

THE RELATION BETWEEN PARENTING GOAL AND
PARENTING STRATEGY IN POSITIVE AND
NEGATIVE CHILD BEHAVIOR CONTEXTS:
AN EXPERIMENTAL ANALYSIS

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the degree of
DOCTOR OF PHILOSOPHY
July, 2007

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ACKNOWLEDGMENTS

It is with much gratitude and appreciation that I acknowledge my mentor, Dr. Maureen A. Sullivan. Her knowledge of the subject area and expert guidance throughout all aspects of this project, together with her patience, kindness, and willingness to teach, have made this project possible. I also want to thank the other members of my committee, Dr. Doug Scambler, Dr. Cynthia Hartung, and Dr. Patricia Self, for their advice and support.

I would like to thank my wife, Maria, and my children, Sadie, Liam, and Brigham, for their unending support and patience during the long, and sometimes arduous process of completing graduate school. I also thank my parents and other family members for their support and encouragement. Finally, I thank God, whose daily sustaining and love gives me the strength to persevere in all aspects of life.

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CHAPTER I

INTRODUCTION

Over the course of the last several decades there has been a growing body of research on the nature of parent-child interactions and examinations of the many influences on, and outcomes of, the overall parenting process. Relatively recently, a body of literature has emerged which seeks to examine the relation between certain cognitive variables that play a role in the kinds of strategies parents use when interacting with their children. This set of cognitive variables, referred to as “parental belief systems,” includes the thoughts parents have concerning themselves as parents and about the childrearing process, as well as their goals, attributions, and perceptions of the child and child behavior (Coplan, Hastings, Legace-Seguin, & Moulton, 2002).

Researchers have found that the goals parents have in mind when interacting with (typically, disciplining) their child, are related to the types of strategies they will use in response to various child behaviors (Coplan et al., 2002; Hastings & Grusec, 1998). Understanding the relation between parental cognition and parenting behavior may provide useful information to mental health practitioners when conducting parent training and other similar interventions.

The relation between different parenting goals and the strategies parents are likely to use in response to both positive and negative child behaviors is the subject of this paper. First, the theoretical underpinnings and empirical analyses of the processes involved in parent-child interaction and the reciprocal influences between parent and

child will be reviewed. Next, the literature on parental belief systems will be discussed. This review will include the definition of the three types of parenting goals, and explanation of the attributional processes involved in parent-child interaction, and a discussion of the various contextual variables that influence parent cognition and behavior (including child characteristics, child behavior, and child age). Each of these variables will be discussed in the context of how it influences parent cognition and behavior toward children. Next, the relevant parenting strategies will be described (including power assertion, love withdrawal, and verbal strategies). Finally, the current investigation will be discussed.

CHAPTER II

REVIEW OF THE LITERATURE

Theoretical Framework of Parenting Research

One of the major themes of the study of parenting is to examine the relation among certain global parenting beliefs or attitudes and the various parenting behaviors that are characteristic of, or flow from, those beliefs. Embedded within this seemingly simple relation, however, are a multitude of factors that influence the nature, effectiveness, and outcomes of parenting. Among these factors are the individual personality characteristics, psychological and emotional functioning of the parent and child, the interaction that occurs between these variables when parent and child interact with one another, and the context in which parent-child interactions occur. Although a variety of theories exist to explain the complexities of parenting, no single model has yet emerged that is capable of independently capturing the entire picture. Instead, it has been suggested that the available theoretical models be considered as complimentary to one another, each one contributing to the understanding of this multi-faceted and complex domain of human functioning (Cummings, Davies, & Campbell, 2000).

The theoretical foundation for much of today's parenting research is derived from the frameworks of developmental psychopathology, social-learning theory, social information processing in children, and social cognition in parents. Developmental psychopathology is an interdisciplinary theoretical and research paradigm which seeks to understand the interchange among the biological, psychological, and social-contextual

aspects of development, normal and abnormal, across the life span (Cummings, Davies, & Campbell, 2000). Developmental psychopathologists endeavor to identify and understand the dynamic interactions among these variables, which underlie the course of development. As it relates to parenting then, developmental psychopathology is interested in the ways in which individual parent and child characteristics interact with familial and larger contextual domains to produce developmental outcomes (positive and negative). This approach, in contrast to more traditional approaches, emphasizes multidomain and multicontextual methodology in examining the etiology, origin, and course of both normal and disordered development, with an emphasis on evaluating the reciprocal interactions between individuals and social contexts over time. From this viewpoint, parenting is considered an interactional process in which parent and child have mutual influence on each other. Bell (1979) addressed the process of parent-child reciprocity and described the adaptive nature of the relation, emphasizing the comparatively large power of a small infant to influence the parent's caretaking behavior.

Although parenting researchers are more sensitive to the influence of multiple contextual factors and the reciprocal influences between parent and child, the primary emphasis remains the way in which parents influence children. Social-learning theory (Bandura, 1977) has been a key foundational framework within which to evaluate this parent-to-child pattern of influence. Social-learning theory posits that individuals (children, in the context of this discussion) learn to moderate and control their behavior through interactions with and observations of other individuals (parents). This theory suggests that in the day-to-day interactions with parents, children develop a pattern of responses (positive or negative) to parental efforts at limit setting. Patterson (1982) identified a specific pattern of negative parent-child interactions (i.e., social learning) in discipline situations, known as the "coercive family process," that has been shown to lead

to increases in child non-compliance and negative (often aggressive) behavior. The pattern begins when parents demonstrate an over-reliance on harsh, coercive, and inconsistent discipline practices including the use of physical punishment. If the child is noncompliant to parental demands, this noncompliance is met with harsher discipline in an effort by the parent to force compliance, or the parent may relent and fail to follow through with his or her demands at all. The inconsistency in the discipline and the use of excessively controlling strategies often leads to increases in negative child behavior. It is in the repetition of these interactions and the reciprocal influences between parent and child that the coercive family process develops. Thus children become increasingly noncompliant and parents become increasingly harsh and inconsistent. Through this process, the child comes to perceive aggression as an effective tactic for controlling others and reducing aversive events. At the same time, there is less opportunity for learning and practicing more prosocial and adaptive problem-solving skills.

Another theoretical model that informs the study of parenting is that of social information processing. Grusec and Goodnow (1994) describe the mediational role of children's social-cognitive processes in the relation between parental disciplinary techniques and children's internalization of values. Specifically, an emphasis is placed on the understanding of the relation between disciplinary techniques and contextual variables, including the misbehavior committed by the child, the nature of the parental reaction, child characteristics (mood, temperament, previous experience with discipline), and parent characteristics (warmth, disciplinary style). Optimal child development is thought to occur when parents respond flexibly to child behavior. According to this model, the interaction between contextual characteristics of the discipline experience influences the likelihood that children will internalize parental values. This is because the contextual variables affect how accurately the child perceives the underlying

socialization message inherent in the discipline and the degree to which the child will accept that message.

Closely related to the theory of social information processing in children is that of social cognition in parents (Dix, Ruble, Grusec, & Nixon, 1986). This attributional model of parent cognition posits that parents continually assess child behavior by determining whether the behavior is reflective of the child's intentions and disposition or of influences on the child's behavior exerted by other forces (i.e., situational demands or developmental limitations). Thus, how a parent responds to child behavior is partly dependent on the attribution the parent makes as to the cause of that behavior.

Parenting researchers often discuss and conduct research on the basis of groupings of parents according to their parenting style. By definition a parenting style is conceptualized as an overarching pattern of childrearing that characterizes a parent's typical repertoire of responses to child behavior (Coplan, et al., 2002). This pattern of parental responding has typically been viewed as transcending the influence of contextual or situational variables, such that parenting style has been conceptualized as a trait, as opposed to a state variable in much of the research in this area (Grusec & Goodnow, 1994). The earliest description of categories of parents on the basis of parenting style was provided by Diana Baumrind (1967, 1971). Baumrind described three types of parents, based primarily upon the level of expectation parents have for child behavior and performance and the level of behavioral control and emotional support provided in order that the child might meet those expectations. Baumrind's classification system identified authoritative, authoritarian, and permissive types of parents. Authoritative parents use firm and consistent control centered on helping the child meet the increasing demands of maturity dictated by societal standards. This group of parents exercises a high degree of behavioral control in the context of warmth (positive emotional relationship) and

encouragement of the child's autonomy and development of individuality. Authoritative parents tend to use primarily inductive techniques (e.g., reasoning and explanation) and mild punishment (time-out, mild physical punishment or control when necessary) in responding to child noncompliance. In contrast, authoritarian parents, who also exercise high levels of behavioral control and have high expectations, do not exhibit the emotional warmth and encouragement that is characteristic of authoritative parents. This group of parents expects immediate and strict obedience to parental authority, and responds with swift and sometimes severe punishment to child noncompliance. Finally, permissive parents are nearly the opposite of the other two styles. This group of parents is accepting and tolerant of most child behaviors (including noncompliance) and therefore exercises limited amounts of behavioral control. Although permissive parents tend to be highly warm and encouraging, they are also reticent to enforce rules or impose authority, thus leading to greater acceptance of the child's impulsive and disruptive behavior.

Baumrind's work has been expanded upon by other researchers (Maccoby & Martin, 1983) who identified a fourth type of parent described as indifferent-uninvolved. This group of parents is emotionally uninvolved with their children and expends limited energy in caretaking. Interactions with the child are dealt with in a manner most likely to lead to a quick resolution requiring the least amount of effort on the part of the parent. Clearly maladaptive, this pattern of parental responding frequently leads to neglectful care of the child.

Since the time of Baumrind's initial typological essay on the nature of parenting styles and subsequent additions by Maccoby and Martin, a considerable body of research has emerged. Some of this research has called into question the usefulness of parental classification and has demonstrated the difficulty of categorizing parents on the basis of global and mutually exclusive categories of parental responding so narrowly defined

(Sternberg, 1994). To be sure, there has been research demonstrating consistent *patterns* of parental responding (McNally et al., 1991), but the earlier suggestion that parents can be neatly grouped into three or four distinct categories based primarily on their parenting behavior has all but been abandoned to more fine-grained analyses of such behavior and the various contextual and other influences upon that behavior. With respect to parenting behavior, research has shown that the same parent may utilize different parenting strategies at different times, that these strategies are influenced by external circumstances, and that they may be uniquely implemented with different children (Grusec & Goodnow, 1994). Thus, the earlier categorizations, which emphasized both the behavioral and emotional characteristics of parenting behavior, have become somewhat less definitive. Nevertheless, research has demonstrated that, although parents may not easily be grouped on the basis of their behavior, there may be some unique patterns of affective arousal that typify these groups of parents. Thus, it may be that the emotional characteristics of the parents are more meaningful than their behavior in classification schemes (Grusec & Goodnow, 1994).

A variety of factors have been identified as having an influence on parenting behavior. Among these factors are parental belief systems (cognitive variables), contextual variables (e.g., child behavior), and the emotional responses experienced by parents following child misbehavior. The following sections will present a review of the literature relating to these key factors. Note that the term *parents* refers to both mothers and fathers. The more gender-specific terms (mother & father) will be used when necessary to clarify the group of parents upon which a given research finding is based.

Parental Belief Systems - Cognition in Parenting

Parental beliefs are the thoughts parents have concerning themselves as parents and about the childrearing process (Coplan et al., 2002). In addition, parental beliefs

include parenting goals, attributions, and perceptions of the child and child behavior.

With respect to parents' beliefs about themselves, researchers have examined the phenomenon of parental efficacy beliefs, or the degree to which parents believe they are capable of promoting positive child outcomes (high vs. low efficacy beliefs) (Luster & Kain, 1987). Parental efficacy has been shown to relate to parenting behavior in a variety of consistent ways. For example, Luster and Kain (1987) observed that parents high in efficacy believe that love, affection and modeling are critical, while parents low in efficacy believe discipline is more critical. Bondy and Mash (1999) similarly found that mothers low in parenting efficacy tended to report greater use of coercive discipline.

Parents also have beliefs concerning the childrearing process in general. Research in this area has examined parental beliefs about discipline strategies, beliefs about the value of conformity versus independence, beliefs about the promotion of exploratory behavior, and beliefs about affectionate and responsive behavior toward the child (Pinderhughes, Dodge, Bates, Petit, & Zelli, 2000).

Other issues of relevance in this area of study are parental goals, attributions, and perceptions. These issues will be examined in greater detail in the following sections.

Parenting Goals

A major component of parental belief systems is that of parenting goals. Dix (1992) defined parenting goal as the outcome that a parent has in mind and hopes to achieve during a given interaction with his or her child. Researchers have identified three broad categories of parenting goals, parent-centered, child-centered, and relationship-centered (Hastings & Grusec, 1998). Parent-centered goals emphasize the satisfaction of needs associated with the parental role (e.g., establishing/maintaining authority, obtaining child compliance and respect) (Hastings & Grusec, 1998). Child-centered goals emphasize the satisfaction of the child's needs, teaching the child an important personal

value or lesson, and of fostering a positive parent-child relationship. In addition to this general definition of child-centered goals, two specific sub-types have been identified, empathic goals and socialization goals. Empathic goals lead the parent to strive for mutually agreeable outcomes in discipline encounters with the aim of building love and trust (Coplan et al., 2002). Socialization goals involve teaching the child an important value or lesson aimed at fostering his or her ability to get along with others. Relationship-centered goals refer to a parent's desire to foster close and harmonious bonds within the family (Hastings & Grusec, 1998).

In addition to the focus of the goal (parent, child, or relationship), research has sought to examine the influence of short-term versus long-term parenting goals and the parenting strategies associated with each. In a sample of 64 mothers and 4-year-old children, Kuczynski (1984) instructed mothers to use whatever means necessary to teach their child to accurately sort a container of forks and spoons into two separate containers. The children's sorting behavior was then examined both in the presence and absence of the mother. The sample was divided into two groups, one in which the mothers were informed of the fact that their child would be required to perform the sorting task in their absence (long-term condition), and one in which no such instruction was given. These conditions could be conceptualized, for purposes of the present discussion, as representing short-term and long-term parenting goals. There was an observed effect of these parenting goals on the mothers' parenting behavior. The mothers in the long-term condition tended to use greater nurturance and reasoning than mothers in the short-term condition. There was also an effect on the child's compliance behavior. The children in the long-term condition engaged in more compliance and less noncompliance than the children in the short-term condition, and the correlations between child compliance and maternal nurturance and reasoning were high. This study provides experimental evidence

for a connection between the time frame for the parenting goal and the strategies used.

As the field of parenting research has evolved, studies have become more and more sophisticated, including various combinations of parenting goal types and child behavior situations. Some of the most recent research using this type of analysis was conducted by Hastings and Grusec (1998).

In a series of studies, Hastings and Grusec (1998) sought to evaluate the relation among multiple parental goals and strategies. In the first study, 103 adults (48 parents, 55 non parents) responded to hypothetical vignettes depicting a 6-year-old child engaged in a variety of misbehaviors. After reading each vignette the participants were asked to pretend that they were the parent depicted in the situation, and to describe what they would do or say to the child to handle the situation. The participants then rated the importance of six pregenerated parenting goals (two from each category - parent-, child-, and relationship-centered). The results showed that, when an individual endorsed greater importance of a parent-centered goal, he or she reported greater use of power assertion and less use of reasoning. The converse was true when the participants had a child-centered or relationship-centered goal in mind (i.e., they reported less power assertion and more reasoning).

In the second study, a sample of 96 parents (65 mothers, 31 fathers) of young school-age children (5 to 7 years old) were interviewed about actual discipline encounters with their own children. Using an elaborate coding system, the researchers identified several categories of parental goals, behaviors, and attributions. In this study, parents described either the most recent public or private discipline interaction they had with their child. Afterward each parent was asked to think about the goal he or she had in mind or what he or she hoped to accomplish in the situation. Parents then rated their *most important goal* on the 1 to 7 scale. Parents who cited more than one goal were asked to

rank order their goals, and provided the 7-point ranking only on the most important goal. Parents' responses were later coded into 6 goal types based on center (parent-, child-, or relationship-centered) and immediacy (short-term vs. long-term).

Parents' reported discipline behaviors were coded into eight categories, and factor analyzed to form four factors. The factors included *dominating behavior* (threaten/punish, punitively control, & negatively control), *directive behavior* (firmly control, surrender/avoid), *responsive behavior* (share control, show warmth), and *reasoning* (provide rationale, explain).

The results showed that, across parent groups (i.e., whether they described a public or private discipline encounter), parents who were most concerned with parent-centered goals used more dominating behavior than parents with child-centered goals. Likewise, parents with child-centered goals used more reasoning than the other groups. Parents whose primary goal was relationship-centered were more responsive than parents with parent-centered goals. Additionally, it was found that parents with parent-centered goals used more directive behavior than any other behavior, and significantly less responsive than reasoning behavior. Parents with child-centered goals were more directive and used more reasoning than they did dominating or responsive behavior. Parents whose primary goal was centered on the relationship used more directive behavior than dominating or responsive behavior; however, they did not use significantly more reasoning than responsive behavior, as was the case with the child-centered focus.

In the third study, a sample of 97 adults (44 parents, 53 non parents) was asked to respond to hypothetical vignettes depicting a 6-year-old child. In this study the authors sought to examine whether manipulating parental goal (i.e., providing the parents with a goal instead of asking them what their goal was, or would be) would reliably result in the adults endorsing parenting strategies consistent with the other two studies. The study

confirmed this hypothesis, demonstrating that parents who were asked to consider parent-centered goals reported the anticipated use of significantly more dominating and directive behaviors and fewer responsive behaviors than when they were asked to consider a relationship-centered goal. When participants were asked to consider a child-centered goal they endorsed the anticipated use of significantly more directive and reasoning behavior and less responsive behavior than if they were asked to consider a relationship-centered goal. Levels of anticipated use of dominating, reasoning, and responsiveness did not vary significantly when participants were asked to consider a parent-centered goal. Reported use of reasoning was significantly greater than dominating or responsiveness when participants were asked to consider a child-centered goal. Finally, when asked to consider a relationship-centered goal, participants anticipated using significantly fewer dominating behaviors than either responsive or reasoning behaviors. Taken together, the three studies by Hastings and Grusec provide strong support for the connection between parenting goals and parenting behavior.

Finally, Edgington and Sullivan (2006, unpublished manuscript) conducted a pilot study to determine whether a single questionnaire could successfully measure a parent's use of multiple parenting strategies in more than one context, while at the same time experimentally manipulating the parenting goal. Fifty undergraduate students were recruited (24 males, 26 females, Mean age = 19.82) from introductory psychology classes. All participants completed a questionnaire designed to measure the influence of both child behavior (context for the parent-child interaction) and parenting goal (parent-, child-, and relationship-centered), on likelihood of using each of 10 parenting strategies. This is the same questionnaire utilized in the present research (see pg. XX for detailed description). A 3 (goal) x 4 (context) within-subjects MANOVA with parent-, child-, and relationship-centered as the levels of goal, and pro-social, poor social skills, compliance,

and non-compliance as the levels of context, was conducted. This analysis revealed significant effects of both factors (Goal: $F(20, 30) = 2.27, p < .021$; Context: $F(30, 20) = 32.97, p < .001$). Thus, participants' ratings of the likelihood of using the different parenting strategies varied significantly as a function of both goal and context, demonstrating the validity of this questionnaire for the purpose of measuring these constructs.

Parental Attributions and Perceptions of the Child and Child Behavior

Another parental cognitive variable that has been shown to have a strong link with parenting behavior is the parent's attributional and perceptual framework. A comprehensive study of maternal attributions, which examined the influence of overall child behavior on maternal beliefs, was conducted by Strassberg (1997). Thirty-six mothers of young boys (mean child age 4.5 years, grouped as mothers of aggressive vs. mothers of non-aggressive boys) were presented with vignettes depicting one of several parent-child interactions. In each vignette the child was engaged in a play activity, followed by a maternal directive to engage in a less desirable activity (e.g., "go to bed"), after which the child responded in one of six ways (compliance, request, statement, complain, ignore, and mild opposition). Mothers were then asked to judge the severity of noncompliance and to make an attribution regarding the child's intent for each vignette. It was found that mothers of aggressive boys made a greater number of negative judgments regarding child behavior and negative attributions regarding child intent than did the mothers of non-aggressive boys. Mothers of aggressive boys viewed their sons' requests and statements as more noncompliant than did mothers of non-aggressive boys. In addition, mothers of aggressive boys attributed all noncompliance to hostile intent on the part of the child (e.g., "to get back at" or "get even with" the mother for telling him what to do). Maternal beliefs were associated with differences in discipline strategies,

with mothers of aggressive boys using greater amounts of coercive discipline than mothers of non-aggressive boys. Of the two types of beliefs (attributions and judgments of behavioral severity), attributions appear to have greater influence on parental behavior, as attribution was a stronger predictor than judgment of noncompliance severity in discriminating between the two groups of mothers. Strassberg posited that mothers of aggressive boys were stuck in a “processing trap” in which their attributions of defiant intent led them to respond with greater power assertion, which in turn led to the exacerbation of the child’s negative behavior.

Of course, not all attributions center on the negative aspects of parent-child interaction. Some research has demonstrated that when parents make situational attributions (i.e., consider the source of misbehavior as existing outside the child and beyond his or her control), they tend to respond with greater empathy and acceptance (i.e., in a more child-centered manner) (Grusec & Hastings, 1998). In the second Hastings and Grusec study, described earlier, the authors discovered that parents make attributions regarding both the dispositional and intentional nature of child misbehavior. Hastings and Grusec combined these two dimensions to form a single measure of attributions ranging from “situationally caused and unintentional” to “dispositionally caused and intentional.” They found that attribution scores were correlated with parenting goal scores. They also found that attributions have a mediating role in the relationship between certain parental goals (namely child short-term and parent long-term goals) and dominating behavior. This was evidenced by the absence of a correlation between parental dominating behavior and parental goals, when attributions were held constant. Thus parental attributions regarding child misbehavior are at least partially connected with the responses parents make to that behavior.

Parents’ perceptions of the child and the child’s misbehavior have also been

shown to relate to parenting strategies. Patterson (1982) argued that parental perception of the child and child behavior may be directly related to the way in which the parent treats the child. He suggested, and later research has shown (Pinderhughes, et al., 2000) that parental perception of the child may mediate the identified relationship between parental stress and parents' discipline responses. In addition, as was discussed previously, Strassberg (1997) observed that maternal judgments regarding the severity of child misbehavior discriminated between mothers of aggressive versus non-aggressive boys, although the effect was not as powerful as that of the attributions made regarding the cause of the misbehavior.

Contextual Variables

Of significant importance to modern-day parenting researchers is the context in which parenting behaviors occur, and the role contextual variables play in influencing parental goals, attributions, and chosen discipline strategies. Some have argued that parental beliefs (e.g., parental goals) are more predictive of parenting behavior when considered in combination with situational and contextual variables, as opposed to the older conception of parenting behavior as a trait (Smetana, 1994). Bugental and Johnston (2000) asserted that parental beliefs provide guidance in differentiating parental response patterns in different contexts. Parental beliefs have been shown to be influenced by certain contextual variables, such as the specific nature of a given childrearing situation (Grusec & Goodnow, 1994; Grusec & Kuczynski, 1980). Furthermore, some research has shown that variations in children's behaviors may elicit different parental beliefs (Hastings & Coplan, 1999). Researchers have considered the influence of a variety of contextual variables including: the setting (public vs. private), the specific child behavior, the characteristics of the child, and the age of the child. The following section will focus on the influence of these contextual variables on the goals and behaviors of parents.

Public Vs. Private Parenting

No doubt each of us behaves as least somewhat differently at home than we do in public. Researchers in the field of parenting have observed this phenomenon in studying the discipline strategies of parents in various public and private settings. An early study by Holden (1983) examined the behavior of mothers and children (aged 27 to 34 months) in a supermarket. Mothers in this study reported the belief that they should be able to anticipate the behavior of their child in different situations, and be able to prevent negative child behaviors from occurring. Half of the mothers in the study stated they felt responsible for controlling child misbehavior by monitoring the environment and altering the environment to foster good behaviors. It was also found that mothers experienced greater embarrassment in this public setting and that this feeling of embarrassment seemed to lead to parent-centered discipline. Specifically, the second most frequently reported response to child misbehavior in the supermarket was a power assertive one (25% of total parental responses). The only parental response used more frequently was reasoning (32% of total parental responses), which was most often coupled with a power assertive response. Thus, these mothers were observed to use strategies designed to elicit immediate compliance (power assert) and perhaps stave off any outbursts (reasoning). Hastings and Grusec (1998) directly compared the goals and behaviors of parents who reported on either a private or public discipline encounter. They found that, in a private setting, parents showed greater concern for achieving socialization goals and establishing parental authority, whereas controlling the child's immediate behavior was of greater concern in public. Thus, whether parents are interacting at home, or in public, appears to have an influence on their identified goals and chosen strategies for handling child noncompliance.

Child Characteristics & Behavior

Certain characteristics of the child and the child's behavior may also influence parenting goals and behaviors. Anyone who has worked with children has experience with their developing sense of autonomy. Children are constantly in the process of negotiating varying levels of independence from their caregivers (Belsky, Woodworth, & Crnic, 1996; Crockenberg & Litman, 1990; Vaughn, Kopp, & Krakow, 1984). The child struggling for autonomy often engages in behaviors that are contrary to parental wishes, and are thus considered noncompliant. Parents are in the difficult position of balancing the developmental inevitability of autonomy with the desire to have children who comply with certain rules. Although the development of autonomy is considered a positive event in a child's life, this normal developmental process is accomplished with varying degrees of difficulty and impact on the parent-child relationship.

The temperament of the individual child is a factor that has an impact on the relative ease with which the child is able to obtain autonomy from the parent. Temperament is a pattern of behavior, or behavioral style, which is present from birth (Buss & Plomin, 1984; Chess & Thomas, 1986) and is relatively stable over time. Given that children, even within the same family, have different temperaments and respond differently to different situations, the need exists for parents to modify their parenting behavior to fit the characteristics of the child with whom they are interacting. Thus the developmental struggle for autonomy and child temperament are two factors that influence child behavior. These influences on child behavior are thought to have an indirect influence on the goals and behaviors of parents.

In addition to the influence of developmental seeking for autonomy and temperament on parenting goals and behaviors, certain researchers have examined the influence of specific types of child behavior on parents. In a large (N=631) at-risk sample of parents and children (child mean age 6.2 years), Stormshak, Bierman, McMahan, and

Lengua (2000) examined rates of various parenting behaviors (punitive, inconsistent, and aggressive) across several types of child behavior (oppositional, aggressive, hyperactive, and internalizing). Children in this high-risk sample were grouped into four categories on the basis of their scores on standardized child behavior rating scales. The groups were, oppositional only, aggressive and oppositional, hyperactive only, and multiproblem children (those high on aggressive, hyperactive, and oppositional behavior), with a control group of “low problem” children (those with no significant elevations on behavior rating scales). The researchers found that parents of hyperactive children used greater punitive discipline but with less intensity than parents of aggressive or oppositional children. They also found that parents of oppositional and aggressive children exhibited lower levels of warmth than parents of “low-problem” children. Thus, child behavior appears to have an influence on parent behavior, although the effect is no doubt bi-directional.

Further evidence of this phenomenon is provided by Strassberg (1997) who observed that mothers of aggressive boys and mothers of average boys differed significantly in their reported rates of the use of physical discipline (with mothers of aggressive boys endorsing greater use of this power assertive technique). Thus, certain categories of child misbehavior are associated with specific patterns of parental cognition and behavioral responding.

A study by Coplan, Hastings, Lagace-Seguin, and Moulton (2002) utilized a self-report format to explore the effect of child behavior (considered a contextual variable) (child engaging in prosocial, shy, aggressive, or general misbehavior) and parenting style (authoritative or authoritarian) on maternal beliefs and affective responses in various situations. The sample consisted of 70 mothers of children 2½ to 6 years old. Mothers were asked to rate (on a likert type scale) their parenting goal, attribution of the cause of

the child's behavior, and their emotional reactions to specific child behaviors in each of the above-mentioned categories. The researchers found that situations marked by high levels of child misbehavior were more likely to elicit strict maternal responses, whereas positive child behavior was more likely to elicit an empathic response. Differences were noted across the two types of mothers, in that authoritarian mothers tended to make internal attributions regarding *negative* child behavior and external attributions regarding *positive* child behavior. The opposite pattern was observed in the authoritative mothers. The authors noted that parenting styles are most reflective of parents' behaviors specifically in discipline situations, and less so in other situations. Further, the authors found support for a moderating effect of child behavior context on the relation between a global parenting style and specific parenting behaviors. With respect to the differences between the authoritative and authoritarian mothers, it was found that mother's parenting *behaviors* were largely situationally determined, whereas their overall state of *affective arousal* remained relatively stable across contexts. This illustrates the concept that parenting style is more a function of the parent's characteristic emotional response in parent-child interactions, and less a function of their parenting behavior (which is more contextually determined).

Finally, a laboratory study of mothers and young children (ages 10 to 20 months of age) by Zahn-Waxler and Chapman (1982) found that mothers used predictable parenting strategies following specific types of child misbehavior. In this study, child behaviors included physical or psychological harm to others, harm (or potential harm) to objects or property, and lack of self control. Parenting behaviors included explanations, instructions, verbal prohibition, physical punishment, physical restraint, and love withdrawal. Results showed that mothers used more physical punishment and love withdrawal for destruction of property and poor self control. Physical restraint was used

most frequently for lapses of self control, and explanations and instruction were used more frequently for harm to people or property.

Child Age

Research has shown that child compliance varies, in part, as a function of the age of the child. It has been shown that very young children (less than 18 months old) have a limited ability to delay their actions, and that this ability increases drastically between 18 and 30 months of age (Vaughn et al., 1984). Kopp (1982) found additional support for this concept, noting that self-regulation evolves as a developmental progression from infancy to childhood, and results in the ability to monitor and modify one's behavior. Kaler and Kopp (1990), in a sample of mothers and young children (ages 12 to 19 months) found that noncompliance was mildly positively correlated with age, which could be attributed to age-appropriate struggles for autonomy. Elsewhere it has been found that direct defiance and passive noncompliance peak around age three and then decline (i.e., negative correlation) with age (Kuczynski & Kochanska, 1990). Kuczynski, Kochanska, Radke-Yarrow, and Girnius-Brown, (1987) examined changes in the form of child noncompliance and parenting strategies as a function of the child's age in a sample of mothers and young children (age 15 to 44 months). The researchers found that children decreased in their rates of passive noncompliance and direct defiance from age 2 to 3, and that the children increased in their use of negotiation during this same time period. They also found that mothers used more verbal and less physical means of discipline as the children increased in age. The authors speculated that this shift from physical to verbal parenting strategies was related to the child's increasing ability to comprehend parental instructions and prohibitions (which was manifested by the increased use of negotiation on the part of the children). Thus the age of the child, and certain developmental changes, appear to have a direct influence on the child's ability to

control his or her behavior and the manner in which he or she interacts with the parent. These changes have implications in terms of overall child compliance and the parenting behaviors necessary to elicit compliance. In other words, the developmental trend toward greater use of negotiation on the part of the child may lead directly to the greater use of reasoning and other verbal strategies on the part of the parent.

Earlier work by Achenbach and Edelbrock (1981) provides information regarding the changes in child behavior that occur across the developmental spectrum from age 4 to 16. In general they observed that behavior problems, particularly in terms of global problem behavior, decline with age. However, fluctuations were observed with respect to individual problem behaviors. Examples of the changes in some of these behaviors are provided here to illustrate the way in which child age may alter the types of discipline situations likely to be encountered by parents as children mature. For example, arguing remains nearly constant in girls across the age span, whereas boys tend to argue more during the 5 to 7-year-old period, and then decline, until they exhibit another increase in arguing at age 12, with a subsequent leveling off to the level of arguing shown by girls at age 16. This pattern of changes in arguing require the parent to make reciprocal changes in their approach to discipline with the child. Similarly, disobedience at home declines markedly between ages 4 and 11 in boys and girls, then at age 12 boys show an increase in disobedience followed by additional reductions whereas girls levels of disobedience generally decline across the age span. Fighting shows a mild increase at age 11 for girls and age 12 for boys, otherwise fighting is at a low level across the spectrum. Impulsivity generally decreases in boys with a mild upswing around age 10 and again at age 16, in girls there is a pronounced downward trend across the age span with the exception of a mild upswing around age 8. Lying and cheating decline from age 4 to age 11 in both boys and girls, followed by a mild upward trend in boys that declines at age 16, with girls

demonstrating a downward trend beginning at age 11 and returning upward at age 16 meeting the level of their male counterparts. By contrast, difficulty with schoolwork shows a mildly increasing trend across the age span which is slightly worse in boys. Stubbornness and irritability decrease from age 4 to 11, and then increase slightly in both boys and girls. Moodiness generally increases across the age span, with the exception that boys show a sharp decline in moodiness between ages 10 and 11. Swearing increases slightly across the age span in both boys and girls. With all of these developmental changes in child behavior, parents are presented with changing demands on their skills as parents. Whether a parent needs to respond and the form of his or her response to issues (e.g., school problems, lying and cheating, irritability, etc.) will, of necessity, change as the child matures.

Note that, although some work has been done to examine the influence of child age and development on child compliance and parenting behaviors (as cited above) there is more to do in this area. No study, of which the author is aware, has directly compared the potential differences in parenting goals and parenting behaviors that may occur across broad age groups (and different developmental levels) of children. In fact, most studies examining the relation between these constructs have used samples of children age 6 or younger.

Parenting Strategies

There is little doubt that how a parent behaves toward his or her child does have an influence on how that child behaves. This phenomenon is perhaps best illustrated by an early study by Johnson and Lobitz (1974). In this study parents were asked to manipulate their child's behavior to make him or her appear "good" for half of a 45-minute observation and "bad" for the second half. It was found that parents were able to

perform these manipulations, primarily by altering the rate at which they gave commands and by feigning negative reactions to child behavior.

Researchers have examined several strategies that parents use to gain child compliance. Due to the wide variety of discipline strategies parents may and do use, the following discussion will center primarily on those most germane to the present study. Parental discipline strategies can generally be grouped into one of three categories, power assertion, love withdrawal, and verbal strategies (most of which fall into the subcategories of prohibition or induction).

Power Assertion

The term power assertion refers to a group of parenting behaviors that includes physical restraint, physical punishment (spanking), criticism, force, and threats (Kuczynski, 1984; Lytton, 1979). Power assertion is often used in combination with other parenting techniques, such as direct commands, and is used more often in dealing with an aggressive child (Minton, Kagan, & Levine, 1971). Zahn-Waxler and Chapman (1982) found that parents tended to use physical punishment to correct misbehavior that involved destruction of property or severe lapses in self-control. Parents tended to use physical restraint to deal with less severe lapses of self-control. In the study by Holden (1983) cited earlier, it was found that mothers used power assertion as much as 25% of the time when attempting to control noncompliance in the supermarket. Although parents may use power assertive techniques rather often (in certain situations at least), there is little research to suggest that such techniques are effective in fostering compliance or reducing noncompliance over time. Indeed, several studies have found that power assertive techniques may actually result in higher levels of noncompliance (Kochanska & Aksan, 1995; Lytton, 1975), and lower levels of compliance (Kuczynski, 1984; Lytton, 1977). Lytton and Zvirner (1975) found that, in children 25 to 35 months

of age, the use of physical control and negativity on the part of the parent increased noncompliance in the present and the likelihood of parent-child conflict in the future. Stormshak, et al., (2000) observed that spanking was predictive of oppositional, aggressive, and hyperactive child behaviors, and was also associated with children having a combination of these problematic behaviors.

Love Withdrawal

Love withdrawal, or withdrawing attention or affection from a child, has shown mixed results as a means of gaining child compliance (Chapman & Zahn-Waxler, 1982). Parent behaviors such as sending a child to his or her room or other time-out location, or simply ignoring the child, both fall under the category of love withdrawal. Holden (1983) found that, in attempting to gain child compliance with parental requests in a supermarket, ignoring was the least effective method. Alternatively, Chapman and Zahn-Waxler (1982) found that a combination of love withdrawal and other parenting techniques (e.g., reasoning, verbal or physical prohibition) was the most effective technique used by parents of 10- to 20-month-old children across a variety of child misbehaviors (children complied with 85% of parental instructions, versus 55% for love withdrawal alone). Thus, ignoring a child's misbehavior has been shown to be quite effective when used in combination with other behaviors.

Verbal Strategies

Many parents attempt to gain their child's compliance through various forms of verbal strategy. Verbal strategies fall into two basic categories, prohibitive and inductive. A prohibitive strategy is one in which the parent reprimands a child for misbehavior or instructs the child to stop a given misbehavior. An inductive strategy is one in which the parent uses a verbal remark designed to elicit a specific compliance behavior (i.e., to encourage the child to *do* something at the parent's request). Verbal strategies include

reasons, explanations, suggestions, instructions, and directives (also called commands). One verbal strategy that has received considerable attention by researchers is reasoning. Reasoning has been defined as explaining to the child the justification for compliance with respect to values or norms, or the likely consequences to property, self, or others that would result from a specific behavior (Kuczynski et al. 1987). Lytton (1979) offered that providing justification for a command or prohibition is considered reasoning. Chapman and Zahn-Waxler (1982) defined reasoning in terms of providing the child with an explanation of the significance and consequences of the misdeeds. Kuczynski (1984) identified five subtypes of reasoning: other-oriented (explaining to the child the potential consequences of their actions to other people, or emphasizing why the child should obey a certain individual); authority-oriented (requesting compliance from the child based on the authority of the parent or other adult); normative statements (also referred to as moralizing, this involves explaining to the child that compliance is expected by society); matter-of-fact (emphasizing the physical state of the task or other nonsocial justifications for compliance); and generalizations (getting the child to comply with present demands based on the past compliance with similar demands). The extent to which a child's behavior is influenced by the reasons he or she is provided has been a topic of debate among researchers for some time. Lytton (1977) stated that in general, the literature on reasoning suggests a positive association between reasoning and the development of conscience. Hoffman (1970) found that child compliance and internalization of expectations were more positively influenced by methods of reasoning than by force (power assertion). Hoffman found that certain types of reasons (e.g., those involving guilt, pride, or the expression of empathy for others) may lead to internally motivated behavior in children. In a more recent study, Kochanska (1993) found that reasoning was

more effective with children who exhibited high levels of inhibitory control versus those who were more impulsive.

Suggestion, when a parent suggests an alternative activity for the child, is another form of inductive discipline. Bargaining, negotiation, and explanation have also been observed. Lytton and Zwirner (1975) observed that children were most likely to comply with a maternal request in the form of a suggestion, whereas compliance declined with the use of verbal prohibition and reasoning. It has been found that parents tend to use greater amounts of verbal and lesser amounts of physical discipline and control strategies as children age (Kuczynski et al., 1987).

Instructions and directives (also called commands) are among the verbal strategies that may be either prohibitive or inductive. Some research has demonstrated that, particularly in young children, the use of instruction or direction on the part of the parent is just as, and perhaps more effective, than the use of reasoning (Dunlap-Ballew, 2002; Edgington, 2004).

Summary and Critique

Several key themes arise from the present literature review. First, the theoretical underpinnings of parenting research are varied and complex. Several theories seem to combine to explain the multifaceted issues involved in this complex domain of human functioning. Among the relevant theories are that of developmental psychopathology (Cummings, Davies, & Campbell, 2000), which emphasizes the interplay among the various parental, child, and contextual variables that contribute to the whole of parent-child interaction and discipline. Social learning theory (Bandura, 1977) illustrates the importance of parental modeling in the development of child behavior. Patterson's (1982) explanation of the coercive cycle describes the manner in which social learning principles may operate to produce negative child behavior outcomes through faulty

parent-child interactions. Social information processing theory (Grusec and Goodnow, 1994) explains the mediational role of children's social-cognitive processes in the relation between parental disciplinary techniques and children's internalization of values. And, social cognition in parents (Dix, Ruble, Grusec, & Nixon, 1986) explains the manner in which parent's attribute their child's behavior to his or her intentions and disposition, or to influences on the child's behavior exerted by other forces (i.e., situational demands or developmental limitations).

The parenting research literature has progressed, through a series of steps, from broad-based characterizations of parenting style (Baumrind, 1971; Maccoby & Martin, 1983), to finer-grained analyses of the complexities that exist in the parent-child interaction. Broad-based notions of parenting style are helpful, in that they provide a framework for classifying the range of parenting behaviors into manageable constructs. However, some research has indicated that *parents themselves* cannot be categorized as easily as can the *behaviors* in which they engage during the course of parenting (Sternberg, 1994). This is true, in part, because of the influence of parental belief systems.

Parental belief systems, described as the thoughts parents have concerning themselves as parents and about the childrearing process (Coplan et al, 2002), include parental goals, attributions, and perceptions of the child and child behavior. The literature clearly points to a connection between parental belief systems and parental behaviors. This belief-behavior relation has various important features. First, greater parental beliefs about the efficacy of their parenting leads parents to engage in more loving, affectionate, and modeling behaviors. Alternatively, lower parental efficacy beliefs lead parents to primarily emphasize discipline (Luster & Kain, 1987), and perhaps harsh discipline (Bondy & Mash, 1999). Second, parenting goals, defined as the outcomes a parent has in

mind and hopes to achieve during a given interaction with his or her child (Dix, 1992), are related in predictable ways to parenting behaviors. Parenting goals have been classified as parent-centered, child-centered, and relationship-centered (Hastings & Grusec, 1998). Parent-centered goals are associated with parenting behaviors aimed at discipline, gaining immediate compliance, and establishing parental authority. Child-centered goals emphasize the satisfaction of the child's needs, teaching the child an important personal value or lesson, and of fostering a positive parent-child relationship. These goals tend to lead to increased use of verbal inductive techniques on the part of the parent. Relationship-centered goals emphasize a parent's desire to foster close and harmonious bonds within the family (Coplan, et al., 2002; Hastings & Grusec, 1998). Parenting goals can also be influenced by the time horizon of the goal (i.e., short-term vs. long-term) (Kuczynski, 1984). Third, the relation between goals and behaviors is influenced in part by the attributions parents make regarding the causes of child behavior (Hastings & Grusec, 1998; Strassberg, 1997), and the perceptions they have of the child (Patterson, 1982; Pinderhughes et al., 2000) and of the severity of child misbehavior (Strassberg, 1997). Perhaps one of the strongest criticisms of these studies is the reliance, almost exclusively, on parent-child interactions involving negative child behavior and the need for parental discipline. Although this was the express aim of these studies, an aim which was certainly worth achieving, the potential relation between parenting goals and behaviors in response to positive child behavior has been largely ignored.

Next, parenting beliefs are affected by a variety of contextual variables. Among the contextual variables that may influence the parenting goal-parenting behavior relation are public versus private interactional setting (Holden, 1983; Hastings & Grusec, 1998), child characteristics and temperament (Belsky, Woodworth, & Crnic, 1996; Buss & Plomin, 1984; Chess & Thomas, 1986; Crockenberg & Litman, 1990; and Vaughn,

Kopp, & Krakow, 1984), specific child behaviors (Coplan, et al., 2002; Hastings & Grusec, 1998; Stormshak et al., 2000; Strassberg, 1997; and Zahn-Waxler & Chapman, 1982), and child age and developmental level (Kochanska et al., 1987; Kopp, 1982; Kuczynski & Kochanska, 1990; Vaughn et al. 1984). These variables provide useful information in understanding the nature of parent-child interactions and help to explain why parents might respond differently to the same behavior under different circumstances (e.g., parental response may vary as a function of one or more changing contextual variables).

Finally, the vignette methodology employed by the various researchers studying these variables appears to be an effective way in which to elicit parents' goals, attributions, and behaviors. The present study has employed similar methodology, in part, for the purpose of replication of the parenting goal-parenting behavior relation withing the vignette paradigm. Most studies in this area have not taken advantage of the ability to utilize experimental manipulation in studying these variables. Utilizing an experimental model, with manipulation and control of the parenting goal variable, will enable more specific conclusions to be made regarding the influence of parenting goals on parenting behavior.

Several studies reviewed in this paper examined the influence of child behavior, as a contextual variable, on parental goals and behaviors (Coplan, et al., 2002; Hastings & Grusec, 1998; Stormshak et al., 2000; Strassberg, 1997). Although these studies included a variety of child behavior contexts (primarily dealing with misbehavior, as noted earlier) the analyses were not conducted in such a way as to allow for an examination of the parenting goal-parenting behavior relation within the individual contexts. Instead, the authors collapsed across all contexts when conducting their analyses. Thus, the full extent to which the child behavioral context influences parent's

goals and behaviors, including differences that may exist between discipline and compliance situations, has not been examined. Separate analyses of child behavior contexts may yield new information about the influence of child behavior on the relation between parenting goals and parenting strategies.

Noticeably absent from the available literature are studies examining the above outlined issues in samples of older children. The studies that do examine the relation between parenting beliefs and behaviors have used samples of children (or hypothetical children) age 6 or younger. This leaves unanswered the question as to the nature of the parenting goal-parenting behavior relation in older children. Applying parenting goals and strategies equally to children of all ages would seem counterintuitive, especially given what is known regarding the developmental struggle for autonomy and the increasingly complex nature of cognition as children mature. Because children are in a constant state of developmental change, it seems likely that the approach a parent takes must (and does) change with the child. Indeed, research has demonstrated not only that the nature of child compliance (and noncompliance) changes over time but also that parenting responses change with them, moving from direct physical manipulation of the child to greater use of verbal strategies in children as young as 2 or 3 (Kuczynski, et al., 1987). One would expect this developmental progression to continue into older childhood and adolescence. The comparison in the present study between parents of younger and older children will provide an empirical check on this developmental trend as it relates to parenting goals and strategies.

Understanding the relation between parental belief systems and parenting behaviors may serve as a useful point of intervention in clinical settings in which parents present for assistance with difficult child behavior problems. At a minimum, clinicians may benefit from an understanding of the relations among a parent's goals, attributions,

and perceptions, and how these beliefs may influence his or her parenting behaviors. At best, clinicians may find that intervening at the level of the parental belief system may serve as the foundation for (or at least a contributor to) the successful resolution of parent-child conflict and the maintenance of treatment gains. The following section details the specific aims and design of the present investigation.

CHAPTER III

CURRENT INVESTIGATION

The first aim of the present study was to replicate previous research demonstrating a relationship between parental goals and discipline strategies. In addition, whereas previous research in this area has focused exclusively on the parents of younger children (less than 6 years of age), the second aim of this study was to expand the understanding of the goal-behavior relationship within parents of younger and older children.

The third aim of this study was to examine the relations among child behavior contexts, parenting goals, and parenting strategies. The currently available literature is skewed toward a univariate approach in this area, in that most researchers have not entered multiple parenting strategies as dependent variables in their analyses. The present study examines both the multivariate and univariate relation between parenting goals and strategies.

The fourth major aim of the study was to examine the goal-strategy relation within a variety of individual child behavior contexts. Previous researchers, many of whom have queried responses across multiple contexts, have not examined the within-context effects of child behavior on parenting goals and strategies. Typically they have instead collapsed across child behavior context. This may be due to the fact that most previous research has focused on negative or noncompliant child behavior contexts. The present investigation included both positive and negative (e.g., compliance and

noncompliance) child behavior contexts. This allowed for an examination of the differences that exist in the parenting goal-parenting behavior relationship as a function of positive vs. negative child behavior.

The present study involved the completion of four questionnaires: demographic, a vignette questionnaire, the Parenting Scale (Arnold, O'Leary, Wolff, & Acker, 1993), and the Eyberg Child Behavior Inventory (ECBI) (Burns & Patterson, 1990; Eyberg & Ross, 1978). These latter two questionnaires were included to facilitate the comparison of children and parents on broad measures of child behavior and parenting.

The design of the present study included elements of previous studies for the purpose of facilitating cross-study comparisons. For example, likert-style ratings of likelihood of strategy have been used in most other studies examining these variables. Also, the younger age group of children in the present study was the same as that used by most other researchers, which was designed to replicate the previous findings based on that age group. Further, the goal types used in the present investigation (parent-, child-, and relationship-centered) are the same as those investigated/identified by other researchers. Finally, the parenting strategies measured in this study are similar to those endorsed by parents in studies that used an open-ended format of data collection (e.g., free report by parents during an interview). Because the present investigation employed a more closed-ended approach, parents were given the opportunity to write in a strategy not listed in the questionnaire. This enabled the evaluation of whether the goals and strategies provided should be reduced, modified, or possibly expanded in future research employing a similar methodology.

Several main hypotheses were explored. A main effect of age was predicted, with strategy ratings expected to differ by the age group of the child. Specifically, it was expected that parents of younger children would endorse higher likelihood of the use of physical discipline and lower likelihood of non-physical discipline than parents of older children. Parents of younger children were also expected to endorse lower likelihood of verbal induction than parents of older children. These predictions were based on the findings of developmental research which indicate that as children mature they become more capable of responding to verbal forms of discipline because of increased cognitive capacity, and this developmental change is associated with greater use of verbal discipline strategies by parents. A main effect of age on positive reinforcement was also expected. Parents of younger children were expected to endorse higher likelihood of positive reinforcement than parents of older children. This is because as children mature, parents expect them to have greater behavioral control and internal motivation for compliance, thus requiring less positive reinforcement from the parent. Finally, no specific hypothesis was made regarding the age effect on likelihood of non-physical discipline, because of the lack of research on this effect. However, it was thought that parents of younger children may endorse lower likelihood of non-physical discipline than parents of older children. Perhaps parents use more non-physical discipline as children mature for the same reason they use less physical discipline, that being the increased understanding of consequences on the part of the child.

The type of goal a parent was asked to consider was expected to affect likelihood ratings on the different parenting strategies. It was hypothesized that parents who were asked to consider parent-centered goals would endorse higher likelihood of physical and

non-physical discipline, and lower likelihood of verbal induction and positive reinforcement. Parents who were asked to consider a child-centered goal were expected to endorse greater likelihood of the use of verbal induction and positive reinforcement, and lesser likelihood of physical and non-physical discipline. The pattern of results for relationship-centered goals was expected to be the same as that of child-centered goals (e.g., higher likelihood of verbal induction and positive reinforcement and lesser likelihood of discipline).

Child behavior context was expected to influence parents' ratings of likelihood for the different parenting strategies. Ratings of the likelihood of strategy were expected to vary significantly as a function of the specific child-behavior context. It was predicted that likelihood of positive reinforcement would be higher in the pro-social and compliance scenarios than in the poor social skill and active defiance scenarios. Likelihood of verbal induction was expected to be higher in the poor social skills and active defiance scenarios than in the pro-social and compliance scenarios. Likelihood of physical discipline was expected to be higher in the active defiance scenario than in the other three scenarios. Finally, non-physical discipline was expected to be higher in the active defiance and poor social skill scenarios than in the pro-social skills and compliance scenarios.

Age of the child and child behavior context were expected to influence likelihood ratings. It was expected that the contextual relation between goals and strategies would vary as a function of the age of the child. In other words, the likelihood of strategy ratings by parents of younger vs. older children are expected to differ significantly by context (i.e., child behavior scenario). Additionally, the relation between child age and

child behavior was expected to be different for each parenting strategy. However, due to lack of scientific precedent, the specific nature of these relations was left as a research question with no specific hypotheses.

Age of the child and type of parenting goal were expected to influence likelihood ratings. It was predicted that parents of younger and older children would endorse different levels of the likelihood of strategy as a function of the goals they were asked to consider. The relation between child age and parenting goal was expected to be different for each parenting strategy. Again, the specific nature of these relations was not predicted, but was left as a research question.

Likelihood ratings are expected to be influenced by the relation between parenting goal and child behavior context. Moreover, it was expected that the parenting goal-child behavior context relationship would be different for each parenting strategy.

Finally, the relation among child age, parenting goal, and child behavior context would produce significant influences on parents' likelihood of strategy ratings. Exploring these relations will answer the question, "Do parents of younger and older children endorse different likelihood of parenting strategies within different contexts as a function of the goal they were asked to consider?" An additional research question was to explore the influence of the relation among these three variables on parents' likelihood of using each parenting strategy.

This research will make several important contributions to the parenting literature. First, most studies have examined the parenting goal-parenting behavior relationship exclusively in the context of negative or non-compliant child behavior. The inclusion of both positive and negative child behavior contexts will expand the scope of

understanding on this issue. Second, the majority of studies have focused almost exclusively on children younger than 6 years of age. This study will expand the literature by providing a comparison of both younger and older children. Third, learning whether parents alter their behavior as a function of goal has implications for the inclusion of a cognitive component in parenting training programs. Although most parent training programs have a psychoeducational component, they do not necessarily include the identification and modification of parental cognition as it relates to what they want to accomplish through their parenting strategies. If the results of this study are supportive of a strong relationship between parents' goals and behaviors, this could suggest the need to further explore the utility of a cognitive restructuring component in parent training. Such an intervention could perhaps facilitate the success of parent training by teaching parents to relate specific types of child behavior with specific goals and then following through with strategies likely to accomplish those goals.

CHAPTER IV

METHODOLOGY

Participants

Participants for the present study were 98 mothers of children 2 to 11 years of age. Participants were divided into two groups based upon the age of the child for whom questionnaires were completed. The first group included mothers of children age 2 through 5 years 11 months, and the second group, mothers of children ages 6 to 11. Participants were solicited through posters in the community and on campus, newspaper ads, campus events, contacting former research participants who have consented to future contact from the laboratory, and contacting mothers by word of mouth advertising. Mothers who participated were entered into one of four \$50.00 drawings.

The average age of the participant mothers of younger children was (32.33), with the average age of mothers of older children being (35.93). Mothers of the younger children were mostly Caucasian (46), followed by Asian American (3) Native American (2), Latino (2), and the remainder being either bi-racial or other ethnicity (5). Mothers of older children were of a similar ethnic composition: Caucasian (34), Native American (3), Latino (2), and bi-racial or other (2). There were no African American or Asian American mothers in the older age group. In the younger group 50 were married, with 2 single, 2 divorced, and 3 “other.” In the older group 33 were married and 8 were divorced, with no single or “other” mothers. The mothers’ mean years of education in the younger group was (15.60), and the older group was (15.24). The monthly family income for both groups

was fairly high with most participants reporting monthly family income in the range of \$2001.00 - \$2500.00. (Refer to Table 1 for a detailed summary of participant demographics.)

The child participants for the younger group included 37 boys and 20 girls with a mean age of 3.7 years. The older group included 18 boys and 23 girls with a mean age of 7.8 years. The ethnic make-up of the child groups was virtually identical to that of their parents (Refer to Table 1).

Measures

Demographic Questionnaire. All mothers completed a demographic questionnaire (Appendix A). Information regarding age, gender, ethnicity, level of education, occupation, and income was obtained. The developmental history of the child, including major developmental milestones, was also obtained. This questionnaire was used for descriptive purposes.

Vignette Questionnaire. A vignette questionnaire (See appendix B) was completed by all participants. Participants were asked to complete the questionnaire as part of a packet of questionnaires designed to evaluate parents' thoughts and behaviors in different parent-child interactions. The questionnaire contained four stem stories, each story depicting one of four child behaviors: prosocial (sharing with a peer), poor social skills (absence of appropriate social responding), active defiance/tantrum (child refuses to obey/throws tantrum or yells), and compliance (child picks up toys/cleans room quickly when asked). Participants were asked to imagine that the child in the vignette was their own child. Three ending statements describing different parenting goals (parent-, child-, and relationship-centered goals) were created for each story, resulting in

12 vignettes. After reading each vignette, parents were asked to rate the likelihood of using each of 10 parenting strategies (Likelihood of Strategy = LS). Each strategy statement was followed by a 7-point Likert-style scale (ranging from “1 = Definitely would not do” to “7 = Definitely would do”). Parenting strategies included positive reinforcement (praise, reward), verbal induction (reason, explanation), physical discipline (spank, physically remove the child/force compliance), non-physical discipline (time-out, removal of privilege), distraction, and use of humor. Likelihood ratings for positive reinforcement, verbal induction, physical and non-physical discipline included two statements each, which were averaged for purposes of statistical analysis. Twelve separate vignettes were thus presented to each participant. The order of presentation was randomized using a computerized random number generator, to control for order effects.

Eyberg Child Behavior Inventory (ECBI). The ECBI (Burns & Patterson, 1990; Eyberg & Ross, 1978) is a 36-item, parent-report, checklist used to assess both the frequency of problem behaviors and the extent to which parents view these behaviors as problematic, in children between 2 and 16 years. The instrument yields both a Problem score and an Intensity score. Boggs, Eyberg, and Reynolds (1990) found the ECBI to have adequate validity and reliability in discriminating between problem and non-problem children. Internal consistency reliability is high (Chronbach’s $\alpha = .95$ and $.93$ for the Intensity and Problem scales, respectively). Construct validity has been demonstrated with high correlations between the ECBI Problem and Intensity scores and the Externalizing scale on the Child Behavior Checklist (Achenbach & Edelbrock, 1983) ($r = .67$ and $.75$, respectively). The ECBI has been shown to discriminate between children with conduct disorder and controls. This questionnaire is part of a standard battery of

measures that are given in most studies conducted by this lab. It was included here for descriptive purposes and to preserve continuity of data collection.

Parenting Scale. Created by Arnold and colleagues (Arnold, O'Leary, Wolff, & Acker, 1993), the Parenting Scale measures dysfunctional parental discipline practices of parents of children ranging from 18 months to 4 years old (with norms for older children derived through additional research, described below). The scale is completed by the parent and contains 36 items with seven-point ratings. The Parenting Scale has demonstrated adequate internal consistency and validity (Arnold, et al., (1993). The instrument provides three factor scores, Verbosity, Overreactivity, and Laxness, as well as a Total score. The internal consistency reliability of the Parenting Scale is high ($\alpha = .63$, Verbosity; $.82$, Overreactivity; $.83$, Laxness; and $.84$, Total score, respectively). Validity was confirmed by demonstrating significant correlations between the subscales of the Parenting Scale and the Externalizing score on the Child Behavior Checklist (Achenbach & Edelbrock, 1983). Further, the instrument was capable of distinguishing among clinic and nonclinic children on the Laxness and Overreactivity factors and the Total score. Scores on the Parenting Scale have also been found to be correlated with observational measures of parenting.

The Parenting Scale has been shown to have good validity for use with children older than 4 years of age as well (Collett, Gimpel, Greenon, Gunderson, 2001). The factor structure of the parenting scale is somewhat different with older children, with a two factor solution showing Laxness (Factor 1) and Overreactivity (Factor 2) as strong factors with Verbosity demonstrating some overlap with these two factors. Internal consistency estimates for the Total score and the two factors scores were as follows:

Total score (.87), Factor 1 (.86), and Factor 2 (.81). It was observed that there were no significant differences in reported maladaptive parenting behaviors by parents at different child ages. This questionnaire is part of a standard battery of measures that are given in most studies conducted by this lab. It was included here for descriptive purposes and to preserve continuity of data collection.

Procedure

General Protocol

Participants were contacted by telephone, either by the principle investigator or an undergraduate research assistant. During this telephone contact, the researcher read a brief, scripted overview of the study to the mother and obtained verbal consent to participate in the research. After obtaining consent, the researcher explained the four questionnaires to be completed and obtained the mailing address of the participant. In the event that a family had more than one child within the age range for the study, the mother was asked to select only one child, and to complete all study materials relative to that child. All materials were completed in paper and pencil format and participants received and returned their materials via regular mail with postage paid by the researcher.

Written Consent Procedure

Each packet of questionnaires included a written consent form, which the participants were instructed to read and sign prior to completing the remaining forms.

CHAPTER V

RESULTS

Design

The present study employed a 2 (age) x 3 (goal) x 4 (context) mixed-design. Age was a between-groups factor (younger versus older). Within-subjects factors were goal (parent-centered, child-centered, and relationship-centered) and context (pro-social, compliance, poor-social, and noncompliance). Likelihood of strategy (LS) ratings were the dependent variables. LS ratings were derived by averaging the likelihood ratings for each of four types of strategy (with two ratings per strategy). The resulting strategies were as follows: positive reinforcement (verbal praise, extra privilege or tangible reward); verbal induction (explain reasons for the request, explain consequences of compliance and noncompliance); physical discipline (physically remove child from situation, give one or two swats); and non-physical discipline (time-out, removal of privilege). Two additional strategies, distraction (attempt to engage child in a new activity) and humor (make a joke, try to get the child to laugh) were analyzed separately. Thus, six unique parenting strategies were entered in the analyses. Refer to Table 2 for mean and standard deviations of all strategy ratings.

Descriptive Information Regarding Parenting and Child Behavior

All mothers completed the Eyberg Child Behavior Inventory (ECBI) and the Parenting Scale (PS). On the ECBI Intensity scale (a measure of oppositional child behavior), most children fell within the normal range ($M = 87.38$, $SD = 22.80$). However,

there were four children whose scores were in the clinically significant range (ECBI Total \geq 131). In terms of overall levels of dysfunctional parenting behavior (measured with the Parenting Scale Total Score), most mothers were in the normal range ($M = 2.69$, $SD = .52$), with 7 mothers obtaining a score equal to or greater than $1 \frac{1}{2} SD$ above the mean of 2.6 for the normative sample (e.g., Total Score \geq 3.5) (clinical range). Therefore, most mothers in the sample described themselves as engaging in generally positive parenting behaviors and their children as displaying normal levels of negative behaviors commonly observed in young children.

Group Equivalence

The equivalence of groups was evaluated through the comparison of both continuous variables (education, and age of mother) and categorical variables (ethnicity, gender, marital status, socioeconomic status).

A series of two-tailed, independent samples *t*-tests were calculated to determine equivalence of groups for mothers' age and mothers' years of education. The groups differed significantly based on the age of the mother (younger $M = 32.33$ years, $SD = 5.14$; older $M = 35.93$ years, $SD = 5.75$, $t(96) = -3.26$, $p < .002$). No group differences were found with respect to mothers' level of education, (younger $M = 15.60$, $SD = 1.45$; older $M = 15.24$, $SD = 1.63$, $t(96) = 1.30$, $p < .262$).

A series of chi-square analyses was conducted to assess for group equivalence on categorical variables including child gender, child ethnicity, maternal ethnicity, and family income level. The younger group was significantly different from the older group on child gender, $\chi^2(1, N = 98) = 4.28$, $p < .039$, with a greater number of males in the younger group (younger group - males = 37, females = 20; older group - males = 18,

females = 23). There were no differences between the younger and older groups on child ethnicity, $\chi^2(6, N = 98) = 7.39, p < .287$ or maternal ethnicity, $\chi^2(6, N = 98) = 3.74, p < .712$. Finally, there were no differences between groups with respect to family income level, $\chi^2(5, N = 96) = 3.13, p < .680$.

The Eyberg Child Behavior Inventory (ECBI) (Burns & Patterson, 1990; Eyberg & Ross, 1978), was utilized to examine group equivalence on reported child behavior problems. The groups did not differ significantly on either the ECBI Problem score (younger $M = 6.8, SD = 5.88$; older $M = 6.39, SD = 4.73$; $t(94) = .366, p < .715$), or the ECBI Intensity score (younger $M = 89.64, SD = 24.16$; older $M = 85.29, SD = 20.96$; $t(94) = .921, p < .359$).

The Parenting Scale (Arnold et al., 1993) Total score was calculated to verify that no significant differences in parenting style were present between groups. A two-tailed independent samples t -test revealed no difference between the younger group ($M = 2.68, SD = .58$) and the older group ($M = 2.74, SD = .43$), $t(94) = -.509, p < .612$.

Analyses

Overall MANOVA

A 2 (age) x 3 (goal) x 4 (context) mixed-design MANOVA was conducted. For all of the following analyses, age was a between-groups factor, and goal and context were within-subjects factors. Levels of age were younger and older. Levels of goal were parent-centered, child-centered, and relationship-centered. Levels of context were pro-social, compliance, poor-social, and noncompliance. Likelihood of strategy ratings were the dependent variables. Main analyses tested the hypotheses and examined whether the likelihood of using different parenting strategies varied as a function of the age of the

child, parenting goal, child behavior context, or any combination of these factors across parenting strategies. It was expected that main effects of age, goal, and context would occur. These main effects hypotheses were supported. There was a main effect of age, $F(6, 91) = 2.45, p < .031$, a main effect of goal, $F(12, 85) = 4.10, p < .001$, and a main effect of context, $F(18, 79) = 133.86, p < .001$. Interaction effects were also expected, as follows: Age x Context, Age x Goal, Goal x Context, and Age x Goal x Context. These analyses revealed no significant Age x Context, Age x Goal, or Age x Context x Goal interactions (all F s n.s.). However, there was a significant Goal x Context interaction, $F(36, 61) = 2.90, p < .002$. Thus, mothers' likelihood of using different parenting strategies was significantly related to the child's age, behavior, and the goals she was asked to consider. Please refer to Table 3 for details of these analyses. Because the primary interest in the present study was the univariate relation among child age, behavioral context, and parenting goal, these initial analyses will not be explored further. Please refer to the following sections for a description of the univariate analyses.

Following the MANOVA, a series of univariate analyses was conducted to examine the effects of the independent variables (age, goal, and context) that were hypothesized to exist at the level of each individual parenting strategy.

Age Effects

A main effect of age was predicted, with likelihood of strategy ratings expected to differ by the age group of the child. A main effect of age on positive reinforcement was expected, with differing ratings of likelihood expected for each age group. Mothers of younger children were expected to endorse higher likelihood of positive reinforcement than mothers of older children. A main effect of age was also expected on verbal

induction, with differing rates of verbal induction for each age group. Mothers of younger children were expected to endorse lower likelihood of verbal induction than mothers of older children. Finally, a main effect of age on physical discipline was predicted, with differing rates of physical discipline for younger versus older children. It was expected that mothers of younger children would endorse higher likelihood of the use of physical discipline than mothers of older children.. These hypotheses were not supported. There were no main effects of age on likelihood of positive reinforcement, verbal induction, or physical discipline (all F s n.s.). Mothers endorsed essentially equal likelihood of these strategies, irrespective of the age of the child (Please refer to Table 4). No hypotheses were made regarding the possible age effects on non-physical discipline, distraction, or humor. No age effects were found on non-physical discipline or humor (all F s n.s.). Mothers endorsed roughly equal likelihood of these strategies regardless of the child's age. However, there was a significant age effect on the use of distraction, $F(1,96) = 12.30$ $p < .001$. Mothers of younger children endorsed higher likelihood of distraction than mothers of older children.

Goal Effects

A main effect of goal on likelihood of strategy was expected. The type of goal a parent was asked to consider was expected to affect likelihood ratings on the different parenting strategies. A main effect of goal was expected for positive reinforcement and verbal induction, with differing rates of these strategies as a function of goal. It was expected that mothers would endorse greater likelihood of positive reinforcement and verbal induction with a child-centered goal, than a parent- or relationship centered goal. However, no effects of goal were obtained for positive reinforcement or verbal induction

(Refer to Table 5). Nevertheless, as these effects were predicted, planned comparison analyses were conducted. Separate 2 (age) x 2 (goal) x 4 (context) mixed-design ANOVAs were conducted. For each variable (positive reinforcement and verbal induction), the child-centered goal was compared first to the parent-centered goal, and then to the relationship-centered goal (e.g., 2 planned comparisons for each dependent variable). None of these comparisons resulted in a significant effect of goal (all F s n.s.). Refer to Tables 7 and 8 for more detail.

Main effects of goal were also expected for physical and non-physical discipline, with differing likelihood of these strategies expected as a function of parenting goal. It was hypothesized that mothers would endorse greater likelihood of physical and non-physical discipline when considering a parent-centered goal than a child- or relationship-centered goal. Main effects of goal were found on physical discipline $F(1, 96) = 17.31$, $p < .001$, and nonphysical discipline $F(1, 96) = 5.63$, $p < .02$ (Refer to Table 5). These main effects of goal were further analyzed with two planned comparisons using 2 (age) x 2 (goal) x 4 (context) mixed-design ANOVAs comparing strategy ratings for two levels of goal (levels of goal will be cited for each analysis).

For physical discipline, the parent-centered goal was compared to the child-centered and relationship-centered goals separately. A significant main effect of goal was found when comparing the parent-centered goal to the child-centered goal $F(1, 96) = 8.98$, $p < .003$. Similarly, a main effect of goal emerged when comparing the parent-centered goal to the relationship-centered goal $F(1, 96) = 17.31$, $p < .001$. (Refer to Table 9). As expected, mothers endorsed greater likelihood of physical discipline when considering a parent-centered goal, as compared to a child- or relationship-centered goal.

Planned comparisons of non-physical discipline comparing the parent-centered to the child-centered goal, did not reveal a significant effect of goal $F(1, 96) = .371, p < .544$. However, a significant effect of goal did emerge when comparing the parent-centered goal to the relationship-centered goal $F(1, 96) = 5.63, p < .020$ (Refer to Table 10). Mothers endorsed greater likelihood of non-physical discipline when considering a parent-centered versus a relationship-centered goal. Likelihood ratings did not differ significantly when comparing a parent- and child-centered goal.

No hypotheses were made regarding the effect of goal on distraction or humor. However, main effects of goal were found on both of these variables (distraction = $F(1, 96) = 7.42, p < .008$; humor = $F(1, 96) = 29.30, p < .001$) (Refer to Table 5). Planned comparisons were conducted to further explore these main effects. For distraction, when comparing a parent-centered to a relationship-centered goal, a significant main effect of goal was obtained $F(1, 96) = 7.42, p < .008$. However, no main effect of goal was obtained when comparing a parent-centered and child-centered goal (Refer to Table 11). Mothers endorsed greater likelihood of distraction with a relationship-centered goal than with a parent-centered goal, but there was no significant difference in likelihood ratings when comparing a parent-centered to a child-centered goal.

For humor, the planned comparison of the parent-centered versus child-centered goal resulted in a significant effect of goal $F(1, 96) = 5.25, p < .024$. A significant effect of goal was also found in the comparison between the parent-centered and relationship-centered goal $F(1, 96) = 29.30, p < .001$ (Refer to Table 12). Mothers endorsed greater likelihood of using humor with a relationship-centered goal, followed by a child-centered, and then parent-centered goal.

Overall, when considering a parent-centered goal, mothers endorsed greater likelihood of physical and non-physical discipline than with either a child-centered or relationship-centered goal. When considering a relationship-centered goal, mothers endorsed greater likelihood of using humor or distraction, as compared to parent- and child-centered goals. Likelihood of positive reinforcement and verbal induction did not differ significantly as a function of the type of parenting goal.

Context Effects

A main effect of context was expected. Ratings of the likelihood of strategy were expected to vary significantly as a function of the specific child-behavior context. It was predicted that likelihood of positive reinforcement would be higher in the pro-social and compliance contexts (positive behavior) than in the poor social skill and noncompliance contexts (negative behavior). This hypothesis was supported. There was a main effect of context on positive reinforcement $F(1, 96) = 1193.63, p < .001$ (Refer to Table 6). Planned comparisons using a 2 (age) x 3 (goal) x 2 (context) mixed-design ANOVA, were conducted. In these analyses the two positive behavior contexts and two negative behavior contexts were averaged, yielding two strategy ratings for each dependent variable (one for the average of the two positive behavior contexts and one for the average of the two negative behavior contexts). These combined ratings were made because it was hypothesized that ratings for positive reinforcement would be essentially equal in the two positive behavior contexts and in the two negative behavior contexts. The planned comparison analysis revealed a significant main effect of context on positive reinforcement $F(1, 96) = 1454.47, p < .001$ (Refer to Table 7). As expected, mothers endorsed greater likelihood of using positive reinforcement when their children were

engaging in positive, as opposed to negative, behavior. As previously mentioned, age effects were not significant.

A main effect of context was expected for verbal induction, with differing likelihood ratings as a function of context. Likelihood of verbal induction was expected to be higher in the negative behavior contexts than in the positive behavior contexts. This hypothesis was supported, as there was a main effect of context on verbal induction $F(1, 96) = 12.57, p < .001$ (Refer to Table 6). A planned comparison using a 2 (age) x 3 (goal) x 2 (context) mixed-design ANOVA (as described above for positive reinforcement) revealed a significant main effect of context $F(1, 96) = 20.51, p < .001$ (Refer to Table 8). Mothers endorsed greater likelihood of using verbal induction in the negative behavior contexts than in the positive behavior contexts.

A main effect of context on physical discipline was predicted, with differing rates of likelihood as a function of context. Likelihood of physical discipline was expected to be higher in the noncompliance context than in the other three contexts. There was a main effect of context on physical discipline, $F(1, 96) = 191.62, p < .001$ (Refer to Table 6). Three planned comparisons using separate 2 (age) x 3 (goal) x 2 (context) mixed-design ANOVAs were conducted. These analyses compared likelihood ratings of physical discipline in the non-compliance versus pro-social, non-compliance versus compliance, and non-compliance versus poor social skills contexts, in independent analyses. Significant main effects of context were obtained in each of these analyses (Refer to Table 9). Mothers endorsed greater likelihood of using physical discipline in the noncompliance context than any of the other three contexts, as predicted.

A main effect of context was also expected for non-physical discipline, with differing likelihood ratings expected as a function of context. Non-physical discipline was expected to be higher in the negative behavior contexts than in the positive behavior contexts. This hypothesis was supported, as there was a main effect of context on non-physical discipline, $F(1, 96) = 554.03$, $p < .001$ (Refer to Table 6). A planned comparison analysis using a 2 (age) x 3 (goal) x 2 (context) mixed-design ANOVA (as described above for positive reinforcement) revealed a significant effect of context $F(1, 96) = 537.77$, $p < .001$ (Refer to Table 10). Mothers endorsed greater likelihood of non-physical discipline in the negative behavior contexts than the positive behavior contexts, as expected. Furthermore, although not predicted beforehand, this same pattern emerged on likelihood of using distraction $F(1, 96) = 110.09$, $p < .001$ (Refer to Table 6). A planned comparison revealed a significant effect of context when comparing positive and negative contexts $F(1, 96) = 104.04$, $p < .001$ (Refer to Table 11). Mothers endorsed greater likelihood of using distraction when their children were misbehaving than when they were behaving well, as would be expected.

Finally, there was no specific prediction regarding the main effect of context on likelihood of humor. No significant main effect was found $F(1, 96) = 2.95$, $p < .089$ (Refer to Table 6). Although the present investigation did not find a statistically significant effect, there was an interesting pattern in the likelihood of humor across contexts. Examining the marginal means of likelihood ratings of humor by context revealed that the highest likelihood of using this strategy occurred in the compliance context ($M = 2.9$) and the lowest likelihood occurred in the poor social skill context ($M =$

1.57). It seems mothers do not find it very funny when their child has committed a social *faux pas*.

Interaction Effects

An Age x Context interaction was predicted. Likelihood of strategy ratings by mothers of younger vs. older children were expected to differ significantly by context. As these analyses had not previously been researched, the specific nature of these effects was not predicted. An Age x Context interaction was obtained on distraction $F(1, 96) = 4.69, p < .033$ (Refer to Table 13). A planned comparison using a 2 (age) x 3 (goal) x 2 (context) ANOVA revealed a significant age by context interaction $F(1, 96) = 6.83, p < .010$ (Refer to Table 11). Mothers endorsed greater likelihood of distraction in the negative behavior contexts than the positive behavior contexts. The interaction revealed that mothers of younger children endorsed greater overall likelihood of this strategy than did mothers of older children (Refer to Figure X). No age by context interactions were obtained for positive reinforcement, verbal induction, physical discipline, non-physical discipline, or humor.

An Age x Goal interaction was expected. It was predicted that mothers of younger and older children would endorse different levels of the likelihood of strategy as a function of the goals they were asked to consider. As with the age x context interaction, univariate analyses were expected to produce significant age x goal interactions on each separate dependent variable. The specific nature of these interactions was not predicted due to lack of scientific precedent. There were no significant Age x Goal interactions (all F s n.s.). Refer to Table 14 for details.

A Goal x Context interaction was expected. It was expected that likelihood of strategy ratings would differ significantly as a function of the Goal x Context interaction. Univariate analyses were expected to reveal that, across contexts, mothers would endorse differing rates of the likelihood of each strategy as a function of goal type. Significant Goal x Context interactions were obtained for the following variables: positive reinforcement $F(1, 96) = 3.81, p < .054$; physical discipline $F(1, 96) = 11.00, p < .001$; non-physical discipline $F(1, 96) = 7.97, p < .006$; and distraction $F(1, 96) = 8.22, p < .005$. Goal x Context interactions were not obtained for verbal induction or humor (Refer to Table 15).

Planned analyses for all Goal x Context interactions were conducted using a simple effects 2 (age) x 3 (goal) mixed-design ANOVA at each level of context. These analyses reveal whether likelihood ratings differed significantly as a function of goal type within each level of context (e.g., 4 planned comparisons for each dependent variable, one for each context).

Regarding positive reinforcement, the planned comparison revealed a significant effect of goal within the noncompliance context $F(1, 96) = 4.96, p < .028$ (See Figure X). In this context mothers endorsed the greatest likelihood of positive reinforcement when considering a child-centered goal, followed by a relationship-centered and then a parent-centered goal. Note that, overall, mothers endorsed very low likelihood of positive reinforcement within the noncompliance context (Grand Mean = 1.41).

For physical discipline, the planned comparison revealed significant effects of goal within the poor social skill and noncompliance contexts ($F(1, 96) = 16.24, p < .001$, and $F(1, 96) = 9.05, p < .003$, respectively) (See Figure X). In each case, mothers

endorsed the greatest likelihood of physical discipline with a parent-centered goal, followed by a child-centered and then relationship-centered goal. There were no significant effects of goal in the pro-social or compliance contexts.

For non-physical discipline, the planned comparison revealed a significant effect of goal within the poor social skill context $F(1, 96) = 7.65, p < .007$. Within this context mothers endorsed the greatest likelihood of non-physical discipline with a parent-centered goal, followed by a child- and relationship-centered goal (See Figure X)). A similar pattern emerged for ratings of non-physical discipline within the noncompliance context; however, the effect did not reach significance $F(1, 96) = 3.74, p = .056$.

For distraction, the planned comparison revealed a significant effect of goal within the noncompliance context $F(1, 96) = 8.31, p < .005$. Within this context mothers endorsed the greatest likelihood of non-physical discipline with a relationship-centered goal, followed by a child- and parent-centered goal (See Figure X)).

Finally, a 3-way interaction (age x goal x context) was expected. This interaction would answer the question, “Do mothers of younger and older children endorse different likelihood of parenting strategies within different contexts as a function of the goal they were asked to consider?” As this question had not been asked in previous research it was included here for exploratory purposes. No significant Age x Goal x Context interactions were obtained.

Analysis of Covariance

As a more sensitive method of analyzing the effects of age, all of the principle analyses were conducted with age of the child (in years) as a covariate. These analyses did not result in any alterations to the above reported findings.

CHAPTER VI

DISCUSSION

This research was designed to evaluate the relation between parental goal and parenting behavior in positive and negative child behavior contexts in parents of younger (age 2 to 5) versus older (age 6 to 11) children. The design of the present study included elements of previous studies for the purpose of facilitating cross-study comparisons. These elements included likert-style ratings of the likelihood of parental strategy, a sample that includes parents of children of the same age as previous research in this area, the same types of goal (parent-centered, child-centered, and relationship-centered), and parenting strategies similar to those identified by others research in this area.

Several elements of this study were designed to extend this line of research and make new contributions to the field. First, most studies have focused primarily on children age 6 or younger. The inclusion, in this study, of children age 6 to 11 has sought to expand the analysis of these constructs to the parents of somewhat older children. Second, positive and negative child behavior contexts were included with the aim of broadening our understanding of the parenting goal-parenting behavior relationship. Previous research has studied this relationship almost exclusively in the context of negative child behavior. Third, this research was designed to test whether parents' ratings of the likelihood of different parenting strategies could be successfully influenced by experimentally manipulating parenting goal. Such a finding could have an impact on future research in this area, in that it would suggest the possibility of exploring additional

parenting contexts and goals within a questionnaire-based, vignette methodology. Moreover, it may have relevance to the clinical practice of behavioral parent training, in that therapists may wish to incorporate a discussion of parents' goals for their parenting approach as a means of helping to modify the problematic parenting patterns of their clients.

This chapter will first present the findings of the present study within the context of previous research on the relation between parental goals and parenting strategies. Next, conclusions and practical applications of the present research, in the context of the aims of the study, will be presented. A discussion of the strengths and weaknesses of the present study will follow. And finally, ideas for extending this line of research will be presented.

Age

A main effect of age was predicted. Regarding the use of positive reinforcement, parents of younger children were expected to endorse higher likelihood of positive reinforcement than parents of older children. Parents of younger children were also expected to endorse lower likelihood of verbal induction than parents of older children. It was expected that parents of younger children would endorse higher likelihood of the use of physical discipline than parents of older children. Conversely, parents of older children were expected to endorse greater likelihood of non-physical discipline than parents of younger children. These predictions were based on the findings of developmental research which indicate that as children mature they become more capable of responding to verbal forms of discipline because of increased cognitive capacity, and this developmental change is associated with greater use of verbal discipline strategies by parents (Kuczynski, et. al., 1987). No specific hypothesis was made regarding the age effect on likelihood of non-physical discipline, because of the lack of research on this

effect. However, it was thought that parents of younger children may endorse lower likelihood of non-physical discipline than parents of older children. No hypotheses were made regarding the possible age effects on likelihood of distraction or humor.

Main effects of age were not obtained for most variables, and the above hypotheses were therefore not supported. However, there was a significant difference in the likelihood of distraction, with parents of younger children endorsing greater likelihood of distraction than parents of older children. This makes intuitive sense considering the common parenting practice of using redirection with younger children, even in some parenting programs.

Although significant main effects of age were not obtained, age was shown to have effects in combination with other variables (i.e., interactions), which will be described later.

One explanation for the absence of this effect is that the composition of the groups did not lend itself to identifying effects. Perhaps grouping the children into narrower, and more closely related, age categories would enable the detection of age effects (e.g., 2-3, 4-5, 6-8, and 9-11 years of age). However, given that analyses of covariance did not yield significant changes in the analyses, perhaps there is in fact no age effect. Perhaps the differences in parenting strategy do not begin to develop until children reach their pre-adolescent and adolescent years, and hence a new developmental stage. Evidence of this is found in the research of Achenbach and Edelbrock (1981) who studied changes in a variety of child behaviors across the developmental span from 4 to 16 years of age. Among other things, they noted that a common child behavior (arguing) is relatively steady for boys to age 7, after which time arguing declines, but then peaks again at age 12. For girls, arguing remains relatively constant across the developmental period from age 4 to 16. Similarly, noncompliance was found to decline significantly

from 4 to 11 years of age, followed by an increase in noncompliance at age 12 for boys, with girls having generally lower levels of noncompliance than boys across the developmental spectrum. Thus, it may be that the age span of the children in this study was insufficiently broad to capture any significant effects of the age of the child, which likewise prevented most Age x Goal and Age x Context interactions.

It is also possible that, due to the highly educated sample, and low overall rates of physical discipline, that the mothers in this group begin using a variety of different parenting strategies at early ages and continue using these strategies into the latter years of childhood (in this sample, age 11).

Goal

The type of goal a parent was asked to consider was expected to affect likelihood ratings on the different parenting strategies. Positive reinforcement and verbal induction were expected to be higher with a child-centered goal, than a parent- or relationship-centered goal. However, no such effects were found. In the present research, mothers endorsed an overall moderate level of positive reinforcement and a high likelihood of verbal induction, regardless of goal. Thus, this group of mothers emphasized their role as teachers, explaining to their children the potential consequences (positive or negative) of their behavior. Perhaps one explanation for this finding is in the phrasing of the statements in the vignette questionnaire. The two statements that were combined to form the verbal induction strategy read as follows: “I would tell my child the reasons why he or she should or should not behave in this manner” and “I would explain to my child the consequences/rewards of behaving in this manner” (See Appendix Y). Therefore, parents were at liberty to endorse a high likelihood of verbal induction whether the child behavior context was positive or negative. In most other research, parents were asked to report their parenting behaviors only in the context of a child misbehavior, and not a

positive behavior. Therefore, a deeper understanding of the influence of parenting goal on strategy ratings must be considered within the context of the child's behavior. Refer to the section on interaction effects, below, for an explanation of these findings.

Parenting goals were expected to influence likelihood ratings for physical and non-physical discipline. It was believed that mothers would endorse greater likelihood of these strategies when given a parent-centered goal than a child- or relationship-centered goal. This hypothesis was supported in each case. When mothers were given a goal to “teach your child to follow instructions and do what you say,” which was the parent-centered goal, they were more likely to use power-assertive strategies. Likelihood of using such strategies was significantly lower when mothers were given a child- or relationship-centered goal. These findings mirror that of Hastings and Grusec (1998), who found the same thing.

Although not specifically predicted, the present research found that the likelihood of distraction and humor were highest with a relationship-centered goal. These findings are also in line with previous research, which has found that parents use less power-assertive strategies when their goal is to “keep a warm and loving relationship with your child” (i.e., relationship-centered goal). This finding also supports previous research (Hastings & Grusec, 1998).

Context

Child behavior, conceptualized in this and other research as one of the contexts within which parenting behaviors occur, was expected to influence parents' likelihood ratings for the different parenting strategies. It was predicted that likelihood of positive reinforcement would be higher in the pro-social and compliance scenarios than in the poor social skill and noncompliance scenarios. Likelihood of verbal induction was expected to be higher in the poor social skills and noncompliance scenarios than in the

pro-social and compliance scenarios. Likelihood of physical discipline was expected to be higher in the noncompliance scenario than in the other three scenarios. Finally, non-physical discipline was expected to be higher in the noncompliance and poor social skill scenarios than in the pro-social skills and compliance scenarios.

Each of the above hypotheses was supported. Mothers endorsed greater likelihood of positive reinforcement when children were behaving well, than when they were misbehaving. Likelihood of using verbal induction was greater in the negative behavior contexts than the positive behavior contexts. As expected, physical discipline was highest when the child was engaging in direct defiance (e.g., noncompliance context) followed by the poor social skill, compliance and pro-social contexts. Likelihood of non-physical discipline was higher in the negative behavior contexts than the positive behavior contexts. As would be expected, mothers endorsed very low likelihood of using either form of discipline in the positive behavior contexts. Likelihood of distraction followed the same pattern as non-physical discipline, with greater likelihood of this strategy in the negative behavior contexts than the positive behavior contexts. Finally, likelihood of using humor did not differ significantly as a function of child behavior context. Humor was a novel strategy that had not been previously investigated. Although no statistically significant effects were found, there was a notably low likelihood of using humor when one's child had committed a social *faux pas*, and then failed to make amends.

These findings are consistent with research demonstrating greater use of physical discipline and lower levels of warmth (e.g., positive reinforcement) when children are engaged in negative or aggressive behavior (Stormshak, et. al., 2000; Strassberg, 1997). The results also mirror research by Coplan and colleagues (2002) which found that negative child behavior elicited more power-assertive maternal responses, whereas positive behaviors were more likely to elicit an empathic or warm response. Finally, the

results are consistent with those of Zahn-Waxler and Chapman (1982) who found that the use of explanations (i.e., reasoning) was high in situations resulting in harm to people, as was the case in this study for likelihood of verbal induction in the poor social skill context.

The present research thus provides a good replication of earlier studies in finding higher likelihood of power-assertive strategies in negative child behavior contexts and nurturing or warm responses in positive child behavior contexts. Finally, these findings could be considered a check on the validity of the questionnaire methodology used in this investigation, considering how consistently this pattern of responses has been observed in previous research.

Interactions

An interaction was expected between child age (younger versus older) and parenting goal. The specific nature of this effect was not predicted due to the lack of research precedent. No significant age by goal interactions were found. As previously discussed, this is most likely due to the lack of an age effect for most strategies. It seems the age range of the present investigation, although initially believed to be sufficiently broad to detect differences in parenting behaviors at different levels of age, did not permit the demonstration of such differences. A review of the data would not suggest that the lack of this finding was due to any statistical artifact (e.g., insufficient power), but that in fact, no differences seemed to exist as a function of the age by goal interaction.

An interaction between age of the child and child behavior context was expected. Likelihood of strategy ratings were expected to differ significantly for parents of younger versus older children across the different contexts. No specific hypotheses were made due to the relatively novel nature of this research question (considering that most previous studies have not sampled parents of children older than age six). No significant

age by context interactions were found for positive reinforcement, verbal induction, physical discipline, non-physical discipline, or humor. A significant age by context interaction was obtained on distraction. Mothers endorsed greater likelihood of distraction in the negative behavior contexts than the positive behavior contexts, overall. Mothers of younger children endorsed greater overall likelihood of this strategy than mothers of older children. As mentioned previously, this result is consistent with the common practice of using redirection with young children as a means of modifying negative behavior in the short term. The lack of significant age by context effects on the other variables is most likely the result of insufficient overall effects of age, as previously explained.

An interaction between parenting goal and child behavior context was expected. Strategy ratings were expected to differ significantly across child behavior contexts as a function of the type of goal the parent was asked to consider. These goal by context interactions were found for positive reinforcement, physical discipline, non-physical discipline, and distraction. Regarding positive reinforcement, mothers endorsed the greatest likelihood of positive reinforcement when considering a child-centered goal, followed by a relationship-centered and then a parent-centered goal. As would be expected, mothers endorsed very low likelihood of positive reinforcement within the noncompliance context. Within the noncompliance context, mothers endorsed greater likelihood of physical discipline when considering a parent-centered goal, and lower likelihood of this strategy with child-centered or relationship-centered goals. Similar results were obtained for non-physical discipline. These findings are consistent with previous research showing that parents are more likely to use punitive discipline practices in the context of negative (particularly noncompliant) child behavior (Holden, 1983; Stormshack, et al., 2000) and with a parent-centered goal (Hastings & Grusec,

1998). Regarding distraction, mothers were more likely to use this strategy in the noncompliance context when their goal was relationship-centered, and less likely to use distraction when their goal was parent-centered. This is consistent with research by Hastings and Grusec (1998) which demonstrated that parents tend to use less invasive parenting strategies when they have a relationship-centered goal, as opposed to a child- or parent-centered goal.

Significant goal by context interactions were not obtained for verbal induction or humor. The absence of the goal by context interaction for verbal induction is most likely attributable to the nature of the questionnaire, which allowed for ratings of this strategy to be high in both positive and negative child behavior contexts.

Regarding humor, although this interaction did not reach statistical significance, an interesting trend was detected in the data. Mothers were very unlikely to make light of her child's absence of polite behavior with a parent-centered goal, and were more likely to engage in jovial behavior when the child was compliant and the mother had a relationship-centered goal. It seems to suggest that, perhaps the consideration of a socialization goal, might also be operating on this particular strategy. Hastings and Grusec (1998) did describe such a goal, in which a parent attempts to foster the child's ability to get along with others. It seems logical that, although not specifically cued with such a goal, mothers might have considered their desire to teach their children proper manners as they contemplated their ratings of this particular strategy.

Finally, strategy ratings were expected to differ significantly as a function of the relation among child age, parenting goal, and child behavior context. This interaction would answer the question, "Do parents of younger and older children endorse different likelihood of parenting strategies within different contexts as a function of the goal they were asked to consider?" No such interactions were found.

Conclusions

The four major goals of this research were as follows. First, replicate previous research demonstrating a relation between parental goals, child behavior context, and discipline strategies. Second, expand the understanding of the parenting goal-parenting behavior relation to parents of older children. Third, examine the relation between child behavior contexts, parenting goals, and parenting strategies using both multivariate and univariate approaches. Fourth and final, examine the parenting goal-parenting strategy relation within both positive and negative child behavior contexts.

The first aim of this research was accomplished. Significant effects of parenting goal on likelihood of strategy were found for all but one parenting strategy (positive reinforcement). Thus, this study was able to demonstrate a significant change in parent behavior (in the form of likelihood ratings) through experimental manipulation of parenting goal. To the best of this author's knowledge, only one other study has attempted this manipulation (Hastings & Grusec, 1998). This finding may have implications for parenting research and intervention practices. Researchers may wish to consider expanding upon the present study by creating new vignettes with unique context and goal scenarios. The present research suggests that such an approach is an effective method for studying these relationships without laborious laboratory investigation. Clinicians may find that helping parents identify (and perhaps, alter) their parenting goals may facilitate positive change in parenting behavior. As an example, a parent who demonstrates an over-reliance on power-assertive approaches (i.e., authoritarian parenting style) may inadvertently act to maintain a negative pattern of child behavior (Patterson, 1982). Working with the parent to shift his/her goal away from a parent-centered and toward a child- or -relationship-centered goal may lead to greater use of strategies with less potential for negative patterns of parent-child behavior. In the present

study, when given a child- or relationship-centered goal mothers endorsed greater likelihood of verbal induction and distraction. Of course, eliminating the use of non-physical discipline practices (e.g., time out) or even physical discipline practices (e.g., spanking) may not be required or necessary in every case. However, families that find themselves caught in the coercive process often require a significant change in parenting style in order to bring about positive change. Helping the parents shift their cognitive framework (e.g., schema, beliefs) through discussions of parenting goals, may be an approach to therapy that can help bring about a change in parenting behavior.

The second aim of this research, to extend the scope to parents of older children, did not ultimately prove fruitful. It appears that, in the present sample, differences in parenting strategies were associated most strongly with child behavior context and parenting goal. Effects of child age, although observed in some interaction effects, did not emerge as was expected (with the exception of distraction). It seems most likely that the age range of the present study, although much broader than previous studies, may still be too narrow. Expanding the range to include young adolescents, who have made additional gains in cognitive development and have a stronger sense of autonomy seeking, may yield more results as it relates to the age of the child. Perhaps significant differences in the use of the strategies measured in this study do not change significantly until children reach their teen years. Moreover, perhaps other strategies would have been more salient to parents of older children in this sample than parents of younger children. For example, perhaps parents of older children might have endorsed greater likelihood of using lengthier grounding periods (different from a brief time-out), withholding allowance, or other strategies that may apply more as children increase in age. Lastly, it could be that there were an insufficient number of children at each year of the age span. Although 58% of the sample were in the younger group (2-5) and 42 % were in the older

group (6-11), the sample was disproportionately weighted toward the younger end of the spectrum. There were larger proportions of children at the younger ages (2-year-olds = 12%, 4-year-olds = 22%), and smaller proportions of children at the older ages (9-year-olds = 3%, 11-year-olds = 1%).

The third aim of this research was to examine both the multivariate and univariate nature of the relation among parenting goal, parenting strategy, child behavior context, and child age. As has been reported, significant main and interaction effects were obtained using both approaches. Previous research has relied mainly on sampling a single parenting interaction, with a single parenting goal, and a single strategy. The present research examined these univariate effects, but also explored the relation among these variables across multiple levels of context and parenting goal, for several parenting strategies at once. In both sets of analyses, significant influences on parenting strategy were obtained under various conditions of parenting goal and child behavior context.

The ability of this research to obtain such findings may suggest a new area of research using multivariate statistical analyses. Multivariate analyses may serve to further enrich our understanding of the complex nature of the relation among parenting goal, child behavior context, and parenting strategies. Perhaps a factor analysis of the vignette questionnaire would be a logical next step. Such an analysis could lead to the identification of combinations or patterns of strategies that parents may use under certain circumstances. Previous research has distilled the examination of these variables down to a single context, with a single goal, and a single strategy. It seems safe to say that, given the complexities of parent-child interactions, the use of a single strategy is not highly likely in many instances. Take for example the poor social skill scenario used in the present investigation. Mothers endorsed a high likelihood of verbal induction, and physical and non-physical discipline, and a low likelihood of positive reinforcement and

humor, with a moderate likelihood of distraction, in this situation. Factor analysis may lead to the discovery of a consistent constellation, a sort of “package” of strategies that parents use in dealing with such a situation. Perhaps a factor called “power assertive reasoning” could explain this “package” of parenting behaviors. The idea being that under a given set of circumstances parents might reliably use certain patterns of parenting strategies in combination with one another to accomplish a given goal. Identifying such patterns could lead to much richer explanations, and understanding, of the complexities of parent-child interactions.

The final aim of this research was to explore the nature of the parenting goal-parenting strategy relation within both positive and negative child behavior contexts. This research supports the conclusion that variations in parenting strategy do occur, not only across contexts (i.e., positive versus negative), but also within contexts. This finding suggests that parents’ behavior is influenced by their intentions (e.g., goals) both when they are attempting to reinforce or teach an appropriate behavior, and when they are attempting to correct their child’s negative behavior.

Strengths & Weaknesses

It has been mentioned that one of the limitations of this research has to do with the age of the children for whom parenting behaviors were reported. The inclusion of a group of older children was rather unique in this line of research. It was believed that differences would be obtained for younger versus older children, based on changing developmental expectations as children mature. Although certain age effects were obtained, in the form of interactions with other variables, the anticipated main effects of age were not found. The most likely reason for this limitation is insufficient difference in child age across the two groups. As mentioned previously, perhaps dividing the children into narrower groups would allow for the detection of age effects. Another consideration

would be to expand the age range even further, perhaps as high as 16 or 17 years of age. Perhaps greater differences in parenting behavior would be observed between parents of children prior to and following the onset of puberty. Other groupings of parents by elementary, middle, and highschool age children might also be considered.

Another explanation for the absent effect of age could be the nature of the child behavior contexts. The vignettes that formed the basis for this research and established the child behavior context were designed to be applicable to children across the age span of the study (2 to 11 years of age). However, perhaps a unique series of contexts for parents of younger versus older children may have resulted in greater differences in parenting strategies by child age. For example, using the same general contexts (e.g., pro-social, compliance, poor social, and non-compliance), a separate series of vignettes for younger and older children could be created.

A final reason that may explain the absent age effect is the potential confound of child sex. It is possible that parents of girls and parents of boys might respond differently, particularly as the children reach the older end of the age range and the social expectations begin to be more delineated along gender lines. Future research will need to examine this issue more closely, directly testing for the effects of child sex in the analyses.

Another strength of this study was the inclusion of both positive and negative child behavior contexts. Previous research has relied on descriptions of parenting behaviors largely in the context of negative child behavior (e.g., non-compliance). The present investigation extends this line of research by making direct comparisons of positive and negative child behavior contexts. This allows us to move beyond inference to the beginnings of empirical support for the notion that parents' behavior is influenced by child behavior and parenting goal across in both positive and negative situations.

Gaining a greater understanding of this relationship may lead to additional knowledge as to how it is that parents not only correct their child's undesirable behaviors, but also how they teach and shape positive behaviors. This research has application to furthering our understanding of social learning theory (Bandura, 1977) and social information processing (Grusec & Goodnow, 1994). These theories posit that it is in the interaction between parent and child, and the interplay between parental discipline practices and child behavior, that leads to internalization of values and norms and establishes patterns of appropriate social behavior. Given that parents and children engage in a myriad of positive and negative encounters every day, expanding our understanding of how these encounters develop and shape child behavior is essential to understanding the processes of social and moral development.

This provides a context in which to discuss one of the limitations of the present research, that being the inclusion of primarily Caucasian, highly educated, clinically normal mothers and children from largely intact homes. The parents in the present sample reported themselves as generally within the normal range in terms of dysfunctional parenting behavior. They also reported their children as being within the normal range in terms of oppositional child behaviors. Given the well understood stress imposed on parent-child interactions that comes through lower socioeconomic status, lower educational attainment, and family disruption it is reasonable to speculate that certain differences may exist between participants in this research project (and other similar individuals) and a sample of individuals with greater socioeconomic and familial stressors.

The inclusion of almost exclusively typical children is also a potential limitation to the external validity of the present study. There is evidence to show that mothers of children with aggressive or oppositional children tend to have a more negative overall

perception of their child's behavior than mothers of non-aggressive children (Strassberg, 1997). These maternal perceptions are associated with increased use of coercive discipline among mothers of behaviorally difficult children. Patterson (1982) identified a clear pattern of negative behavior among parents and children that leads to escalations in problematic interactions and disrupted relationships. This pattern is associated with harsh discipline practices and aggressive child behavior that usually requires intervention to correct. The present findings may not accurately reflect what the relationship among child behavior context and parenting goal would be for parents and children who find themselves stuck in that coercive process. In fact, the likelihood is that there would be considerable differences in the relation among these variables in families with and without such conflictual relationships.

Ideas for Future Research

Directly addressing the limitation regarding the lack of age effects seems a logical first step in expanding this line of research. As mentioned previously, increasing the age range into the middle or even high school years may prove interesting. Creating a unique set of vignettes for each age group may also serve to magnify any effects of age. The best approach would likely be to determine the types of context to be studied (e.g., compliance, noncompliance, etc.) and create an age-appropriate vignette for each child age group. This would enable direct comparisons of contexts across ages, and may provide a more powerful effect of age by giving parents a more salient of child behavior at each level of age.

Intervention research could include a psychoeducational component concerning the importance of setting goals for different parent-child interactions, with an eye toward enhancing the parent's repertoire of strategies. Alternatively, parents who exhibit an over-reliance on power-assertion may benefit from more formal discussions regarding

their beliefs regarding parent-child relationships, followed by discussions regarding their goals for their parenting encounters. Helping authoritarian parents who are caught in the coercive cycle to alter their goals by adopting more child- and relationship-centered goals, may help to change their behavior and lead to them using less punitive forms of discipline.

Finally, expanding this research by including father participants is encouraged. Fathers may possess unique perceptions of child behavior and have different underlying goals or assumptions about child behavior and may endorse different likelihood of parenting strategies than mothers as a result. Encouraging father participation in this research would help to answer some of these questions.

The present study adds to the body of research demonstrating a relation between parenting goal and child behavior and their influence on parenting strategies. This research both supports previous research in this area and expands upon the knowledge base by elucidating previously unexamined variables using novel approaches.

References

- Achenbach, T. M., & Edelbrock, C. S. (1981). *Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen* (No. 188). Chicago: Society for Research in child Development.
- Bandura, A. (1977). *Social learning theory*: Prentice-Hall.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, 4(1, pt. 2), 101-103.
- Bell, R. Q. (1979). Parent, child, and reciprocal influences. *American Psychologist*, 34(10), 821-826.
- Belsky, J., Woodworth, S., & Crnic, K. (1996). Trouble in the second year: Three questions about family interaction. *Child Development*, 67, 556-578.
- Bondy, E. M., & Mash, E. J. (1999). Parenting efficacy, perceived control over caregiving failure, and mothers' reactions to preschool children's misbehavior. *Child Study Journal*, 29(3), 157-175.
- Buss, A. H., & Plomin, R. (1984). *Temperament: Early developing personality traits*. Hillsdale, NJ: Erlbaum.
- Chapman, M., & Zahn-Waxler, C. (1982). Young children's compliance and noncompliance to parental discipline in a natural setting. *International Journal of Behavioral Development*, 5, 81-94.
- Chess, S., & Thomas, A. (1986). *Temperament in clinical practice*. New York: Guildford Press.
- Coplan, R. J., Hastings, P. D., Lagace-Seguin, D. G., & Moulton, C. E. (2002). Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice*, 2(1), 1-26.

- Crockenberg, S., & Litman, C. (1990). Autonomy as competence in 2-year-olds: Maternal correlates of child defiance, compliance and self-assertion. *Developmental Psychology, 26*, 961-971.
- Cummings, E. M., Davies, P. T., & Campbell, S. B. (2000). *Developmental psychopathology and family process: Theory, research, and clinical implications*: Guilford Press.
- Dix, T., Ruble, D. N., Grusec, J. E., & Nixon, S. (1986). Social cognition and parents: Inferential and affective reactions to children of three age levels. *Child Development, 57*, 879-894.
- Dix, T., Sigel, I. E., & McGillicuddy-DeLisi, A. V. (1992). Parenting on behalf of the child: Empathic goals in the regulation of responsive parenting. In *Parental belief systems: The psychological consequences for children (2nd ed.)*. (pp. 319-346): Lawrence Erlbaum Associates, Inc.
- Dunlap-Ballew, M. S. (2002). *The effects of reasoning, age, and temperament on child compliance*. Unpublished master's thesis., Oklahoma State University, Stillwater, Oklahoma.
- Eyberg, S. M., & Ross, A. W. (1978). Assessment of child behavior problems: The validation of a new inventory. *Journal of Clinical Child Psychology, 7*(2), 113-116.
- Edgington, C. (2004). *The effects of reasoning on child compliance: A father-toddler laboratory investigation*. Oklahoma State University, Stillwater, Oklahoma.
- Edgington, C., & Sullivan, M.A. (2006). Experimental manipulation of parenting goal and child behavior context in a vignette paradigm: Effects on endorsed parenting strategies in a group of non-parents. Unpublished manuscript.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*(1), 4-19.
- Grusec, J. E., & Kuczynski, L. (1980). Direction of effect in socialization: A comparison of the parent's versus the child's behavior as determinants of disciplinary techniques. *Developmental Psychology, 16*, 1-9.
- Hastings, P. D., Coplan, R., Piotrowski, C. C., & Hastings, P. D. (1999). Conceptual and empirical links between children's social spheres: Relating maternal beliefs and preschoolers' behaviors with peers. In *Conflict as a context for understanding maternal beliefs about child rearing and children's misbehavior*. (pp. 43-59): Jossey-Bass.

- Hastings, P. D., & Grusec, J. E. (1998). Parenting goals as organizers of responses to parent-child disagreement. *Developmental Psychology, 34*(3), 465-479.
- Hoffman, M. L. (1970). Conscience, personality, and socialization techniques. *Human Development, 13*, 90-126.
- Holden, G. W. (1983). *Avoiding Conflict: Mothers as Tacticians in the Supermarket, Child Development* (Vol. 54, pp. 233): Blackwell Publishing Limited.
- Johnson, S. M., & Lobitz, G. K. (1974). Parental manipulation of child behavior in home observations. *Journal of Applied Behavior Analysis, 7*, 23-31.
- Kaler, S. R., & Kopp, C. B. (1990). Compliance and comprehension in very young toddlers. *Child Development, 61*, 1997-2003.
- Kochanska, G. (1993). Toward a synthesis of parental socialization and child temperament in early development of conscience. *Child Development, 64*, 325-347.
- Kochanska, G., & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early intervention. *Child Development, 66*, 236-254.
- Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology, 18*(2), 199-214.
- Kuczynski, L. (1984). Socialization goals and mother-child interaction: Strategies for long-term and short-term compliance. *Developmental Psychology, 20*(6), 1061-1073.
- Kuczynski, L., & Kochanska, G. (1990). Development of children's noncompliance strategies from toddlerhood to age 5. *Developmental Psychology, 26*(3), 398-408.
- Kuczynski, L., Kochanska, G., Radke-Yarrow, M., & Girnius-Brown, O. (1987). A developmental interpretation of young children's noncompliance. *Developmental Psychology, 23*(6), 799-806.
- Luster, T., & Rhoades, K. (1989). The relation between child-rearing beliefs and the home environment in a sample of adolescent mothers. *Family Relations: Journal of Applied Family & Child Studies, 38*(3), 317-322.
- Lytton, H. (1977). Correlates of compliance and the rudiments of conscience in two-year-old boys. *Canadian Journal of Behavioral Science, 9*(3), 242-251.
- Lytton, H., & Zwirner, W. (1975). Compliance and its controlling stimuli observed in a natural setting. *Developmental Psychology, 11*, 769-777.

- Maccoby, E., & Martin, J. (1983). Socialization in contexts of the family: Parent-child interaction. In E. M. Hetherington (Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (4th ed., pp. 1-101). New York: Wiley.
- McNally, S., Eisenberg, N., & Harris, J. D. (1991). Consistency and change in maternal child-rearing practices and values: A longitudinal study. *Child Development, 62*(1), 190-198.
- Minton, C., Kagan, J., & Levine, J. A. (1971). Maternal control and obedience in the two-year-old. *Child Development, 42*, 1873-1894.
- Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia.
- Pinderhughes, E. E., Dodge, K. A., Bates, J. E., Petit, G. S., & Zelli, A. (2000). Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes. *Journal of Family Psychology, 14*(3), 380-400.
- Smetana, J. G., & Smetana, J. G. (1994). Parenting styles and beliefs about parental authority. In *Beliefs about parenting: Origins and developmental implications*. (pp. 21-36): Jossey-Bass.
- Steinberg, L., Lamborn, S. D., Darling, N., & Mounts, N. S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*(3), 754-770.
- Stormshak, E. A., Bierman, K. L., McMahon, R. J., & Lengua, L. J. (2000). Parenting practices and child disruptive behavior problems in early elementary school. *Journal of Clinical Child Psychology, 29*(1), 17-29.
- Strassberg, Z. (1997). Levels of analysis in cognitive bases of maternal disciplinary dysfunction. *Journal of Abnormal Child Psychology, 25*(3), 209-215.
- Vaughn, B. E., Kopp, C. B., & Krakow, J. B. (1984). The emergence and consolidation of self-control from eighteen to thirty months of age: Normative trends and individual differences. *Child Development, 55*, 990-1004.
- Zahn-Waxler, C., & Chapman, M. (1982). Immediate antecedents of caretakers' methods of discipline. *Child Psychiatry and Human Development, 12*(3), 179-192.

APPENDIX A
DEMOGRAPHIC QUESTIONNAIRE

Demographics Questionnaire

Please complete this confidential questionnaire. An answer to every question is requested.

1. Your relationship to the child: Mother _____
 Father _____
 Other _____

2. Your sex: Female _____ Male _____

3. Your age (in years): _____

4. Your ethnicity: Caucasian _____
 African American _____
 Asian American _____
 Hispanic _____
 Native American _____ (nation/tribe(s)): _____
 Biracial (please specify): _____
 Other (please specify): _____

5. Highest level of education completed (circle year):
 1 2 3 4 5 6 7 8 (Grade school)

 9 10 11 12 (High school)

 13 14 15 16 (College)

 17 and over (Graduate school)

6. Your occupation: _____

7. Marital status: Single _____ Married _____ Divorced _____
 Separated _____ Other (living with a partner, etc.) _____

8. Total family income per month:
 Less that \$800 _____ \$800-\$1000 _____ \$1001-\$1500 _____

 \$1501-\$2000 _____ \$2001-\$2500 _____ over \$2500 _____

9. If married or living with a partner, please provide the following information about your spouse/partner:
 - a. his/her relationship to the child: Mother _____
 Father _____
 Other _____

 - b. his/her age: _____

c. his/her ethnicity: Caucasian _____
 African American _____
 Asian American _____
 Hispanic _____
 Native American _____ (nation/tribe(s)): _____
 Biracial (please specify): _____
 Other (please specify): _____

d. his/her highest level of education completed (circle year)

1	2	3	4	5	6	7	8	(Grade school)
9	10	11	12					(High school)
13	14	15	16					(College)
17	and over							(Graduate school)

e. Spouse/partner's occupation: _____

10. Please list the child's brothers/sisters:

Age (in years)	Sex (please circle)		Living in the home (please circle)	
_____	M	F	Y	N
_____	M	F	Y	N
_____	M	F	Y	N
_____	M	F	Y	N
_____	M	F	Y	N

11. Please provide the following information about your child:

a. date of birth: (day) _____ (month) _____ (year) _____

b. sex: Female _____ Male _____

c. ethnicity: Caucasian _____
 African American _____
 Asian American _____
 Hispanic _____
 Native American _____ (nation/tribe(s)): _____
 Biracial (please specify): _____
 Other (please specify): _____

12. Developmental milestones:

At what age (in months) did your child:

a. sit independently _____

b. crawl _____

c. walk independently _____

13. Is your child on any medication at this time? Yes _____ No _____

If so, please list: _____

14. Has your child attended or does your child attend daycare/preschool? Yes ____ No ____

If your child is not currently attending daycare/preschool, but has in the past, please provide the following information:

- a. How old was your child when he/she attended daycare/preschool? _____
- b. How many days out of a month did your child attend daycare/preschool? ____
- c. For how long (e.g., 6 months)? _____
- d. Was the daycare at an institution or in a home? _____

If your child currently attends a daycare/preschool, please provide the following information:

- e. How many days per month does your child currently attend daycare/preschool? _____
- f. How long has your child attended the current daycare/preschool? _____
- g. Is the daycare/preschool at an institution or in a home? _____

Please answer the following questions about the manner in which you and your spouse/partner divide up household and childcare responsibilities.

16. Please indicate which parent/partner typically does the following tasks: (if there is a roughly equal participation in a task by both parents/partners, please check both places). If your child does the activity independently you may indicate "NA".

	<u>Yourself</u>	<u>Partner</u>
Diapering/Toileting	_____	_____
Medical appts.	_____	_____
Feeding/cooking	_____	_____
Dressing, Doing hair, Clipping nails, etc.	_____	_____
Bathing	_____	_____
Playing	_____	_____
Reading	_____	_____
Comforting when hurt	_____	_____
Disciplining	_____	_____
Arranging babysitting	_____	_____
Taking to get haircut/ Cutting Child's hair	_____	_____

15. Please indicate the approximate number of hours each parent/partner spends during a typical week in the following activities:

	<u>Yourself</u>	<u>Partner</u>
Work Outside Home	_____	_____
Household Duties	<u>Yourself</u>	<u>Partner</u>
Cleaning house	_____	_____
Laundry	_____	_____
Yard care	_____	_____
Financial	_____	_____
Meal Preparation	_____	_____

Child Care	<u>Yourself</u>	<u>Partner</u>
Diapering/Toileting		
Medical appts., feeding		
Dressing, Doing hair,		
Clipping nails, bathing, etc.	_____	_____
Playing	_____	_____
Reading	_____	_____
Disciplining	_____	_____

APPENDIX B
VIGNETTE QUESTIONNAIRE
SAMPLE PAGE

Vignette Questionnaire - Sample Page

You have invited some friends to your home for dinner. Your child is playing with one of your friend's children in another room. You walk by the room where the two are playing and notice your child has shared one of his or her favorite toys. You have been trying to teach your child to share and play nicely with others.

Imagine that for this situation your main goal is to teach your child to follow instructions and do what you say. You want your child to learn that it is important to do what you say.

How likely is it that you would do the following:

	Definitely would not do					Definitely would do							
	1	2	3	4	5	6	7	6	5	4	3	2	1
1. I would praise my child's behavior.	1	2	3	4	5	6	7						
2. I would reward my child with an extra privilege, or with a prize, money, or treat.	1	2	3	4	5	6	7						
3. I would tell my child the reasons why he or she should or should not behave in this manner.	1	2	3	4	5	6	7						
4. I would explain to my child the consequences/rewards of behaving in this manner.	1	2	3	4	5	6	7						
5. I would physically remove my child from the situation or use other physical means to make my child comply.	1	2	3	4	5	6	7						
6. I would spank my child with 1 or 2 swats.	1	2	3	4	5	6	7						
7. I would give my child a time-out for a few minutes.	1	2	3	4	5	6	7						
8. I would take away one or more privileges (computer or TV time, playtime, etc.)	1	2	3	4	5	6	7						
9. I would try to distract my child and focus his or her attention on something else.	1	2	3	4	5	6	7						
10. I would use humor (make a joke, laugh, etc.).	1	2	3	4	5	6	7						

PSPC

APPENDIX C
TABLES

Table 1
Summary of Participant Demographic Information

Demographic Variables	Younger Group	Older Group	Entire Sample
Parent Variables			
Mother age	$M = 32.33$ $SD = 5.14$	$M = 35.93$ $SD = 5.75$	$M = 33.84$ $SD = 5.66$
Mother ethnicity			
Caucasian	48	36	84
African American	1	0	1
Asian American	2	0	2
Latino	2	1	3
Native American	2	3	5
Bi-racial/Other	2	1	3
Mother education	$M = 15.60$ $SD = 1.45$	$M = 15.24$ $SD = 1.63$	$M = 15.45$ $SD = 1.53$
Parental marital status			
Married	50	33	83
Divorced	2	8	10
Single/Other	5	0	5
Child Variables			
Child Age	$M = 3.70$ $SD = 1.09$	$M = 7.80$ $SD = 1.49$	$M = 5.42$ $SD = 2.39$
Child gender			
Male	37	18	55
Female	20	23	43
Child ethnicity			
Caucasian	46	34	80
African American	1	0	1
Asian American	3	0	3
Latino	0	2	2
Native American	2	3	5
Bi-racial/Other	5	2	7

Table 2
Mean Likelihood Ratings by Age, goal, and Context

Context		Younger						Older					
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
		PR	VI	PD	NPD	D	H	PR	VI	PD	NPD	D	H
Pro-Social	PC	5.63 (0.15)	5.75 (.20)	1.17 (0.06)	1.13 (0.05)	1.28 (0.09)	2.16 (0.22)	5.54 (0.18)	6.00 (0.24)	1.15 (0.07)	1.02 (0.06)	1.00 (0.10)	2.20 (0.26)
	CC	5.61 (0.15)	5.87 (0.19)	1.13 (0.06)	1.06 (0.06)	1.23 (0.09)	2.46 (0.25)	5.31 (0.18)	5.92 (0.22)	1.07 (0.07)	1.10 (0.07)	1.00 (0.11)	2.07 (0.29)
	RC	5.41 (0.15)	5.68 (0.21)	1.10 (0.06)	1.16 (0.10)	1.19 (0.08)	2.35 (0.28)	5.56 (0.18)	5.81 (0.25)	1.09 (0.07)	1.12 (0.11)	1.00 (0.09)	2.73 (0.33)
Compliance	PC	6.04 (0.12)	5.97 (0.16)	1.29 (0.09)	1.23 (0.90)	1.05 (0.03)	2.75 (0.27)	5.84 (0.14)	6.20 (0.18)	1.05 (0.11)	1.04 (0.11)	1.00 (0.04)	2.59 (0.32)
	CC	6.02 (0.13)	6.09 (0.15)	1.12 (0.04)	1.26 (0.13)	1.14 (0.06)	2.75 (0.28)	5.89 (0.15)	6.29 (0.18)	1.00 (0.05)	1.13 (0.15)	1.00 (0.07)	2.95 (0.33)
	RC	6.08 (0.12)	5.8 (0.19)	1.19 (0.06)	1.25 (0.11)	1.21 (0.08)	3.16 (0.29)	5.89 (0.14)	5.98 (0.23)	1.01 (0.07)	1.10 (0.13)	1.00 (0.09)	3.20 (0.35)
Poor Social	PC	1.36 (0.13)	6.25 (0.15)	2.93 (0.20)	3.99 (0.24)	1.77 (0.15)	1.44 (0.14)	1.20 (0.16)	6.67 (0.17)	3.01 (0.23)	4.12 (0.28)	1.27 (0.18)	1.37 (0.17)
	CC	1.38 (0.14)	6.40 (0.16)	2.62 (0.18)	4.05 (0.24)	1.93 (0.18)	1.75 (0.17)	1.21 (0.17)	6.67 (0.14)	2.82 (0.21)	3.74 (0.28)	1.22 (0.21)	1.29 (0.20)
	RC	1.45 (0.14)	6.38 (0.12)	2.5 (0.17)	3.49 (0.24)	2.00 (0.18)	1.95 (0.22)	1.12 (0.17)	6.63 (0.15)	2.52 (0.21)	3.71 (0.28)	1.22 (0.21)	1.66 (0.26)
Non-Compliance	PC	1.26 (0.11)	5.90 (0.19)	3.25 (0.22)	4.39 (0.21)	2.83 (0.24)	2.19 (0.21)	1.29 (0.14)	6.17 (0.23)	3.12 (0.26)	4.72 (0.24)	2.17 (0.28)	1.90 (0.24)
	CC	1.76 (0.19)	6.34 (0.15)	3.05 (0.21)	4.43 (0.20)	3.19 (0.24)	2.53 (0.24)	1.28 (0.23)	6.31 (0.18)	2.99 (0.25)	4.57 (0.24)	2.39 (0.28)	1.98 (0.29)
	RC	1.47 (0.14)	6.17 (0.17)	2.75 (0.21)	3.94 (0.22)	3.5 (0.28)	3.28 (0.28)	1.38 (0.16)	6.16 (0.20)	2.81 (0.25)	4.61 (0.27)	2.56 (0.33)	2.56 (0.34)

Table 3

Overall MANOVA, Main and Interaction Effects

Factor	Value	df	<i>F</i>	Sig. of <i>F</i>
Main Effects				
Age	.14	6	2.45	.031*
Goal	.37	12	4.10	.001***
Context	.97	18	133.86	.001***
Interaction Effects				
Age x Context	.28	18	1.68	.062
Age x Goal	.13	12	1.08	.386
Goal x Context	.58	36	2.29	.002**
Age x Goal x Context	.41	36	1.15	.308

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

Age - Main Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	7.74	1	1.78	.185
Verbal Induction	9.51	1	.98	.324
Physical Discipline	.66	1	.13	.724
Non-Physical Discipline	.66	1	.12	.736
Distraction	60.97	1	12.30	.001***
Humor	10.37	1	.56	.457

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

Goal - Main Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	.13	1	.40	.531
Verbal Induction	.22	1	.25	.622
Physical Discipline	10.78	1	17.31	.001***
Non-Physical Discipline	4.54	1	5.63	.020*
Distraction	5.51	1	7.42	.008**
Humor	54.87	1	29.30	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6

Context- Main Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	4124.71	1	1193.63	.001***
Verbal Induction	30.47	1	12.57	.001***
Physical Discipline	764.64	1	191.62	.001***
Non-Physical Discipline	2317.43	1	554.03	.001***
Distraction	431.52	1	110.09	.001***
Humor	16.89	1	2.95	.089

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7

Distraction - Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. RC	5.51	1	7.42	.008**
PC vs. CC	1.60	1	3.3	.072
Context Main Effect ††				
PB vs. NB	2754.77	1	1454.47	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

†† PB = positive behavior; NB = negative behavior

Table 8

Verbal Induction - Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. CC	3.98	1	.05	.829
CC vs. RC	.44	1	.40	.529
Context Main Effect ††				
PB vs. NB	21.77	1	20.51	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

†† PB = positive behavior; NB = negative behavior

Table 9

Physical Discipline- Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. RC	10.78	1	17.31	.001***
PC vs. CC	3.38	1	8.98	.003**
Context Main Effect††				
NC vs. PS	1603.88	1	471.72	.001***
NC vs. CO	1537.65	1	444.30	.001***
NC vs. AS	50.79	1	11.30	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

†† NC = non-compliance; PS = pro-social; CO = compliance; AS = poor social

Table 10

Non-Physical Discipline- Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. RC	4.54	1	5.63	.020*
PC vs. CC	.24	1	.37	.544
Context Main Effect††				
PB vs. NB	1300.84	1	537.78	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

†† PB = positive behavior; NB = negative behavior

Table 11

Distraction - Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. RC	5.51	1	7.42	.008**
PC vs. CC	1.60	1	3.3	.072
Context Main Effect††				
PB vs. NB	167.59	1	104.04	.001***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

†† PB = positive behavior; NB = negative behavior

Table 12

Humor - Planned Comparison Analyses Following Significant Main Effects

Analysis	MS	df	<i>F</i>	Sig. of <i>F</i>
Goal Main Effect †				
PC vs. RC	54.87	1	29.30	.001***
PC vs. CC	4.23	1	5.25	.024*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

† PC = parent-centered; CC = child-centered; RC = relationship-centered

Table 13

Age x Context - Interaction Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	.42	1	.12	.728
Verbal Induction	2.36	1	.01	.922
Physical Discipline	.37	1	.09	.761
Non-Physical Discipline	7.02	1	1.68	.198
Distraction	18.40	1	4.70	.033*
Humor	12.81	1	2.24	.138

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 14

Age x Goal - Interaction Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	4.18	1	.01	.910
Verbal Induction	1.28	1	1.44	.232
Physical Discipline	.25	1	.41	.525
Non-Physical Discipline	.75	1	.93	.336
Distraction	1.36	1	1.84	.179
Humor	2.71	1	.01	.904

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 15

Goal x Context- Interaction Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	1.16	1	3.81	.054*
Verbal Induction	2.37	1	2.55	.113
Physical Discipline	5.86	1	11.00	.001***
Non-Physical Discipline	5.25	1	7.97	.006**
Distraction	7.78	1	8.22	.005**
Humor	4.80	1	3.37	.070

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 16

Age x Goal x Context- Interaction Effects

Strategy	MS	df	<i>F</i>	Sig. of <i>F</i>
Positive Reinforcement	.97	1	3.18	.078
Verbal Induction	.17	1	.18	.671
Physical Discipline	7.29	1	.01	.907
Non-Physical Discipline	.35	1	.54	.465
Distraction	1.12	1	1.18	.280
Humor	4.48	1	3.14	.079

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

APPENDIX D
FIGURES

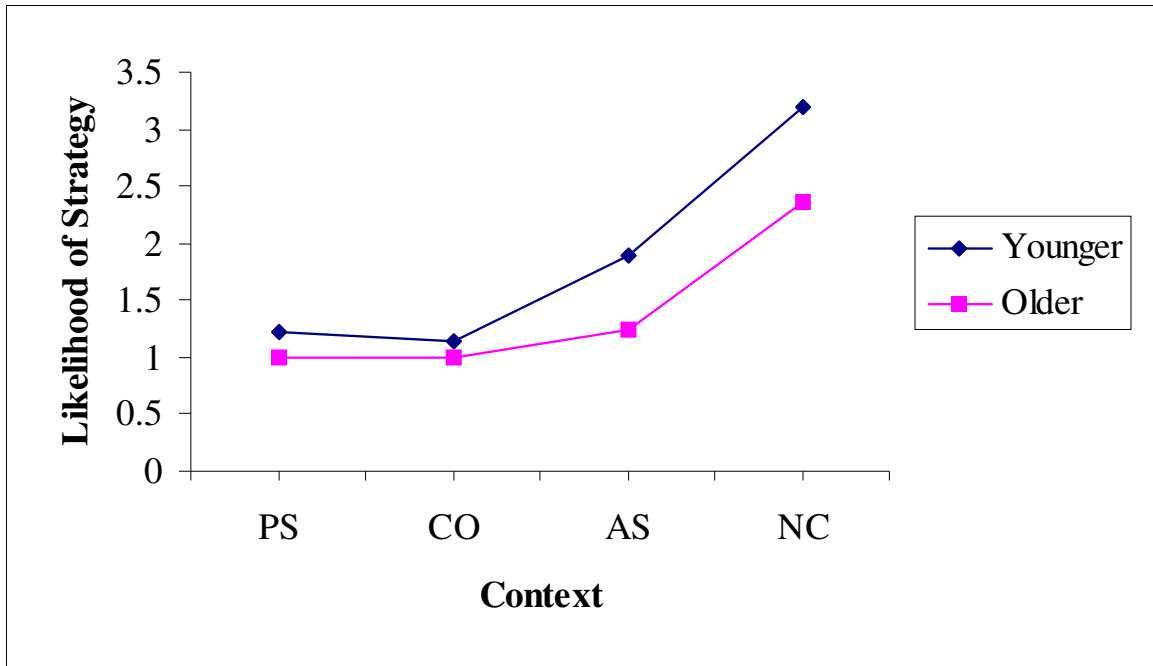


Figure 1. Age x Context Interaction on Distraction.

Note. PS = Pro-social; CO = Compliance; AS = Poor Social; NC = Non-Compliance

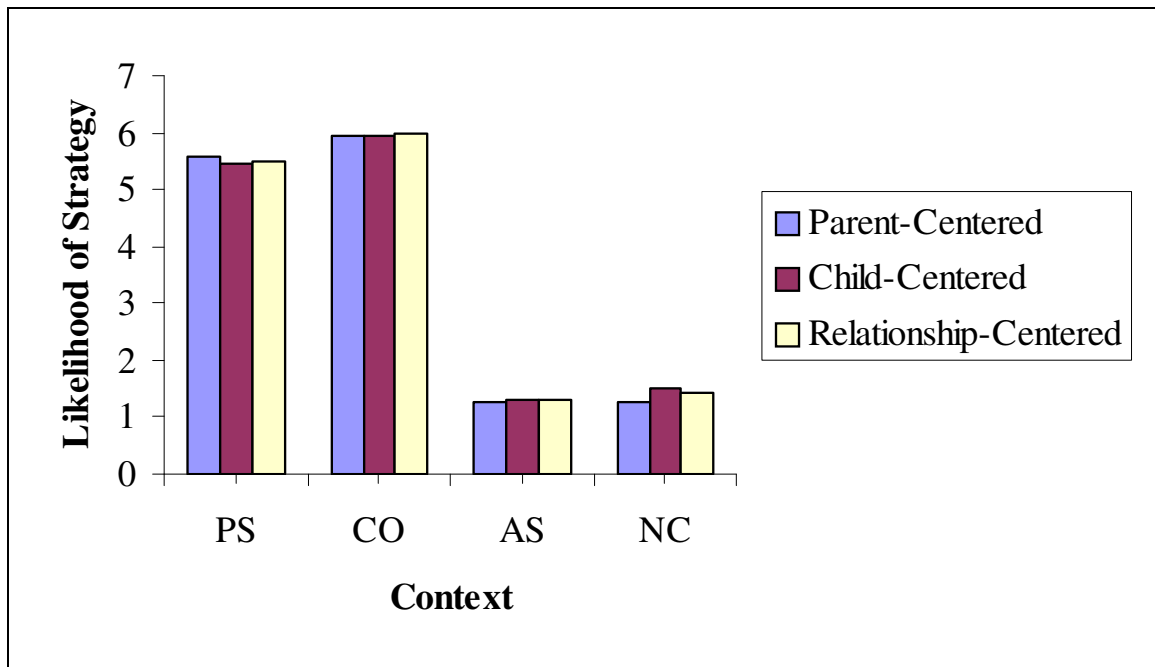


Figure 2. Goal x Context Interaction on Positive Reinforcement

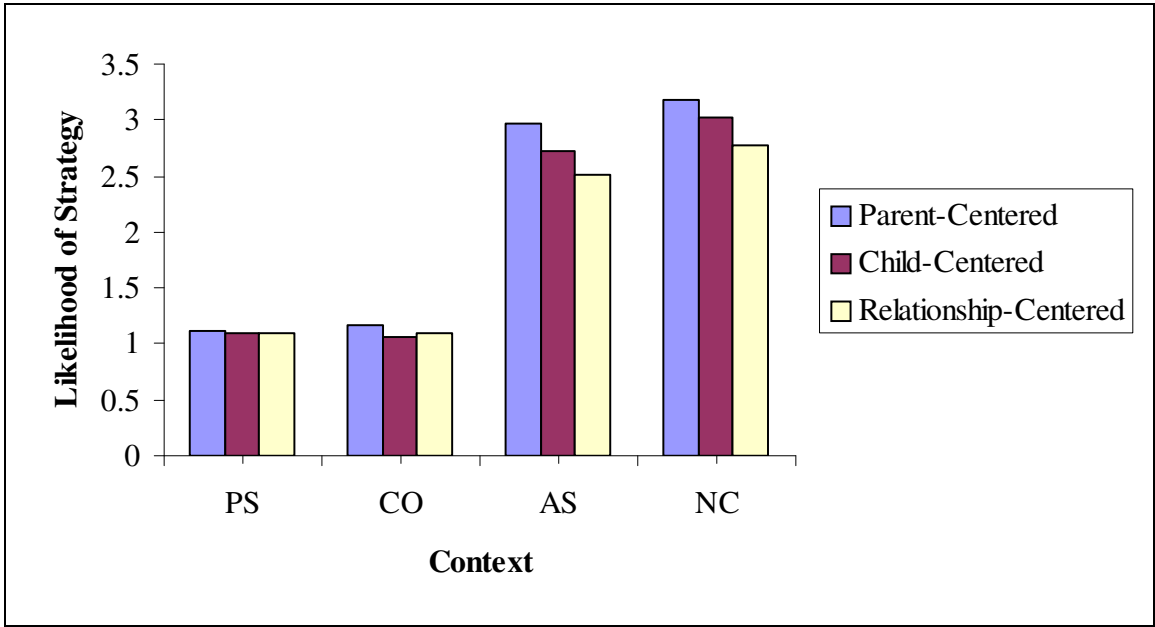


Figure 3. Goal x Context Interaction on Physical Discipline

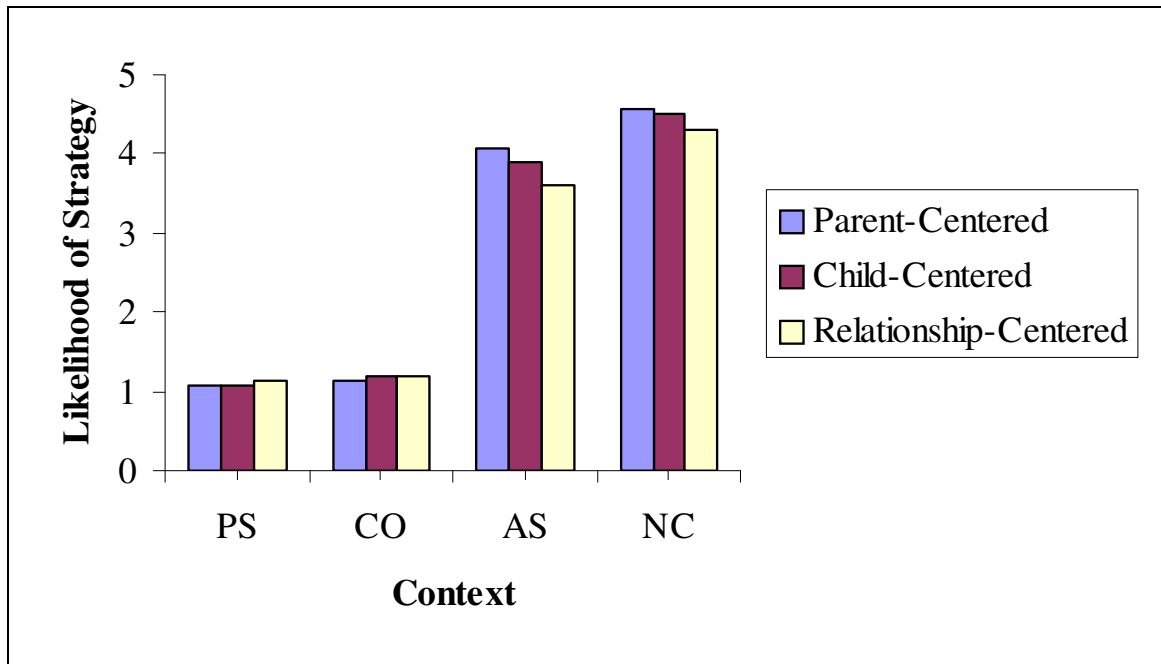


Figure 4. Goal x Context Interaction on Non-Physical Discipline

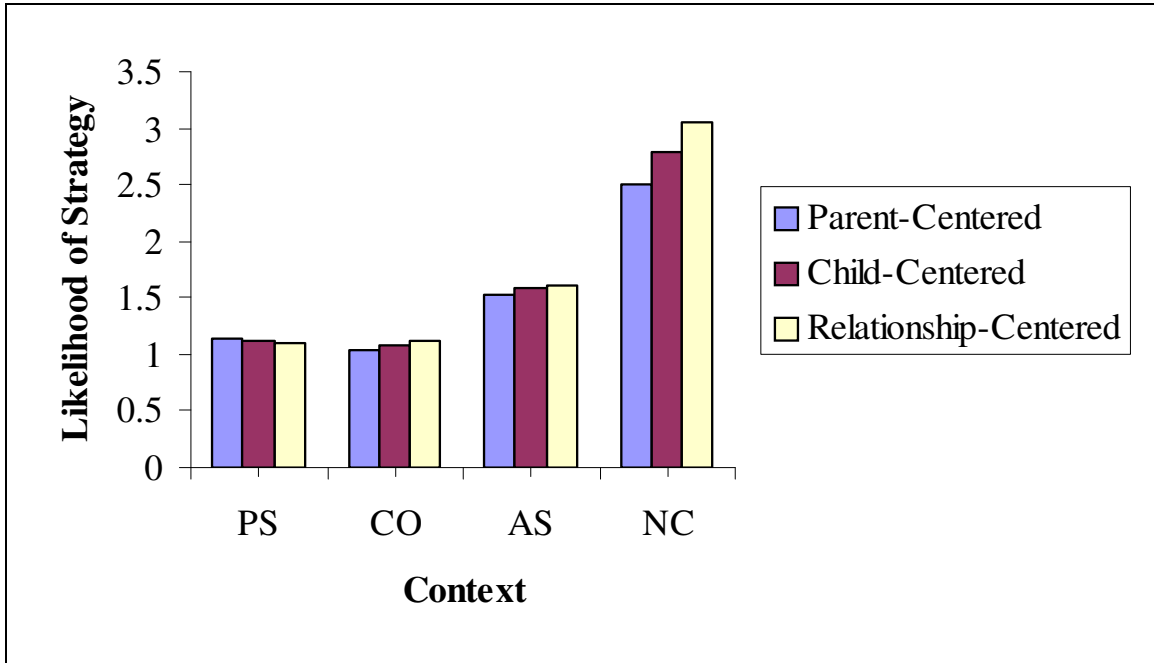


Figure 5. Goal x Context Interaction on Distraction

APPENDIX E
INSTITUTIONAL REVIEW BOARD
APPROVAL FORMS

Oklahoma State University Institutional Review Board

Date: Monday, February 06, 2006
IRB Application No AS0657
Proposal Title: An Experimental Analysis of the Relationship Between Parenting Goal and Parenting Strategy Within Positive and Negative Child Behavior Contexts
Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 2/5/2007

Principal

Investigator(s)

Carl Edgington
214 North Murray
Stillwater, OK 74078

Maureen Sullivan
215 N Murray
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair
Institutional Review Board

Oklahoma State University Institutional Review Board

Date: Thursday, March 23, 2006
IRB Application No AS0676
Proposal Title: An Experimental Analysis of the Relationship Between Parenting Goal and Parenting Strategy Within Positive and Negative Child Behavior Contexts Phase II
Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 3/22/2007

Principal

Investigator(s)

Carl Edgington
214 North Murray
Stillwater, OK 74078

Maureen Sullivan
215 N Murray
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

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Sincerely,



Sue C. Jacobs, Chair
Institutional Review Board

VITA

Carl Robert Edgington

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE RELATION BETWEEN PARENTING GOAL AND PARENTING STRATEGY IN POSITIVE AND NEGATIVE CHILD BEHAVIOR CONTEXTS: AN EXPERIMENTAL ANALYSIS

Major Field: Psychology

Biographical:

Personal Data: Born in Salt Lake City, Utah, on May 15, 1973, the son of Carl and Kathie Edgington, the husband of Maria Sessions, the father of Sadie, Liam, and Brigham Edgington.

Education: Graduated from Olympus High School, Salt Lake City, Utah in May 2001; received Bachelor of Science degree in Psychology, from the University of Utah, Salt Lake City, Utah in June 1998. Received Master of Science degree in Psychology from Oklahoma State University in December 2004. Completed the requirements for the Doctor of Philosophy degree with a major in Psychology at Oklahoma State University in July 2007.

Professional Memberships: American Psychological Association (Division 40), Association for the Cognitive and Behavioral Therapies, International Neuropsychological Society.

Name: Carl Robert Edgington

Date of Degree: July, 2007

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE RELATION BETWEEN PARENTING GOAL AND
PARENTING STRATEGY IN POSITIVE AND NEGATIVE CHILD
BEHAVIOR CONTEXTS: AN EXPERIMENTAL ANALYSIS

Pages in Study: 102

Candidate for the Degree of Doctor of Philosophy

Major Field: Psychology

Parenting research has shown that parents may vary their responses to their child's behavior based on a variety of factors. Two of these factors, parenting goal and the child's behavior (considered the context for the parenting interaction), have been shown to have predictable influences on parenting behavior. Parenting goals fall into three broad categories: Parent-centered (the desire for immediate child compliance and respect for parental authority), child-centered (the desire to teach one's child important lessons and to promote autonomy), and relationship-centered (the desire to maintain a warm and positive relationship with one's child). The purpose of this research is to examine the relationship between parenting goals and parenting strategies in different child behavior contexts. The present study measures the extent to which a parent's anticipated use of various parenting strategies is affected by specific child behaviors and parenting goals. Participants for the present study were 98 mothers of children 2 to 11 years of age. Participants were divided into two groups based upon the age of the child for whom questionnaires were completed. The first group included mothers of children age 2 through 5 years, and the second group, mothers of children ages 6 to 11. Results demonstrated significant effects parenting goal and child behavior context, and subtle effects of child age, on the parenting strategies mothers endorsed. Interactions among these three factors were also found. Ideas are presented for extending this line of research and for applying the findings in clinical work with families and children.

ADVISER'S APPROVAL: Maureen A. Sullivan, Ph.D.