

A LONGITUDINAL STUDY OF MOTHER-CHILD CONFLICT
DURING THE FIRST TWO YEARS
OF LIFE

by

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ABSTRACT

This dissertation reports the results of a longitudinal study of the development of mother-child control and conflict encounters. Underlying this research is the idea that conflict encounters represent an intrinsic part of social interaction. Such encounters are thought to constitute an important aspect of how relationships are defined and maintained. The frequency and quality of such encounters thus impacts on relational health and development, and, through such interactional encounters, on important aspects of individual growth and functioning.

Twelve mother-child dyads were observed in semi-naturalistic interaction when the children were aged 10, 16, and 24 months. Various characteristics of mother-child control and conflict episodes were assessed using observational methods. The overall frequency of control and conflict encounters was measured, and such episodes were classified in terms of the type of issue that precipitated the mothers' first attempt at using verbal and/or physical means of controlling their children's behavior. Conflict episodes were also examined in terms of their length and eventual resolution. In addition to examining these dyadic/episodic variables, individual mother controls and child responses were examined. For each of these measures the interest was in developmental change (assessed through examination of mean differences) and stability (assessed through correlational procedures). In addition, correlational analyses were used to examine associations amongst some of the key measures.

The results of this research suggest that control and conflict encounters are relatively frequent occurrences in mother-child interaction over the period examined. Conflicts were relatively brief and seldom involved any strongly aversive or coercive behavior on the part of the parents or the children. Control and conflict encounters occurred with a similar frequency at each of the ages assessed, but the quality of these interactions differed a great deal in terms of the "tactics" typically used by mothers and the responses demonstrated by their children. The obtained results suggested that mothers were sensitive to their children's growing competencies and autonomy, and tended to use less intrusive strategies as their children matured. For their part, children's rate of compliance was similar at each time of measurement, but their opposition became more "skillful" as they matured. Finally, the quality of the mother-child control or conflict episode was greatly influenced by the type of issue that precipitated the first maternal control. For example, episodes initiated by a maternal attempt to set limits were much different in quality than those initiated by an attempt to initiate a cooperative activity. The relationship of these findings to previous research is discussed, and implications for future research are presented.

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DEDICATION

To my exceptionally loving, patient and supportive wife, Sherry, without whom I would never have completed this project, and also my wonderful daughter Jessica, whose birth and life has brought me profound happiness.

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CHAPTER ONE

OVERVIEW

The first two years of a child's life represent a period of rapid and continuous development both in the individual child and in caregiver-child relationships. As with all intimate relationships, the caregiver-child bond involves a dialectic between "growing together" and "growing apart"; between healthy interdependence and healthy autonomy. The establishment of "healthy interdependence" appears to be the first major developmental task for caregiver-child relationships, and the importance of this period is illustrated in the voluminous research on attachment (e.g., Ainsworth, Blehar, Waters & Wall, 1978; Sroufe & Waters, 1977). The first two years of life also bring the first signs of healthy independence, as the child emerges from an initial state of total dependency to one of autonomy.

These first steps towards independence bring with them an increased potential for parent-child conflict. Theresa and Frank Caplan (1983) describe this in their book for parents:

When Toddler-ones begin to get around on their own, they develop the ability to assert themselves. Just when their caregivers are getting used to attending to the needs of dependent infants, the youngsters suddenly shift gears from the stage of babyhood to that of early childhood. The Toddler-two period is identified by Erikson as the period of autonomy: "... becoming aware of oneself as a person and wanting to do things by oneself" Parents need to understand that the Toddler-two's behavior is not malicious Above all, prepare for "mock battles", as your child tries out his growing capacity to assert himself. (p. 25)

Although the term "mock battles" may not do justice to the very real conflicts in which parents often find themselves in with their young children, this passage aptly describes the first of what will be many

recalibrations in the parent-child relationship. Conflicts are a frequent and important part of this process of mutual accommodation. In contrast to the more "voluntary" nature of many other relationships -- where it is easier to "walk away" from a conflicted association -- the parent-child relationship involves an obligatory and long-term bond of intimacy. This type of intimate interdependence, with its continual age-related shifts in the nature of the parent-child relationship, increases the potential for conflict. Facilitating both relational and individual growth requires developing means of allowing for healthy conflict while still constraining its more destructive potential.

This research is a longitudinal exploration of mother-child conflict during the first two years of life, with particular emphasis on the early development of children's oppositional behaviors. Central to this research is the belief that conflict is a necessary and natural part of the process whereby individuals define and redefine their relationships. Although conflict is often equated with its extreme manifestations, it also takes place each time individuals verbally disagree about which team will win a game; each time a child does not comply with a parent's repeated request; each time a wife and husband playfully argue about whose is the better way to do the dishes. Through such seemingly minor oppositional interchanges individuals not only express aspects of themselves, they define themselves in relation to others. In long-term and intimate relationships, this process can have significant effects on its members. As previously noted, this is especially true of the early caregiver-child relationship, both because of the degree of interdependence of the relationship and because of the

impact the relationship has in this formative period of child development.

In the past, a number of research perspectives have contributed to our understanding of parent-child conflict. Although conflict has seldom been the explicit focus of these discussions, they have provided at least indirect theory and data that can inform future research. In chapter two, previous research perspectives are reviewed in terms of their implicit models of parent-child conflict and child opposition. It is proposed that most developmental literature on parent-child conflict has been guided by a "socialization" perspective that has implicitly defined conflict as maladaptive. In contrast, researchers studying marital and family conflict from a "pragmatic/systems" perspective have relied on a more dynamic model of conflict that recognizes both its positive and negative potential.

In chapter three, specific research findings on parent-child conflict will be reviewed. The focus generally will be on conflict during the preschool years, with an emphasis on conflict episodes. That is, parent-child conflict will be discussed in terms of issues, length, resolutions, and overall frequency. A final section will discuss what is known about parent and child behavior during control and conflict encounters.

The method used in the present research will be reviewed in chapter four. Briefly, the study utilized a semi-naturalistic setting to gather observational data on the control and conflict encounters of mothers and their children when the children were aged approximately 10, 16, and 24 months.

Chapter five presents the results of the research. The results are discussed in five main sections: (1) data related to the episodic features of conflict (i.e., frequency, length, issues, resolutions); (2) developmental change and stability in maternal behaviors; (3) developmental change and stability in child behaviors; (4) examination of the association between mother and child behavior; and, (5) results related to the impact that various issues that initiated conflicts had on the quantity and quality of those conflicts.

In chapter six, the current research is discussed in relation to the literature on children's social development during the first two years. Ideas for future research and theoretical advances are discussed, and the clinical implications of the current study are presented. The chapter concludes with a discussion of the limitations of the current research.

CHAPTER TWO

RESEARCH PERSPECTIVES ON PARENT-CHILD CONFLICT

Parent-report data indicate that the early child-rearing years involve considerable conflict (e.g., Heinstein, 1969; Feusser, 1984). Despite the impact that this conflict can have on parent-child interactions, there is little research addressing its basic form and functions. Shantz (1987) notes that this is true of research on peer conflict as well, and contends that the lack of research arises from two factors: (a) conflict has typically been equated with its more extreme manifestations in episodes involving aggression, and (b) psychologists have emphasized the individual as the "unit" of analysis. This emphasis on the individual has limited research on the interactional nature of interpersonal conflict. Also influencing the research on parent-child conflict is the emphasis on socialization, which has dominated developmental literature. The socialization literature has implicitly defined conflict as a maladaptive phenomenon. The term "socialization" suggests both the parent-to-child influence model that has guided most research as well as the "goal" of parental influence: namely the development of the socialized child (Bell, 1968). This goal is reflected in the research on compliance (e.g., Lytton, 1980), obedience (e.g., Minton, Kagan and Levine, 1971), and self-regulation (Kopp, 1982). Although not discounting that early parent-child interactions do involve considerable parent-to-child influence, and that compliance is an important developmental phenomenon, an overemphasis on both has

resulted in little research or theory on the adaptive role of social conflict in parent-child relations.

There exists only a small body of research that examines parent-child conflict per se. That is, there is a relatively small body of research that examines actual parent-child conflicts from their onset to their resolution. However, there is considerable literature that deals with conflict-related phenomena. This literature has taken four primary forms: (1) research on parenting styles and their impact on children's socialization (e.g., Baumrind, 1967; Lytton, 1980); (2) research on child noncompliance, aggression and antisocial behavior (e.g., Parke & Slaby, 1983; Patterson, 1982); (3) investigations of the "normal" development of opposition in children (e.g., Lampard, 1986; Wenar, 1982); and (4) studies of children's language development and communication (e.g., Garvey, 1984; Haslett, 1983). Each of these lines of research brings a slightly different focus of inquiry and set of assumptions to the study of parent-child conflict and interaction. The remainder of this chapter will briefly review each of these four approaches.

Socialization

As alluded to previously, a major focus of inquiry for developmentalists concerned with parent-child interaction has been socialization (Maccoby & Martin, 1983; Maccoby, 1984). Within this paradigm, parents have been studied as "socializing agents" (e.g., Holden, 1983) whose goal is to foster appropriate child behavior. As

Maccoby and Martin (1983) noted, "a major aspect of the socialization process is children's acquisition of the ability to monitor and control their own behavior ... " (p. 3). Historically, much of the early research in this area utilized factor analytic studies of parenting attitudes and behaviors to develop "typologies" of parenting styles, and then studied these styles in relation to various child outcomes (e.g., Baumrind, 1967). More recently, attention has shifted to observational studies of parent-child interaction, with considerable research on parent behavior as it relates to child compliance (e.g., Londerville & Main, 1981; Lytton, 1980; Westerman, 1990), with compliance being viewed as an important precursor to the development of self-control (Kopp, 1982) and conscience (Lytton, 1980).

The developmental research on compliance inevitably yielded information about its opposite, the "default" category of noncompliance. Much of this research has important implications for an understanding of parent-child conflict (specific research findings are discussed in the next chapter). However, "...a limitation of compliance and noncompliance constructs is that they inherently reflect conceptualizations of the child as a passive recipient of parental influence" (Kuczynski, Kochanska, Radke-Yarrow & Girnius-Brown, 1987, p. 799). Similarly, the "socialization" perspective that underlies this research implicitly defines conflict as something undesirable; as tantamount to a "breakdown" in parent-child interaction. Thus, although the socialization literature has provided some useful "indirect" data on parent-child conflict, the implicit assumptions of the approach have limited its utility for understanding conflict as an important and

necessary contributor to individual development and relational growth.

Clinical Research on Noncompliance and Antisocial Behavior

A great deal of data relevant to the study of parent-child conflict has come from researchers whose explicit focus has been on maladaptive manifestations of conflict and noncompliant child behavior. Historically, some of the first significant discussions of the normal development of children's oppositional behavior came from clinicians concerned with the processes whereby "normal" opposition can develop into clinical manifestations of antisocial behavior (e.g., Jenkins, 1935; Levy, 1955; Spitz, 1957). These early discussions were generally guided by a psychoanalytic perspective. From this perspective, clinicians described both normal and clinical manifestations of oppositional behavior (see Lampard, 1986; Wenar 1982, for reviews of this literature). Central to this literature was the assumption that healthy development requires adaptive means of resisting external interference with self-directed activity. Although this early theory was promising in its explicit recognition of the interrelatedness of normal and abnormal manifestations of opposition, there was relatively little research based on this perspective.

With the growing influence of behavioral models, much of the research on clinical manifestations of noncompliance became grounded in operant conditioning models (e.g., Green, Forehand & McMahon, 1979; Lobitz & Johnson, 1975; Wahler, 1969). This line of research has generally focussed on clinical manifestations of noncompliance (although

samples of "nonreferred children" are sometimes included in studies for purposes of comparison). Recently, a great deal of research has investigated the development of aversive and coercive behavior utilizing a "social interactional perspective" (Patterson & Reid, 1984), that relies on observational methods to examine interactional processes and structures.

This latter line of research is exemplified in the ongoing research of Gerald Patterson and his associates (e.g., Patterson, 1976; Patterson, 1982; Patterson & Reid, 1984). Patterson has identified a number of interactional measures that differentiate families with aggressive children from non-referred families. In general, Patterson has found that the family interaction pattern of referred families is marked by an interaction style that involves a greater propensity to start conflict on the part of all family members, a greater likelihood that such conflicts will be reciprocated through "counterattack", and a greater likelihood that the conflict will be continued in an extended sequence. Patterson (1982) attempted to explain his findings by utilizing concepts from social learning theory and, to a lesser extent, from family systems approaches. He and his colleagues have produced a large body of research amply demonstrating that extreme manifestations of aversive and coercive behavior at early ages are related to social and academic problems in later years (e.g., Patterson, 1993).

There can be no disputing that extremes of conflict and child noncompliance can have deleterious effects on relational and individual well-being. Extreme forms of noncompliant behavior are the most frequent reasons for the psychiatric referral of children (Forehand,

1977). Research on such behavior has helped us understand how some manifestations of parent-child conflict can be associated with negative developmental outcomes. Although such studies have produced excellent descriptive data on maladaptive patterns of family interaction, the stated focus of much of this research (clinical manifestations of noncompliance) has limited its yield in terms of theory or research on potential adaptive functions of conflict and child opposition. As Shantz (1987) has argued, by equating conflict with aggression and similar extreme behaviors, developmentalists have neglected to study conflict's basic forms and effects.

Developmental Research on Oppositional Behavior

In recent years there has been a renewed interest in studying children's oppositional behavior as an important developmental phenomenon in its own right (e.g., Du, 1992; Crockenberg & Litman, 1990; Kuczynski, Kochanska, Radke-Yarrow, & Girnius-Brown, 1987; Kuczynski & Kochanska, 1990; Lampard, 1986; see Lampard, 1986 and Wenar, 1982 for reviews of research done during the 1920s and 30s). These studies have described categories of noncompliance and examined them in terms of their developmental trends, effects, and correlates. This research has been guided by the perspective that healthy opposition is associated with self-as-agent; with competence, autonomy, independence, mastery and initiative (Wenar, 1982). Whereas compliance seems an important component of self-control, socially skilled opposition appears important for self-protection, self-assertion, and self-definition. Moreover,

recent research "supports the notion that compliance and healthy resistance are really opposite sides of the same coin" (Du, 1992, p. 96).

Inherent in research on children's opposition is the assumption that parent-child conflict is natural and necessary for development. Some of this research has extended its focus on children's opposition to examine broader episodic features of parent-child conflict (e.g., Du, 1992; Kochanska, Kuczynski, Radke-Yarrow & Welsh, 1987; Kuczynski, et al, 1987; Lampard, 1986). However, most of this research has not been guided by any model of how social conflict contributes to relational development. That is, although opposition has been conceptualized as important for individual growth, the role of opposition and conflict in the development of the parent-child relationship, and the subsequent effects this may have, have not been significant foci of theory or research.

Interpersonal Communication Approaches

The final "line" of research that has contributed to an understanding of opposition and conflict really consists of two approaches that have in common a focus on interpersonal communication. The first of these consists of sociolinguistic examinations of children's verbal conflict strategies (e.g., Brenneis & Lein, 1977; Dorval & Gundy, 1990; Emihovich, 1986; Garvey, 1984; Haslett, 1983; Shantz, 1987 reviews some of this literature). This research has produced a great deal of descriptive data on the structure of children's

verbal disputes. The second communications perspective has been labelled the "pragmatic perspective", and has strong theoretical connections to systems-oriented approaches to family process. Whereas the former line of inquiry has generally been "atheoretical" regarding the psychological and interactional functions of social conflict, the latter approach has offered a useful perspective on these functions, which might be usefully incorporated into developmental research on opposition and conflict. Each approach will be discussed in the section that follows, with the discussion of the pragmatic approach being more involved given its potential for contributing to theory about social conflict.

Sociolinguists have contributed much to the study of children's conflicts. Within this perspective "conflicts of interest are a fact of life in children's interactions" (Garvey, 1984; p. 140). Within this approach conflicts are not described in terms of their positive or negative potential. They are simply a commonplace speech event and are thus an important focus of inquiry. Thus, children's conflicts, typically between peers or siblings, are studied as part of a broader exploration of the communicative functions of speech. As Genishi and Di Paolo state, "sociolinguists have been interested in children's arguments as discourse phenomenon" (1982, p. 50). This line of research has produced data on the structure of children's verbal disputes and has detailed some of the developmental changes in children's dispute strategies (e.g., Haslett, 1984). Although this type of approach has much to offer, its explicit focus on the linguistic structure of conflicts is not intended to offer insights into how social conflict

contributes to individual or relational development.

The second communications-oriented approach to the study of conflict is guided by a "pragmatic perspective". This approach incorporates many concepts from general systems theory and has been very influential in the study of family dynamics and in family-systems approaches to therapy. In a pioneering work in this area, Watzlawick, Beavin and Jackson (1967) stressed that a focus on pragmatics entails looking at the behavioral effects of communication. Some of the basic tenets of this perspective are: (a) social interaction proceeds through information exchanges that are manifested in communicative behavior; (b) all social behavior (both verbal and nonverbal) is communicative in that it possesses potential informational content for the interactants; and, (c) all communication defines, maintains or changes the nature of the relationship between the interactants (Watzlawick et al. 1967). Communication serves to define the nature of relationships because every exchange of messages says something about the relationship between the interactants, even if that something is only a confirmation of the status quo. Within this process, conflict is viewed dynamically, "as a natural, inevitable occurrence in the continuous restructuring of relationships" (Millar, Rogers & Bavelas, 1984, p. 231). To understand this perspective on conflict requires a conceptualization of the process whereby relationships are created and maintained through communicative behavior.

As Watzlawick et al. (1967) suggested, all communication contributes to the definition of the relationship between interactants because each message simultaneously involves information about the

"content" of the message and about the relationship between the interactants. For example, when a student says, "Excuse me, could you explain something to me?" to a professor, in addition to the request for assistance (i.e., the content of the message), there is also an implicit confirmation of the status between the two (i.e., the relational aspect). Each message between individuals thus offers some implicit or explicit definition of the relationship between the interactants. Watzlawick et al. (1967) go on to point out that while each message may offer a definition of the relationship, any such definition may subsequently be accepted, rejected or disconfirmed (i.e., ignored). In the preceding example, the professor may offer assistance, and thereby accept the definition of the relationship, but could conceivably respond; "I know you! You aren't in this section. You should take that question to your instructor." This type of response would represent a rejection of the definition of the relationship implicit in the student's question. An extended sequence in which the student then "countered" the professor's statement might signal the start of an overt verbal conflict.

The preceding conceptualization of communication suggests the complexity of social conflict. Because of the "dual" content and relationship aspects of communication, any conflict may exist on at least two levels. The husband and wife who have what is later described as a "silly" fight about how to store butter, may have been in conflict about the "content" of their discussion (e.g., competing hypotheses about butter storage), but may also have been in conflict about the relational component (e.g., an ongoing struggle about who makes

decisions about household matters). Obviously, the relational implications of any message are likely to be multifaceted and have the potential to impact on various aspects of a given relationship. In any case, despite whatever the couple says or feels about their interaction, it is clear from their behavior that they have had a conflict: a conflict that can be described in terms of onset, tactics and eventual resolution. Moreover, descriptive data about the characteristic structure of the couples' conflicts, such as agreement/disagreement ratio, may provide valuable insight into the overall nature of their relationship. Thus, the analysis of communication/interaction affords a direct behavioral means of assessing aspects of the relationship between the interactants. To reaffirm a point made earlier, the exchange of messages is the relationship. This very type of perspective has at least implicitly guided the literature on attachment, in which "attachment behavior" provides a measure of relational functioning.

The foregoing suggests that social conflict helps to define and redefine the nature of the relationship between interactants. In addition to serving this important interpersonal function, social conflict also impacts in important ways on individual development. To select a significant example, Watzlawick et al. (1967) noted that as we mutually define our relationships, so too do we simultaneously define and redefine aspects of ourselves. As they put it, "quite apart from the mere exchange of information, man has to communicate with others for the sake of his own awareness of self..." (pp. 84-85). Thus, through our communication with others, we offer and respond to messages that shape our definition of ourselves in relation to our significant others.

This notion of self-definition relates to psychological, or individual aspects of the communicative/interactional process, and has obvious implications for those interested in understanding how children's oppositional behaviors relate to both their autonomous strivings and to their social conflicts.

Summary

Within developmental psychology it is unlikely that anyone would dispute that conflict and opposition can make important contributions to healthy individual and relational development. However, the implicit assumptions of the "socialization" perspective seem to limit developmental theory or research on the adaptive functions of conflict and opposition. This situation is changing somewhat, with the recent renewal of interest in the normal development of children's opposition (e.g., Du, 1992; Kuczynski & Kochanska, 1990; Lampard, 1986; Wenar, 1982). Although promising in many respects, the focus on opposition will likely be most fruitful if conceptualized within the context of relational functioning and development. This requires a dynamic and systemic conceptualization of conflict, similar to that seen in interpersonal communication approaches, in which conflict is seen as an intrinsic component of close personal relationships.

CHAPTER THREE

MAJOR RESEARCH AND EMPIRICAL FINDINGS

Research on Parent-Child Conflict

As noted previously, there is very little research that examines parent-child conflict per se. That is, there are very few studies that examine conflict episodes from onset through to resolution. However, as suggested in chapter two, there is considerable literature that deals with conflict-related phenomena. From this literature it is possible to piece together some information about the temporal form of parent-child conflict (e.g., onset, duration, resolution), and the individual "tactics" that parents and children typically use in their attempts to influence or resist one another. The next section reviews this literature, first examining data on the temporal form of conflict episodes, and then discussing what is known about parent and child behavior during control and conflict encounters. The focus will be on literature relevant to parent-child conflict during early childhood.

Conflict Episodes

Incidence. The start of an episode of interpersonal conflict has been variously described as involving a 2- or 3-step interactional sequence. The former definition requires: (a) an initial control attempt made by person A, and (2) a subsequent opposition by person B. For example, the following would constitute a conflict according to this

definition: Mother - "Go get your coat so we can leave". Child - "No, no, no (screams)! Don't want to!" The latter definition would include the first two steps and would also require an additional step in which person A "opposes the opposition" of person B (Shantz, 1987). Either definition seems defensible. The following review will differentiate between: (a) initial parent controls (step 1); (b) the subsequent proportion of sequences involving immediate child compliance or noncompliance (step 2); and, (c) the frequency of episodes in which children's noncompliance results in an additional parental control (step 3).

How frequently do parents issue controls to their young children? Lytton (1980) estimated that parents issue a control approximately every 2.5 minutes to their 2 1/2-year-old sons. Another naturalistic study of children aged 27 months reported a similar estimate of a control every 3 minutes (Minton, Kagan & Levine, 1971). Using somewhat different criteria, Lee and Bates (1985) found that their 24-month-old children "approached or got into trouble once every 5 minutes" (pp. 1317-1318). The frequency of initial controls appears to vary by age, at least over the early childhood years, with younger children receiving more parental controls (Schaffer & Crook 1980; Vaughn, Kopp & Krakow, 1984). Thus, the early childhood years involve a high frequency of parent-child interactions where there is at least a potential for conflict.

The extent to which an initial parental control is met by compliance or noncompliance has been addressed by numerous studies. Overall, compliance rates for samples of nonreferred children aged 2-11 range from 50-80% (Forehand, 1977; Forehand, King, Peed & Yoder, 1975;

Johnson & Lobitz, 1974). There appears to be a gradual improvement in compliance rates over the first 2 to 3 years of life (Lampard, 1986; McLaughlin, 1980), with some indication of a "plateau" between this period and age 5 (Kuczynski & Kochanska, 1990). That some degree of noncompliance continues to be frequent during childhood is indicated by Patterson and Forgatch's (1987) contention that a compliance rate of 50-60% is within "normal" bounds for 10- to 11-year-old males. Thus, it appears that the normal course of development involves a significant likelihood that a parental control will be met with some degree of resistance even into the middle childhood years. How do parents respond to this opposition to their controls?

Although numerous studies have examined initial parental controls (step 1) and children's subsequent compliance/noncompliance (step 2), relatively few have examined subsequent "steps" in the interaction sequence. An exception is Lytton (1980), who found that, confronted by noncompliance from their 2-year-old sons, parents responded with a positive response 10% of the time, showed no response approximately 33% of the time, and resorted to an additional control or some negative behavior the remainder of the time (i.e., approximately 55%). Thus, slightly more than half of the child's noncompliance resulted in additional controls.

In sum, the available data indicate that parents issue numerous controls to their young children (i.e., approximately 1 every 2.5 minutes) and that their young children comply about 50-80% of the time to these initial controls. Where compliance is not immediately forthcoming, parents seem to persist with some form of control or

reprimand, but do "accept" some degree of opposition by showing no response, or even "reward" resistance through a positive action.

Duration. The preceding discussion suggests that conflicts occur with some regularity in normal parent-child interaction. Although estimates of conflict length or duration are rare, the available evidence suggests that most conflicts are brief. Holden (1983) found that 70% of his mother-child conflicts lasted an average of 15 seconds (details about the remaining 30% were not given). Dowdney and Pickles (1991) found that their control/conflict episodes ranged in length from 1 to 99 turns, with a median length of 4 turns. This again suggests that the average length of conflicts is short. Similarly, Vuchinich (1987) found a mean length of 4.6 turns in his study of verbal conflicts during family dinners (mean age of children 11.7 years). Reid (1986) found that over 90% of all "aversive" episodes lasted 11 seconds or less (Reid's sample included nondistressed and clinic-referred mother-child dyads with children's mean age being 8.4 years). Only 3-5% of the aversive episodes lasted between 12 and 23 seconds, and episodes longer than 23 seconds were extremely rare (0.2% to 3%).

Reid's (1986) data suggest a potentially important link between conflict duration and conflict intensity. He found that "the longer an aversive interaction between parent and child persists, the more likely it is that the parent will engage in seriously abusive behavior toward the child" (p. 251). This relationship held for groups of nonreferred mother-child dyads and for the clinic-referred group, although the likelihood of abusive behavior was greater for the referred group. With a younger sample (ages 2-4), Dowdney and Pickles (1991) found that

increased episode length was related to increased negative behavior and affect for both mothers and their children. Lytton (1980) found that mothers who engaged in longer sequences also displayed higher rates of negative actions and scored lower on measures of positive actions, such as responsiveness and appropriateness.

Issues. There appears to be surprisingly little research on the types of issues that give rise to parent-child conflict, or on how different issues impact on such conflict. Goodenough (1931), who used maternal-report data to study children's anger, found that encounters with mothers in relation to "routines" were the most frequent cause of child anger during the second year. This was followed by "conflicts with authority" as the next highest precipitant of children's anger. Lytton (1980) did not examine child behavior in relation to different issues, but did look at parental behavior as a function of issue type. His results suggest that parents utilize a high proportion of direct commands (directives and prohibitions) in situations where they are setting limits on the children's behavior. In contrast, parents used a high proportion of suggestions during times of play. Finally, Schneider-Rosen and Wenz-Gross (1990) used several situations in which mothers tried to gain compliance from their young children, and found significant differences in compliance as a function of the type of situation. One would also expect that the quality of children's opposition might vary as a function of different issues. An exploration of issue-related differences in parent-child conflict was a major objective of the present research.

Resolutions. Research on the association between conflict length

and escalations in negative behavior suggests that a swift resolution to parent-child conflict is important in avoiding its negative potential. Also likely to be of importance is the nature of the resolution reached between parent and child. As noted, children typically comply immediately with 50-60% of parental commands. Where such immediate compliance does not occur, mothers "drop" the matter or show no response approximately 1/3 of the time (Lampard, 1986; Lytton, 1980). A number of studies have examined conflict resolutions. In the first work of this kind, Minton, Kagan and Levine (1971) looked at the resolution of sequences in which 27-month-old children did not comply with a maternal prohibition ("violation sequences"). The most frequent resolution to such sequences was voluntary child compliance (43%), followed by mothers' physically "forcing" compliance (18%), accepting disobedience (15%), and compromising with the child (13%). In a study of children aged 10, 16, and 24 months, Lampard (1986) found that, overall, the most frequent outcome of a conflict was for mothers to abandon the issue (47%), followed next by voluntary child compliance (24%), compromise (16%), and forced compliance (13%). Significant age effects included a linear increase with age in voluntary child compliance and a linear decrease with age in the frequency of mother's abandoning the conflict. Finally, Kochanska et al. (1987) studied the outcome of control episodes between mothers and children aged 15-51 months. The most common resolution was ultimate maternal success by persuasion (46%). Mothers abandoned conflicts frequently, either immediately after the first control was opposed (22%) or after further controls were issued (14%). Compromise took place in 6% of the cases. Finally, enforcement (similar

to "forced") took place in 4% of episodes. There was a significant age-related increase in maternal compromise and a decrease in forced compliance.

Parental Control Strategies

Parents can utilize a wide range of strategies in attempting to control their children, ranging from gently stated suggestions to physical interventions to abusive aggression. In addition to varying on this dimension of "degree of control", parental strategies can vary in the degree to which they are responsive to their children's ongoing activities or needs. Both of these dimensions have been studied in relation to children's compliance.

Regarding the "control" dimension of parental strategies, there seems to be general agreement that children's compliance is associated with parental reliance on "authoritative" and non-power assertive methods (Crockenberg & Litman, 1990; Maccoby & Martin, 1983). In addition, highly power assertive methods (e.g., anger, harshness, physical intervention) are associated with children's angry and defiant behavior (Crockenberg, 1987; Crockenberg & Litman, 1990; Kuczynski, et al, 1987; Oldershaw, Walters & Hall, 1986). It therefore seems that a parent's best chance for success in the context of a conflict would be to rely on a non-power coercive control tactic. However, the situation is not quite so clear cut. Studies that support the utility of non-power assertive methods in promoting compliance have generally relied on correlational analyses (in which parents' overall tendency to rely on

power assertion is related to children's compliance). Studies that utilize sequential analysis of moment-to-moment exchanges have found that power-assertive methods actually facilitate immediate compliance in naturalistic settings (e.g., Crockenberg & Litman, 1990; Lytton, 1980; Patterson, 1976).

Maccoby and Martin (1983) attempt to resolve this apparent contradiction by distinguishing between situational compliance (compliance arising from immediate situational pressures) and receptive compliance (compliance that reflects a child's longer-term propensity to comply). They contend that, although power-assertive methods may be effective in promoting situational compliance (as contingency analyses would suggest), their continual use is associated with less compliance in the longer-term (as indicated by correlational analyses). Moreover, highly power-assertive methods not only lead to less compliance in the long-term, they also relate positively to children's angry, defiant, and aversive behaviors (e.g., Patterson, 1982). Maccoby and Martin contend that continued reliance on power-assertive methods during parent-child conflict eventually results in a less compliant and more coercive child. There is considerable clinical literature on aggressive and oppositional children that supports such a hypotheses (Gard & Berry, 1986; Parke & Slaby, 1983).

The second dimension of parental strategies that has been investigated is parental responsiveness and children's compliance. This line of research is guided by the assumption that compliance will be promoted by parental commands that are coordinated with children's ongoing activity. In this respect, Shaffer and Crook (1979, 1980) found

that compliance was enhanced when mothers issued controls that were adapted to their children's current activity. Rocissano, Slade and Lynch (1987) reported similar results, and also found that compliance was associated with mothers' tendencies to follow their children's lead when children "broke topic". Other studies have indicated that compliance is enhanced when parents utilize a sequential strategy whereby they first direct a child's activity in a desired direction and then gradually direct the child's activity through instructions and commands that build on the child's current state of involvement. (Shaffer & Crook, 1979, 1980; Westerman & Havstad, 1982). Westerman (1990) found that mothers in compliance-problem dyads are less able to appropriately adjust their controls and instructions than are mothers of compliant children. Projected into the realm of parent-child conflict, these results suggest that conflicts can be avoided or more swiftly resolved by parental actions that take into account their children's current activity. Controls that "come out of the blue" are less likely to be successful. A sequence of repeated controls (e.g., "Do it! Do it! ... I said do it!") that does not adjust to the child's ongoing state is also likely to reduce the immediate likelihood of compliance. In an interesting study examining mother-child conflict in the supermarket, Holden (1983) found that children who displayed lower amounts of undesirable behavior had mothers who used proactive strategies (such as distraction, providing positive activities) to head off conflict before it could start. These preventative maneuvers by the mothers represent further evidence of how responsiveness to children's needs can facilitate greater cooperation.

Children's Oppositional Behaviors

The foregoing discussion has primarily addressed parental strategies as they impact on children's compliance. The development of a capacity for compliance in early childhood is rightly regarded as an important attainment in the development of self-control (Kopp, 1982) and serves as an important forerunner in the development of conscience (Lytton, 1980). Moreover, a diplomatic willingness to comply likely serves important interpersonal functions in conflict negotiation and resolution. However, healthy relationships and the development of individual autonomy are not well-served by excessive one-sided compliance. As Maccoby and Martin (1983) note, "Parents who are themselves cooperative with their children's needs and desires tend to have children who are cooperative with theirs ..." (p.68). Moreover, "compulsive compliance" in children has been associated with histories of abuse (Crittenden & DiLalla, 1988) and with an increased incidence (in boys) of internal distress (Kuczynski & Kochanska, 1990). The consistent finding that "normal" parent-child interaction involves child noncompliance rates of up to 50% (Patterson & Forgatch, 1987) also suggests the possibility that healthy relationships requires some room for opposition just as they simultaneously require a mutual willingness to comply with another's wishes.

How do children oppose their parents? As Shantz (1987) notes, "the ways in which children pursue their goals are virtually limitless" (p. 289). Moreover, it appears that even very young children possess a variety of ways of expressing their resistance. Patterson (1982)

contends that, by age 3, children have learned virtually their entire repertoire of aversive oppositional behaviors. Although this may be somewhat of an overstatement, a number of studies indicate that very young children's opposition is very diverse and ranges from playful noncompliance, simple ignoring, and negotiation, to acts of defiance, tantrums and physical aggression (Caille, 1933; Goodenough, 1931; Kuczynski et al, 1987; Lampard, 1986).

In addition to describing the forms that opposition takes, researchers have examined age-related changes in the frequency of resistance. In terms of overall frequency, there appears to be little change in noncompliance rates over the early childhood years (Kuczynski et al, 1987; Kuczynski & Kochanska, 1990). Although noncompliance continues to occur at a fairly high rate throughout the preschool and elementary years (i.e., 40-50%), there is a steady age-related decrease in the more aversive and coercive forms of this behavior (Goodenough, 1931; Kuczynski et al, 1987; Kuczynski and Kochanska, 1990; Patterson, 1982). Aversive and coercive forms of opposition typically include behaviors that involve aggression, destruction and angry or defiant behavior (e.g., Crockerberg & Litman, 1990; Kuczynski and Kochanska, 1990). Coinciding with the decrease in the more aversive forms of resistance is a trend towards an increasing reliance on more skillful forms of opposition, such as negotiation (Du, 1992; Kuczynski, et al, 1987). In addition to negotiation and persuasion, simple refusal (i.e., saying "No" in response to a request) has been considered a form of "skillful" opposition for young toddlers (Crockerberg & Litman, 1990; Kuczynski & Kochanska, 1990). Literature on peer conflict (e.g.,

Haslett 1984) indicates that children's verbal strategies become increasingly diverse and sophisticated throughout the elementary years.

There is growing evidence that the development and reliance on skillful forms of resistance is related to the more general development of social skills. For example, Kuczynski and Kochanska (1990) found that children who relied on more skillful forms of resistance (e.g., simple refusal, negotiation) were also more likely to be skillful when making requests of their mothers. They also found that less skillful forms of resistance were related to later behavior problems, whereas the more skillful forms of resistance were not. A study by Crockenberg and Litman (1990) found that self-assertion (a more skillful form of resistance) was related to other positive child behaviors (e.g. positive communication), whereas defiance, (a less skillful form that involves angry opposition or instances where the child does the opposite of what is asked) was associated with negative behaviors (e.g., ignores requests, makes a mess). In a recent study (Du, 1992), more skillful forms of resistance were positively related to measures of social skill and perspective taking. In a related line of research, Dodge (1985) has described how deficits in social-cognitive skills are related to high levels of aggression (and presumably, to "unskilled" opposition) in children. This growing body of research suggests that the skillful use of opposition is associated with social skills in general.

How does parent-child interaction contribute to children's development of skillful means of opposition? The aforementioned literature on compliance is relevant to this question. In some important aspects, skillful opposition and compliance appear to share

some of the same parenting style correlates. That is, the "authoritative" parenting style that has been linked to the development of children's compliance also appears related to the early development of skillful means of opposition. For example, Crockenberg and Litman (1990) found that negative forms of parental control (threats, anger, power assertion) were associated with children's use of defiant opposition (a coercive and less "skillful" form of resistance). In contrast:

Mothers who were effective in eliciting compliance from their children and deflecting defiance were very clear about what they wanted, but in addition to listening to their children's objections, they also accommodated them in ways that conveyed respect for the children's autonomy and individuality. Often, the process of gaining compliance was quite extended; mothers reasoned, persuaded, suggested, and adapted their requests to what they thought the child would accept. In doing so, they encouraged competent behavior on the part of their toddler. (Crockenberg and Litman, 1990, p. 970)

Crockenberg and Litman found that both compliance and self-assertion were associated with maternal use of persuasive, authoritative forms of control, and that both compliance and assertion appeared to be more "competent" forms of behavior than defiance. Thus, their study provides some initial evidence suggesting that the development of skillful forms of opposition appears to be meaningfully related to parental behavior.

Although there is at present only a small body of research examining the development of skillful opposition, there is a large body of work on the development of unskilled, coercive, and aggressive forms of such behavior, and how they relate to parent-child interaction. Based on a series of observational studies of parent-child interaction, Patterson (1982) contended that children's reliance on coercive and

aggressive behaviors is supported by the effectiveness these behaviors have in putting an end to coercive pressures used by others. In other words, these coercive behaviors are maintained by negative reinforcement. Patterson (1976) noted that school-aged "oppositional children" tend to rely on the type of coercive behaviors typically seen in 2- to 3-year-old children. He proposed a developmental lag hypothesis whereby the high levels of unskilled opposition seen in young children develop into clinical manifestations of noncompliance when parents: (a) rely on high levels of power assertion (e.g., punishment) and (b) fail to support or train alternate prosocial behaviors. Placed in the context of conflict interaction, it seems that children who are not supported or reinforced for their skillful resistance may continue to rely on aversive or coercive forms of opposition. If these negative behaviors produce some measure of success, the child may be at risk of "winning the battle" only to lose the war.

In sum, parental behaviors that encourage some degree of autonomy in the child, that allow for some negotiation, and that do this while still guiding the child's behavior in line with parental expectations, tend to be associated with child compliance and with skillful means of opposition. In contrast, parent approaches that rely on negative control, such as threats and punishments tend to correlate with highly aversive and coercive child behavior. Admittedly, there is so far only a very small amount of literature that differentiates "skillful" from less "skillful" forms of opposition. However, the available research does suggest that meaningful distinctions exist, and that the more skillful forms may have more in common with compliance than with the

coercive forms of opposition. Developmentally, parent-child interaction histories that give rise to the compliant child may also be of the same quality that give rise to the appropriately assertive child.

The Present Study

The preceding review suggests that some information about parent-child conflict can be gleaned from the developmental research on children's compliance and opposition. However, conflict per se has seldom been a focus of this research, and the research that has examined parent-child conflict has typically been guided by the "socialization" perspective in which such conflict has been viewed primarily in terms of its negative potential. Such a bias is implicit in Maccoby and Martin's (1983) discussion of how the existence of frequent parent-child conflicts "implies that socialization is already off to a bad start, in the sense that the parent-child pair frequently have conflicting objectives, and the two are not responsive to one another's subtle signals as to what is desired or expected by the partner" (p. 70). Yet, parent report data and research on children's opposition indicate that conflict is a very frequent occurrence in the everyday encounters between parents and children. To better understand the very real negative potential of conflict, researchers interested in parent-child interaction will have to broaden their conceptualization of conflict to address its potentially constructive functions.

The pragmatic perspective offers a useful conceptualization of possible adaptive functions of conflict in both relational and

individual development. Interestingly, a similar, dynamic conceptualization of conflict has long been part of major developmental theories. For example, Shantz (1987) reviews how Freud, Erikson, and Piaget all considered conflict to be a major force in individual development. At an even more general level, dialectical models utilize conflict as the "basic metaphor" in their explanation of development at all levels of existence, from the chemical to the biological to the psychological to the social (Dixon & Lerner, 1988). In her review of the literature on peer conflict, Shantz (1987) notes that, despite considerable theoretical interest in conflict, "little research has been addressed to it--its basic features and effects" (p. 284). Thus, although the importance of conflict in human relationships appears to be widely recognized, actual research addressing it's role in the development of relationships and of individuals is scarce.

A major goal of the present research was to explore the structure of mother-child conflict during early childhood (i.e., 10- 16- and 24-months of age). The developmental study of parent-child conflict is deemed to be important for practical and theoretical reasons. Practically, this issue is important because parents frequently experience discomfoting levels of conflict when they interact with their very young children, as is often stated in popular books on parenting (e.g., Caplan & Caplan, 1984; Kelly & Parsons, 1975). Information on the development of such conflict may be useful in helping parents to understand and deal with it. As noted previously, the development of crawling brings with it the first emergence of autonomy -- the first advance into Erikson's (1959) crisis of autonomy versus

shame and doubt. Much research and theory has (at least indirectly) examined Erikson's first stage of basic trust versus mistrust (e.g., literature on attachment), but there has been comparatively little research on the development of autonomy that marks the second stage. This period marks an important time of recalibration in the parent-child relationship. It has been argued that the nature and resolution of conflicts at such periods of transition can impact in important ways on later development (Maccoby & Martin, 1983). The "pragmatic" perspective on conflict would suggest that the definition and re-definition of relationships that takes place through everyday conflicts could impact on relational development. Also, given its possible role in the definition of self, communication involving conflict could impact on social and personality development. Patterson's research (e.g., Patterson, 1982) indicated that coercive behavior in the context of family interaction was associated with similar types of behavior in other contexts. Similarly, Kochanska (1992) has demonstrated that maternal conflict behavior (influence strategies) with toddlers predicts children's conflict behavior with peers at later ages. Thus, there is some evidence that the lessons learned in the context of parent-child conflict may have significant short- and long-term developmental effects.

The present research on parent-child conflict was designed to investigate the early development of mother-child control and conflict interaction. The developmental emphasis required a longitudinal design. The emphasis on conflict interaction required direct observation of mother-child interaction. Although these methodological considerations

appear to be self-evident given the stated focus on the early development of conflict, previous research on development and on conflict has often "missed" these seemingly apparent considerations. For example, it has been argued that most studies of "development" are "primarily studies of immature organisms at a single age" (Appelbaum & McCall, 1983, p. 418). In a similar vein, it has been noted that most studies of interpersonal conflict (an interactional phenomenon) have utilized self-report questionnaire data, which measure individual perceptions/beliefs, etc. (Rogers, Millar & Bavelas, 1985). It is likely the case that at least part of the decision to use these methods arose from very practical concerns: longitudinal data are time-consuming to obtain, and "it is more costly to observe than to use other methods such as questionnaires" (Bakeman & Gottman, 1986, p. xiv). Despite these potential drawbacks, the stated focus of the present study demanded the incorporation of both a longitudinal design and an observational methodology.

The present study represents an extension of Lampard's (1986) research, in which the major focus was on a cross-sectional description of age-related differences in children's oppositional behavior during early childhood. The incidence of maternal control episodes and of conflict episodes was also examined, as were the various forms of resolution that took place at each age. Lampard (1986) observed 10 mother-child dyads at each of the ages of 10, 16, and 22 months. The study utilized an observational procedure that was essentially the same as that used in the current research. The results of the study indicated that, compared to other forms of opposition, passive

noncompliance (ignoring) was the most frequent form of opposition at all ages. The relative frequency of this behavior decreased with age. Verbal opposition and active noncompliance increased with age, whereas playful noncompliance decreased. The most frequent outcome to conflict episodes was for the mother to abandon the issue, but this outcome became less frequent as children matured. In contrast, with increasing age it became more likely for children to voluntarily comply as a way of resolving a conflict. Lampard's 1986 study also found some notable sex differences in children's conflict behavior. In general, the results suggested that females tended to show an earlier improvement in their behavior than was true for males. Overall, the Lampard (1986) study provided some much-needed observational data on age differences in children's oppositional behavior during the period prior to their second birthday. This research provided an impetus to further examine mother-child conflict during this period by extending the analysis to more fully capture the interactional/dyadic nature of such interaction.

In the present study, four areas were explored: (a) the structure of dyadic aspects of parent-child conflict (i.e., incidence, length, resolutions); (b) mother and child behaviors during control and conflict encounters; (c) the association between mother and child behavior; and (d) the impact that various issues had on mother-child conflict. As in Lampard's (1986) research, the study utilized an approach that was primarily exploratory and descriptive in nature. The assumption underlying this approach is that careful and systematic observation should precede theory-building and hypothesis-testing. Although recognizing that this type of descriptive and hypothesis-

generating research represents only a first step in studying a phenomena, it represents an essential first step that is sometimes neglected in psychological research (see Bakeman and Gottman, 1986, pp. 200-201, McCall, 1977).

CHAPTER FOUR

METHOD

Participants

The mothers and children who took part in this study were initially obtained from a "subject pool" of parents who responded to a form distributed to new mothers at the maternity ward of the Victoria General Hospital (Appendix A). The mother-child dyads who took part in the current study were first seen as part of a cross-sectional study examining oppositional behavior in children at ages 10, 16, and 24 months (Lampard, 1986). Of the 20 dyads with 10-month-old infants seen for the original study, 12 mothers and children took part in the longitudinal extension comprising the current research. The decision to extend the 10-month-old group into a longitudinal design was made after the initial cross-sectional study was completed (i.e., the mothers of the 10-month-olds did not originally volunteer to take part in a longitudinal design). Of the 8 dyads who did not complete the longitudinal study, 1 dyad's data was "lost" due to equipment failure. One dyad could not participate because of construction taking part in the interaction lab at the time that their session was scheduled. Two dyads had moved and were not located in time to take part in the next testing session, and 4 dyads did not take part because the mothers declined to participate. The most frequent reason given for this was because of the birth of a second child. Given the varied reasons for "attrition" there does not appear to be an obvious bias in the remaining sample that would limit its representativeness (beyond those limits

already established by the original way that subjects self-selected when volunteering).

For the present study, each of the 12 mother-child dyads was seen when the children were aged 10 months (mean age: 10 months, 7 days; range: 9 months, 22 days - 10 months, 19 days), and subsequently seen again on two occasions, separated by approximately 6 month intervals. The children's mean age at the time of the second session was 16 months, 23 days (range: 16 months, 3 days - 17 months, 12 days). At the time of the third session, the mean age of the children was 24 months, 13 days (range: 24 months, 9 days - 25 months, 3 days). There were an equal number of boys and girls, and all were without significant health problems. At the start of the study, 8 of the children were firstborn and without siblings. Two of the children were involved in part-time daycare.

All of the children in the study came from two-parent families. The parents in the study had been together as couples for an average of 7.2 years at the start of the research. The mean age of the mothers and fathers was 30.4 and 32.1, respectively. The mothers had an average of 14.2 years of education; fathers averaged 14.1.

Procedure

The procedure for the present study was the same as that used in Lampard's (1986) cross-sectional study of mother-child interaction. In the current longitudinal study, mothers and children interacted in the social interaction laboratory at the University of Victoria at each of the three times of assessment. The room was set up to approximate a living room environment, and contained a desk, coffee table,

chesterfield chairs, t.v., portable radio-cassette, stereo, records, books, telephone, lamps, and a small plant table. Some toys, a small play table, and a concealed toy box were also in the room. The interaction room is equipped with four remote-controlled video cameras that are operated from an adjoining observation room. The video-images from the cameras fed into a special effects generator, allowing the operator to select any or all of the 4 camera images for viewing using a split-screen image. This made it possible to videotape the mother and child even when they were at different locations in the room, or when they were blocking one another. A time-date generator placed a visual time-signal on each videotape.

At the start of the first assessment session (Time 1), the details of the study were explained to the mother in a reception room adjoining the interaction room. A written explanation of the procedures was given to the mother to take with her into the interaction room (Appendix B). After reviewing this, the mother signed an informed consent form (Appendix C) and given a questionnaire involving background/demographic information (Appendix D). The session that followed was scripted to sample a variety of typical mother-child interactions, and included activities that were thought likely to promote cooperative activity (e.g., free play) as well as activities more likely to promote conflict (e.g., "clean-up" of toys). The sessions were identical at each testing session. Each session consisted of six phases which took approximately 50 minutes to complete. Mothers were signalled to shift from one phase to the next via a knock on a one-way mirror separating the interaction room from the video control room.

The six phases consisted of the following:

1. Free Play 1 (5 minutes): During this phase of the session the mother and child were free to play with the toys in the room or to engage in any other type of activity in an unstructured manner. This phase was designed to give the child an opportunity to become familiar with the new environment.
2. Mother Task (10 minutes): This phase consisted of the mother's sitting at a desk and working on two tasks. The first was to fill out a form containing demographic data (Appendix D). The second was to read two short magazine articles.
3. Mother-child Reading (5 minutes): During this phase, the mother sat and read to her child. The mother's objective was to keep the child interested and "on task" as much as possible.
4. Phone Call (10 minutes): The mother phoned the researcher, who was in the observation room, and engaged in a general conversation about her child's play and exploratory behavior.
5. Free-Play 2 (6 minutes): The mother went to a toy-box which had been concealed in the room, and let her child play with the novel toys that it contained. This continued until the mother was signalled to begin the final, "clean-up" phase.
6. Clean-up: The mother enlisted her child's help in putting away all of the toys. This phase ended when the mother and child had finished putting away the toys to the mother's satisfaction.

Although each mother was given instructions on the general type of activity she and her child should engage in during each phase, she

was otherwise asked to behave naturally. If a mother asked about whether or not a given item could be touched by her child (e.g., the T.V., stereo, records, etc.), she was informed that this was up to her to decide and that she should base her decision on how she would usually guide her child when in a stranger's home, or in some similar situation. At the completion of each session, mothers were asked to sign a videotape consent form which outlined the various ways that the taped interaction could be used (Appendix E). This included an option to "erase the tape" if the mother so desired.

Coding of Interactions: The initial development of the coding system is outlined in Lampard (1986). To briefly summarize, the coding system used in this earlier study was designed to produce shorthand "behavioral transcripts" of mother-child interaction. The coding system was designed by repeatedly viewing three videotaped interactions of mother-child interaction of children aged 10, 16, and 22 months. An attempt was made to differentiate as many functionally different maternal controls and child responses as could be objectively defined for this age range. The initial coding scheme contained 14 different child noncompliant responses. Similar behaviors were later grouped together to allow for meaningful analysis, and with a few minor alterations, these groupings formed the foundation for the coding system used in the present study.

The coding system used in the present study utilized an episodic approach which coded compliance/conflict episodes beginning with a maternal control and coding subsequent mother and child behaviors until some form of resolution was reached. In addition to coding behaviors

taking place during each compliance/conflict episode, each episode was coded in terms of the general issue that precipitated the first control.

As noted, each control/conflict episode began with a maternal control. Maternal controls could include a verbal and/or a physical component. The coding criteria for the verbal components are defined in Table 1; the criteria for physical components in Table 2. Following a maternal control, the child could either comply immediately in some way (which would constitute a compliance episode), or could engage in some form of opposition (signalling the start of a conflict episode). The behavioral categories for the various child responses are listed in Table 3.

Once initiated by a child's opposition to a maternal control, a conflict episode was coded in a "turn by turn" manner until some form of resolution was reached. The criteria for the coding of conflict resolutions are listed in Table 4. Finally, every episode was coded in terms of the general issue that precipitated the first control. The coding categories for issues are listed in Table 5.

Table 1

Coding Categories of Maternal Verbal Controls

CONTROL	DEFINITION/DESCRIPTION
Bargain	Direct or indirect verbal control paired with an explicit offer contingent on compliance: "Help me clean up and we can get a treat on the way home."
Suggestion	Indirect commands or prohibitions phrased as a request, suggestion, or question: "Should we pick up these toys now?"
Directive	Direct command ("Do this") or prohibition (Don't do that") phrased in such a way that offers no alternative but compliance: "Get me the ball right now."
Reasoning	Use of explanations, justification or reasoning when attempting to get cooperation or compliance: "Don't play with the light because it might break".
Negative Verbal	Negative verbal statements that involve use of criticism, disapproval, reprimand or similar verbal punishment: "Oh, you're so bad when I take you out."

Table 2

Coding Categories of Maternal Physical Controls

CONTROL	DEFINITION/DESCRIPTION
Gesture	Use of nonverbal signal to direct a child's attention (e.g., pointing to something) or signal some desired or prohibited activity (e.g., headshake "No", use of hand to gesture "Come here").
Restrain	Use of physical restraint as part of an attempt to control or guide child behavior. Differs from code for "Remove" in that restraint is milder and does not involve physically removing a child from an object (or an object from a child).
Remove	Use of physical intervention to remove child from an area/activity/object, or to remove something from the child. Remove differs from restraint in that the child is placed at a distance such that walking or crawling would be required to get back to the forbidden item/area.
Give Item	Giving a toy or other "distractor" such as food, items from purse, etc., outside of the context of joint play, and in an apparent attempt to distract or occupy the child.
Punish	Instances of physical punishment, such as spanking, forceful or rough intervention, or nonverbal threat of such punishment (e.g., raised hand).

Table 3

Coding Categories of Child Responses to Maternal Controls

CHILD RESPONSE	DESCRIPTION/DEFINITION
Playful Noncomply	Child noncompliance combined with laughter or some other clear indicator of playful, positive affect.
Passive Noncomply	Instances where the child does not comply with a control, but responds in a neutral fashion without negative affect, or any indication of overt opposition or defiance.
Simple Noncomply	Use of verbal or nonverbal "No" without addition of justification or reasoning (e.g., headshake, "uhn uhn", etc.).
Negotiation	Child's use of explanations, reasoning, bargaining, to attempt to reach some compromise in response to a maternal control.
Low Negative	Whining or similar verbal protest in response to maternal control.
High Negative	Includes all instances of aggression, destruction, or temper tantrums which take place in context of conflict episode.
Physical Resistance	Scored when child resists the mother's physical interventions (e.g., hands on to a toy that mother attempts to take; struggles when being picked up).
Compliance	Scored whenever child explicitly complies with a maternal control, or where child implicitly complies by not reacting with opposition when being controlled physically. Compliance may be somewhat delayed, as long as it takes place prior to the next maternal control.
Partial Compliance	Scored when child responds to maternal control with only partial compliance (e.g., mother states "Get the ball and throw it to me", to which child only responds to first half of the directive, but is neither being oppositional or fully compliant).

Table 4

Coding Categories of Conflict Resolutions

RESOLUTION	DEFINITION/DESCRIPTION
Freely Comply	Child freely complies with a maternal control after having engaged in one or more instances of oppositional behavior.
Maternal Comply/Abandon	Mother explicitly complies with the child's negotiation, assertion, etc., in the context of a conflict episode, or mother implicitly complies by abandoning an issue when met with passive or active resistance to a control.
Forced Compliance	Mother uses physical intervention to "force" compliance from child.
Compromise	Mother accepts partial compliance from child (i.e., does not continue to issue controls after child partially responds to her intervention). Also coded when mother and child reach a compromise solution, typically where mother offers child a "deal" in response to child's opposition ("O.K., if you put away some of the crayons, I'll help you put away the rest").

Table 5

Coding Categories of Issue Types Precipitating a Maternal Control

ISSUE TYPE	DESCRIPTION/DEFINITION
Initiate Play	Controls issued in the context of initiating or maintaining play or a similar positive interaction, such as reading.
Limit Setting	Controls issued in the context of commanding child to cease a prohibited activity (e.g., playing with television), or to start an activity that the parent requires, such as cleaning up toys, putting on jacket and shoes, etc.
Proactive/ Distract	Controls issued when the child is engaged in some activity that the mother is attempting to alter through provision of some alternative. This might consist of a verbal control ("Look at the nice book over there"), or of a physical intervention (e.g., mother handing child the keys out of her purse while she is talking on the phone).
Other	Includes miscellaneous controls issued in contexts other than those listed above.

CHAPTER FIVE

RESULTS

Reliability of coding

A second observer independently coded the complete records of 9 of the 36 videotaped interaction sessions (25% of the total data). Interobserver reliability was measured for episode boundaries (onset and termination) using percentage of agreement, as recommended by Bakeman and Gottman (1986). The averaged percent agreement for onset of episodes was 84%. The agreement for episode termination was 83%.

Agreement for the "molecular" episodic and mother-child behavior variables was assessed using Cohen's kappa (Cohen, 1960). Cohen's kappa is an agreement statistic that "corrects" for chance agreement (Bakeman & Gottman, 1986). Bakeman and Gottman (1986) note that complexities arise in computing kappa where events are the "unit" (versus time-based units) and where observers are required to segment event boundaries and assign code labels to those events at the same time. Two choices present themselves. First, one could calculate kappa based only on those events where there was agreement for event boundaries (thereby ignoring errors of omission). This method (Method 1) likely overestimates reliability. A second choice would be to code disagreement only in those instances where there was agreement on event boundaries, but Bakeman and Gottman argue that this method (Method 2) underestimates reliability. This would be the case where, as in the present study, huge spans of time could pass where both coders "agree"

that there is no control/conflict episode (i.e., agree that some "other" activity is taking place). However, this agreement is not reflected in a meaningful way in the kappa calculation because non-conflict events (of whatever duration) are not entered into the kappa table. A time-based coding system, where agreement would be "counted" based on pre-determined time intervals, would not suffer this same difficulty. Given these considerations, both kappa and percentage of agreement were calculated using both of the methods described by Bakeman and Gottman (1986), and these data are presented in Table 6. Except in instances where there is perfect agreement, kappa will always be less than percent agreement, and this is reflected in the table. There is no formal criteria for deciding on how high kappa must be to be acceptable, but Fleiss (1981) suggests that kappas of .40 to .60 are "fair", .60 to .75 are "good", and .75 and over are "excellent".

Data Analyses

The results concerning developmental change and stability in mother-child conflict are presented in four sections. The first section presents analyses of control and conflict episodes. This section includes analyses of the total number of control episodes, the proportion of those episodes that resulted in conflict, the average length of conflict episodes, and the relative proportion of conflict resolutions. The second section analyzes change and stability in maternal controls and child responses during conflict episodes. The third section examines associations between mother and child behavior

Table 6

Reliability of Coding Categories

	Method 1		Method 2	
	% Agreement	Kappa	% Agreement	Kappa
Issue Type	93	.89	83	.76
Resolution	91	.83	79	.62
M.Verbal	91	.81	76	.58
M.Physical	94	.91	76	.65
C.Response	92	.89	79	.70

during control and conflict encounters. The final section examines various types of issues that precipitated a maternal control (e.g., limit-setting, initiating play) to see how they impacted on mother-child behavior during the ensuing episodes.

Within the first two sections (i.e., episodic form, mother and child behavior), the main analyses focus on developmental change in the relevant variables, typically by utilizing univariate or multivariate analysis of variance. The analysis of each subset of variables was independent of others, thus providing some protection against Type I error. In addition, age trends were examined through planned comparisons of the linear and quadratic trends for specific variables. Nevertheless, these analyses are based on 12 subjects at each age, and as such, the results of these analyses should be considered descriptive and exploratory, in keeping with the original intent of the study. It should be noted, however, that the longitudinal design makes the effective sample size equivalent to a cross-sectional design with 36 subjects, and has the additional advantage of measuring change directly.

Following the testing of mean differences for variables, which examined developmental change, correlational analyses were done to examine cross-age stability and/or associations amongst key variables. Given the small sample size, a large correlation coefficient would be required to reach statistical significance (i.e., above .58), and a decision was made to use correlations in a descriptive rather than inferential manner. The "heirarchical" rule in deciding on which correlations to interpret was to: (1) consider patterns of correlations rather than single correlations (e.g., a consistent pattern of positive

correlations between a maternal control and child response at each of the three testing periods), (2) use .20 as a "rule of thumb" for interpreting correlations where other than "pattern" was being considered, and (3) utilize previous research findings as a guide in deciding on important correlations to examine (i.e., look for replication of patterns found in previous studies).

Episodic Variables

Analyses of Developmental Change

The first set of analyses focussed on variables that describe features of control and conflict episodes. The initial questions addressed by these analyses included: "How often do mothers and their young children become involved in control and conflict episodes?"; "When conflict episodes take place, how long do they tend to last?"; and, "How are conflict episodes resolved?". For each of these initial questions, subsequent analyses focussed on the major goal of assessing developmental change in the relevant variables.

The means and standard deviations for control and conflict episode variables are presented in Table 7 and Table 8. Table 7 contains the data for the total number of control episodes, the proportion of those episodes that resulted in conflict, and the average length of each episode. A control episode was defined as beginning with a maternal control, and included instances where the child complied immediately and instances where the child engaged in at least one oppositional behavior (a conflict episode). Episode length was measured in terms of mother-child "turns", where each turn consisted of a maternal control and a child response. Each variable was analyzed

Table 7

Control and Conflict Episode Variables

	10 Months	16 Months	24 Months
Total Number of Control Episodes	M 34.667 SD (14.859)	M 46.667 SD (14.456)	M 33.583 SD (11.131)
Proportion Conflict	M .610 SD (.143)	M .582 SD (.117)	M .539 SD (.067)
# of Mother-Child Turns/Episode	M 2.059 SD (0.491)	M 2.630 SD (1.731)	M 2.460 SD (0.949)

Table 7

Control and Conflict Episode Variables

	10 Months	16 Months	24 Months
Total Number of <u>M</u> Control Episodes SD	34.667 (14.859)	46.667 (14.456)	33.583 (11.131)
Proportion <u>M</u> Conflict SD	.610 (.143)	.582 (.117)	.539 (.067)
# of Mother-Child <u>M</u> Turns/Episode SD	2.059 (0.491)	2.630 (1.731)	2.460 (0.949)

Table 8

Conflict Resolutions

Type of Resolution		10 Months	16 Months	24 Months
Child Freely Comply	<u>M</u> SD	.332 (.099)	.461 (.122)	.479 (.185)
Compromise	<u>M</u> SD	.079 (.068)	.149 (.067)	.111 (.111)
Mother Comply or Abandon	<u>M</u> SD	.433 (.148)	.322 (.115)	.375 (.182)
Child Forced Comply	<u>M</u> SD	.154 (.122)	.068 (.060)	.035 (.040)

separately using repeated measures MANOVA. Although a doubly multivariate approach to analyzing all 3 variables simultaneously might have been warranted, the focus of this analysis was on each variable separately rather than on their linear combinations.

The first analysis was on the total number of control episodes at each age. There was a significant main effect of age (Wilks Lambda = .39, $F(2,10) = 7.747$, $p < .01$). A subsequent comparison of the quadratic component indicated a greater number of control episodes for children when they were 16 months old than when they were 10 or 24 months of age ($F(1,11) = 16.891$, $p < .01$).

Control episodes could result in either immediate compliance from the child (a compliance episode), or in one or more oppositional behaviors (a conflict episode). At each age, the mean proportion of conflict was greater than 50%, indicating that the majority of control episodes resulted in at least one oppositional behavior. Although there was an apparent decrease in the proportion of overall conflict with age, the linear effect of age was not statistically significant ($F(1,11) = 16.891$, $p = .16$).

Although the results indicated that most control episodes involved at least some child opposition, the average number of turns per control episode (i.e., one turn = maternal control + child response) did not exceed three turns at any time of assessment (Table 7). Thus, although opposition was a frequent response to an initial maternal control, episodes were generally resolved quickly. There were no significant differences in the length of control episodes as a function of age (Wilk's Lambda = .832, $F(2,10) = 1.013$, $p = .398$).

Once initiated, a conflict episode continued until one of four possible resolutions was reached: (a) child complies of free will, (b) mother abandons the issue or complies with the child, (c) mother forces the child to comply, and (d) mother and child compromise. Relative measures of frequencies of conflict resolution types (i.e., proportions) were calculated to correct for differences in the total number of conflict episodes across individual mother-child dyads. The mean proportion of each of the four resolution types is presented in Table 8.

An effect of using proportional scores is that they give rise to singularity within the correlation matrices (i.e., one score will always be a linear combination of the others), which renders further analysis impossible (Tabachnick & Fidell, 1983). To allow for analysis, a logarithmic transformation was performed on the proportion scores. Because zeros occasionally occurred, a constant (i.e., 1.0) was added to both the numerator and denominator prior to transformation. Since resolutions were all measured on the same scale, resolution type and age were both treated as within-subject factors in a 4 (Resolution Type) by 3 (Age) repeated measures MANOVA.

The analysis indicated a significant main effect of resolution type (Wilk's Lambda = .036, $F(2,10) = 80.208$, $p < .001$), with Child Freely Comply being the most frequent outcome (.42) along with Mother Comply/Abandon (.38), followed by Compromise (.11) and Child Forced Comply (.09). The multivariate effect for age was not significant (Wilk's Lambda = .727, $F(2,10) = 1.881$, $p = .203$), but there was a trend for an age by resolution type interaction (Wilk's Lambda = .242, $F(6,6) = 3.139$, $p < .10$). Subsequent trend analyses indicated a linear

decrease with age in the proportion of Child Forced ($F(1,11) = 15.893, p < .01$) and a linear increase in the proportion of Child Freely Comply ($F(1,11) = 5.649, p < .05$).

In summary, the analyses of developmental change in episodic variables indicated: (a) control episodes were slightly more frequent at 16 months of age than at 10 or 24 months; (b) the proportion of control episodes that gave rise to conflict was above 50% at each of the three ages assessed, with no significant change as a function of age; (c) the average length of conflict episodes did not differ in a significant way across age; and (d) there was developmental change in conflict resolutions, with children freely complying more with increased age, and with forced child compliance becoming less frequent with increased age.

Analyses of Developmental Stability

The preceding analyses suggests that there is developmental change in some of the episodic features of control and conflict variables. Also of interest were questions related to possible stability in mother-child episodic variables across time. Maccoby and Martin (1983) have speculated that one might expect some stability in the frequency of conflict and conflict resolutions amongst parent-child dyads. As they suggest, the quality of conflict at each developmental period "will depend on the amount of conflict and the nature of its resolution at earlier periods" (Maccoby & Martin, 1983, p. 72). The following analyses provide some initial examination of dyadic stability in episodic variables over the early childhood period. Whereas the examination of developmental function (i.e., developmental change in behavior) relies on a comparison of means, the analysis of stability

utilizes correlational procedures.

Table 9 presents the correlations between the major episodic variables between 10 to 16 months and 16 to 24 months. Examination of the correlations related to the incidence, length, and proportion of episodes involving conflicts suggests a pattern of stability in all measures from 10 months to 16 months. That is, there appears to be some predictability in dyads during this period in the number of control episodes, the length of control episodes, and in the proportion of episodes involving conflict. This stability appears between 16 and 24 months, but only in the total number of episodes and in the length of episodes. The stability in the proportion of conflict episodes between 10 to 16 months is not replicated in the 16 to 24 month data.

The cross-time correlations for Resolution Type are presented in Table 9. These data indicate little stability in the proportion of resolution types from the first observation to the second, or from the second observation to the third (stabilities are found in the main diagonals of the cross-age correlation matrices. Thus, specific resolution types were not stable across either of these developmental periods.

Further examination of the data indicates that the strongest correlations for 10 to 16 months were between Child Freely Comply at 10 months with (a) Child Forced at 16 months (+.50), and (b) Compromise at 16 months (-.56). This pattern suggests that conflict resolutions at 10 months marked by high levels of Child Freely Comply were related to greater maternal enforcement at 16 months, and to lower levels of maternal acceptance of compromise at the later age. One possible

Table 9

Episodic Variables: Cross-Age Correlations

	10-16 Months	16-24 Months
Number of Episodes	.60	.53
Length of Episodes	.62	.57
Proportion of Episodes Involving Conflict	.57	.12

Cross-Age Correlations for Conflict Resolutions

Age in Months		16			
		CCO	CM	CF	CP
10	CCO	-.13	-.11	.50	-.56
	CM	.00	-.27	.16	-.01
	CF	-.14	.33	-.22	.33
	CP	.27	-.16	-.23	.06

Age in Months		24			
		CCO	CM	CF	CP
16	CCO	.00	.54	-.30	.05
	CM	.22	-.17	-.07	-.17
	CF	-.08	-.19	.14	.14
	CP	-.09	-.54	.41	-.18

CCO = Child Freely Comply
 CM = Mother Comply/Abandon
 CP = Mother Accept Partial Compliance/Compromise
 CF = Mother Physically Forces Compliance

explanation of these findings is that mothers who experienced high levels of child compliance as a conflict outcome at 10 months were more likely to use enforcement at 16 months - when control episodes reached their peak - as part of an "authoritative" style whereby they were being firm when confronted with a greater need for control of their young children's behavior.

The results from the next age period (16 to 24 months) suggest a much different pattern. That is, high levels of Child Freely Comply at 16 months were related to less enforcement at 24 months (i.e., greater Maternal Comply [+ .54] and lower Child Forced [- .30]). However, a second pattern was also obtained, whereby high levels of Compromise at 16 months were related to lower levels of Maternal Comply (- .54) and higher levels of Child Forced (+ .41) at 24 months. This suggests the possibility of two divergent patterns, where high levels of Child Freely Comply at 16 months were a positive indicator of the child's willingness to cooperate, which enabled mothers to "back off" during conflicts at 24 months. Conversely, mothers who accepted compromise at 16 months may have been using a strategy that was too permissive, and which resulted in a need for greater enforcement at 24 months.

Maternal Control Strategies

The analyses of episodic variables indicated that mothers initiated control episodes quite frequently at each of the three assessments. That is, given that sessions lasted about 50 minutes, control episodes took place an average of between one and two times per

A repeated measures MANOVA indicated a significant main effect of age (Wilks' Lambda = .322, $F(2,10) = 10.517$, $p < .01$), due to a significant decreasing trend ($F(1,11) = 21.767$, $p < .001$). Taken in concert, these results suggest that, over the early developmental period examined, mothers come to rely more and more on verbal controls, and less and less on the relatively "gross" physical interventions measured in this study. These findings seem to fit with casual observations of parent-child interaction, where obvious forms of physical intervention do seem to decrease in frequency during the early childhood years.

Maternal Verbal Control Strategies

Analyses of Developmental Change

This section presents the analyses related to developmental change and stability in maternal verbal control strategies. The subsequent section presents the analyses of physical control strategies. Because proportional scores were used, the same transformation that was used for Resolution Types (see page 56) was applied to the data for verbal and physical control strategies.

The means and standard deviations of the relative frequencies (proportions) of the various maternal verbal control strategies are shown in Table 10. A repeated measures MANOVA, with age and Type of Verbal control as within-subject factors, produced a significant effect for the age by verbal control interaction (Wilks' Lambda = .033, $F(8,4) = 14.44$, $p < .05$). Subsequent comparisons indicated that suggestions, reasoning and bargaining increased in a linear fashion with age (p 's $< .01$). Direct commands showed a tendency to decrease in a linear fashion ($p = .08$), and there was no significant age effect for negative

minute. The next major focus of inquiry for the present study was on developmental change and stability in maternal control strategies.

Maternal control strategies could consist of a verbal component and/or a physical component. That is, a mother might issue only a verbal control (e.g., "Come here!"); might combine this with a physical control (e.g., pull the child with one hand while saying "Come here!"); or might use only a physical component. It would seem to make sense that the relative use of verbal and physical interventions would undergo change during early childhood, given developmental gains in children's language comprehension, and the corresponding decrease in the need for physical interventions. The relative proportion of controls that included a verbal component or a physical component were examined in two separate analyses.

First, the proportion of controls that included a verbal component were examined. The mean proportion of controls that included a verbal component was calculated using the following:

$$\frac{\text{Total Maternal Controls} - \text{Physical Controls without Verbal Component}}{\text{Total Maternal Controls}}$$

The mean proportion of controls that included a verbal component was .80 at 10 months, .85 at 16 months and .90 at 24 months. A repeated measures MANOVA indicated a significant main effect of age (Wilks' Lambda = .516, $F(2,10) = 4.694$, $p < .05$). A subsequent analysis indicated a significant linear effect for age, suggesting an age-related increase in the proportion of controls that included a verbal component ($F(1,11) = 5.342$, $p < .05$).

The mean proportion of maternal controls that included a physical component was .62 at 10 months, .43 at 16 months, and .35 at 24 months.

Table 10

Maternal Verbal Controls

Verbal Controls		10 Months	16 Months	24 Months
Suggestion	<u>M</u> SD	.260 (.134)	.325 (.178)	.328 (.102)
Direct Command	<u>M</u> SD	.712 (.137)	.598 (.155)	.479 (.134)
Reason	<u>M</u> SD	.021 (.034)	.050 (.062)	.129 (.076)
Bargain	<u>M</u> SD	.003 (.010)	.017 (.015)	.060 (.045)
Negative Verbal	<u>M</u> SD	.004 (.011)	.010 (.020)	.004 (.009)

verbal controls (which were relatively infrequent at each time of assessment). These results suggest a steady age-related increase during early childhood in verbal strategies that rely on persuasion or indirect appeals to the child, and a corresponding decrease in verbal controls that utilize direct commands or prohibitions.

Analysis of Developmental Stability

In addition to examining developmental changes in maternal verbal controls, the present data were analyzed with respect to stability across time in maternal verbal control strategies. Was a heavy reliance on a particular strategy at one point in time related to a similar style at later points in development? The correlations of maternal control strategies between 10 to 16 months and 16 to 24 months are presented in Table 11. The data indicate little evidence of stability in maternal verbal controls between 10 to 16 months, with the possible exception of maternal use of suggestions (+.38). In contrast, the pattern of results suggests increasing stability between 16 to 24 months, where each of the verbal strategies at 16 months showed its strongest positive correlations with itself at 24 months. The strongest associations were seen in maternal directives (+.55) and suggestions (+.52), with more modest stability in reasoning (+.30) and bargaining (+.33).

Maternal Physical Control Strategies

Analysis of Developmental Change

The means and standard deviations of the proportions of maternal physical controls are shown in Table 12. A repeated measures MANOVA produced a significant effect for physical control type (Wilks' Lambda = .026, $F(4,8) = 73.77$, $p < .001$). Subsequent analyses indicated a linear

Table 11

Cross-Age Correlations for Maternal Verbal Controls

Age in Months		16			
		Di	Su	Re	Ba
	Di	.20	-.09	-.13	-.31
10	Su	-.24	.38	.32	.28
	Re	.35	.08	-.19	.44
	Ba	-.11	.43	-.27	.27

Age in Months		24			
		Di	Su	Re	Ba
	Di	.55	-.59	-.14	-.21
16	Su	-.27	.52	.27	.15
	Re	-.10	-.46	.30	-.10
	Ba	-.08	-.02	.18	.33

Di = Directives
 Su = Suggestions
 Re = Reasoning
 Ba = Bargaining

Table 12

Maternal Physical Controls

Physical Controls		10 Months	16 Months	24 Months
Gesture	<u>M</u> SD	.254 (.171)	.385 (.201)	.462 (.209)
Give Item/ Distraction	<u>M</u> SD	.163 (.064)	.126 (.097)	.094 (.088)
Physically Restrain	<u>M</u> SD	.391 (.145)	.347 (.140)	.315 (.154)
Physically Remove	<u>M</u> SD	.190 (.139)	.136 (.080)	.129 (.104)
Physically Punish	<u>M</u> SD	.002 (.007)	.006 (.013)	.000 (.000)

increase with age in gestures ($F(1,11) = 25.387, p < .001$). Although there were linear decreases in give item/distract, physical restraint, and physical remove, none of these tendencies were statistically significant. Physical punishment was a relatively low frequency event at each time of assessment.

Analysis of Developmental Stability

The preceding analysis suggests some developmental change in how mothers attempted to use physical controls to guide their children's behavior. Also of interest was whether there was any consistency across time in the way individual mothers utilized physical controls. Table 13 contains the correlations between maternal physical controls between 10 to 16 months and 16 to 24 months. Between 10 to 16 months, there appeared to be some stability in maternal use of physical restraint (+.71) and physical removal (+.60), but no evidence of stability for the other physical control measures. From 16 to 24 months, only physical removal appeared stable (+.76). Thus, with the exception of physical removal, maternal physical control strategies seemed to be marked more by transformations across age than by consistency.

Child Responses to Maternal Controls

The preceding analyses indicated that maternal controls underwent some significant change as children developed from 10 months to 2 years. The next series of analyses addressed the nature of children's responses to maternal controls. When confronted with a maternal control, children can either acquiesce or show some form of resistance, and the next set of analyses focussed on whether there was developmental change in children's response patterns. The discussion of developmental

Table 13

Cross-Age Correlations for Maternal Physical Controls

Age in Months		16			
		Ge	Gi	Rs	Rv
	Ge	.11	-.37	-.33	-.32
10	Gi	.26	.17	.07	.18
	Rs	.02	.47	.71	-.01
	Rv	-.03	.09	.10	.60
Age in Months		24			
		Ge	Gi	Rs	Rv
	Ge	-.03	-.13	.06	-.05
16	Gi	-.24	.47	.09	.60
	Rs	-.01	.69	.09	.36
	Rv	-.25	.01	.49	.76

Ge = Gestures
 Gi = Give Item/Distration
 Rs = Restraint
 Rv = Removal

change in child response patterns is followed by an analysis of developmental stability in children's responses. That is, did children show stability in their responses over time?

Analyses of Developmental Change

Table 14 includes the means and standard deviations for children's responses to maternal controls. The analyses of compliance ratio and oppositional responses were done separately. The compliance ratio was calculated by dividing the total number of child compliance responses by the total number of maternal control attempts. As can be seen in Table 14, the overall compliance ratio was approximately 35% at each age of assessment, with no significant change as a function of age. Similar findings (for a slightly older age-range) were reported by Kuczynski et al. (1987). The results of the present study are interesting in that they suggest that mothers gain compliance to their controls about 1/3 of the time, with little change in this overall rate between 10 months and 2 years.

Given the relatively low (and unchanging) rate of compliance that mothers encountered between 10 months and 2 years, what was the quality of the resistance they encountered? Children's opposition could take one of the seven forms listed in Table 14. As in preceding analyses, proportion scores (relative frequencies) were used, and these were subjected to the transformation used with other proportional data (see page 56). Child opposition was analyzed using a repeated measures MANOVA. The multivariate test could not be run due to sample size constraints. The univariate test indicated a significant age by opposition type interaction ($F(12, 132) = 7.254, p < .001$). Subsequent

Table 14

Child Responses to Maternal Controls

		10 Months	16 Months	24 Months
Compliance Ratio	\bar{M} SD	.363 (.099)	.346 (.126)	.349 (.123)
Opposition Types				
Playful Noncompliance	\bar{M} SD	.012 (.028)	.009 (.026)	.000 (.000)
Passive Noncompliance	\bar{M} SD	.637 (.152)	.667 (.190)	.537 (.205)
Simple Noncompliance	\bar{M} SD	.000 (.000)	.038 (.086)	.232 (.168)
Negotiation	\bar{M} SD	.000 (.000)	.000 (.000)	.007 (.017)
Whiny Noncompliance	\bar{M} SD	.114 (.103)	.089 (.088)	.101 (.095)
Angry Noncompliance	\bar{M} SD	.013 (.025)	.074 (.115)	.065 (.098)
Physical Resistance	\bar{M} SD	.224 (.145)	.112 (.096)	.057 (.075)

comparisons indicated significant linear trends for Passive noncompliance ($F(1,11) = 4.917, p < .05$), Simple noncompliance ($F(1,11) = 39.377, p < .001$), Angry noncompliance ($F(1,11) = 5.954, p < .05$) and physical resistance ($F(1,11) = 12.136, p < .01$). The results for Passive noncompliance reflected similar rates at 10 and 16 months, followed by a decline at 24 months. Physical resistance showed a steady decline over each of the three times of assessment. In contrast, Simple refusal increased from 0% at 10 months, to 4% at 16 months and then to 23% at 24 months. Angry noncompliance was rare at 10 months (1%) and increased to a similar rate of approximately 7% at 16 and 24 months. Although there was not a significant effect for Playful noncompliance, the pattern of results replicates those obtained by Lampard (1986) in finding (a) a low frequency of this form of opposition, and (b) a steady decline in the relative frequency of Playful noncompliance from 10 to 24 months.

In sum, although children's overall compliance rate did not change appreciably during the period from 10 months to 2 years, there were significant changes in the quality of their oppositional responses. Children became less passive in their resistance by the time they reached two years. With age, they also used less physical resistance, but displayed age-related increases in their angry outbursts from 10 months to 16 months. Finally, there were small but steady age-related increases in their use of simple refusal as a means of assertion.

Analyses of Developmental Stability

Table 15 contains the correlations between measures of child responses to maternal control at 10 to 16 months and at 16 to 24 months. Because of the relatively low frequency of certain opposition types,

Table 15

Cross-Age Correlations for Child Responses

Age in Months		16			
10	Comply Ratio	Aversive Noncomply	Passive Noncomply	Physical Noncomply	Verbal Noncomply
Comply Ratio	.31	-.10	-.31	.65	.07
Aversive Noncomply	-.20	-.02	.04	.21	-.36
Passive Noncomply	.13	-.07	.16	-.39	.23
Physical Noncomply	.00	.09	-.19	.26	-.03
Age in Months		24			
16	Comply Ratio	Aversive Noncomply	Passive Noncomply	Physical Noncomply	Verbal Noncomply
Comply Ratio	.56	-.32	.24	-.02	-.04
Aversive Noncomply	-.38	.14	-.29	.00	.27
Passive Noncomply	.35	-.17	.27	-.19	-.08
Physical Noncomply	-.38	.39	-.28	.57	-.38
Verbal Noncomply	.34	-.38	.24	-.32	.23

data were combined for similar categories. High negative and Low negative were combined in the category Aversive. Simple noncompliance ("No") and negotiation were combined in the category Verbal. Playful noncompliance was dropped due to its low frequency, and Passive noncompliance and Physical resistance were kept as they were originally coded.

Examination of Table 15 indicates that there was little stability evident in child responses from 10 to 16 months, with the possible exception of compliance ratio and physical resistance. These two responses also showed the greatest stability from 16 to 24 months.

Further examination of the 16 to 24 month data suggests some interesting patterns of association. Specifically, compliance ratio and passive noncompliance at 24 months show similar patterns of association with responses at 16 months. That is, compliance ratio and passive noncompliance at 24 months are positively correlated with (a) each other at 16 months, (b) verbal noncomply at 16 months, and (c) with earlier 16 month measures of the same behavior (i.e., there was some stability in the measures of compliance ratio and passive noncomply). In contrast, compliance ratio and passive noncompliance at 24 months are negatively correlated with aversive opposition and physical resistance at 16 months. Thus, compliance ratio and passive noncompliance at 24 months, which are positive or neutral responses, showed a pattern of positive correlations with similar behaviors or identical behaviors at 16 months. These two behaviors, which are positively correlated with one another across this measurement period, were both negatively associated with aversive or physical means of resistance. Although only preliminary

findings, these results suggest that early (16 month) reliance on positive or neutral forms of opposition (i.e., verbal, passive) and a willingness to comply, may predict similar behaviors at 2 years, and may signal a reduced likelihood of relying on aversive or physical means of resistance.

Relationships between Maternal Behavior and Child Behavior

The relationship between mother and child behavior was examined through two sets of analyses. The first set of analyses focussed on the associations between mother and child behavior at the same time of measurement (i.e., concurrently), through separate correlations of mother-child behavior at each of the three times of assessment.

Following this, the cross-age correlation between maternal behavior at 10 months and child behavior at 16 months and at 24 months was examined.

Because of the relatively low frequency of certain opposition types, data were combined for similar categories, as in the preceding analysis.

Concurrent Correlations between Mother and Child Behavior

Tables 16, 17, and 18 present the correlations of the child response categories with maternal controls at 10, 16, and 24 months. As with previous correlational analyses, the focus in this analysis was exploratory and the emphasis was on patterns of correlations.

Children's compliance ratio (CR) was negatively correlated with maternal directives at each period, but the size of the correlation decreased with age. In contrast, maternal use of suggestions was positively associated with compliance at each age, although the correlation became

Table 16

Correlations of Maternal Behavior and Child Behavior at 10 Months

<u>Maternal Behavior</u>	<u>Child Behavior</u>			
	Compliance Ratio	Passive Noncomply	Aversive Noncomply	Physical Noncomply
Directive	-.41	-.27	-.30	.50
Suggestion	.38	.38	.32	-.63
Reason	.22	-.34	-.13	.45
Bargain	-.36	-.22	.35	-.02
Give Item	-.04	-.19	.34	-.04
Gesture	-.32	.22	-.06	-.19
Restraint	.15	-.08	-.64	.54
Remove	.25	-.10	.59	-.31

Table 17

Correlations of Maternal Behavior and Child Behavior at 16 Months

<u>Maternal Behavior</u>	<u>Child Behavior</u>				
	Comply Ratio	Passive Noncomply	Verbal Noncomply	Aversive Noncomply	Physical Noncomply
Directive	-.33	-.40	-.40	.55	.29
Suggestion	.33	.40	.46	-.47	-.44
Reason	-.21	-.16	-.24	-.04	.53
Bargain	.37	.07	-.27	.04	.00
Give Item	-.44	-.49	.06	.52	.17
Gesture	-.08	.37	-.25	-.21	-.23
Restraint	.38	-.18	.30	.00	.12
Remove	.07	-.01	.02	-.10	.16

Table 18

Correlations of Maternal Behavior and Child Behavior at 24 Months

<u>Maternal Behavior</u>	<u>Child Behavior</u>				
	Comply Ratio	Passive Noncomply	Verbal Noncomply	Aversive Noncomply	Physical Noncomply
Directive	-.17	-.01	-.25	.06	.28
Suggestion	.11	.18	.33	-.24	-.51
Reason	.05	-.27	-.16	.15	.55
Bargain	.19	.09	.27	.06	-.60
Give Item	-.32	-.38	-.14	.63	.14
Gesture	.73	.47	.22	-.46	-.63
Restraint	-.47	-.32	-.23	.24	.62
Remove	-.49	-.15	.01	.04	.21

smaller at each age. The only physical control that showed a consistent relationship with compliance was mothers' use of giving an item as a distraction, which was negatively related to compliance at each age.

Passive noncompliance showed a pattern of consistent negative correlations with: (a) directives, (b) reasoning, (c) give item, and (d) physical restraint. In contrast, passive noncompliance was positively related to maternal suggestions and gestures at each age period. These results generally suggest that, during the period prior to two years, maternal use of less intrusive strategies appears related to a greater frequency of passive noncompliance, whereas the reverse is true for some of the more intrusive strategies. One interesting exception to this trend is with maternal use of reasoning, which would appear to be a less intrusive strategy, but which was negatively related to passive noncompliance.

Interestingly, the pattern of correlations for physical resistance was almost the exact opposite of that for passive noncompliance. That is, at each age period physical resistance was positively correlated with directives, reasoning, and physical restraint. Consistently negative correlations were found between physical resistance and suggestions and gestures.

There was no apparent pattern of correlations between aversive noncompliance and any of the maternal verbal control strategies. Amongst the maternal physical controls, "give item" was positively associated with aversive noncompliance at each age. None of the other physical control strategies were consistently related to aversive noncompliance, but the category physical restraint displayed an

interesting pattern in that it was negatively related to aversive noncompliance at 10 months ($-.64$), then showed virtually no association at 16 months ($-.01$) and a small positive correlation at 24 months ($.24$). If replicated, this finding would suggest that mothers who use high levels of physical restraint when their children are young (i.e., 10 months) tend to encounter lower levels of aversive opposition than mothers who use lower levels of physical restraint. However, over time, this pattern shifts, such that by 24 months, a greater reliance on physical restraint is associated with a greater frequency of aversive opposition.

Verbal noncompliance did not occur at 10 months. At 16 and 24 months it was positively related to maternal use of suggestions and negatively related to maternal use of directives. This pattern of results is consistent with those obtained by Kuczynski et al (1987) for a slightly older age range (15-44 months, average age 30 months).

Cross-Age Correlations between Mother and Child Behavior

Tables 19 and 20 show the correlations between maternal controls at 10 months and child responses at 16 months and 24 months. The goal in conducting these analyses was to examine whether there appeared to be any longer-term correlation between maternal behavior when children were very young, and their behavior at later ages. Regarding child compliance, the first notable pattern is that compliance at later ages appears to be positively associated with maternal suggestions and reasoning at 10 months. In contrast, child compliance at 16 and 24 months was negatively related to maternal use of directives at 10 months. Thus, there is a consistent pattern whereby higher levels of

Table 19

Correlations of Maternal Behavior at 10 Months
and Child Behavior at 16 Months

<u>Maternal Behavior at 10 Months</u>	<u>Child Behavior at 16 Months</u>				
	Comply Ratio	Passive Noncomply	Verbal Noncomply	Aversive Noncomply	Physical Noncomply
Directive	-.54	-.16	-.16	.42	-.14
Suggestion	.40	.03	.19	-.28	.19
Reason	.51	.36	-.06	-.45	-.02
Bargain	.26	.54	-.14	-.32	-.47
Give Item	.06	.34	-.63	-.02	-.17
Gesture	.07	.58	.24	-.42	-.68
Restraint	-.19	-.60	.20	.51	.29
Remove	.09	-.24	-.22	-.01	.61

Table 20

Correlations of Maternal Behavior at 10 Months
and Child Behavior at 24 Months

<u>Maternal Behavior at 10 Months</u>	<u>Child Behavior at 24 Months</u>				
	Comply Ratio	Passive Noncomply	Verbal Noncomply	Aversive Noncomply	Physical Noncomply
Directive	-.36	.11	-.08	-.03	-.06
Suggestion	.25	-.15	.17	.02	.02
Reason	.44	.21	-.45	.12	.11
Bargain	.11	-.25	.47	-.34	.20
Give Item	.14	.02	-.03	-.19	.22
Gesture	.39	.12	.39	-.20	-.53
Restraint	-.21	.17	-.17	.08	-.17
Remove	-.32	-.34	-.28	.25	.73

child compliance at later ages is associated with a maternal tendency to utilize indirect verbal controls at earlier ages.

Whereas maternal verbal strategies showed some relationship with later child compliance, most of the categories of child noncompliance at 16 and 24 months were not consistently related to maternal verbal controls at 10 months. Amongst the nonverbal controls, maternal use of gestures at 10 months showed a pattern opposite to that shown by maternal use of physical removal. That is, maternal use of gestures was positively related to child verbal opposition at subsequent ages and negatively related to children's physical resistance. In contrast maternal use of removal at 10 months predicted children's physical resistance at 16 (.60) and 24 months (.73), and showed a small negative relationship with verbal opposition at 16 (-.22) and 24 months (-.28). The maternal use of removal at 10 months also showed a small negative correlation with children's passive noncompliance at 16 (-.24) and 24 months (-.34), whereas maternal use of gestures was negatively related to children's aversive noncompliance (-.42 at 16 months and -.20 at 24 months).

Analyses of the Effects of Issue Type On Mother-Child Conflict

Developmental Change in Issue Types

Table 21 contains the means and standard deviations for the proportion of control issue types at each of the three times of assessment. These data were analyzed using a 2-way repeated measures MANOVA, with age and Issue Type as within-subject factors. The Issue Types were: (a) Initiate Play, (b) Limit Setting,

Table 21

Proportion of Control Episodes of Different Issue Types at 10, 16, and 24 Months

Issue Type		10 Months	16 Months	24 Months
Initiate Play	<u>M</u> SD	.34 (.12)	.37 (.10)	.42 (.10)
Limit Setting	<u>M</u> SD	.44 (.13)	.43 (.16)	.39 (.13)
Proactive/ Distraction	<u>M</u> SD	.17 (.06)	.15 (.10)	.16 (.09)
Other	<u>M</u> SD	.06 (.05)	.04 (.04)	.03 (.04)

(c) Proactive/Distract, and (d) Other. There was a significant effect for Issue Type (Wilk's Lambda = .019, $F(3,9) = 155.90$, $p < .001$), indicating that, overall, Limit Setting (.42) and Initiate Play (.38) were the most frequent issues precipitating a control episode, followed by Proactive/Distract (.16), and then by "Other" (.04). The only significant age trend was in Initiate Play, where there was an age-related increase in the proportion of such episodes ($F(1,11) = 7.614$, $p < .05$). Given its relatively low frequency, the category "Other" was dropped from subsequent analyses.

Developmental Stability in Issue Types

Table 22 contains the correlations of Issue Type between 10 to 16 months and 16 to 24 months. There were indications of moderate stability apparent in the data pertaining to Issue Type. That is, the 10 to 16 month data suggests some stability in the issue types Initiate Play and Proactive/Distract. The stability in Initiate Play seems to persist to the 16 to 22 month period, but this pattern does not hold for the Proactive/Distract category, where there is no evidence of predictability from the 16 to 22 month period. Finally, the data provide no evidence of significant predictability for the Issue type Limit Setting.

Developmental Change in Conflict Encounters as a Function of Issue Type

The means and standard deviations for the proportion of control episodes that resulted in conflict for each of the three Issue types are presented in Table 23. There was a significant multivariate effect of Issue Type (Wilks' Lambda = .340, $F(2,10) = 9.715$, $p < .01$), indicating that, overall, the most frequent Issue type involving conflict was Limit

Table 22

Proportion of Control Episodes of Each Issue Type:
Cross-Age Correlations

	10-16 Months	16-24 Months
Initiate Play	.68	.54
Limit Setting	.11	.27
Proactive/Distracton	.50	.09

Table 23

Proportion of Control Episodes Involving Conflict Analyzed
By Age and Issue Type

Context Type		10 Months	16 Months	24 Months
Initiate Play	<u>M</u>	.613	.573	.474
	SD	(.194)	(.147)	(.147)
Limit Setting	<u>M</u>	.700	.623	.594
	SD	(.163)	(.200)	(.144)
Proactive/ Distraction	<u>M</u>	.401	.551	.600
	SD	(.311)	(.256)	(.240)

Setting (with 64% of control episodes involving conflict), followed by Initiate Play (55%), and then by Proactive/Distracton (52%).

Subsequent analyses of age trends indicated an age-related decrease in the proportion of conflict during Initiate Play ($F(1,11) = 5.930, p < .05$). In contrast, the proportion of conflict increased in a linear fashion during Proactive/Distracton episodes ($F(1,11) = 6.135, p < .05$). The slight linear decrease with age in the proportion of Limit Setting was not statistically significant ($F(1,11) = 1.985, p = .18$).

Developmental Change in Child Behavior as a Function of Issue Type

The type of issue precipitating a control also appears to have differential effects on children's compliance, as shown in Table 24. Analysis of these data indicated a significant multivariate main effect of Issue Type (Wilks' Lambda = .310, $F(2,10) = 1.735, p < .005$). This indicated that, overall, the highest compliance ratio occurred during Proactive/Distracton episodes (.47), followed closely by Initiate Play (.43) and then by Limit Setting (.32). Subsequent analyses indicated a linear decrease with age in children's compliance during Proactive/Distracton episodes, from a high of .60 at 10 months to .36 at 24 months ($F(1,11) = 6.471, p < .05$). Although there were slight linear increases in the compliance ratio during Initiate Play and Limit Setting episodes, these trends did not reach statistical significance.

The preceding suggests that the likelihood of a control episode turning into a conflict, or of children complying with their mothers was influenced by the type of issue that precipitated the control episode. Also of interest was how much opposition mothers encountered during the various issue types. To examine this question, children's opposition

Table 24

Compliance Ratio by Age and Context Type

Context Type		10 Months	16 Months	24 Months
Initiate Play	<u>M</u>	.405	.415	.462
	SD	(.160)	(.094)	(.118)
Limit Setting	<u>M</u>	.313	.328	.331
	SD	(.124)	(.153)	(.161)
Proactive/ Distraction	<u>M</u>	.606	.455	.362
	SD	(.247)	(.226)	(.241)

during each issue type was divided by the total number of episodes of that type. The resulting number provided an index of the number of oppositional behaviors encountered for each issue type.

Table 25 presents the means and standard deviations for opposition/episode for each issue type (Opposition) at each age. These data were analyzed by a repeated measures MANOVA. There was a significant multivariate effect of Opposition (Wilks' Lambda = .182, $F(2,10) = 22.539$, $p < .001$), with the average number of oppositional behaviors/episode increasing from 1.09 at 10 months, to 1.36 at 16 months, and to 1.92 at 24 months. The Age by Opposition interaction was also significant (Wilk's Lambda = .268, $F(4,8)$, $p < .05$). Subsequent analyses of specific age trends did not reveal any statistically significant trends for Opposition as a function of any of the Issue Types (p 's $> .10$).

The preceding analyses suggest that the type of issue which precipitated a control episode had a significant effect on the likelihood of conflict, on children's compliance ratio, and on the total number of oppositions taking place during each episode. Also of interest was whether or not the quality of children's opposition was influenced by the type of issue that precipitated a control. An analysis of each of the seven types of child opposition by age (c) and issue type (c) was not feasible because of the large number of cells that would result. A decision was made to group opposition strategies into two categories: (a) Neutral/Positive (Playful noncompliance, Passive Noncompliance, Simple Assertion, Negotiation) and (b) Aversive/Physical (Low Negative, High Negative, Physical Resistance).

Table 25

Number of Oppositional Behaviors per Issue Type Episode

Issue Type		10 Months	16 Months	24 Months
Initiate Play	<u>M</u> SD	1.01 (.44)	.76 (.27)	.79 (.80)
Limit Setting	<u>M</u> SD	1.64 (.91)	2.27 (2.30)	1.88 (1.37)
Proactive/ Distraction	<u>M</u> SD	.62 (.53)	1.06 (.95)	3.09 (6.35)

Table 26 contains data on the relative frequency (proportions) of Neutral/Positive noncompliance at each age and issue type (the totals do not add to 1 because the proportion of Aversive/Physical noncompliance was not included. The proportion of Aversive/Physical could be obtained by subtracting the figures for Neutral/Positive noncompliance from 1).

The data from Table 26 were analyzed using a repeated measures MANOVA. Four missing data points (comprising 3.7 % of the total data) were estimated by mean substitution. There were significant multivariate effects of Age (Wilks' Lambda = .443, $F(2,10) = 6.278$, $p < .05$) and Issue type (Wilks' Lambda = .132, $F(2,10) = 32.934$, $p < .001$). The effect for Issue type reflected Neutral/Positive opposition being the most frequent form during Initiate Play (.94), followed by a lower frequency during Proactive/Distracton (.80), and then by the least amount during Limit Setting (.62). Examination of the age-related effects of Issue Type revealed a significant linear increase with age in the relative frequency of Neutral/Positive opposition during Limit Setting encounters ($F(1,11) = 12.014$, $p < .01$).

These results suggest that the type of issue precipitating a control episode had a significant effect on the quality of oppositional behavior that mothers were likely to encounter during the ensuing episode. During episodes precipitated by an attempt to initiate play, the overwhelming majority of opposition involved passive, playful or verbal forms of opposition (i.e., Neutral/Positive). During episodes precipitated by a mother's attempt to distract her child, the majority of opposition was neutral or positive, but a significant amount (i.e., approximately 20% overall) of opposition was aversive or physical.

Table 26

Proportion of Neutral/Positive Opposition
as a Function of Issue Type

Issue Type		10 Months	16 Months	24 Months
Initiate Play	M SD	.93 (.10)	.95 (.08)	.95 (.11)
Limit Setting	M SD	.49 (.19)	.61 (.21)	.76 (.25)
Proactive/ Distraction	M SD	.73 (.31)	.89 (.18)	.78 (.25)

Finally, the lowest frequency of Neutral/Positive opposition took place during Limit Setting encounters, with there being a significant age-related change in the amount of such opposition. At 10 months, the majority of opposition encountered during Limit Setting episodes involved physical resistance or aversive opposition. With age, there was a steady increase in the relative frequency of Neutral/Positive forms of opposition (and, conversely, a steady decrease in aversive opposition and physical resistance).

Associations between Issue Type and Child Responses

Correlational analyses were used to examine the relationship between Issue Types and child responses at each of the three times of assessment. These analyses addressed the issue of concurrent associations between the frequency of various Issue types and the different forms of child response. Table 27 presents the correlations between the various Issue Types and measures of child compliance and opposition. Because of the relatively low frequency of certain opposition types, data were combined for similar categories, as was done in previous analyses involving opposition type. Examination of the correlations at 10 months suggests little association between measures of child behavior and the proportion of Limit setting issues that took place. The Issue type Initiate play appears to be negatively correlated with Physical resistance (-.61). Proactive/Distraction showed a moderate positive correlation with compliance (.53). At 16 months, none of the correlations between the relative frequency of Issue types and child behaviors exceeded .50. At 24 months, there was indication of a positive relationship between the frequency of Limit setting and

Table 27

Correlation of Relative Frequency of Issue Types
with Child Behavior at 10, 16, and 24 Months

10 MONTHS

Child Behavior	Issue Type		Limit Setting
	Proactive/ Distraction	Initiate Play	
Compliance	.53	-.11	-.06
Passive Oppose	-.13	.37	-.14
Aversive Oppose	-.42	.30	-.06
Physical Oppose	.43	-.61	.19

16 MONTHS

Child Behavior	Issue Type		Limit Setting
	Proactive/ Distraction	Initiate Play	
Compliance	.15	.11	-.22
Passive Oppose	.20	.28	-.32
Verbal Oppose	.04	.32	-.35
Aversive Oppose	-.23	-.30	.40
Physical Oppose	-.09	-.35	.28

24 MONTHS

Child Behavior	Issue Type		Limit Setting
	Proactive/ Distraction	Initiate Play	
Compliance	.21	.00	-.17
Passive Oppose	.31	-.37	-.01
Verbal Oppose	-.38	.46	-.12
Aversive Oppose	.21	.22	-.29
Physical Oppose	-.28	-.22	.51

Physical resistance (.51).

In addition to concurrent associations between Issue type and child behavior, the cross-age association between the two was of interest. That is, it was of interest to determine if individual differences in mother's engagement in various control issues were related to child behavior at later ages. Put differently, Did a mother's tendency to engage in certain types of control encounters at 10 months show any relationship with her child's response to control at later ages? The correlations between the frequency of Issue types at 10 months and children's behavior at 16 and 24 months are presented in Table 28. The results contain interesting patterns of correlations for both Initiate play and Limit setting. Regarding Initiate play, its relative frequency at 10 months was positively associated with child compliance and verbal opposition at later ages. In contrast, there was a pattern of negative correlations between Initiate play at 10 months and physical resistance at 16 and 24 months. The exact reverse pattern of correlations was found for Limit setting, where it was negatively correlated with compliance and verbal opposition and positively correlated with physical resistance. Though exploratory in nature, these results suggest the possibility that mothers who more frequently initiated play with their children at 10 months tended to have children who were more compliant and more sophisticated in their opposition when they were older.

Table 28

Correlation of Relative Frequency of Issue Types
at 10 months with Child Behavior at 16 Months
and at 24 Months

16 Month Child Behavior	Relative Frequency of Issue Types (10 Months)		
	Proactive/ Distraction	Initiate Play	Limit Setting
Compliance	.15	.28	-.20
Passive Oppose	-.09	.37	-.13
Verbal Oppose	-.18	.14	-.17
Aversive Oppose	.04	-.26	.03
Physical Oppose	.24	-.44	.32

24 Month Child Behavior	Relative Frequency of Issue Types (10 Months)		
	Proactive/ Distraction	Initiate Play	Limit Setting
Compliance	.26	.52	-.62
Passive Oppose	.36	-.10	.03
Verbal Oppose	-.38	.46	-.41
Aversive Oppose	.11	-.15	.12
Physical Oppose	-.25	-.27	.39

CHAPTER SIX

DISCUSSION

The present research investigated mother-child interaction following maternal attempts to gain compliance from their young children. Systemic models emphasize that relationships emerge from interaction, and that conflict encounters are a common and intrinsic part of the process whereby relationships are continually organized and reorganized through interactional exchanges. The present research adopted a systemic conceptualization of conflict, and attempted to describe such conflicts developmentally during the formative period of the mother-child relationship leading up to the "terrible twos". The research utilized an observational method that attempted to measure numerous features of the "temporal form" of mother-child control and conflict encounters. This included measures where the conflict episode itself was the "unit" of analysis (e.g., issue type, frequency, length, resolution) as well as measures of individual mother and child behaviors during such interaction. A longitudinal design was utilized to allow for examination of whether early characteristics of conflict interaction related in meaningful ways to later patterns, and to allow for a description of developmental changes in conflict.

This chapter will review the major findings of the present research in the context of previous theory and empirical studies. The chapter reviews this material by breaking it down into four major areas: (a) examination of the general form of control and conflict encounters (i.e., frequency, length, resolution); (b) discussion of developmental

change and stability in individual mother and child behaviors during conflict; (c) review of associations between mother and child behavior; and (d) exploration of how the issue type that "initiated" a conflict impacted on the form the conflict then took. The chapter concludes with a discussion of the limitations of the present research and with suggestions for future study.

One of the first issues examined in this study was the frequency with which mothers initiated controls with their young children, and the likelihood that such initiations would result in conflict. The mothers in this study frequently issued controls to their young children (i.e., approximately one control episode every one to two minutes), and they faced a greater than 50% likelihood that their young children would not comply with their initial control. Thus, control episodes and conflict encounters were common occurrences during this stage of development, a finding that is consistent with previous observational studies and with parent-report data.

Although control and conflict episodes were relatively frequent, they seldom involved the extreme manifestations that are often equated with the term "conflict". Control episodes tended to be brief, and conflicts were typically resolved through children voluntarily complying or through the mother "accepting" some degree of opposition: mothers "forced" compliance relatively infrequently. Coercive behavior on the part of the mother or the child was rare, and the most common form of child opposition at each age was passive noncompliance. These findings seem consistent with Reid's conclusion that "more than 90% of the moment-by-moment interactions between parents and their children, even

in serious and chronic child-abusive families, are either positive or neutral" (1986, p. 247). Thus, extreme manifestations of conflict were rare, even though "constrained" conflicts were quite frequent. This finding is consistent with dynamic models of conflict, which conceptualize conflict as inherent in relationships.

The "commonplace" occurrence of control and conflict encounters appeared to be similar at each of the three times of assessment. That is, there were relatively few significant changes in the overall frequency or average length of control episodes. Although the overall number of control episodes remained fairly similar at each age, these control encounters differed in some important ways. There was a trend towards an age-related decrease in the proportion of conflict episodes. Although this trend did not reach significance, the direction of change is consistent with Lampard's (1986) finding of an overall age-related decrease in conflict.

The present study also found developmental change in conflict resolutions, with children showing linear increases with age in their voluntary compliance, and mothers showing linear decreases with age in their propensity to "force" compliance from their children. The finding of linear increases in voluntary compliance replicates a pattern obtained in Lampard's 1986 cross-sectional study of children aged 10-, 16- and 22-months of age. The findings regarding forced compliance differ from Lampard's cross-sectional study, but there was a modification made to the coding criteria that may explain this result. In the present study, "forced" compliance was coded only when the mother used physical removal that essentially left the child no option but to

comply, whereas in the 1986 study, "forced" was coded following compliance after either maternal restraint or removal. The former coding seems to more accurately represent "forced" compliance, given that restraint was frequently used as a form of guidance that was less intrusive than removal and still allowed for greater choice on the part of the child.

The results pertaining to stability in the episodic variables indicated that, even at the young ages studied, there were stable "dyadic differences" in the frequency and length of control encounters. These results suggest the possibility that, at least in some respects, mothers and their young children may develop a "conflict style" which involves consistent dyadic differences in interaction. Although both mothers and children displayed significant developmental changes in the specific form of behaviors they used during conflict, it appears that there were some indications of stable dyadic differences that went along with these changes. For example, dyads displayed some consistency in the frequency and length of their control encounters. Dyads displaying a high frequency of control encounters at one point in time were more likely to show a similar relative standing at later ages. Similarly, despite many changes in mother and child behavior, dyads that displayed longer episodes were more likely to show a similar pattern at subsequent periods. Patterson (1993) has discussed how similar patterns of stability amidst changes in form seem to characterize antisocial children. He refers to the development of an antisocial trait in such children as a chimera; as an underlying essence that remains despite systematic developmental changes in form. In studying parent-child

relationships, especially as they relate to conflict style, it will be interesting to see if the apparent stable dyadic differences in the frequency of control episodes and episode length relate to later conflict style or to individual child behavior.

Examination of developmental change and stability in mother-child behavior during control and conflict episodes was a major objective of the present research. The obtained results suggest that mother-child interaction undergoes significant change over the period of 10 months to approximately 2 years. Although control encounters may occur with a similar frequency and be of a similar duration during this period, the behavior of mothers and their children changes in many ways.

In regard to child behavior during control and conflict episodes, it was notable that the overall rate of compliance did not change during the 10 month to 2 year period. Thus, a categorization scheme which coded only compliance versus noncompliance would have demonstrated little developmental change in child behavior. Analyses of the differentiated categories of child opposition indicated significant changes as a function of age, with the obtained results generally being consistent with previous research (Kuczynski et al, 1987; Lampard, 1986), and with theoretical conceptualizations of child opposition (Wenar, 1982). Children's opposition became less passive and less physical during this period, and there was a trend towards fewer instances of playful noncompliance. In contrast, the use of "no" increased with age, and the first instances of negotiation began to occur at 24 months. Angry opposition increased after 10 months and was at similar levels thereafter, whereas whiny noncompliance remained at a

similar level at each age.

Taken in concert, these results suggest that, although children become less passive in their opposition during this period, their active opposition consisted of aversive noncompliance as well as increasingly sophisticated forms of verbal opposition. The acquisition of the first potential for verbal opposition did not herald a relinquishment of aversive opposition -- such opposition increased after 10 months. These results may reflect how the autonomous striving of the child interacts with a less than fully developed capacity for skillful self-assertion. Others have noted that the more aversive forms of opposition begin to decline after approximately 2 to 3 years (Heinstein, 1969; Kuczynski et al, 1987; Patterson, 1982). Taken together with the current results, these data suggest that the oft-noted parental exasperation with children during the "terrible-twos" may have its origin in the quality of children's opposition during the second year. Although compliance rates may not differ dramatically between 10 months and 2 years, children become active in their opposition, and although gaining verbal skill, they have not yet relinquished the use of aversive or coercive types of resistance. Thus, although parents may feel that their two-year-olds now have the competence to comply, they are still met with frequent instances of noncompliance -- much of which is still relatively "unskilled".

The developmental changes in child behavior were paralleled by significant changes in maternal strategies between 10 months and 2 years. In general, the results suggest that mothers were adapting to developmental changes in their children. The first notable finding was

of a linear increase with age in the proportion of maternal controls which included a verbal component and a linear decrease in the proportion which included a physical component. This suggests that mothers were increasingly relying on verbal controls as their children developed greater language comprehension. Interestingly, there were also significant age changes in maternal verbal controls during this period, with mothers showing less reliance on directives, and a greater use of more persuasive strategies such as suggestions, reasoning, and bargaining. The age-related shifts in maternal physical controls followed a similar pattern, with an age-related increase in gestures, and nonsignificant trends for a linear decrease in physical restraint and removal. Overall then, the results suggested that as their children developed, mothers were increasingly relying on indirect persuasive strategies.

The age-related changes in maternal behavior suggest that mothers were responsive to their children's growing abilities and autonomy. In her article on socialization, Maccoby (1984) argues that developmentalists have too often assumed that developmental changes in children were the result of socialization practices. She advises that:

...we must be very aware of the way in which developmental change in children constitutes a force that requires change in both the content of the messages that parents transmit, and the means whereby they influence the growing child. (p. 325)

The results of the present research seem to represent a good example of Maccoby's point. The steady increase in the frequency of maternal verbal controls and the corresponding decrease in physical controls suggests an adjustment to children's verbal comprehension. Within the

verbal sphere, the increased reliance on indirect forms of persuasion may reflect maternal recognition of their children's growing autonomy and independence. This latter point is supported by the observation that children's overall compliance did not increase with age, thus making it unlikely that changes in maternal behavior were prompted by the development of greater cooperation in children.

Crockenberg and Litman (1990) found that maternal directives were associated with child defiance in two-year-old children, and suggested that this defiance may arise in the service of autonomy. It is possible that, as their children matured, mothers in the present study were relying more on indirect forms of persuasion because they were increasingly greeted with defiance when they failed to use methods that allowed for negotiation. That is, although suggestions and direct commands may convey similar information about the "content" of the control, they differ in the "relationship" aspect (Watzlawick, Beavin & Jackson, 1967), and as children approach their second birthday, it appears that they become more sensitive to this subtlety. As Crockenberg and Litman (1990) suggest:

Apparently, it is not the specific content of the message but the information it provides about the balance of power in the mother-child relationship to which the 2-year-old child responds, at least in the immediate situation. (p. 970)

Thus, the age-related shift towards a maternal reliance on more persuasive and indirect forms of control may reflect an important "recalibration" in the mother-child relationship that takes place because of developmental maturation in the child. Such recalibrations

are likely to be common developmental phenomenon, as:

Virtually inevitable internal changes (age and maturation of both parents and of children) may change the setting of the system, either gradually from within, or drastically from without as the social environment impinges on these changes (Watzlawick et al. 1967, pp. 147-148)

The analyses of the association between mother and child behavior were exploratory. The pattern of correlations for the analyses of concurrent mother and child behavior indicated that positive or neutral forms of child behavior tended to correlate positively with indirect forms of maternal control. A similar pattern of results was found in comparisons of the strategies used by mothers when their children were 10 months old and subsequent child behavior at 16 and 24 months. The pattern of results for the more negative forms of opposition was less clear, with physical resistance being related to more intrusive maternal strategies, and aversive opposition not showing any consistent pattern of results. Other research has found that negative forms of child opposition tend to be associated with negative forms of maternal power assertion. Crockenberg and Litman (1990) found defiance to be associated with maternal threats, criticism, anger and physical interventions. Londerville and Main (1981) reported that active disobedience was associated with maternal negativity and power assertion, and Dowdney and Pickles (1991) found that the highest rate of onset for child negativity followed maternal irritability, anger, or aggression. In the present study, negative maternal behavior was very rare, and it was thus impossible to assess the relationship between such behavior and the more aversive forms of child behavior. Nevertheless, the present results, combined with findings from previous studies,

suggest that mother-child control and conflict encounters that are marked by a flexible and persuasive maternal style tend to be associated with more competent and socially acceptable child behavior.

The data pertaining to issue type, and its impact on conflicts, suggested that the mothers in the present study had some interesting and effective ways of managing conflicts in ways that helped diffuse conflicts and promote their swift resolution. However, the effectiveness of these techniques depended a great deal on the age of the child and on the issue that set the stage for the control encounter. For example, a very interesting pattern of results was obtained in regards to issues that were precipitated by maternal attempts to distract children by providing some alternative activity or object. This tactic was very successful with 10-month-old children. However, the strategy decreased in its effectiveness as children matured. These results likely reflect the increasing autonomy of young children during the period examined. That is, at younger ages, children appeared to be quite willing to shift their focus from their chosen activity to the new alternative proposed by their mothers. As they grew older, they became less and less willing to do so, resulting in greater conflict, less compliance, and more opposition during such episodes. In his study of supermarket conflicts between mothers and their 2 1/2 year olds, Holden (1983) similarly found that reactive controls were less effective than proactive strategies that engaged the child in an attractive activity before the child wanted something. Thus, for parents of young children, one of the secrets to avoiding negative conflicts might be to arrange things so that the child is engaged in acceptable and desirable

activities that lessen the opportunity for disciplinary encounters.

With respect to the other issue types, mothers were less likely to encounter conflict when initiating play than when setting limits, and, consistent with this, their children were more likely to be compliant, to use fewer oppositional behaviors, and to use less aversive forms of opposition during encounters precipitated by the initiation of play. The results also suggested that, although there was little association between the frequency of play initiation or limit setting and child behavior in the short-term (i.e., concurrently), the extent to which mothers initiated these episodes at 10 months was consistently and meaningfully related to child behavior at 16 and 24 months. A higher frequency of play initiation was related to greater compliance and verbal opposition at later ages, and to less physical resistance. In contrast, higher frequencies of limit setting at 10 months were associated with lower frequencies of compliance and verbal opposition, and to a greater frequency of physical resistance at later ages.

These results are consistent with other studies that have found a relationship between situational demands and child compliance (Schneider-Rosen & Wenz-Gross, 1990), and with research showing a positive relationship between maternal play and child compliance (Lytton, 1980). They suggest the possibility that a "climate for cooperation" can be established by parents who initiate activities where their children will want to cooperate. Play is just such an activity. Parpal and Maccoby (1985) found that maternal use of responsive play resulted in increased frequency of child compliance in a later compliance test. It seems likely that parents who frequently initiate

play with their children are engaging in behaviors marked by warmth and responsiveness, both of which are facilitative of positive child outcomes; and taking part in interchanges that allow for greater mutuality and child autonomy. At a more basic level, joint cooperative play helps define a way of relating that seems to foster relational well-being and individual child development.

The possible positive functions of joint play (or similar cooperative activity) is increasingly being recognized by researchers interested in children who manifest extremes of oppositional behavior. For example, Gardner (1987) found that, during family interaction, conduct-problem children differ from their nonproblem peers in both their conflict activity and in their nonconflict activity (play, conversation). Gardner hypothesizes that the potential for conflict encounters and for conduct problems increases when there is insufficient cooperative activity early on in parent-child interaction. She describes play and similar cooperative activity as "training for harmony", and implies that it helps establish a relationship in which compliance and responsiveness is mutual. The results of the present study lend some preliminary support to Gardner's hypothesis in that there appeared to be both concurrent and long-term effects related to play initiation. At a more general level, Maccoby and Martin (1983) have hypothesized that family members will have less conflicts when there is "Frequent cooperative activity, in which the activities of each family member clearly contribute to group goals ..." (p. 72). The results of the present study suggest that, even at the early ages studied, the types of activity that parents arrange at the "macro" level

(i.e., joint cooperative activity, limit-setting/control oriented) have the potential to strongly affect the more "micro" moment-to-moment interaction taking place. Setting the stage for a healthy relationship thus seems to demand a healthy balance between the necessary disciplinary encounters that will occur and the types of joint activity that help foster relational functioning.

The finding that joint activity of a playful and child-oriented sort seems to foster child compliance raises a possible clinical application of the present research. That is, this finding suggests that parent-child dyads that present with high levels of conflict might benefit from parent-education approaches that incorporate play and similar child-oriented techniques as a basis for improving relational functioning. Such a recommendation is by no means novel, as many behavioral programs stress the need to teach parents to interact with their children in a positive, warm and nondirective manner (see Gard & Berry, 1986 for a review). However, these programs tend to place a heavy emphasis on child compliance as the ultimate objective of the program. Such an implicit or explicit goal seems at odds with the oft-reported finding that high levels of noncompliance characterize even healthy parent-child interaction. This brings up a second clinical application of the current results.

The present study was consistent with the notion that parent-child conflict is a commonplace occurrence in the continual structuring and restructuring of the parent-child relationship. Given this, it may be beneficial to devise parent-education programs that emphasize "conflict-management" rather than child compliance. The former stresses

the idea of mutuality and of negotiation, both of which seem to characterize healthy and well-functioning parent-child relationships. The latter approach, which runs the risk of overemphasizing one-sided child compliance, seems to be more congruent with the type of authoritarian parenting stance that is related to negative child outcomes. Consequently, it may be useful to devise parenting programs based on models that emphasize that conflict is a necessary and potentially healthy part of relationships. Rather than teaching methods of "extracting" compliance from children, such programs could emphasize how parents can teach their children appropriate conflict negotiation skills. Importantly, such programs would also teach parents that noncompliance per se is not a negative thing, that they must be willing to engage in a reasonable give and take with their children, and that it is important to teach their children ways of being assertive in a socially acceptable manner.

Limitations

The results of the present study should be interpreted within the context of the limitations inherent in the data. The small sample size places obvious limits on the sensitivity of some analyses, and required that interpretation of correlational data be considered primarily suggestive. The sample used in the present study also placed limits on generalizability in that it was comprised exclusively of white, middle class, two-parent families, where both the mother and the father had an average of approximately 14 years of education. It is possible that the

pattern of results obtained for more varied and representative samples would differ in some ways from the present findings. For example, Kuczynski et al (1987) found that socioeconomic status (SES) was differentially related to maternal behavior during control encounters. Mothers from a higher SES relied more on explanation, indirect commands, positive reinforcement, and gestures than mothers from lower SES backgrounds.

As with any longitudinal research, it is possible that the experience of repeated testing may have influenced the results of the study such that "repeated testing" instead of normal developmental change was giving rise to the findings. Such a result seems unlikely in the present study given that the obtained results are similar to those in cross-sectional studies where "repeated testing" was not a factor (e.g., Kuczynski et al, 1987; Lampard, 1986).

An additional limitation to the present study arose from the observational procedure used, in which the mothers were aware of being videotaped. Although the children in the study did not appear to share this awareness, and often engaged in behavior which required parental control, it is possible that their mothers relied on what they considered to be more socially desirable forms of control. Consequently, it might be best to consider the current results as being representative, not of interaction in the home, but of interaction taking place in a store, a waiting room, or any similar setting. In such situations, a parent's concern with social desirability often has to adapt to a child's apparent obliviousness to the same consideration. The ensuing control encounters likely reflect important aspects of

relational functioning, even if they do not exactly replicate interactions as they might occur in other contexts.

Directions for Future Research

The current study has a number of implications for future research on conflict and opposition. First, the description of mother-child interaction that emerged from this research strongly supports a theoretical perspective that conceptualizes conflict as a relational necessity. "Necessity" as used here is not meant to imply that conflict is essential for "healthy" relationships (although this may be true); but rather, that conflict is simply intrinsic to relationships. People in relationships engage in conflict as part of the ongoing process of defining and redefining their relationship.

In addition to conceiving of conflict as being an intrinsic interactional necessity, the present study conceived of conflict in developmental and systemic terms. Future work on conflict should utilize a similar conceptualization. That is, to understand the form and function of conflicts, there must be an increased emphasis on studying conflict as a developmental, relational phenomenon. Within the context of parent-child conflict, important issues for such a focus would include examination of how conflict form and frequency at early ages relates to relational and individual functioning at later ages. There is already ample evidence demonstrating that extremes of maladaptive opposition and antisocial behavior becomes a very stable trait (e.g., Patterson, 1993); what we are lacking are descriptions of

how very early patterns of parent-child conflict might be involved in this process. The developmental study of conflict within the context of the parent-child relationship may help to identify how adaptive and maladaptive patterns of interaction develop over time and thereby impact on both relational and individual functioning.

The preceding discussion implies a systemic perspective that would require the development of further refinements in measuring patterns of conflict interaction. For example, the present study focussed on maternal controls as initiators of control sequences because it was difficult to adequately define child initiations, given that many of these involved nonverbal behavior. Although not yet a part of developmental approaches, there exists a body of literature derived from the systems/communications approach which has proposed a number of ways of conceptualizing and measuring conflict interaction (e.g., Bavelas, Rogers & Millar, 1985; Millar, Rogers & Bavelas, 1984). Future research on parent-child conflict would likely benefit from this literature because of its explicit conceptualization of communication as the interactional process whereby individuals define themselves in relation to others, and its resultant emphasis on behavioral measures of communication patterns, both verbal and nonverbal. To adequately describe patterns of conflict interaction requires coding systems that focus on observable behaviors and measure these in ways that capture meaningful patterns of interaction (e.g., escalation, de-escalation, resolutions, etc.).

In summary, what is advocated for future research on parent-child conflict is an approach that is both strongly relational and strongly

developmental. A study of conflict patterns at one point in a relationship tells us little about how conflict plays a role in the development of that relationship. Similarly, a study of individual behaviors that is not interactional tells us very little about the interpersonal matrix that contributes to relational and individual development. In studying the early development of the parent-child relationship, it will be important to further examine how conflicts take place and how they contribute to a healthy relationship that promotes intimacy even as it encourages and allows for the healthy child autonomy of the "terrible-twos".

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APPENDIX A

Dear Parent(s)

Studies of infant and child development are going on at the University of Victoria. Many different topics are studied, including exploration, play, and social development. If you are interested in taking part in one of these or future studies, please fill in the attached postcard and mail it to us.

Although we cannot guarantee that you will be called, it is possible that at some point your child will be at the right age for one of our studies. When that happens we will call you to explain the purpose of the study and invite you to participate in it. Only after we have explained the study to you in detail and answered any questions that you may have will we ask as to whether or not you wish to take part.

Thank you for taking the time to read this letter. I sincerely hope that you will want to take part in one of our studies.

Sincerely,

Michael A. Hunter, Ph.D.
Psychology Department
University of Victoria

APPENDIX B

EXPLANATION OF PROCEDURE

While you are interacting with your child, you will be asked to take part in a number of activities similar to those that you might engage in elsewhere.

DURING THE SESSION, REMEMBER THAT, ASIDE FROM ENGAGING IN THE GENERAL ACTIVITIES DESCRIBED, YOU ARE FREE TO BEHAVE AS YOU NATURALLY WOULD IN SITUATIONS OUTSIDE OF THIS SETTING.

1. Free-Play/unstructured: During this time feel free to play with your child in whatever manner you wish. This period should help your child to become comfortable with the unfamiliar surroundings.
2. Reading Task: During this period, would you attempt to read the two very brief articles that are on the desk near the phone. When you are telephoned later I will discuss one of these articles with you.
3. Mother-child Reading: There is a child's book in the upper right-hand drawer of the desk. During this phase of the session you can spend time reading with your child.
4. Phone Call: You will be telephoned at some point during the session, and I will discuss with you one of the articles that you read during the Reading Task.
5. Free Play/Unstructured 2: At this point you can go over to the toy-box that is closed and open it up for your child. Use any or all of the toys you wish in playing with your child.

6. Try to get your child to help in putting the toys back into the toy-box. I will phone you at the end of this phase and ask you a few brief questions to end the session.

END OF SESSION: THANK YOU FOR YOUR PARTICIPATION

APPENDIX C
INFORMED CONSENT FORM

This is to certify that I, _____,
hereby agree to participate with my child in a scientific study as
an authorized part of the educational research program of the University
of Victoria under the supervision of Robert Lampard.

The study and my part in it have been defined and fully explained
to me by the investigator and I understand his explanation. The
procedures of this study have been discussed in detail with me.

I have been given an opportunity to ask whatever questions I may
have had and all such questions and inquiries have been answered to my
satisfaction.

I understand that any data or answers to questions will remain
confidential with regard to my identity or that of my child.

I certify that to the best of my knowledge and belief, myself and
my child have no physical illnesses or other problems that would
increase the risk to us of participation in this study.

I FURTHER UNDERSTAND THAT I AM FREE TO WITHDRAW MY CONSENT AND TERMINATE
PARTICIPATION AT ANY TIME.

Date: _____. Signature of _____

Parent:

I, the undersigned, have defined and fully explained the above to the
signing parent in detail, and to my best knowledge and belief it was
understood.

Date: _____. Signature of _____

Investigator:

APPENDIX D

GENERAL INFORMATION

The following information is required in order for us to be able to provide descriptive information about the characteristics of the individuals that took part in the study. This information will only be used to generate group averages; at NO TIME will you or your child be identified individually. All information will be kept strictly confidential.

1. Marital status: _____
2. If married/common-law; indicate the number of years that you have been living with your spouse: _____
3. Age of: a) self: _____
b) child's father: _____
4. Years of education: a) self: _____
b) child's father: _____
5. Occupation (includes homemaker, primary caretaker of your children, etc.)
a) self: _____
b) child's father: _____
6. Sex and age of your child's siblings:

7. General health of your child (list any health problems, past or present):

8. Is your child involved in a day-care program of any sort? If "Yes", give approximate amount of time that your child spends in day-care (e.g., 3 hours, 3 days per week):

9. Your child's birth date: _____

10. Your child's sex: Male Female

11. Today's date: _____

APPENDIX E

VIDEOTAPE CONSENT FORM

Now that you have completed the study, please indicate below the way(s) in which we may use the videotape made during this study. The experimenter will explain in detail what each might consist of. Your tape would be identified only by number. The sheet that connects your name with this number will be kept separately in a secure place. Obviously, however, videotapes are not anonymous to anyone who knows you.

I, _____, hereby give my consent to have the videotape made during this study in the following way(s):

- _____ only for analysis by research team (R. Lampard, research assistants, Dr. M.A. Hunter).
- _____ for viewing by professional audiences (e.g., at psychological colloquiums, conferences, etc.).
- _____ for general demonstration purposes (e.g., at talks given to parent groups, undergraduate psychology students, etc.).
- _____ for use in future research projects where individuals like yourself would view the tapes in order to obtain their impressions of the meaning of different behaviors.
- _____ all of the above.
- _____ none of the above; please erase the tape.

Signature: _____

Date: _____

VITA

Surname: Lampard Given Names: Robert Allen

Place of Birth: Regina, Saskatchewan Date of Birth: January 8, 1959

Educational Institutions Attended:

Cariboo College, Kamloops, B.C.	1977 to 1979
University of Victoria	1980 to 1982
University of Victoria	1983 to 1994

Degrees Awarded:

B.A. (Honours)	University of Victoria	1982
M.A.	University of Victoria	1987

Honours and Awards:

University of Victoria Graduate Fellowship	1983-1986
Social Sciences and Humanities Research Council of Canada Graduate Fellowship	1986-1989

