefficient using Cronbach's Alpha of .69 was obtained for this two item scale, suggesting that there is some consistency between adolescents' views of their mothers' and fathers' patterns of authority in child rearing.

The additive model of child rearing environment used multiple family member data and consisted of four five-point items. This model included the two forementioned questions obtained from the adolescent regarding the parents' power in child rearing and one item from each parent regarding perception of his/her own power in the child rearing of this adolescent. For this model of child rearing environment a Cronbach's Alpha of .36 was obtained, highlighting the level of difference in perceptions within a family. Cronbach's Alpha would only be expected to be high for discrete models, reflecting internal consistency of the individual level items.

A discrepancy model of child rearing environment used the differences between family members' reports of parental power and resulted in a scale with two items. One item assessed the absolute
value of the difference between the adolescent's and mother's perceptions of the mother's power in child rearing. The second item assessed the absolute value of the difference between the adolescent's and father's perceptions of the father's power in child rearing. A Cronbach's Alpha of .08 was obtained for the discrepancy model of child rearing environment.

**Induction**

The first model was based upon the adolescent's perceptions. Frequency of parental explanations was assessed for each parent using a five-point scale, ranging from "never" to "yes, always" (Elder, 1962, 1963). This first model consisted of two items and yielded a Cronbach's Alpha of .63.

An additive model, using multiple perceptions of induction consisted of four five-point items. In addition to the two items assessing the adolescent's perceptions of parental induction, one item of each parent's perception of his/her level of use of induction was included. An internal reliability coefficient of .51 was found.

The third model, based upon discrepancy in perception of level of induction, produced a scale with two items. One item assessed the difference between the adolescent's and mother's perceptions of the mother's use of induction. The second item yielded a similar discrepancy score in relation to the father's use of induction. A test of Cronbach's Alpha resulted in a coefficient of .47.

**Autonomy**

Using the adolescent's perceptions (Model 1) the measure of autonomy consisted of three four-point items which assessed level of
behavioral autonomy in decision making (Elder, 1962, 1963). For this model an internal reliability coefficient of .73 was achieved.

The additive model for autonomy consisted of two factors (see Table 2). These factors were derived from a principle components analysis using oblique rotation. Factor 1 included three four-point items from the adolescent indicating the expected level of behavioral autonomy of the adolescent regarding a parent-peer conflict and expectations of parental responses. Factor 2 was composed of two four-point items reflecting each parent's expectation of the adolescent's level of autonomous behavior in that same parent-peer conflict situation. A Cronbach's Alpha was computed for Factor 1 (.73), Factor 2 (.38), and the overall additive model (.60).

The discrepancy model of autonomy was composed of four items based upon the differences in perception of autonomy in each parent-adolescent dyad. One item assessed the difference between the adolescent's and father's perceptions of the child's behavioral autonomy, and a second item assessed like differences between the perceptions of the adolescent and mother. One item assessed similar comparisons of differences in perceptions regarding the father's response and the adolescent's perception of the father's response, and the final item assessed differences between the mother's response and the adolescent's perception of the mother's response. The internal reliability coefficient for the discrepancy scale on autonomy was .64.

Support

The scale for adolescent's perception of family support was composed of nine items; a four-point item assessing the number of
Table 2
Factor Analysis for Autonomy

<table>
<thead>
<tr>
<th>Autonomy Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent's Behavior</td>
<td>.67077</td>
<td>.40362</td>
</tr>
<tr>
<td>Adolescent's Expectation of Mother's Response</td>
<td>.86347</td>
<td>-.26925</td>
</tr>
<tr>
<td>Adolescent's Expectation of Father's Response</td>
<td>.85628</td>
<td>-.36394</td>
</tr>
<tr>
<td>Mother's Expectation of Adolescent's Behavior</td>
<td>.18811</td>
<td>.77902</td>
</tr>
<tr>
<td>Father's Expectation of Adolescent's Behavior</td>
<td>.19492</td>
<td>.65076</td>
</tr>
</tbody>
</table>

Eigenvalues
Factor I = 2.0021
Factor II = 1.3982
persons involved in family daily decision making, two five-point items indicating the adolescent's perception of desirability of each parent as a role model, four five-point items representing the degree to which the adolescent feels each parent understands him/her and the adolescent's perception of his/her level of understanding the parent, and two four-point items describing the perceived level of love in the relationship of the adolescent and each parent. Using a principle components analysis, these nine items loaded heavily on one factor (see Table 3). For this model of support a Cronbach's Alpha of .73 was obtained.

The additive model for support consisted of 21 items. Since a single principle components analysis produced a factor structure that did not maximize understanding as would be expected, separate analyses were conducted for each family position (adolescent factor which was already described in the first model of support, mother and father factors seen in Table 4). For each family position the analysis resulted in heavy loading on one factor. Factor 1 consisted of the aforementioned nine items of adolescent's perception of support and resulted in a Cronbach's Alpha of .73. Factor 2 consisted of the six items that were counterparts for the father, resulting in a Cronbach's Alpha of .66. Factor 3 consisted of the six related items for the mother and produced a Cronbach's Alpha of .53. A reliability coefficient of -.20 was obtained for the overall additive support scale.

The discrepancy model for support contained the absolute values for 10 items including the differences in perceptions of the
Table 3
Factor Analysis of Adolescent's Perception of Support

<table>
<thead>
<tr>
<th>Support Items</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Decision Making</td>
<td>.4728</td>
</tr>
<tr>
<td>Desirability of Mother as Role Model</td>
<td>.6781</td>
</tr>
<tr>
<td>Desirability of Father as Role Model</td>
<td>.6943</td>
</tr>
<tr>
<td>Adolescent's Level of Understanding of Mother</td>
<td>.6410</td>
</tr>
<tr>
<td>Mother's Level of Understanding of Adolescent</td>
<td>.7048</td>
</tr>
<tr>
<td>Adolescent's Level of Understanding of Father</td>
<td>.4211</td>
</tr>
<tr>
<td>Father's Level of Understanding of Adolescent</td>
<td>.4246</td>
</tr>
<tr>
<td>Feeling of Love with Mother</td>
<td>.6041</td>
</tr>
<tr>
<td>Feeling of Love with Father</td>
<td>.3749</td>
</tr>
</tbody>
</table>

Variance Explained by Factor I = 2.9361
Table 4
Factor Analyses of Parent's Perception of Support

<table>
<thead>
<tr>
<th>Support Items</th>
<th>Factors (run independently)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother's</td>
</tr>
<tr>
<td>Participation in Decision Making</td>
<td>.3211</td>
</tr>
<tr>
<td>Desirability of Self as Role Model</td>
<td>.5564</td>
</tr>
<tr>
<td>Desirability of Child as Role Model</td>
<td>.5712</td>
</tr>
<tr>
<td>Parent's Level of Understanding of Adolescent</td>
<td>.7102</td>
</tr>
<tr>
<td>Adolescent's Level of Understanding of Parent</td>
<td>.6530</td>
</tr>
<tr>
<td>Feeling of Love with Adolescent</td>
<td>.6059</td>
</tr>
</tbody>
</table>

Variance Explained by Mother's Factor = 2.0370
Variance Explained by Father's Factor = 2.3336
adolescent and each parent in terms of the number of persons involved in family daily decision making, the desirability of the parent as a role model, the adolescent's level of understanding of the parent, the parent's level of understanding of the adolescent, and the level of love present in each parent-child relationship. For this model of support a Cronbach's Alpha of .50 was found.

Data Analyses

To investigate Research Questions 1-5, measures of frequency, and central tendency, and analysis of variance techniques (ANOVA) were used. These techniques assessed whether any age level differences (11 years, 14 years, and 17 years) existed within the five major variables of this study. These procedures were repeated for each of the three models of data manipulation of multiple family members' perceptions.

The data manipulation procedures employed in this study utilized 1) a discrete model using the adolescents' perceptions, 2) an additive model using multiple family member data and based upon the following equation, where "FP" represents family process (Klein, 1983):

\[ FP = \left( X_{\text{adolescent}} + X_{\text{mother}} + X_{\text{father}} \right) ; \]

and 3) a discrepancy model utilizing the dispersion or difference between reports of the family members, where "X" represents the "i"th report, and "n" represents the number of reports provided (Klein, 1983):

\[ FP = SD_{X} \left( \frac{X_{i} - X_{j}}{n(n-1)/2} \right) \]

Klein (1983) has delineated five strategies for manipulating
discrepant reports, each reflecting the underlying theoretical assumptions of a particular study and the nature of the questions asked. For example, the additive model simply combines the scores of several family members on a single item into one family score. It may be that the compounding of family members' scores more truly reflects the overall family environment. Yet, aggregate family scores can be arrived at a number of ways, reflecting different configurations of family members' perceptions. Information on those different configurations is lost in an additive score. The discrepancy score model which utilizes the mathematical property of dispersion has been suggested by Klein (1983) as appropriate for meaningfully combining individual family members' scores regarding perception of one another. This is especially useful from a symbolic interaction perspective since that theoretical orientation assumes that individuals are the basic unit of social action and that social meaning is created through the process of interaction (such as in role-taking ability). Yet, these discrepancy scores can also be composed of various combinations of differences in family members' perceptions that result in the same aggregate score. Thus, an analysis which considers discrete reports and also compares the results of several of these methods would be preferable.

Pearson's correlation coefficients (r) were used to analyze the relationships and multicollinearity between and among the demographic variables, dependent variables, and independent variables. Tolerance and variance inflation factors were also computed to assess excessive multicollinearity. The mere use of correlations does not indicate
situations where each variable contributes systematically a small amount of collinearity so that sources of collinearity cannot be isolated. Scattergrams of each variable were plotted to seek out nonlinear relationships.

To investigate Research Question 6, simultaneous and stepwise multiple regressions (forward and backward procedures) were performed to determine the best model (set of variables) for explaining level of family moral atmosphere. Interaction terms for child rearing environment by induction and for child rearing environment by support were included. This procedure was repeated for each of the three age groups using each of the three models of data manipulation.

For all statistical techniques utilized to analyze the data in this study, an alpha (level of significance) of .05 was used. Experiment-wise error was controlled for by dividing the alpha of .05 by the number of analyses performed within any one of the data manipulation models (Kennedy, 1978). The Statistical Analyses System (SAS, 1982) was used in each analysis.

**Limitations**

The sample utilized in this study consisted of intact white families and their oldest children. Therefore, its unrepresentative nature limits generalization to rural families, single parent households, or minority families. In addition, it is unclear if there are significant differences between families who chose to participate and those who declined. Those families who declined to participate generally stated that they were either too busy or not interested. It
may also be that these families were less invested in familial roles, protective of their privacy, or experiencing a significant amount of parent-adolescent conflict.

Ability to generalize is also hampered by the exploratory nature of this study. While it can provide information useful in planning the direction of future research, it cannot provide definitive information or predictive power regarding the relationships of the variables under study.

The small number of families also limits data analysis procedures. With approximately 30 families per cell, attention to such issues as the interactive effects of sex and age is inappropriate when using the forementioned multivariate approach. Sample size also limits the comparisons of families with employed mothers with those families in which mothers are primarily homemakers, or the comparison of step-families with intact families.

In addition, other variables of possible importance were not addressed. Family size and religious preference, two variables identified by Elder (1962, 1963) as significant in the study of child rearing patterns, were not included in this study. It may be that these two variables were not as salient at the present time. However, Thomas et al. (1974) still found the role of religious preference to be significant in their study of family socialization, parental control, and power and the adolescent.

Finally, since many of the families participating in this study were interviewed during weekday evenings there may have been a problem with fatigue. This problem was most likely to occur with younger
adolescents or those adults who arrived home from work at a late hour (7 pm - 8 pm), just in time to participate in the interview.
CHAPTER IV

RESULTS

The purpose of this investigation was to examine the relationship between perceptions of processes involved in decision making and family moral atmosphere as a function of 1) age of oldest adolescent and 2) source of perception. For those research questions (1-5) aimed at an understanding of age related differences for each variable singularly, age was considered the independent variable and those items related to family moral atmosphere or processes involved in decision making were considered dependent variables. For the last research question aimed at determining the best model to explain variance in family moral atmosphere, family moral atmosphere was the dependent variable and processes involved in decision making were considered independent variables. The decision making variables examined in this study included perception of child rearing environment, level of induction, support, and behavioral autonomy. Perceptions of processes involved in family decision making included: 1) the adolescent's perceptions alone (Model 1); 2) the summation of the adolescent's, father's, and mother's perceptions (Model 2); and 3) the discrepancy of differences among family members' perceptions of the independent variables. Family moral atmosphere was measured during a family triadic discussion using an adaptation of Power and Reimer's (1978) procedure used to assess the moral atmosphere of a
school, and originally based on Kohlberg's Moral Judgment Interview. Families were classified into three categories—those with oldest children who were either age 11, 14, or 17.

Data Analyses Performed

The purpose of this chapter is to present the results of the data analyses used to describe the relationship of perceptions of processes in decision making to moral atmosphere in families with oldest adolescents ages 11, 14, or 17. An analysis of the normal distribution of families with regard to moral atmosphere was conducted through an examination of scattergrams and plots of residuals for each age group and for each of the data manipulation models. Multicollinearity was assessed through an examination of correlation coefficients, tolerance and variance inflation factors. Correlational analyses, including Pearson's product moment (r) correlation coefficient, were used to assess the linear relationships between demographic, dependent, and independent variables for each age group. One-way analysis of variance was employed for research questions one through five to assess whether family moral atmosphere, child rearing environment, level of induction, autonomy, or support differ among the three age groups using each of the three data manipulation models. Simultaneous and stepwise multiple regressions were conducted to find the best model for describing the relationship between perception of family processes and family moral atmosphere. These regressions were conducted for each age group and using each data manipulation technique (model).
Overview of Nature of the Data

Before presenting the inferential statistical analyses used in this study, an overview of the nature of the data from the self-report questionnaire on processes involved in family decision making and from the family moral atmosphere will be presented. The means, standard deviations, and range of responses of the variables in the study for each of the three age groups are presented in Table 5. In addition, scattergrams of original data points for independent variables were plotted in relation to family moral atmosphere scores. There did not appear to be any obvious curvilinear relationships present. Plots of residuals also did not produce a curvilinear picture, and they thus meet the assumption of homoscedasticity. Therefore, the use of linear models was considered appropriate for analyses in this study.

An additional problem sometimes encountered in research is that of multicollinearity, a situation in which the correlation between and among the independent variables is high, thus influencing the interpretability or precision of the multivariate analyses. For this study, analyses of the correlation coefficients of the variables of families with adolescents age 11 (Tables G-1 to G-3), age 14 (Tables G-4 to G-6), and age 17 (Tables G-7 to G-9) indicated that the level of multicollinearity was not significant. In no case did the correlation among the independent variables approach .85 or higher, the level at which concern for multicollinearity becomes apparent (Pedhazur, 1982). Tolerance and variance inflation factors (Tables H-1 to H-3) were also computed to assess excessive multicollinearity; the mere use of correlations does not indicate situations wherein each
Table 5
Descriptive comparison of the Responses of Families with Adolescents of Three Age Groups on Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Child Rearing Environment</th>
<th>11 YEARS (n = 79)</th>
<th>14 YEARS (n = 31)</th>
<th>17 YEARS (n = 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Model 1</td>
<td>5.59</td>
<td>1.66</td>
<td>2-10</td>
</tr>
<tr>
<td>2</td>
<td>11.05</td>
<td>1.87</td>
<td>7-14</td>
</tr>
<tr>
<td>3</td>
<td>1.89</td>
<td>1.13</td>
<td>0-6</td>
</tr>
</tbody>
</table>

Induction

| Model 1                   | 7.92 | 1.54 | 4-10   | 7.42 | 1.48 | 4-10   | 7.83 | 1.39 | 4-10   |
| 2                         | 16.87| 1.96 | 12-20  | 16.19| 1.68 | 13-20  | 16.67| 1.82 | 12-20  |
| 3                         | 1.34 | 1.12 | 0-4    | 1.68 | 1.49 | 0-8    | 1.60 | 1.07 | 0-4    |

Support

| Model 1                   | 32.49| 26.60 | 26-40  | 30.64| 23.29 | 22-37  | 50.30| 24.17 | 19-36  |
| 2                         | 74.71| 50.09 | 50-80  | 71.29| 57.23 | 60-81  | 69.93| 48.48 | 52-80  |
| 3                         | 5.66 | 3.53 | 2-14   | 5.77 | 2.50 | 2-13   | 6.57 | 3.67 | 1-18   |

Autonomy

| Model 1                   | 5.92 | 2.44 | 3-15   | 6.68 | 2.15 | 4-12   | 7.53 | 2.56 | 4-12   |
| 2                         | 10.00| 2.56 | 6-19   | 10.94| 2.58 | 7-16   | 12.33| 3.04 | 7-20   |
| 3                         | 2.87 | 2.44 | 0-12   | 3.01 | 2.27 | 0-8    | 4.13 | 2.60 | 0-12   |

Family Moral Atmosphere

| 324.46 | 17.81 | 288-358 | 329.90 | 21.51 | 285-371 | 329.33 | 14.02 | 300-367 |

Possible Ranges for Independent and Dependent Variables

<table>
<thead>
<tr>
<th>Child Rearing Environment</th>
<th>Support</th>
<th>Autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Range</td>
</tr>
<tr>
<td>Model 1</td>
<td>2-10</td>
<td>3-17</td>
</tr>
<tr>
<td>2</td>
<td>4-20</td>
<td>5-20</td>
</tr>
<tr>
<td>3</td>
<td>0-8</td>
<td>0-12</td>
</tr>
</tbody>
</table>

Induction

<table>
<thead>
<tr>
<th>Family Moral Atmosphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-400</td>
</tr>
</tbody>
</table>
variable systematically contributes a small amount of collinearity so that individual sources of collinearity cannot be isolated. Because none of the variance inflation factors had values of five or larger, it appeared that there was minimal multicollinearity.

To examine relationships between salient family demographic variables (discussed in Chapter 3) and study variables, Pearson product moment ($r$) correlation coefficients were used with data from each age group (Tables I-1 to I-3). Only one correlation was significant at a .01 level, but several were significant at the .05 level. In families with 11 year-old adolescents (Table I-1), there was a negative relationship between father's level of education and child rearing environment from both the adolescent's perception ($p < .02$) and the additive model ($p < .04$) which incorporated the parents' and adolescent's perceptions. Adolescents with highly educated fathers perceived themselves as having less power in family decision making than adolescents with less educated fathers. There was a positive relationship between mother's level of education and the additive model of support ($p < .04$), as well as a positive relationship between mother's level of education and autonomy from both the adolescent's perspective ($p < .03$) and the additive model ($p < .05$). It should be noted that the correlation ($r$) between mother's and father's education levels was .32.

In families with 14 year-olds (Table I-2) there was a negative relationship between the number of years parents were married prior to the adolescent's birth and level of induction from a discrepancy model ($p < .05$). In other words, in families where parents were married for
a longer period before the child's birth, there was less discrepancy among those family members' perceptions of level of induction than in families where parents were married for a shorter time prior to the child's birth. Family socioeconomic status (SES), as measured by parental occupational status, was positively related to the family moral atmosphere ($p < .03$) and approached significance ($p < .06$) with level of support from the additive model. Father's education was also positively related to family moral atmosphere. In addition, there was a positive relationship between father's level of education and the additive ($p < .04$) and discrepancy ($p = .01$) models of autonomy. Although the aggregate scores on behavioral autonomy for families with fathers with high levels of education were higher than those of families with fathers with less education, there was also a greater discrepancy in perceptions among members within those families. This pattern suggests that parents in these families perceived an atmosphere of greater behavioral autonomy than did their adolescents. This trend toward greater discrepancy in perception among members of families in which the fathers had higher levels of education was also reflected in families in which mothers had higher levels of education. Families with highly educated mothers had a significantly higher level of discrepancy among members' perceptions of level of autonomy ($p < .02$) than did families with less educated mothers. The correlation between mother's and father's education in families with 14 year-olds was .59.

Among families with 17 year-olds, several of the father's demographic variables were negatively related to support (Model 1).
There was a negative relationship between number of years father was married before the birth of the child and the adolescent's perception of family support ($p < .03$). This age group contained four families with step-fathers, who had been present in the home from a period of 5 to 12 years prior to the interview, and one step-mother present for 15 years. Father's age at the child's birth and his level of education were also negatively related to adolescent's perception of familial support ($p < .05$).

Analyses of Independent Variables with Respect to Age and Data Manipulation Models

One-way analysis of variance was one method used to determine the nature of the relationships between the study variables of family moral atmosphere, child rearing environment, level of induction, environment of behavioral autonomy, and level of support with regard to age of the adolescent. Data for the independent variables were analyzed using the three models of (1) adolescent's perceptions alone (Model 1); (2) family additive score (Model 2); and (3) family discrepancy scores (Model 3). Because each model involved four separate analyses the significance level of .05 was lowered to a significance level of .0125 for each analysis to control for experiment-wise error, as suggested by Kennedy (1978).

1. Is there a significant difference between and among the three age groups in family moral atmosphere scores?

An analysis of variance provided no support for a relationship between age of the adolescent and family moral atmosphere, $F(2, 97) =$
.98, p < .38. Age of adolescent accounted for less than 2% of the variance in family moral atmosphere scores. Therefore, on the basis of the analysis of variance, it appears there are no significant differences among the three age groups with regard to family moral atmosphere.

2. Is there a significant difference between and among the three age groups in child rearing environment, and does this relationship differ as a function of data manipulation models?

The analysis of variance for the effect of age on child rearing environment using the adolescent's perceptions alone (Model 1) was not significant, $F(2, 96) = 2.96, p < .20$. There were also no significant differences in child rearing environments of families with adolescents of ages 11, 14, or 17 using Model 2, $F(2, 96) = .89, p < .42$, or Model 3, $F(2, 96) = .89, p < .42$. Age accounted for less than 1% of the variance in child rearing environment using Model 1 and less than 2% of the variance using either Model 2 or Model 3. Therefore, on the basis of the analysis of variances for each of the three models, it appears that there is no significant difference among the three age groups with regard to child rearing environment.

3. Is there a significant difference between and among the three age groups in level of induction, and does this relationship differ as a function of data manipulation models?

An analysis of variance for Model 1 indicated that age of the adolescent and level of induction were not significantly related, $F(2, 97) = 1.09, p < .35$. No significant age-related differences were found using Model 2, $F(2, 96) = 1.03, p < .36$, or Model 3, $F(2, 96) =$
.71, \( p < .50 \). Within Models 1 and 2, age of the adolescent accounted for slightly more than 2% of the variance in level of induction, and within Model 3 age accounted for less than 1.5% of the variance in induction. On the basis of the analyses of variance, it appears that there are no significant differences among the three age groups in level of induction, and that the three data manipulation models produce similar results.

4. Is there a significant difference between and among the three age groups in environment of behavioral autonomy, and does this relationship differ as a function of data manipulation models?

Age of the adolescent was somewhat significant (with the experiment-wise control of \( p = .0125 \)) in its relationship with the adolescent's perception of the environment of behavioral autonomy (Model 1), \( F (2,97) = 3.85, p < .025 \). A Duncan's Multiple Range Test, conducted as a post hoc analysis, indicated that the significant difference in perception of behavioral autonomy existed between 11 year-olds (\( \bar{X} = 5.92 \)) and 17 year-olds (\( \bar{X} = 7.53 \)), with older adolescents perceiving an environment of greater behavioral autonomy. Age of the adolescent accounted for 7.4% of the variance in the adolescent's perception of autonomy. Using an additive model (Model 2), age of the adolescent was significantly related to the family's perception of the environment of behavioral autonomy, \( F (2,96) = 6.18, p < .003 \). Post hoc analysis of this aggregate model suggested that families with adolescents ages 11 years (\( \bar{X} = 10.00 \)) or 14 years (\( \bar{X} = 10.94 \)) perceive their environments to be significantly lower in behavioral autonomy than do families with 17 year-olds (\( \bar{X} = 12.33 \)).
Age of the adolescent accounted for 11.4% of the variance in the additive model of family's perception of behavioral autonomy. The discrepancy model (Model 3) of autonomy did not indicate any significant relationship between age of the adolescent and level of discrepancy in family members' perceptions of autonomy, $F(2, 96) = 2.36, p < .10$. Within this third model, age of the adolescent accounted for 4.7% of the variance in family discrepancy scores. In summary, Model 2 (additive model) clearly suggests a positive relationship between age of the adolescent and the aggregate of the members' perceptions of level of behavioral autonomy. Although Model 1 is significant at a .05 level, it does not meet the standard of .0125 imposed to control for experiment-wise error and must therefore be interpreted with caution. Discrepancy scores (Model 3) were also not significant.

5. Is there a significant difference between and among the three age groups in level of support, and does this relationship differ as a function of data manipulation models?

The relationship between age of the adolescent and his/her perception of support (Model 1) was significant, $F(2, 97) = 9.71, p < .0001$. Age accounted for over 16% of the variance in perception of support. Post hoc analysis indicated that 11 year-olds ($\bar{x} = 33.56$) differed significantly from both 14 year-olds ($\bar{x} = 30.71$) and 17 year-olds ($\bar{x} = 30.47$), with younger adolescents perceiving greater familial support. The additive model of support (Model 2) indicated a negative and significant relationship between age of the adolescent and family members' perceptions of support, $F(2, 96) = 5.77, p < .005$. 
However, some of this significance resulted from the inclusion of the adolescent's perceptions in the model. Age accounted for 10.7% of the variance in Model 2. Post hoc analysis indicated that families with 11 year-olds perceived a higher level of support ($\bar{x} = 74.90$) than did families with 14 year-olds ($\bar{x} = 72.03$) or families with 17 year-olds ($\bar{x} = 70.37$). The discrepancy model (Model 3) did not yield a significant result between age of adolescent and level of discrepancy among family members' perceptions of support, $F(2, 96) = .24, p < .79$. Age accounted for less than 1% of the variance in this discrepancy model. In summary, both Model 1 and Model 2 suggested that there is a significant difference among the three age groups with regard to support. In both models, higher levels of support were perceived in families with 11 year-olds than in families with 14 or 17 year-olds. In contrast, the discrepancy model (Model 3) did not support the relationship between age of adolescent and level of support.

**Determination of Model Best Explaining Family Moral Atmosphere**

Simultaneous multiple regression was the initial statistical procedure employed to assess the magnitude of the relationship between the independent variables and the dependent measure of family moral atmosphere. Simultaneous regression is preferable when there is no theoretical base for a hierarchical order of entry of independent variables into the model (Cohen & Cohen, 1975). This type of regression creates a model for predicting the dependent variable that has within it the shared variance (e.g., the amount of relationship) among the independent variables, and between the independent and
dependent variables, and a set of beta weights (Kerlinger, 1973). The beta weights are differential weights of the independent variables designed to yield a solution in which the sum of squared errors of prediction is minimized by the criterion of least squares (Pedhazur, 1982). In this study Type III Sums of Squares were used to test whether the regression coefficient (b) for each independent variable was significant while controlling for the relationship of the other variables. Tests were conducted for each of the three data manipulation models in this study.

Stepwise regressions were also carried out in this study. While simultaneous regression includes all potential predictors at once, stepwise regression proceeds in a sequence, selecting from a group of independent variables the one variable at each step which accounts for the largest amount of variance in the overall model (Cohen & Cohen, 1975). Stepwise regressions were performed in this study in order to isolate the subset of predictor variables from the independent variables that would produce the best explanatory equation for each of the three age groups using each of the three data manipulation models. Stepwise regression deletes observations because of missing values, but this was not of major concern in this study since data were only missing from one family with an 11 year-old male adolescent.

Although the previous analysis of variance procedures did not result in significant relationships between age and either childrearing environment, induction, or family moral atmosphere, there was reason to suspect that the variables "support" and "behavioral autonomy" did differ as a function of age of the adolescent.
Therefore, to account for these possible developmental differences and to account for possible differences in the best fit model for each age group (which included the combined effects of these independent variables) both simultaneous and stepwise regressions were separately conducted by age group. Thus, within each of the three data manipulation models, three analyses were conducted and a modified significance level of .0167 was used to control for experiment-wise error. A total of six independent variables comprised each model: these consisted of the four original independent variables of child rearing environment, Induction, autonomy, and support, and two interaction terms composed of the multiplicative effects of child rearing environment with Induction and child rearing environment with support.

6. What combination of variables best explains the family moral atmosphere for each of the three age groups, and does this differ as a function of data manipulation models?

Simultaneous regressions of the relationship of the six independent variables to family moral atmosphere were not significant using Model 1, the adolescent's perceptions alone. The failure to find a significant relationship here held true for families with 11 year-olds, \( F(6,32) = .25, p < .96 \); families with 14 year-olds, \( F(6,24) = 1.90, p < .13 \); and families with 17 year-olds, \( F(6,23) = 2.02, p < .11 \). The regression test for this best fit model using Model 2 (additive scores) proved to be nonsignificant for families with 11 year-olds, \( F(6,31) = .12, p < 1.00 \), and for families with 14 year-olds, \( F(6,24) = 1.30, p < .30 \). However, the additive model
(Model 2) was significant at a .05 level for explaining moral atmosphere in families with 17 year-olds, $F(6,23) = 3.15, p < .021$. Table 6 indicates that Model 2 scores on child rearing environment, level of induction, and the interaction of those two variables each correlated positively with the dependent variable, and accounted for a significant amount of variance in family moral atmosphere. However, these results do not meet the experiment-wise controlled alpha of .0167 and should be interpreted with caution. To facilitate understanding, a scattergram of the interaction of child rearing environment and induction in relation to family moral atmosphere is included in Figure J-1. The six independent variables together accounted for 45.1% of the variance in moral atmosphere scores in families with 17 year-olds. Using discrepancy scores (Model 3), there was no significant relationship between discrepancies in perceptions of family decision making variables and family moral atmosphere for families with 11 year-olds, $F(6,31) = 1.76, p < .15$; families with 14 year-olds, $F(6,24) = 1.65, p < .18$; or families with 17 year-olds, $F(6,23) = 1.35, p < .28$.

Stepwise regression procedures reported that no independent variables met the significance level of .05 for entry into Model 1 for families with either 11 or 17 year-olds. A stepwise procedure for families with 14 year-olds (Table 7) suggested that only the variable of child rearing environment was significantly related to family moral atmosphere, accounting for 19% of the variance in the dependent variable, $F(1,29) = 6.81, p < .015$. This negative relationship indicated that 14 year-old adolescents who perceived themselves as
Table 6
Regression Analyses for the Effect of Family Perceptions of Processes in Decision Making on Moral Atmosphere in Families with 17 Year-Olds (Model 2)
(n = 30)

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>SS</th>
<th>F</th>
<th>p</th>
<th>Sign of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Rearing Environment</td>
<td>1</td>
<td>1221.94</td>
<td>8.98</td>
<td>.006</td>
<td>+</td>
</tr>
<tr>
<td>Induction</td>
<td>1</td>
<td>996.01</td>
<td>7.32</td>
<td>.013</td>
<td>+</td>
</tr>
<tr>
<td>Support</td>
<td>1</td>
<td>125.79</td>
<td>.92</td>
<td>.346</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>1</td>
<td>75.52</td>
<td>.56</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Environment X Induction</td>
<td>1</td>
<td>1041.54</td>
<td>7.66</td>
<td>.011</td>
<td>+</td>
</tr>
<tr>
<td>Environment X Support</td>
<td>1</td>
<td>155.32</td>
<td>1.14</td>
<td>.296</td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>6</td>
<td>2572.64</td>
<td>3.15</td>
<td>.021</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td>3128.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>5700.67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ R^2 = .4513 \]
Table 7
Stepwise Regression Analysis for the Effect of Adolescent's Perceptions of Processes in Decision Making on Moral Atmosphere in Families with 14 Year-Olds (Model 1)

\( n = 31 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>SS</th>
<th>F</th>
<th>p</th>
<th>Sign of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Rearing Environment</td>
<td>1</td>
<td>2639.61</td>
<td>6.81</td>
<td>.014</td>
<td>-</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>11239.10</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>13878.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( R^2 = .1902 \)
having greater power in family decision making were more likely to be in families with lower moral atmospheres than 14 year-olds who perceived themselves as having less power in the child rearing environment. No variables met the .05 significance level in relation to family moral atmosphere for any age group using Model 2 or Model 3.

In summary, significant results from the simultaneous regressions were only obtained for families with 17 year-old adolescents using an additive model (Model 2). In those families, child rearing environment, induction, and the interaction of those two variables each accounted for a significant amount of variance in family moral atmosphere. Significant results from the stepwise regression were only obtained for Model 1 (adolescent's perceptions alone) in families with 14 year-old adolescents. For this group, adolescent's perceptions of the family's child rearing environment (e.g., the adolescent's power in decision making were negatively related to family moral atmosphere.

Additional Analyses

Additional analyses of variance were conducted to assess the relationship between sex of the adolescent and the dependent and independent variables. Sex of the adolescent was not significantly related to child rearing environment using Model 1 (adolescent's perceptions alone), $F(1,98) = 3.89$, $p < .052$; Model 2 (additive score), $F(1,97) = 1.47$, $p < .23$; or Model 3 (discrepancy scores), $F(1,97) = .41$, $p < .53$. There was also no significant relationship between sex of the adolescent and level of induction employing Model
1, $F(1,98) = .76, p < .39$; Model 2, $F(1,97) = .48, p < .49$; or Model 3, $F(1,97) = .04, p < .85$. No significant relationship existed between sex of the adolescent and level of support from the standpoint of Model 1, $F(1,98) = .70, p < .41$; Model 2, $F(1,97) = .52, p < .47$; or Model 3, $F(1,97) = .60, p < .45$. Sex of the adolescent was not significantly related to behavioral autonomy using Model 1, $F(1,98) = .05, p < .83$; Model 2, $F(1,97) = .24, p < .63$; or Model 3, $F(1,97) = .05, p < .83$. There was also no significant relationship between sex of the adolescent and family moral atmosphere, $F(1,98) = 1.56, p < .22$.

Further analyses were performed to determine the relationship of each parent's perception to original research questions two through six:

1. **Is there a significant difference between and among the three age groups in a) child rearing environment; b) level of induction; c) environment of behavioral autonomy; or d) level of support, and does this relationship differ as a function of each parent's perceptions?**

Four one-way analysis of variance procedures indicated there was no significant relationship between age of the adolescent and father's perceptions of child rearing environment, $F(2,96) = 2.42, p < .10$; level of induction, $F(2,96) = .44, p < .65$; environment of behavioral autonomy, $F(2,96) = .88, p < .42$; or level of support, $F(2,96) = 1.99, p < .15$. Four additional one-way analysis of variance procedures indicated there was no significant relationship between age of the adolescent and mother's perceptions of child rearing environment, $F(2,97) = .42, p < .66$; level of induction,
Given the adjusted significance level of .0125 used to control experiment-wise error when four tests of one model were calculated, interpretation of the relationship between mother's perception of behavioral autonomy and age of the adolescent could only be made with great caution.

2. What combination of variables best explains the family moral atmosphere for each of the three age groups, and does this relationship differ as a function of either parent's perceptions?

Using simultaneous multiple regression, the model composed of father's perception of his child rearing environment, level of induction, autonomy, support, and the interactions of child rearing environment and induction, and child rearing environment and support was significant in explaining the moral atmosphere in families with 11 year-olds (Table 8), $F(6,31) = 4.29, p < .003$. This group of variables accounted for over 45% of the variance in moral atmosphere in families with 11 year-olds. Specifically, father's child rearing environment, use of support, and the interaction of these two variables were significant. Father's perception of child rearing environment was negatively correlated with moral atmosphere, whereas the correlation between level of support and moral atmosphere was positive. A scattergram of the relationship between the interaction of child rearing environment and support and family moral atmosphere is located in Figure J-2. Among families with 14 or 17 year-olds, this model, based upon fathers' perceptions, was not significant,
Table 8

Regression Analyses for the Effect of Father's Perceptions of Processes in Decision Making on Moral Atmosphere in Families with 11 Year-Olds

(n = 38)

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
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<th>F</th>
<th>p</th>
<th>Sign of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Rearing Environment</td>
<td>1</td>
<td>3103.28</td>
<td>15.47</td>
<td>.0004</td>
<td>-</td>
</tr>
<tr>
<td>Induction</td>
<td>1</td>
<td>.15</td>
<td>0.00</td>
<td>.978</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>1</td>
<td>2365.51</td>
<td>11.79</td>
<td>.0017</td>
<td>+</td>
</tr>
<tr>
<td>Autonomy</td>
<td>1</td>
<td>4.48</td>
<td>.02</td>
<td>.882</td>
<td></td>
</tr>
<tr>
<td>Environment X Induction</td>
<td>1</td>
<td>13.99</td>
<td>.07</td>
<td>.794</td>
<td></td>
</tr>
<tr>
<td>Environment X Support</td>
<td>1</td>
<td>3161.06</td>
<td>15.76</td>
<td>.0004</td>
<td>-/+</td>
</tr>
<tr>
<td>Model</td>
<td>6</td>
<td>5169.04</td>
<td>4.29</td>
<td>.0029</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>31</td>
<td>6219.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>11388.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .4539$
A similar model of best fit, composed of mothers' perceptions of processes involved in decision making, was not significantly related to moral atmosphere in families with 11 year-olds, $F(6,32) = .94, p < .49$; families with 14 year-olds, $F(6,24) = 1.22, p < .34$; or families with 17 year-olds, $F(6,23) = 1.38, p < .27$. Using the stepwise regression procedure, no variables in either the fathers' or mothers' models met the .05 significance level in relation to family moral atmosphere.

In addition, a stepwise regression was computed for the dependent variable of family moral atmosphere using only demographic items as the independent variables. These included sex of adolescent, father's level of education, family occupational status, mother's level of education, and the interactions of family occupational status (SES) with sex of the adolescent, and mother's education with sex of the adolescent. For families with adolescents ages 11 or 17 years there were no variables which met the .05 significance level of entry into the model. In families with 14 year-olds only father's education (Table 9) was significantly related to family moral atmosphere, $F(1,29) = 6.45, p < .017$. Father's education accounted for 18.2% of the variance in moral atmosphere in families with 14 year-old adolescents, and was positively correlated with that dependent variable.
Table 9
Stepwise Regression Analyses for the Effect of Family Demographics on Moral Atmosphere in Families with 14 Year-Old Adolescents

(n = 31)

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>SS</th>
<th>F</th>
<th>p</th>
<th>Sign of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father's Education</td>
<td>1</td>
<td>2524.94</td>
<td>6.45</td>
<td>.0167</td>
<td>+</td>
</tr>
<tr>
<td>Error</td>
<td>29</td>
<td>11353.77</td>
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<td></td>
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</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>13878.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .1819$
Summary

In this chapter, one-way analysis of variance procedures were used to assess the relationships between age of the adolescent and each of the study variables. Multiple regression was then used to identify the best model for explaining family moral atmosphere for each of the three age groups and each of the three data manipulation models. Although the age of the adolescent was expected to influence the family's perception of processes involved in decision making, consistent results were not found. No significant age differences were found in relation to child rearing environment or level of induction. In addition, there were no age-related differences found in the measure of the study's dependent variable, family moral atmosphere. Significant age differences were only found in relation to the additive model (Model 2) of autonomy and Model 1 (adolescent's perceptions alone) and Model 2 of support.

The model proposed in this study (including independent variables of child rearing environment, level of induction, environment of behavioral autonomy, and level of support, in addition to the interaction terms of child rearing environment with induction, and child rearing environment with support) was only found to be significantly related to family moral atmosphere in families with 17 year-old adolescents, and then only from an additive model (Model 2). For families with 17 year-olds, child rearing environment, induction, and the interaction of those two variables were positively correlated with family moral atmosphere and accounted for a significant amount of variance in moral atmosphere. A stepwise regression, consisting of
the model proposed in this study, revealed that the only variable which met a .05 significance level for entry into a best fit model was that of child rearing environment from the adolescent's perspective (Model 1), and then only for 14 year-old adolescents. These variables were negatively correlated, suggesting that 14 year-olds who perceived themselves as having greater power in family decision making also had families with lower moral atmospheres than 14 year-old adolescents who perceived their parents as having greater power in family decision making.

Additional findings indicated that there were no sex differences in the independent or dependent variables, and no significant relationship between age of the adolescent and either the mothers' or fathers' perceptions of processes involved in family decision making. A simultaneous regression found that a model built upon the father's perception of processes involved in family decision making was related to moral atmosphere in families with 11 year-olds. In particular, the father's perception of child rearing environment, level of support, and the interaction of these two variables accounted for a significant amount of variance in family moral atmosphere. The correlation between father's perception of child rearing environment and moral atmosphere was negative, while the correlation between level of support and moral atmosphere was positive. A stepwise regression using demographic items as the independent variables found that only father's level of education in families with 14 year-old adolescents accounted for a significant amount of the variance in family moral atmosphere, and that correlation was positive.
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

Summary of Findings

A symbolic interaction perspective is based on the processes and relationships occurring within a family. Each family member's perception of parent-adolescent interaction, and the roles each person plays, are internalized, and contribute to the development of the social self. As the adolescent develops, obtaining greater cognitive and social competence, the family needs to provide greater opportunity for him/her to participate in areas such as family decision making. Greater participation increases the opportunity to take the role of others—enhancing the adolescent's development of values, ability to empathize or consider the motives of others, and thus, increasing moral development. This expanded autonomy and capability of the adolescent would be expected to influence the family system's interactions, creating some degree of conflict in the area of decision making. Based on Kohlberg's (1969) position that conflict can produce growth, it could be expected that the family's overall moral atmosphere, which influences and is influenced by the family's socialization methods, would also grow, fostered by the adolescent's questioning of inconsistencies in the present moral atmosphere. Each family member's perception of the parent-adolescent interactions involved in decision making might be expected to differ to some extent, thus the relationships between processes involved in decision making...
making and the family's moral atmosphere may differ, depending upon which person(s) perceptions are obtained. Therefore, it is desirable to collect information which allows for an interpretation based upon the perceptions of several family members individually, as well as an overall additive measure of the family system's perceptions, and a measure of discrepancy among the members.

Based on the above considerations, this study was conducted to assess the relationship between processes involved in decision making and family moral atmosphere, as influenced by the age of the adolescent and the use of multiple perceptions. One hundred families with oldest children ages 11, 14, or 17 completed independent questionnaires and participated in triadic interviews. Information gathered from the questionnaires included standard demographic questions, along with questions regarding perceptions of processes involved in family decision making. These processes included child rearing environment, level of induction, support, and behavioral autonomy. The triadic interview was based on two of the stories originally used in Kohlberg's (1969) Moral Judgment Interview. For the purposes of this study, families were asked to arrive at a consensus on their responses to each question--one opinion that best reflected the position of the family. Age related differences were significant in the areas of behavioral autonomy and support, but not in the areas of family moral atmosphere, child rearing environment, or induction. From both the adolescent and the whole family's perceptions, behavioral autonomy was significantly higher in families with 17 year-olds than either families with 11 or 14 year-olds, and
support was significantly higher in families with 11 year-olds than either 14 or 17 year-olds. No sex differences were evident. There was some support for the relationship of child rearing environment, induction, and support to family moral atmosphere, but these results differed by age of adolescent and method of assessing multiple perceptions.

DISCUSSION

Age Differences

Age of the adolescent was expected to significantly relate to the study variables. Peterson (1977) has suggested that advances in the adolescent's normative development influence the parents' perceptions of the adolescent as a more competent and powerful person--providing greater freedom to make decisions alone, and to participate in family decision making.

Changes in moral reasoning over the course of development have been substantiated by Kohlberg (1969) and later by Page (1981) in a longitudinal study of adolescent males. From the Kohlberg measures, ages 10 through 13 were seen as constituting a transitional period from preconventional to conventional thought in urban middle-class boys. Formal operational reasoning, a necessary condition for the development of post-conventional moral thought (Kohlberg & Gilligan, 1971; Piaget, 1972; Rowe & Marcia, 1980), has been associated with increased age in a study of 12, 14, and 16 year-olds (Keating & Clark, 1980). However, it appears that formal operational reasoning is more likely to first occur in relation to physical tasks rather than in
relation to social tasks or interpersonal situations (such as Kohlberg's moral judgment stories). Thus, it is the combination of formal moral reasoning and interpersonal moral reasoning that helps the adolescent interpret and analyze interpersonal situations. Adolescents who are capable of this combination would also be most likely to have the ability to verbally express their concerns and explanations, and impact upon the family moral atmosphere.

However, in the present study no age related differences in family moral atmosphere were found. This would lead one to believe that the relationship between adolescent moral development and family moral atmosphere is not necessarily linear or direct. Unfortunately, individual measures of such family member's moral judgment level were not available. It may be that some behavioral factor involving power and/or communication rules within the family affected the moral atmosphere and consensus reached. The lack of a significant finding between age and family moral atmosphere may also lend support to Haan, Langer, and Kohlberg's (1976) findings that the strength of the correlation between the adolescent's (ages 10 through early adulthood) and parents' level of moral judgment decreases with age.

The relationship of child rearing environment and age of the adolescent was also not significant in this study. The younger adolescents in Elder's classic study (1963) perceived their parents as more powerful or authoritarian in decision making than did the older adolescents. It may be that today (over 20 years after Elder's study) society encourages the development of equalitarian or permissive parent-adolescent interaction at an earlier age. This trend could
also reflect a prevailing attitude of equality purported by middle-class families today. This may also support Roberts, Block, and Block's (1984) reports of continuity in child rearing methods across time. Finally, the differences between the age related findings of Elder in comparison to those in this study may be due to the nature of the data analysis. Elder looked at simple percentages of adolescents in each of his child rearing categories; however, this study assumes child's power is an ordinal variable and applies multivariate statistics to that position.

No relationship was found between age of the adolescent and the parents' use of induction. This is in contrast to Steinberg's (1981) study in which parental explanations to boys ages 11 to 14 years declined over time. Newman (1983) has suggested that with the advent of formal operations, the adolescent is more capable of detecting inconsistencies in parental rules or values, and more likely to press for explanations. If parents do not provide explanations, then the adolescent becomes frustrated. This study is composed in large part, of well-educated parents, and greater amounts of formal education have been associated with increased parental interpersonal sensitivity (Rainwater, 1960); therefore, it may be that these parents were aware of the need to maintain high levels of induction throughout the adolescent years.

In the current study, families with 17 year-olds perceived an environment of considerably greater behavioral autonomy than did families of 11 or 14 year-olds ($p < .003$). This relationship also held true from the adolescents' perceptions, but was less significant
(p < .025, with the significance level set at p < .0125). This age related difference in perceptions of behavioral autonomy would support the notion that individuation and social competence begins with behavioral issues (Newman, 1981; Peterson, 1977). It is only after age 16 that adolescents are allowed to drive automobiles, a factor which greatly increases their opportunities for independence in decision making and responsibility-taking. The gradual increase in perceived autonomy between 11 and 14 year-olds supports the research which has found that beginning around the seventh grade, adolescents perceive greater intimacy and identification (on life-style, behavioral issues) with peers than with parents (Brody & Schaffer, 1982; Hunter & Youniss, 1982).

In this study, level of family support was significantly higher for 11 year-olds than for 14 or 17 year-olds—from either the adolescent's perceptions alone (p < .0001) or from the family's additive model (p < .005). Because the additive model includes the adolescent's perceptions, its significance is greatly influenced by the significance level of the adolescent model.) This finding of a negative relationship between family support and age substantiates the work of others (e.g., Steinberg, 1981; Thornburg, 1982) that has predicted difficulties increasing throughout early adolescence. The early part of the pubertal cycle has been found to be a period of increased mother-son conflict (Steinberg, 1981); and egocentrism (viewed as producing anxiety about the self and feelings of alienation from parents) has been found to be at its highest from ages 11 through 13 (Elkind & Bowen, 1979; Newman, 1981; Simons, Rosenberg, &
Rosenberg, 1973). Therefore, one would expect a large decrease in feelings of support to occur between ages 11 and 14. For the 17 year-olds, parental restrictions on their attempts at increased independence may also be seen as a decrease in support within the family, resulting in a reciprocal decrease in expressions of closeness. Adolescents are also aware of the social norm to decrease observable attachments to the parents. Maintaining bonds of affection, while encouraging behavioral autonomy, appears to be a crucial issue in families with early adolescents (Newman, 1983).

Influence of Processes in Decision Making in Family Moral Atmosphere

There was a lack of consistent findings among the three age groups in regard to the model which best explains the variance in family moral atmosphere. The model proposed consisted of child rearing environment, level of induction, support, autonomy, and the interaction of child rearing environment with induction, and child rearing environment with support. For families with 11 year-old adolescents, this model was not significant, using either the adolescent's perceptions alone, the additive model, or the discrepancy model. For families with 14 year-olds, only child rearing environment was correlated with family moral atmosphere \((p < .015)\), and this relationship was negative; the overall model was not significant. For families with 17 year-olds, the model was significant \((p < .02)\) but should be interpreted with caution given that \(p < .0167\) was the established level of significance controlling for experiment-wise error. In particular, child rearing environment, level of induction, and the interaction of these two variables were positively related to
moral atmosphere in families with 17 year-old adolescents.

A review of the literature would suggest that support, level of induction, and autonomy are positively related to the child's moral judgment. Freud (1960) stated that the kind of emotional relationship a child has with his/her parents largely determines the extent to which the child internalizes their moral principles. Brody and Shaffer (1982) in their review of literature on moral development, suggested that parental use of induction was likely to be associated with advanced moral development among children over age seven. Hoffman (1970) also found that the use of affection and induction were associated with greater reliance on internal standards and greater consideration of intention in situations requiring moral judgment. Haan, Smith, and Block (1968) reported that in retrospect, college students who were at a conventional level of morality perceived their parents as insisting upon rules and relying on rewards and punishments. Students at a post-conventional level of moral judgment reported that their parents had allowed more autonomy. Yet, in the present study, support and autonomy were not significantly related to family moral atmosphere, and induction was only related to moral atmosphere in families with 17 year-olds. It may be that family moral atmosphere, as a group property, differs from moral judgment, an individual property, and requires the examination of a different set of related variables. Another problem which decreased the chances of finding statistically significant results may have been that family moral atmosphere was a behavioral measure whereas the perceptions of processes in decision making were attitudinal and retrospective.
Olson and Rabunsky (1972) addressed this issue and found that the interrelationship of retrospective and behavioral measures of power was not significant. Thus, the validity of comparing these two variables is questionable.

The nature of the child rearing environment could also be expected to relate to family moral atmosphere. Leahy (1981) noted that according to cognitive developmental theory, authoritarian child rearing practices should result in lower levels of moral judgment because moral judgment is enhanced by opportunities to express conflicting opinions, question decisions, and express feelings and autonomy. The authoritarian parent provides social interaction based upon unilateral respect (i.e., a morality of constraint). Holstein (1972) also has reported that parents who encourage the child's participation in discussion and decision making are more likely to have children at higher levels of moral development. However, that sample lacks strict generalizability to higher stages of moral development because of the young age of the sample participants. Buck et al. (1981) reported a significant relationship between preferred or actual child rearing methods, parental moral judgment level, and adolescent moral judgment level.

In the current sample, adolescent power in child rearing environments (from the 14 year-old adolescent's perceptions) was negatively related to family moral atmosphere. It is during this period that adolescents begin to develop the skills necessary to logically argue their position. Families which grant greater power to these younger adolescents may have been more likely to defer to them.
during the family moral atmosphere interview, resulting in an overall atmosphere that reflects the moral judgment level of the developing child, rather than merely that of the parents, and hence a lower overall moral atmosphere prevailed. In families with 17 year-olds, the adolescent who has been granted greater power in decision making over time has challenged the inconsistencies in family rules and values, forcing disequilibrium within the system, and thus resulting in growth of moral atmosphere. Thus, in families with more permissive child rearing methods, the period from age 14 to 17 may be a period of both parent-adolescent conflict and growth in the family moral atmosphere. However, the lack of longitudinal data limits the testing of this hypothesis. On the other hand, the lack of a consistent relationship between child rearing environment and family moral atmosphere may support Holstein's (1969) report that there is no significant relationship between parental moral judgment level and discipline techniques. However, neither Holstein (cf. Buck et al., 1981) nor the current study included a measure of whether the parent had the capacity to take the child's view or a measure of level of compromise with the child. Yet, Kohlberg (1970) has stated that research measuring the effects of type or amount of parental power on moral development has yielded few substantial results. Kohlberg differentiates between moral development and socialization and sees them as two separate processes.

Researchers have repeatedly called for a study of the interactive effects of support, power, and child rearing environment on child or adolescent development, treating these variables in a multiple
regression analysis (Brody & Shaffer, 1982; Leahy, 1981; Rollins & Thomas, 1979). In a study of college students, Block (1972) reported that parents of students at a conventional level of moral judgment described themselves more often as authoritarian and providing less induction, whereas parents of post-conventional students were more likely to describe themselves as democratic and emphasizing reason. Haan et al. (1968) found that preconventional students were more likely to have _laissez-faire_ parents who did not encourage autonomy. Leahy (1981) discussed the interaction of child rearing environment and support on moral judgment, as well as the interactive effects of level of induction and support. Elder (1962, 1963) certainly implied these interactions in his discussion of the moderating effects of level of explanation on child rearing structures. Brody and Shaffer (1982) discussed the moderating variable of parental warmth and affection and its effect with disciplinary strategy on moral development of the child or adolescent. Yet, with all this concern for interactive effects, this study only found one—that of the interaction of child rearing environment and induction on family moral atmosphere in families with 17 year-olds. It appears that older adolescents who theoretically have greater power in the decision making environment and who receive high levels of induction have families with higher moral atmosphere. The direction of this relationship is not clear. It may be that families with older adolescents and higher moral atmospheres are influenced by their beliefs to respect the adolescent as an individual and therefore provide an environment supportive of greater adolescent power in
addition to its support through the use of high induction. On the other hand, it may be that in families of older adolescents where high induction and high adolescent power have been operating for some time, the resulting family interaction fosters a higher moral atmosphere. In fact, there may be such reciprocity among these variables that implying causality is inappropriate.

Two other issues seem worthy of mention in a discussion of the limitations of the model under consideration. One is limitation of range. Parents in particular were not likely to report that they used a low level of induction, or allowed extreme adolescent power in the child rearing environment. This limited range hinders the power of statistical analyses. Another issue is the imprecise definitions and/or measures of independent variables used in studies of factors related to moral development (cf. Brody & Shaffer, 1982). Some of the discrepancies in research findings in this area may be attributed to a lack of consistency in the way variables such as parental power, support, and induction are measured (Rollins & Thomas, 1979).

Finally, the family moral atmosphere measure is suspect. It is a new technique— not an equivalent to the Moral Judgment Interview, but an adaptation. As such, its scoring may not be as accurate as the original scoring for the Moral Judgment Interview. A lack of consistency among the interviewers' probing styles may have caused spurious data. The technique may need to be standardized by some method so that results are consistent across interviewers. While an objective scoring method was used, that method is only as strong as the standardization of administration of the test. At this point no
test-retest reliability has been established. It may also be that this technique is inappropriate for measuring the family level variable of moral atmosphere since it is based upon individual level responses of three persons.

**Sex Differences**

Sex of the adolescent was not significantly related to any of the study variables or any of the models for assessing multiple perceptions. This was somewhat surprising, especially in light of Gilligan's (1979) recent emphasis on the differences between moral judgments of males and females. Gilligan suggested that women have a morality of responsibility based on concepts of harmony and nonviolence, and recognizing the need for compassion and care for the self and others (cf. Brabeck, 1983). This view is in contrast to Kohlberg's (1969) morality of justice, derived from studies of males, based on concepts of reciprocity and fairness, and the recognition that one must respect the rights of others and of the self. If families actually are socializing their adolescents toward these differences, sex related patterns should be expected in the family moral atmosphere. Yet, the present findings, in part, support the work of others in that there are no differences between the moral judgment level of boys and girls ages 10 through 13 years with respect to sex alone (Haan et al., 1976; Holstein, 1969; Turiel, 1976).

One would also expect to find sex differences in level of support and closeness, child rearing environment, and level of behavioral autonomy. Although Montemayor (1982) found that interactions with parents were not especially conflictual for tenth-grade adolescents,
there was a greater level of conflict over a three-day period between females and parents (especially with mothers) than between males and parents. Leahy (1981) reported different effects of parental practices for adolescent males' and females' moral judgment, with fathers' use of control related to higher moral judgment for girls and lower moral judgment levels for boys. Thornburg and Shinn (1982) found that 11 to 14 year-old males perceived greater power in family decision making than did females. Douvan and Adelson (1966) reported that, despite the emphasis on independence within our society, only 25% of girls ages 17-18 said that independence or autonomy was an important parental expectation.

It may be that the consistent lack of relationship between sex of the adolescent and any of the study variables reflects the androgynous nature of these middle-class urban families. This lack of association held true from the adolescent's perceptions alone, the additive perceptions of the family triad, and the level of discrepancy in perception among family members; thus, it may be that all family members hold somewhat similar perceptions of the adolescent's role in decision making regardless of the child's sex.

**Influence of Demographic Variables**

In the present study, the correlation coefficients of several demographic variables indicate a significant relationship between such factors as parental education and socioeconomic status (SES) and the study variables. It should be noted that moderately strong intercorrelations existed between mother's and father's level of education for families with adolescents age 11 ($r = .32, p < .05$); age
14 ($r = .59, p < .0005$); and age 17 ($r = .54, p < .002$). Strong correlations also existed between father's level of education and family SES (measured by the higher of the parents' occupational statuses using the revised Duncan scale) for families with adolescents age 11 ($r = .62, p < .0001$); age 14 ($r = .72, p < .0001$); and age 17 ($r = .79, p < .0001$).

In families with 11 year-olds, father's level of education was negatively associated with child rearing environment from both the adolescent's perspective (Model 1, $r = -.40, p < .02$) and the additive score (Model 2, $r = -.34, p < .04$). This negative correlation between father's education and adolescent's power supports other research suggesting male dominance increases across social class in American families (e.g., Ericksen, Yancey, & Ericksen, 1979). Mother's level of education was positively related to level of support (Model 2, $r = .34, p < .04$) and autonomy (Model 1, $r = .37, p < .03$; Model 2, $r = .33, p < .05$). Elder's (1962, 1963) work would suggest that this relationship between education and support was influenced by the positive relationship between years of education and empathic ability. Empathic ability may also influence the mother's awareness of the importance of allowing young adolescents increased behavioral autonomy.

In families with 14 year-olds, both father's level of education and family SES were positively related to family moral atmosphere. If fathers of upper social classes are more dominant than fathers from lower social classes (Ericksen et al., 1979), then the family consensus in decisions regarding moral dilemmas would be heavily
influenced by the level of that adult male—which is typically higher
than that of women or children (Brabeck, 1983). Also in families with
14 year-olds, there appears to be a positive correlation between level
of education and discrepancy in family perception. For example, both
father's and mother's level of education were positively related to
family discrepancy in perceptions of autonomy ($p < .04$ and $p < .02$
respectively), whereas father's level of education was positively
related to the additive score of autonomy ($p < .04$). It appears that
higher SES families recognized the social norm for an atmosphere of
support and autonomy, and parents perceived that they have such an
environment. In contrast, 14 year-old adolescents did not perceive
this type of environment to the extent that their parents did,
resulting in greater discrepancy among the members of these higher SES
families than among other families. The belief that fathers of upper
social classes are more dominant than fathers from lower social
classes (Ericksen et al., 1979) may also be reflected in the negative
correlations of father's education or age at birth of the child and
the adolescent's attitudes toward familial support in families with 17
year-olds.

Across the three age groups there was a general trend toward the
negative relationship of fathers' education or family SES and child
rearing environment. Yet, for adolescents ages 11 or 17 there was a
trend toward a positive relationship between mothers' level of
education and adolescent power. For all groups parental education was
negatively related to the discrepancy model of child rearing
environment. While parental education may have increased awareness or
communication, and lessened discrepancy in perceptions, it also appears to have influenced mothers and fathers in different ways. It may be that education provides fathers with more authoritarian occupational responsibilities and patterns of interaction, and that style of interaction also dominates at home. Education seems to increase mothers' awareness of the need for adolescent power or equality in general. It is unclear why the education level of mothers of 14 year-olds does not follow this pattern. It may be explained in part by the strong correlation between mothers' and fathers' levels of education for this age group ($r = .59, p < .0005$).

Another general trend suggested that for families with 11 or 14 year-olds parental education was positively related to induction, support, and autonomy from the adolescent and additive models and was negatively related to the discrepancy model for these variables. However, for families with 17 year-olds parental education was negatively related to induction, support, and autonomy from the adolescent and additive models but positively or unrelated to the discrepancy models of these variables. While these results were not all statistically significant their trend was consistent. Since the education level of parents of these three age groups did not differ significantly it may be that these age differences in support, autonomy, and induction reflect general differences in patterns of parent-child interaction for each age group, rather than educational differences per se. Conflict with older adolescents may also be related to the parent's own mid-life transition, a crisis more likely to occur among well-educated adults (Levinson, 1977). There are also
possible cohort differences or the presence of a moderating variable, but explanation of this trend is not clear.

**Parents' Perceptions**

No differences were noted in mothers' perceptions of processes involved in family decision making as a function of age of the adolescent. Nor were any differences found in fathers' perceptions as a function of age of the adolescent. From a symbolic interaction perspective, these findings were rather surprising. One would assume that older adolescents would exhibit more social competence, and parents of older adolescents would perceive their family decision making structure as reflecting and responding to that growth in decision making power and autonomy. Elder's work reflects this position in his findings that mothers and fathers of adolescents in grades 10 through 12 were more likely to treat their children permissively than parents of 7-9th graders. However, Elder's work was entirely based upon adolescent perceptions. In contrast, Roberts et al. (1984) have suggested that substantial continuity exists in parenting patterns across childhood and early adolescence (through age 12).

Older adolescents in the current study perceived lower familial support than younger adolescents, but parents' perceptions did not follow that pattern. It may have been that older adolescents were more likely to encounter restrictions since they have potentially more opportunities for behavioral autonomy (i.e., related to dating and using the car), and they perceive this restriction, or the conflict that ensues, as reflecting less parental support, whereas parents were
less egocentric and less likely to see these conflicts as eroding the base of support. The finding that adolescents perceived greater behavioral autonomy with age whereas parents' perceptions were not contingent upon age, supports Baranowski's (1978) findings that adolescents perceived that they have greater influence on their parents' decisions than parents themselves were aware of. It may also support the notion that family systems seek to maintain equilibrium and avoid change in the balance of power regardless of developmental changes in the adolescent.

Despite the emphasis in the literature on the importance of mother's direct impact on decision making and child development (Brody & Schaffer, 1982; Lamb, 1976), a simultaneous regression indicated that none of the mothers' perceptions were related to family moral atmosphere in families with adolescents. However, a similar regression based upon fathers' perceptions was significant $F(6,31) = 4.29, p < .003$ in explaining the variance in the family moral atmosphere of families with 11 year-olds ($R = .45$). In these families, child rearing environment (from the father's perceptions) was negatively related to family moral atmosphere. In addition there was an interaction between child rearing environment and support (Figure J-2).

In one study Hoffman and Saltzstein (1967) stated that father's patterns of discipline and authority did not clearly relate to a child's moral development, but they later concluded that father
absence or use of induction may contribute to a child's moral development (Hoffman, 1971; Saltzstein, 1976). Leahy (1981) discussed the influence a father may have on moral development by his potential for serving as a model for imitation (Bandura, 1969), as a source of identification (Freud, 1933/1965), or by providing opportunities for role taking (Kohlberg, 1964).

The finding that father's perception of the child rearing environment was negatively related to family moral atmosphere for younger adolescents (age 11) may be explained by the fact that fathers who allow their young adolescents little power in daily decision making are also likely to allow the adolescents little power in deciding upon the family's position on moral dilemmas. Thus, the family moral atmosphere was more likely to reflect the moral judgment level of the adults, rather than that of the child or a compromise. It is interesting to note that research regarding the impact of parental support on moral development has also focused on the role of mother, excluding that of the father from any aspects of the expressive roles (Leahy, 1981). With the great numbers of working mothers and the increased awareness of a need for less stereotypic division of labor or roles, it may be that the role of father in child socialization is becoming stronger than researchers have expected—and thus, father has a stronger role in moral development than was previously expected.
Analyzing Multiple Perceptions

The findings of this study support those of Larson (1974), that perceptions of family reality (i.e., power) vary by position of the respondent. A comparison of results from the discrete reports of mothers, fathers, and adolescents showed no consistent pattern. Additional differences were obtained using either the additive or discrepancy models proposed by Klein (1983) to study multiple perceptions. It may be, as Larson (1974) pointed out, that adults respond to questions of family power in terms of the normative system while adolescents respond to what they have seen. In either case, family members interact in a manner that reflects these perceptual differences—perceptions are reality to the perceiver. Variables assessed in this study reflected general patterns of daily decision making and were more likely to elicit different responses among family members (due to their global nature) than would more specific questions on power (Ezell, et al., 1983; Larson, 1974). Despite these differing results, the use of multiple perception data is warranted; to ignore various perceptions creates a simplistic view of the family. It may be that getting at an underlying family factor requires more advanced approaches to statistical analyses (Schumm, Barnes, Bollman, Jurich, & Milliken, 1984). To make use of multiple perceptions in the form of discrete reports which are influenced by—and influence the family group, knowledge of family system dynamics would be
advantageous. In general, the field of family studies is just beginning to address the conceptual and methodological problems associated with multiple perceptions.

IMPLICATIONS FOR RESEARCH

Research-related issues will be presented in two groups. The first group represents those aspects of the current study which could benefit from change whereas the second group represents issues that would be of interest in future research endeavors.

Suggestions for Longitudinal Study

This study represents the findings of the first phase of a cross-sequential study. Interpretation of findings from later research encounters with these same families will have the additional benefit of looking at issues of causality and reciprocity with a research base. Inferring development by the comparison of three age cohorts at one time period is inappropriate, but observing their differences and similarities in development, as well as change (and stability) within the family across time should provide a significant contribution to the research literature. Another difficulty encountered in this study was the comparison of measures of perception with one measure of behavior. Because behavioral and attitudinal measures of power generally are not highly correlated, the use of multi-method, multi-measures would be helpful in determining what aspects of power are really being measured.
Assessing perceptions of power in several well defined areas of daily decision making could prove more valuable than the present questions aimed at daily decisions in general—questions which family members often expressed as confusing and limiting in scope. They were unclear as to whether the questions were getting at power processes or power outcomes. In addition, assessment of the level of importance ascribed to these decisions would be useful. Several behavioral measures of family interaction, especially those which involve issues that adolescents perceive as pertinent to their own lives, would be useful in eliciting moral atmosphere information as well as tapping into more realistic expressions of family interaction and behaviors. Thus, more relevant moral dilemmas would be useful. In addition, obtaining moral judgment levels of each family member prior to the triadic discussion would allow the researcher to understand better the relationship between socialization practices, moral judgment development and the family's moral atmosphere. Without this information there seems to be a link missing in the logical development of explanations of variance in family moral atmosphere.

Inclusion of the moderating variable, "how reasonable are family rules and parental practices perceived to be," would be beneficial from a symbolic interactionist standpoint, because this perspective proposes that it is the individual's interpretation of the event rather than the event itself which influences attitudes and behaviors. Another variable worthy of consideration
is that of fluency of the child. This variable is tied to level of verbal sophistication (Kovac, 1980) and is a factor necessary for the expression of justifications which are crucial to assessment of level of moral judgment. Finally, the use of a much larger and more diverse sample, which would allow for an analysis of models with a greater number of variables and interaction terms, would enhance the understanding and interrelationships, as well as statistical manipulation of these data.

Issues for Future Research

This study has raised several questions which deserve further analysis:

1. How do role expectations relate to family decision making and moral atmosphere? Issues that require further analyses include sex role expectations, family position (i.e., father, mother, adolescent) role expectations, as well as specific issues such as androgyny and the impact of dual-work families.

2. What shared family paradigms (Oliveri & Reiss, 1981) or rules (Ford, 1983) influence the family's normative expectations for behavior in certain settings (such as the interview)? How do these shared constructs relate to individual perceptions or the family moral atmosphere?

3. Is conflict really growth producing, as Kohlberg (1969) suggests? How much and what type of disequilibrium is desirable and how much and what type is detrimental?
4. How does parents' level of "mid-life crisis" (Levinson, 1977) influence the family's moral atmosphere and family decision making in general? If both the parents and adolescent are experiencing stress and inner-conflict, the entire family system should potentially be in a state of change as well.

5. How does a schema based on Gilligan's stages (1979) of family moral atmosphere differ from one based on Kohlberg's stages (1969) in its relation to processes involved in family decision making? If it is true that the mother is primarily responsible for child socialization and structuring the daily decision making environment, then it may be that a schema of moral development based upon the "female mode of development" would be most useful.

6. What influences do peers have in moral development and in family interactions? While Garbarino and Bronfenbrenner (1976) stress the relatively greater influence of primary caretakers as opposed to extra familial influences, Brody and Shaffer (1982) acknowledge the importance of family and peers in moral development. Yet, can peers of the adolescent and parents account for unexplained variance in family moral atmosphere?

7. What processes are involved in the family members' interactions during the triadic interview? What patterns of verbal and nonverbal communication are noted? Do these differ by age and sex of the participants?
8. Finally, are methods of analyzing whole family or multiple perception data superior to individual measures in explaining the dynamics of a group level measure, such as family moral atmosphere? If so, which methods are best? If not, which individual or individuals' perceptions provide the clearest picture of group level measures? In other words, what methods account for the greatest amount of variance in a family factor? Is the increased information obtained in multiple perception research worth the cost of gathering and analyzing those data?
APPENDIX A

HUMAN SUBJECTS APPROVAL
OHIO STATE UNIVERSITY
Social & Behavioral Sciences
Human Subject Review Committee
Research Involving Human Subjects

PROTOCOL NO. B190042
ORIGINAL REVIEW
CONTINUING REVIEW
FIVE-YEAR REVIEW

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research entitled:
CHANGING CHARACTERISTICS OF THE PARENT-CHILD RELATIONSHIP DURING
ADOLESCENCE

is listed as the principal investigator.

Barbara H. Newman
Family Relations & Human Development

THE SOCIAL AND BEHAVIORAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

☑ Approved
☐ Disapproved
☐ Approved with conditions *
☐ Waiver of Written Consent Granted

* Conditions stated by the Committee have been met by the investigator and, therefore, the protocol is approved.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subject Review Committee for the required retention period.

This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date ___/___/___
Signed: ________________
(Chairperson)

cc: Original - Investigator
File

MS-0258 (Rev. 7/81)
I would like to invite you to participate in a study of changing family relationships during the adolescent years. We are trying to get a better understanding of the way parents and their children relate to one another as the children grow up. I am interested in your ideas, feelings, and reactions to questions about decision making, family responsibilities, and family values. The study will require your participation in a family interview that will take about one hour. Your oldest child must be either 11, 14, or 17. I will also ask you to fill out a questionnaire that will take about forty minutes. There are no right or wrong answers to any of the questions. I simply want to know your views.

Your answers would be completely confidential. They will be used like an opinion poll to get an idea of how people think about important aspects of family life. I hope you would be willing to talk with me again in about three years so I can learn how your family is changing.

I believe the information that is gathered from this study will be of great value in helping children and parents to understand the quality of family life during the adolescent years. One of the members of our research team will be calling you soon to find out if you might be interested in participating in our research. Please feel free to contact me if you have further questions about this project.

Sincerely,

Barbara M. Newman
Director, Laboratory for Child and Family Studies and Chairperson,
Department of Family Relations and Human Development
422-7705
RESEARCH INVOLVING HUMAN SUBJECTS
CONSENT TO SERVE AS A SUBJECT IN RESEARCH

BEHAVIORAL AND SURVEY FORM

I consent to serve as a subject in the research investigation entitled: **CHANCING CHARACTERISTICS OF THE PARENT-CHILD RELATIONSHIP DURING ADOLESCENCE**

The nature and general purpose of the research procedure have been explained to me. This research is to be performed by or under the direction of Dr. Barbara M. Newman, who is authorized to use the services of others in the performance of the research.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity will not be revealed in any publication, document, recording, video-tape, photograph, computer data storage, or in any other way which relates to this research. Finally, I understand that I am free to withdraw my consent and discontinue participation at any time following the notification of the Project Director.

Signed_________________________
(Subject)

Date_________________________

Time_________________________
AM PM

Witness - (Auditor)

Investigator
FAMILY NAME:______________________________

GIVEN NAME:______________________________

DATE:_____________ TIME:_____________

1. Your age__________________ and birth date__________________________

2. Your sex (circle one)   BOY    GIRL

2a. Your weight in lbs._______ Height in feet and inches ________.

3. What grade in school are you in now?______________________________

4. Please rate your overall satisfaction with school.

1______ Highly dissatisfied
2______ Dissatisfied
3______ Somewhat satisfied
4______ Satisfied
5______ Highly satisfied

5. For daily decisions in your family, how would you say those decisions are
   reached?

1______ My mother makes most family decisions.
2______ My father makes most family decisions.
3______ My mother and father make most family decisions.
4______ My mother, father and I make most family decisions.
5______ My mother, father and all the children make most family
decisions together.

Can you describe a recent family decision and tell how it was reached?

6. How confident are you that your own ideas and decisions about what you
   should do and believe are right and best for you?

1______ I am not at all confident.
2______ I am not very confident.
3______ I am a little confident.
4______ I am quite confident.

7. When you have a really important decision to make about yourself and your
   future, do you make it on your own, or do you like to get help on it?

1______ I'd rather let someone else decide for me.
2______ I depend a lot on other people's advice.
3______ I like to get some help.
4______ I get other ideas then make up my own mind.
5______ I make up my own mind without any help.
8. When you don't know why your mother makes a particular decision or has certain rules for you to follow, will she explain the reason?

1. Never
2. Once in a while
3. Sometimes
4. Usually
5. Yes, always

Can you give an example of a rule your mother made that you did not understand or agree with and what happened.

9. When you don't know why your father makes a particular decision or has certain rules for you to follow, will he explain the reason?

1. Never
2. Once in a while
3. Sometimes
4. Usually
5. Yes, always

Can you give an example of a rule your father made that you did not understand or agree with and what happened.

10. In general, how are most decisions made between you and your mother?

1. My mother just tells me what to do.
2. My mother makes the decisions but not without considering my opinions.
3. We arrive at decisions together.
4. I can make my own decisions, but my mother would like me to consider her opinions.
5. I can do what I want regardless of what my mother thinks.

11. In general, how are most decisions made between you and your father?

1. My father just tells me what to do.
2. My father makes the decisions but not without considering my opinions.
3. We arrive at decisions together.
4. I can make my own decisions, but my father would like me to consider his opinions.
5. I can do what I want regardless of what my father thinks.
12. Would you like to be the kind of person your mother is?

1. Not at all.
2. In only a few ways.
3. In many ways.
4. In most ways.
5. Yes, completely.

13. Would you like to be the kind of person your father is?

1. Not at all.
2. In only a few ways.
3. In many ways.
4. In most ways.
5. Yes, completely.

14. If your parents were to object strongly to some of the friends you had, would you:

1. Keep going with them openly.
2. See them secretly.
3. See them less.
4. Stop going with them.

15. Which of these answers would your mother expect you to check?

1. Keep going with them openly.
2. See them secretly.
3. See them less.
4. Stop going with them.

16. Which of these answers would your father expect you to check?

1. Keep going with them openly.
2. See them secretly.
3. See them less.
4. Stop going with them.

17. How well do you understand your mother?

1. I never understand her.
2. Usually, I do not understand her.
3. Sometimes I understand her.
4. I usually understand her.
5. I understand her perfectly.

18. How well does your mother understand you?

1. She never understands me.
2. Usually, she does not understand me.
3. Sometimes she understands me.
4. She usually understands me.
5. She understands me perfectly.
19. If your mother was asked how well she understood you, which of these would your mother check?

1. I never understand him/her.
2. Usually, I do not understand him/her.
3. Sometimes I understand him/her.
4. I usually understand him/her.
5. I understand him/her perfectly.

20. How well do you understand your father?

1. I never understand him.
2. Usually, I do not understand him.
3. Sometimes I understand him.
4. I usually understand him.
5. I understand him perfectly.

21. How well does your father understand you?

1. He never understands me.
2. Usually, he does not understand me.
3. Sometimes he understands me.
4. He usually understands me.
5. He understands me perfectly.

22. If your father was asked how well he understood you, which of these would your father check?

1. I never understand him/her.
2. Usually, I do not understand him/her.
3. Sometimes I understand him/her.
4. I usually understand him/her.
5. I understand him/her perfectly.
23. Here is a list of tasks around the house. Please check who usually does each task. If the task is shared equally among certain family members, check who does the task and also check Shared Equally. Then go back and put a star by all the tasks you have done at least once during the past year.

<table>
<thead>
<tr>
<th>Task</th>
<th>No One</th>
<th>You</th>
<th>Mother</th>
<th>Father</th>
<th>Someone Else</th>
<th>Shared Equally</th>
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<tbody>
<tr>
<td>wash dishes</td>
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<td>make dinner</td>
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<td>wash floors</td>
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<td>clean bathrooms</td>
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<td>laundry</td>
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<tr>
<td>mow lawn</td>
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</table>
24. Which of the following best describes your relationship with your mother?

1. I am absolutely confident of my mother's love.
2. Sometimes I worry that my mother and I are not as close as we might be.
3. There is a growing sense of distance between me and my mother.
4. Right now, my mother and I have very few loving moments.

25. Which of the following best describes your relationship with your father?

1. I am absolutely confident of my father's love.
2. Sometimes I worry that my father and I are not as close as we might be.
3. There is a growing sense of distance between me and my father.
4. Right now, my father and I have very few loving moments.

26. Please complete these phrases any way you wish.

1) My mother

2) My father

3) I know my father loves me when he

4) I wonder if my father loves me when he

5) I know my mother loves me when she

6) I wonder if my mother loves me when she
27. What are the qualities your mother has that you admire most?

28. What are the qualities your mother has that you admire least?

29. What are the qualities your father has that you admire most?

30. What are the qualities your father has that you admire least?

31. What qualities of yours does your mother admire most?

32. What qualities of yours does your mother admire least?

33. What qualities of yours does your father admire most?

34. What qualities of yours does your father admire least?
APPENDIX E

ADOLESCENT'S QUESTIONNAIRE
GIVEN NAME: ________________________________________________________________________
RELATION TO CHILD: __________________________________________________________________

DATE: __________ TIME: __________

1. Child's age ___________ and birth date ___________ boy girl
2. Your age ___________ and birth date ___________
3. Your age at child's birth ___________________________________________________________________
4. Number of years of marriage at child's birth ___________________________________________________________________
5. Number of years of marriage at time of interview ___________________________________________________________________
6. The average age for the major growth spurt in adolescence is about 13 for boys and 11 for girls. Would you say your child was an early, average, or late maturer?
   early ______ average ______ late ______
6a. What is your child's weight in pounds ______ lbs.
      Height in feet and inches ______/______.
7. What is the highest grade in school you have completed?
   1 ______ less than 8th grade
   2 ______ 9-12th grade
   3 ______ High school diploma
   4 ______ 1-2 years of college
   5 ______ 3-4 years of college
   6 ______ College degree
   7 ______ Graduate degree
8. Please describe your profession and your current job.
   Profession
   ____________________________________________________________________________
   Job
   ____________________________________________________________________________
9. Please rate your overall satisfaction with your work.
   1 ______ Highly dissatisfied
   2 ______ Dissatisfied
   3 ______ Somewhat satisfied
   4 ______ Satisfied
   5 ______ Highly satisfied
10. Please rate your overall satisfaction in your marriage.

1  Highly dissatisfied
2  Dissatisfied
3  Somewhat satisfied
4  Satisfied
5  Highly satisfied

11. Please rate your overall satisfaction with the role of parent.

1  Highly dissatisfied
2  Dissatisfied
3  Somewhat satisfied
4  Satisfied
5  Highly satisfied

12. For daily decisions in your family, how would you say those decisions are reached?

1  I make most family decisions.
2  My spouse makes most family decisions.
3  My spouse and I make most decisions together.
4  My spouse, my children, and I make most decisions together.

Can you describe a recent family decision and tell how it was reached?

13. How confident are you that your child's ideas and decisions are right and best for him/her?

1  I am not at all confident.
2  I am a little confident.
3  I am quite confident.
4  I am completely confident.

14. When your child has a really important decision to make about himself/herself and his/her future, do you encourage your child to make the decision on his/her own or do you encourage him/her to get help on it?

1  I'd rather have someone else decide for him/her.
2  I encourage him/her to depend on other people's advice.
3  I encourage my child to get other ideas and then make up his/her own mind.
4  I encourage my child to make up his/her own mind without any help.

15. When you make a decision or set a rule and your child doesn't understand why you have made that decision or rule, will you explain the reason?

1  Never
2  Very few times
3  Sometimes
4  Usually
5  Yes, always
15. (Continued)
Can you give an example of a rule your child did not understand or agree with and what happened?

16. In general, how are most decisions made between you and your child?

1. I just tell him/her what to do.
2. I make the decisions but not without considering his/her own opinions.
3. We arrive at decisions together.
4. My child can make his/her own decisions, but I would like him/her to consider my opinions.
5. My child can do what he/she wants regardless of what I think.

17. Would you like your child to be the kind of person you are?

1. Not at all
2. In only a few ways
3. In many ways
4. In most ways
5. Yes, completely

18. Would you like to be the kind of person your son/daughter is?

1. Not at all
2. In only a few ways
3. In many ways
4. In most ways
5. Yes, completely

19. If you were to object strongly to some friends your son/daughter had, what would you expect would be the most likely way your child would respond?

1. Keep going with them openly.
2. See them secretly.
3. See them less.
4. Stop going with them.

20. How well do you think you understand your son/daughter? (check one)

1. I never understand him/her.
2. Usually I do not understand.
3. Sometimes I understand.
4. I usually understand.
5. I understand him/her perfectly.
21. If your son or daughter were asked how well you understand them, which of these would your son/daughter check?

1. I never understand him/her.
2. Usually I do not understand him/her.
3. Sometimes I understand him/her.
4. I usually understand him/her.
5. I understand him/her perfectly.

22. How well does your son/daughter understand you?

1. He/she never understands me.
2. Usually he/she does not understand.
3. Sometimes he/she understands.
4. He/she usually understands me.
5. He/she understands me perfectly.

23. If your son/daughter were asked how well he/she understood you, which of these would your son/daughter check?

1. I never understand him/her.
2. Usually I do not understand him/her.
3. Sometimes I understand him/her.
4. I usually understand him/her.
5. I understand him/her perfectly.
24. Here is a list of tasks around the house. Please check who usually does each task. If the task is shared equally among certain family members, check who does the task and also check shared equally. Then go back and put a star by all the tasks you have done at least once during the past year.

<table>
<thead>
<tr>
<th>Task</th>
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<th>Child</th>
<th>Mother</th>
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<td>shoveling snow</td>
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<td>wash windows</td>
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<td>take out garbage</td>
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</tbody>
</table>
25. Which of the following best describes your relationship with your child?

1. I am absolutely confident of my son/daughter's love.
2. Sometimes I worry that my son/daughter and I are not as close as we might be.
3. There is a growing sense of distance between me and my child.
4. Right now my son/daughter and I have very few loving moments.

26. Please complete these phrases any way you wish.

1) My son/daughter


2) I know my son/daughter loves me when he/she


3) I wonder if my son/daughter loves me when


27. What are the qualities your son/daughter has that you admire most?


28. What are the qualities your son/daughter has that you admire least?


29. Which of your qualities does your child admire most?
APPENDIX F

MORAL JUDGMENT INTERVIEW QUESTIONS
STORY 1

Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the $40 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

1. Should Joe refuse to give his father the money? Why?

2. Is there any way in which the father has a right to tell the son to give him the money? Why?

3. What is the most important thing a good father should recognize in his relation to his son? Why that?
4. What is the most important thing a good son should recognise in his relation to his father? Why that?

5. Why should a promise be kept?

6. What makes a person feel bad if a promise is broken?

7. Why is it important to keep a promise to someone you don't know well or are not close to?
STORY 2

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Meinz, went to everyone he knew to borrow the money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Meinz got desperate and broke into the man's store to steal the drug for his wife.

1. Should Meinz steal the drug? Why?

2. Which is worse, letting someone die or stealing? Why?

2a. What does the value of life mean to you, anyway?
STORY 2 (Continued)

3. Is there a good reason for a husband to steal if he doesn't love his wife?

4. Would it be as right to steal it for a stranger as his wife? Why?

5. Wains steals the drug and is caught. Should the judge sentence him or should he let him go free? Why?

6. The judge thinks of letting him go free. What would be his reasons for doing so?
7 Thinking in terms of society, what would be the best reasons for the judge to give him some sentence?

8 Thinking in terms of society, what would be the best reasons for the judge to not give him some sentence?

9 What do people mean by conscience? What do you think of as your conscience and what does it do?

10 What or who tells you what is right or wrong?

11 How do people get their consciences? (How did you get or develop a conscience?)
APPENDIX G
INNER CORRELATIONS AMONG DEPENDENT AND INDEPENDENT VARIABLES
### Table G-1

**Inner Correlations among Dependent and Independent Variables for Families with 11 Year-Olds**

(Model 1)

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### Table G-2

**Inner Correlations among Dependent and Independent Variables for Families with 11 Year-Olds**

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Inner Correlations among Dependent and Independent Variables for Families with 11 Year-Olds
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Table G-4

Inner Correlations among Dependent and Independent Variables for Families with 14 Year-Olds
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Inner Correlations among Dependent and Independent Variables for Families with 14 Year-Olds

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**Table G-6**

Inner Correlations among Dependent and Independent Variables for Families with 14 Year-Olds

(Model 3)

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Table G-7

Inner Correlations among Dependent and Independent Variables for Families with 17 Year-Olds

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Table G-8

Inner Correlations among Dependent and Independent Variables for Families with 17 Year-Olds

(Model 2)

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Table G-9

Inner Correlations among Dependent and Independent Variables for Families with 17 Year-Olds

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APPENDIX H

TOLERANCE AND VARIANCE INFLATION FACTORS
FOR INDEPENDENT VARIABLES
Table H-1
Tolerance and Variance Inflation Factors for Independent Variables in Families with 11 Year-Old Adolescents

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Table H-2
Tolerance and Variance Inflation Factors for Independent Variables in Families with 14 Year-Old Adolescents

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### Table I-3

**Tolerance and Variance Inflation Factors for Independent Variables in Families with 17 Year-Old Adolescents**

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APPENDIX I
CORRELATIONS AMONG DEMOGRAPHIC, INDEPENDENT
AND DEPENDENT VARIABLES
Table I-1
Correlations among Demographic, Independent, and Dependent Variables in Families with 11 Year-Old Adolescents

(n = 39)

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* p < .05
Table I-1 (continued)

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* p < .05
Table I-2
Correlations among Demographic, Independent, and Dependent Variables in Families
with 14 Year-Old Adolescents
(n = 31)

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**Child Rearing Environment**

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**Induction**

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**Support**

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Table I-2 (continued)

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<th>Mother's Age at Child's Birth</th>
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* p < .05
### Table I.-3

Correlations among Demographic, Independent, and Dependent Variables in Families with 17 Year-Old Adolescents

(n = 30)

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* p < .05
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* p < .05
APPENDIX J

SCATTERGRAMS OF INTERACTION TERMS BY MORAL ATMOSPHERE
Figure J-1: Plot of Moral Atmosphere by Interaction of Child Rearing Environment and Induction in Families with 17 Year-Olds (Model 2)
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