

MATERNAL CONTROL IN MOTHER-CHILD RELATIONSHIPS AND THE EFFECTS ON
CHILDREN'S SOCIAL DOMINANCE STRATEGIES

By

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Abstract

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The current study examined maternal controlling behaviors in mother-child relationships and the associations with children's social dominance in child-peer interactions. Participants in the current study were drawn from a larger, 2 cohort study of early childhood social development in the Pullman, WA/Moscow, ID area. The 57 children (31 boys, 53 mos.) in this study participated in both a mother-child laboratory assessment and a child-peer playgroup assessment in which maternal control behaviors and child dominance were assessed. Observers coded maternal control and global relationship quality in the lab setting. Other coders rated child dominance and child coercion in the playgroup. Higher levels of maternal control were expected to predict more child dominance and coercion in the playgroup. The results indicated that maternal relationship negativity, but not control behaviors, predicted greater child coercion. The interaction between maternal controlling behaviors and negative relationship quality did not significantly predict either child coercion or child dominance. Discussion includes measurement considerations and ideas for future research.

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CHAPTER ONE

INTRODUCTION

Children's early social behavior is deeply influenced by parenting. This is due, in part, to children's malleable state in early childhood (Van der Bruggen, Stams, & Bogels, 2008), as well as the parent-child relationship (Karreman, Tuijil, Aken, & Dekovic, 2006; Kuczynski, 2003). This influence of parenting is the basis for the interest in the impact specific parenting components may have on important child outcomes. The literature on parenting focuses on defining its components (Baumrind, 1967, 1971; Maccoby & Martin, 1983), as well as distinguishing between parenting behaviors and parenting styles (Darling & Steinberg, 1993). Components of parenting behavior are often described by the degree of warmth or control (Darling & Steinberg, 1993; Fletcher et al., 2008; McLoyd & Smith, 2002). The use of control by a parent may be an important predictor of children's peer interactions. In addition, parenting style also includes components of warmth and control. This research suggests that the emotional climate parents provide children may mediate or moderate the specific behaviors parents use with their children (Darling & Steinberg, 1993).

Parental behaviors and parenting styles are important aspects of parenting because they shape the developmental success of the child and consequently predict child outcomes. Social competence is one outcome in particular that may be associated with the use of specific parenting behaviors and styles. In reference to children, it is recognized that social competence involves two potentially important aspects: communion (or social relationships) and agency (or personal achievement) (Hawley, 2002). The capability to balance these two dimensions is what distinguishes a socially competent child from an aggressive or victimized child (Hawley, 2002). The strategies used by socially competent children are of a particular interest for this study as

they may be used to gain control. This study will examine the association between parental control and the use of social dominance strategies in children.

Specific parenting practices used for control can be separated into two forms: parental controlling behaviors and overall relationship quality; each of which have been shown to impact child outcomes (Calkins, 1994; Chang et al., 2003; Eisenberg et al., 2001; Patterson, 1992; Pettit et al., 2001). Parental controlling behaviors are uniquely associated with child outcomes depending on the degree of negativity in the behaviors. For instance, the child outcomes associated with harsh parenting differ from those associated with psychological abuse (Pettit et al., 2001; Chang et al., 2003). Overall relationship quality is similar in that the degree of negativity plays an important role in predicting child outcomes (Chang et al., 2003). However, overall relationship quality is directly tied to parenting behaviors. Overall relationship quality may, in fact, mediate or moderate the association between parenting behaviors and child outcomes. This review analyzes social learning theory and social reward as possible mechanisms by which this association may function (Bandura, 1969; Patterson, 1982). In addition, the gender of both the parent and child is assessed as potential modifiers.

The current study is designed to increase our understanding of the unique processes through which parents influence the development or maintenance of dominance in young children's social relationships. Specifically, this study will first descriptively examine mothers' controlling behavior frequency and overall relationship quality with their children in tasks that require parent participation or direction and the corresponding children's use of coercive behaviors in a peer interaction. In addition, associations between maternal behaviors and children's dominance and teacher-rated externalizing behaviors in the preschool classroom while controlling for child and family characteristics that may influence child behavioral outcomes.

In the following section, literature covering parenting behaviors and styles, parental control and child dominance is critically reviewed. The review initially focuses on the influence of parenting on children's social behaviors and then proceeds to operationalize control in both adults and children. Next the review assesses the link between parental control and child dominance within the literature. Theories of transmission from mother to child are then discussed and reviewed. This review concludes with a summary and critique of the literature, followed by a discussion of the research questions examined in this thesis.

CHAPTER TWO

REVIEW OF LITERATURE

Parental Influence on Child Development

It is widely recognized that parents play a critical role in children's psychological and behavioral well-being. Parents have a great deal of influence in the development of children's social behavior during early childhood due to fast rate of growth and learning in children and the opportunity for parents to act as role models (Van der Bruggen, Stams, & Bogels, 2008). In addition, parents have control over many of the relationship dynamics between parent and child (Karreman, et al., 2006). Parents primarily own this power in the relationship due to the relative lack of skills and resources on the part of the child and the parent's ability to use appropriate resources during parent-child interactions (Kuczynski, 2003). The extensive literature on this topic is separated into two categories: defining and organizing components of parenting (Baumrind, 1967, 1971; Maccoby & Martin, 1983) and distinguishing between parenting styles and parenting behaviors (Darling & Steinberg, 1993). Both of these categories of research are helpful in setting the stage for the current study. First, the literature focusing on components of parenting has identified two large categories of parenting behavior: warmth and control (Darling & Steinberg, 1993; Fletcher et al., 2008; McLoyd & Smith, 2002). This provides support for the importance of considering parental control as a potential predictor of children's peer interactions. The second category of research, in which parenting style and behaviors are distinguished, also suggests how the emotional climate parents provide children (parenting styles) may moderate the specific actions parents use with the intent of child socialization (parenting behaviors). The exploration of these two parenting dimensions, within the context of parenting components, identifies a complex link between parenting and child outcomes. This literature review will

explore both the key components of parenting, as well as the link between parenting dimensions and child outcomes.

Parenting behavior is distinctly different from parenting style, although they both impact a child's well-being. Based on Baumrind's original theory of parenting styles, Maccoby and Martin (1983) characterized four different styles of parenting: authoritative, authoritarian, permissive, and indifferent. The authoritative parenting style is characterized by high warmth and behavioral control. The authoritarian parenting style, on the other hand, is characterized by high behavioral control and low warmth. Low behavioral control and high warmth would be associated with a permissive parenting style; while indifferent parenting style is characterized by both low warmth and behavioral control. Essentially, these parenting styles create an emotional climate for the parent-child relationship (Darling & Steinberg, 1993). Parenting behavior, by comparison, has been defined as the specific behaviors by which parenting occurs (Darling & Steinberg, 1993).

The relationship between these two dimensions is complex. Parenting behaviors can be one way in which parents express their parenting styles (Fletcher et al., 2008). This is particularly evident in parental disciplinary and control strategies. In terms of general strategies, control and inconsistent discipline have been identified as potentially problematic for child outcomes. Controlling forms of discipline have generally been associated with less than optimal development in children. However, these associations vary depending on the degree of negativity in the controlling behavior (physical punishment, harsh parenting, etc.) (Fletcher et al., 2008). For instance, physical punishment has been associated with increases in child aggression (Strassberg, Dodge, Pettit, & Bates, 1994), while punishment in combination with reasoning strategies has been associated with a decrease in disruptive behavior through a fear of

punishment (Hoffman, 1985). Inconsistent discipline has also been shown to impact children's developmental well-being (Fletcher et al., 2008). Specifically, inconsistent discipline strategies provide reinforcement for non-compliant behavior and increase the likelihood that it will occur again in the future (Patterson, 1997). In addition, these parental inconsistencies have been linked with antisocial behavior among children (Dishion & Kavanagh, 2003).

Researchers have suggested that the use of specific parenting behaviors can be dictated by parenting style (Fletcher et al., 2008). For instance, an authoritative parent (high in warmth and control) would be less likely to use controlling or inconsistent parenting behaviors due to the belief that positive parenting contexts encourage children to be more receptive to parental discipline strategies. In contrast, passive parents (high in warmth and low in control) are more likely to engage in inconsistent parenting behaviors and may have difficulty setting behavioral boundaries. Fletcher et al. (2008) and other researchers have found that the emotional climate (i.e. parenting style) plays an important role in the association between parenting behaviors and child outcomes both with controlling and inconsistent parenting behaviors (Deater-Deckard, Ivy & Petrill, 2006; McLoyd & Smith, 2002; Schneider, Cavell, & Hughes, 2003). Specifically, McLoyd and Smith (2002) found that physical discipline predicted an increase in child behavior problems only in combination with low levels of support. In addition, Fletcher et al. (2008) reported that internalizing, externalizing and social problems were associated with coercive parenting, but only for the authoritarian parents. Essentially the emotional climate set by the parenting style uniquely added to the association between parenting behaviors and child outcomes. This association is the basis for this study's interest in parental control and the link with child dominance. This study is designed to extend our understanding of the association

between parental control and child outcomes by considering the implications for child dominance strategies in peer relationships.

Parental Control

Parental control is a complex and multifaceted construct and as such, can be difficult to define. The literature has many definitions that include several components including parent-child relationships, parental control, harsh parenting, and psychological and behavioral control (Scaramella et al., 2008; Karreman et al., 2006; Barber, 1996; Morris et al., 2002). There are significant differences in the degree to which parents use control and this literature review aims to define and clarify all components of parental control. As previously mentioned, components of parenting can be assessed by the degree of warmth and control (Darling & Steinberg, 1993; Fletcher et al., 2008; McLoyd & Smith, 2002). Types of parental control each vary by the degree of negativity in the controlling behaviors. In addition, the emotional climate, which is determined by overall relationship quality, can also vary by the degree of negativity. This section focuses on warmth and control within parenting behaviors, as well as the emotional climate determined by the overall parent-child relationship quality. Initially, positive and negative control, harsh parenting, and psychological and behavioral control are discussed as parenting behaviors. In addition, overall parent-child relationship quality is discussed as an important aspect of parental control as a parenting style.

Positive and Negative Parental Control

Parental control is only one control strategy and has typically been used as a more general term for excessive regulation of a child's behavior. Sometimes seen as overprotection, it involves limiting a child's decision-making or ability to think or feel independently (Barber, 1996). However, there are inconsistencies in the literature discussing parental controlling

behaviors and child behavior outcomes (Karreman et al., 2006). These inconsistencies may be due to a lack of distinction between positive and negative control. Positive control is parental behavior that is directive, yet characterized by teaching, encouraging and guiding the child's behavior. Negative control, on the other hand, is defined by behaviors such as anger, harshness, and criticism, as well as excessive or intrusive control (Karreman et al., 2006). The difference between these two types of control may explain the variation in the literature and the explicit differences in observed child outcomes.

Harsh Parenting

Researchers have also identified more intrusive forms of parental control. Harsh parenting has been defined as emotionally negative parental behaviors that involve restrictive commands, intrusive physical contact, and criticism of the child (Scaramella et al., 2008). The key ingredient that distinguishes harsh parenting from other types of parental control is the addition of emotional negativity. Chang and colleagues (2003) divide harsh parenting into two categories: coercive acts and negative emotional expressions. Most importantly Chang (2003) found that harsh parenting is more than simple disciplinary behaviors. Harsh parenting is ultimately a form of emotional (or affective) communication in the parent-child relationship. The negative emotional component, or the degree of emotion a parent delivers during discipline, is unique to harsh parenting and distinguishes this form of parenting from other forms of parental control and ultimately sets the tone of the relationship between parent and child. In addition, Deater-Deckard and Dodge (1997) suggest that a negative relationship influences the degree to which harsh parenting impacts child behavior outcomes. Specifically, a negative parent-child relationship significantly impacts the positive association between harsh parenting and child

aggression outcomes. Consequently, this emotional communication is an important component in the relationship between harsh parenting and the resultant child outcomes.

Psychological and Behavioral Control

In extreme cases of parental control, psychological and behavioral control is used to gain power over a child. Psychological control has been classically operationalized as attempts to manipulate a child's behavior and identity that interfere with the psychological and emotional development of the child (Barber, 1996; Morris et al., 2002). The commonly effected developmental outcomes include thinking processes, self-expression, emotions, and attachment to parents. Psychological control is currently conceptualized as a negative form of control due to the negative impact on child outcomes (Barber, 1996). Behavioral control, on the other hand, refers to parental behaviors that attempt to control or manage a child's behavior (Barber, 1996). Barber (1996) suggests that the separation between behavioral control and psychological control lies in the involvement of physical contact. Typically, psychological control has negative effects on children's internalizing behaviors, while behavioral control has negatively impacted externalizing behaviors (Barber, 1996). Other researchers have conceptualized monitoring as a "psychologically neutral" form of behavior regulation (Pettit et al., 2001), in that the regulation focuses solely on the regulation of behavior. Dodge, Pettit, and Bates (1994) argue that behavior regulation facilitates positive socialization in children and adolescents. It is important to note the nature of these definitions. Both psychological and behavior control are defined by their impact on the child, the resultant child outcomes, not by specific behaviors or communication like the other forms of control discussed above.

Overall Parent-Child Relationship Quality in Relation to Parental Control

The parent-child relationship is developed as a result of the combination of parenting behaviors and styles. As previously mentioned, parenting behaviors can be one way in which parents express their parenting styles (Fletcher et al., 2008). Typically, a positive parent child relationship is defined by the degree of warmth and security the parent offers to the child (Maccoby and Martin, 1983). Most often this would be considered an authoritative parenting style. Parental disciplinary and control strategies play a critical role in the development of parent-child relationships. Deater-Deckard and Dodge (1997) found that the parent-child relationship significantly impacts the positive association between harsh parenting and child aggression outcomes. Specifically, a negative relationship strengthens the association between harsh parenting and child aggression. On the other hand, a positive relationship may actually buffer the impact of harsh parenting on children (Deater-Deckard & Dodge, 1997).

Summary

Parent-child relationships, negative parental control, harsh parenting, and psychological and behavioral control are the major components of parental control. Negative parental control is defined by the parenting behaviors, such as criticism and excessive or intrusive control (Karreman et al., 2006). Harsh parenting includes emotional components that set it apart from the other parenting behaviors due to the impact on undesired child outcomes (Chang et al., 2003). This emotional component not only increases the negativity in the parenting behaviors, but also impacts the overall relationship quality. This may play a further role in the association between parental control and child outcomes. This key piece is the defining factor that separates many of the parental discipline constructs to be discussed in this review. Psychological and behavioral control, are positively linked with, and commonly discussed in terms of the outcome:

problem behavior in children (Pettit et al., 2001). These important components set the foundation for linking other parental controlling behaviors and styles with child outcomes. Before one can decipher the impact these behaviors have on children, it is important to understand how dominance manifests itself in children.

Child Dominance

While parent-child relationships have significant impact on child outcomes, so too do the child's own peer relationships. As described in the previous section, parental behaviors and parenting styles are important because they shape the developmental success of the child and in turn they predict child outcomes. One set of child outcomes that are of interest to parents and researchers alike can be grouped under the heading of "social competence." Social competence can be defined as the necessary social, emotional, and cognitive skills and behaviors needed for children's successful social adaptation (Welsh & Bierman, 2001), but this straightforward definition belies the complexity of the construct. Complexity notwithstanding, it is recognized that social competence involves two potentially conflicting aspects: communion (or social relationships) and agency (or personal achievement) (Hawley, 2002). The capability to balance these two dimensions, communion vs. agency, is what distinguishes a socially competent child from an aggressive or victimized child (Hawley, 2002).

Agency has primarily been seen as an individual's ability to successfully control resources in the presence of others, regardless of the method (Hawley, 2002). These resources can include physical objects, social status or even access to peers. This resource control is often considered to be a key aspect of social dominance. Children control these resources through two forms of control: prosocial control and coercive control. Aggression can be costly to individuals. Therefore, in order to establish or maintain social dominance, a child must use a variety of

strategies, both prosocial and coercive (Pellegrini et al., 2007). Researchers have argued that social competence and social dominance are intertwined and often help create an identity, which the child may use to gain confidence or control (Roseth et al, 2007). The various combinations of strategies in children are particularly intriguing. This section addresses the distinct strategies and their use by socially competent children.

Child Social Competence

For children, social competence is often the gauge used to measure social development or wellbeing. This is because socially competent children are capable of maintaining complex social relationships and are highly accepted among their peers (Hawley, 1999; 2002). The lack of social competence is often attributed to maladaptive development. Researchers have suggested that children that are not socially competent may act out aggressively (Pettit, Harrist, Bates, & Dodge, 1991), develop antisocial social behavior (Sroufe, 1983), or even experience maladaptive development in adolescence (Kupersmidt, Coie & Dodge, 1990). These outcomes can severely affect social relationships and even academic progress. Ultimately, the development of socially competent strategies for young children will facilitate appropriate social relationships during those important developmental years and well into the future.

Coercive Strategies for Resource Control

As noted, resource control has typically been defined as control of physical objects used by multiple persons in an activity. Historically though, social dominance has been uniquely associated with aggressive behavior. Hawley (1999; 2002) defined coercive control as resource restriction, physically aggressive behaviors and criticism. These strategies have been traditionally associated with social dominance. Typically, coercive control has not been seen as socially acceptable and is often frowned upon in school settings (Hawley, 2002). Consequently,

this type of behavior alone does not often advance a child's social development due to the aggressive and isolating nature of the behavior.

Prosocial Strategies for Resource Control

Prosocial behaviors are operationalized as voluntary acts that benefit others, such as helping, sharing, and cooperating (Hawley, 2002). Typically, these non-aggressive behaviors are done to benefit others or the group as a whole. Hawley (2003) describes prosocial control as indirect strategies used across time and generally to facilitate positive group regard. These strategies can include reciprocity, cooperation, unsolicited help and friendship formation (Hawley, 2003). It is important to note that these strategies are frequently done with resource control as the desired outcome. Researchers have clearly documented this link between prosocial control and resource control in children (Hawley, 2003; LaFreniere & Charlesworth, 1987).

The Link between Prosocial and Coercive Behavior and Social Dominance

As previously described, children engaged in resource control can compete for more than physical objects. Children can vie for peer relationships and social status as well (Hawley, 1999; Hawley, 2002). This social competition requires more complex control strategies. Socially competent children achieve resource control through a variety of means, including aggressive, coercive, and prosocial acts (Hawley, 2002). Both Roseth and colleagues (2007) and Hawley (2002) conclude that social dominance involves a variety of behaviors including direct and indirect strategies of resource control, up to and including aggression. Roseth and colleagues (2007) suggest that socially dominant children use aggression in a fashion that is frequent, effective and efficient. These children are able to leverage aggression and affiliative resource-control strategies based on the stability of their peer relationships and the current specific social context to achieve their dominance. The use of aggression in concert with other strategies is done

in such a way that this aggression does not become a liability for these children. These studies differentiate between the child aggression and specific dominance behaviors used in a resource-control strategy.

Roseth and colleagues (2007) demonstrates the degree to which socially competent children can differentiate between socially inappropriate aggressive behaviors and more efficient forms of social dominance. In her work, Hawley (1999; 2002) argues that socially competent children may use prosocial control in combination with aggression to obtain resource control as well. Not only can aggression be a mechanism by which socially competent children obtain resources (Roseth et al., 2007), but prosocial control has also been identified as a method for resource control (Hawley, 1999; Hawley, 2002). Hawley (1999; 2002) suggests that prosocial control is then used in combination with other aggressive acts as a strategic move for socially competent children to increase their social status. Her work shows that aggressive behaviors were associated with a number of measures of social competence, specifically prosocial behavior (Hawley, 2002). In Hawley's 2002 study, prosocial behaviors and coercive behaviors were also positively correlated, indicating that children who used prosocial behaviors, such as helping, suggesting or guiding, were also likely to use coercive tactics, such as taking, thwarting and insulting. In fact, socially dominant children engaged in prosocial and coercive behaviors almost twice as often as the subordinate children.

Summary

The ability to control resources allows children to be competitive in their social environments (Hawley, 1999). To obtain this control, children may use prosocial behaviors and/or coercive behaviors. The two strategies differ in approach, but ultimately have the same goal: control of resources. Research has shown that prosocial and coercive strategies may even

be used in combination to obtain resource control (Hawley, 2002). The primary goal of this study is to investigate if and how maternal control strategies are associated with child control strategies. Does parental control of children lead to those children using similar strategies in their peer relationships? Next, this review analyzes the control strategies parents use with children and the impact these strategies have on child behavior and outcomes.

The Link between Parental Control and Child Dominance and Externalizing Behaviors

Parental control and child dominance have each been discussed independently in the literature. However, the association between the two still remains complex. Researchers have suggested that parental control may describe the medium or specific practices or interactions that influence a child's social dominance (Mize & Pettit, 1997). These behaviors can be found in both parent-child interactions and parenting styles. In this section, those studies, which have investigated the association between parental control and child dominance, are reviewed as a basis for the suggestion that control strategies can be transferred from parent to child. Initially, control strategies are examined to understand the process by which parental control is used to gain power in parent-child relationships. Following this, studies investigating the parenting influence on specific child social behaviors are reviewed. Specifically, child social competence and aggression have shown to be influenced by parenting behaviors and styles. Together these studies provide a basis for the link between parental control and child dominance.

Parental Control and Child Outcomes

Within the current literature base parental control has been defined as excessive regulation of children's behaviors, overprotection, limiting a child's decision-making or ability to think or feel independently (Barber, 1996). Parents may use these forms of parenting or discipline to obtain compliance from a child, as well as a personal sense of power. Although

these parenting behaviors may work in the moment, the long-term negative effects of compliance, emotional development and externalizing behaviors (Calkins, 1994; Eisenberg et al., 2001; Patterson, 1992; Pettit et al., 2001) may outweigh the momentary benefits.

Harsh Parenting. The use of harsh and controlling parenting behaviors have been shown to contribute to the development of a child's externalizing behaviors. Research has shown that the parental control over a period of time may influence social behaviors, specifically negativity, noncompliance, and aggression in preschoolers. Harsh and controlling parenting is linked with children's hostility toward peers (Hoffman, 1960). Moreover, harsh and inconsistent parenting increases externalizing behavior (Calkins, 1994; Eisenberg et al., 2001) and internalizing behavior (Shaw, Keenan, Vondra, Delliquadri, & Giovanelli, 1997). Research suggests that parental control may put children at risk for future developmental problems, as well as conduct and behavioral problems (Patterson, 1992). The impact of harsh parenting can last for years.

Behavioral control. Physical abuse and other forms of behavioral control run a fine line between harsh discipline and child abuse. The literature has often used harsh discipline and physical abuse interchangeably when discussing physical contact in discipline and the association with child outcomes (Weiss et al., 1992). Moderate physical discipline, however, is actually more common than physical abuse (Straus et al., 1980). As found by Weiss (1992), harsh physical discipline was moderately associated with increased child aggression. Interestingly, this form of discipline only affected externalizing behaviors in children. There was no association with internalizing behaviors. In addition, physically abused children have been found to have a significantly higher rate of externalizing behaviors than children who were not physically abused (Dodge, Pettit, Bates & Valentine, 1995). Dodge and colleagues (1995) also found that these same children were four times more likely to have clinically deviant behavior

problems. There has been extensive literature on the negative impact of behavioral control on child development and a large portion of the research community argues that physical punishment toward children universally results in negative child outcomes.

Psychological Control. Much like behavioral control, psychological control is associated with a number of detrimental child outcomes. Psychological control is related to high anxiety, depression, and delinquent behavior in adolescents (Pettit et al., 2001). In the same study, the authors found that psychological control is linked with previous reports of harsh parenting by both parent and child. This finding suggests that harsh parenting in childhood can lead to psychological control in adolescence as an attempt to control autonomy formation. As well, this finding fits with the previous suggestion that early harsh parenting can impact later behavioral conduct problems for children. This would be especially true if the discipline became psychologically controlling as the child continues to age.

Summary

Research has concluded that parental control, in many different forms, can put children at risk for future developmental problems (Patterson, 1992). Physically abused children have higher rates of externalizing behaviors than children who were not physically abused (Dodge, Pettit, Bates & Valentine, 1995), while psychologically controlled children may have high anxiety, depression, and delinquent behavior as they age (Pettit et al., 2001). Although researchers have found a solid link between harsh parenting and child outcomes, there is more to the association. Consistently, parenting style has been found to be an important component in this relationship. In fact, parenting style may moderate the association between parental control and child outcomes.

Overall Relationship Quality in Relation to Child Outcomes

As mentioned previously, the emotional climate that parents may employ can have serious implications for child adjustment (Deater-Deckard, Ivy & Petrill, 2006; McLoyd & Smith, 2002; Schneider, Cavell, & Hughes, 2003). Moreover, it appears that the emotional climate set by the parenting style, or what could be seen as overall parent-child relationship quality, may serve to moderate the influence of particular parental behaviors. For example, McLoyd and Smith (2002) found that physical discipline predicted an increase in child behavior problems only in combination with low levels of support. As well, Fletcher et al. (2008) reported that internalizing, externalizing and social problems were associated with coercive parenting, but only for the authoritarian parents. This mediating model has been supported by a number of researchers (Alink et al., 2008). This review will focus on social competence and aggression as outcomes for children in association with parental control but as moderated by overall emotional quality.

Social Competence. Several researchers have suggested that parent-child interaction patterns are important determinants in the development of children's social competence with peers (Finnie & Russell, 1988; Pettit, Harrist, Bates, & Dodge, 1991). Warm parent-child relationships predict increased social competence (MacDonald & Parke, 1984) and peer acceptance in kindergarten (Isley, O'Neil, Clatfelter, & Parke, 1999). Conversely, harsh and inconsistent parenting increases externalizing behavior (Calkins, 1994; Eisenberg et al., 2001) and internalizing behavior (Shaw, Keenan, Vondra, Delliquadri, & Giovanelli, 1997). Harsh and inconsistent parenting may promote the development of antisocial behavior in children through communication of negative affect (Eron, 1987). Moreover, other researchers note that social development is enhanced by a contingent and predictable social environment (Pettit, Harrist,

Bates, & Dodge, 1991), often provided through home or family life. This type of environment provides the child with control and efficacy with respect to social relationships (Leiberman, 1997). This then facilitates the development of appropriate social relationships (Sroufe, 1983). The lack of predictability increases the probability that a child will be threatened by social interactions and consequently acts out in an aggressive manner (Pettit, Harrist, Bates, & Dodge, 1991). This can also lead to coercive interactions between parent and child, which are otherwise known as a coercive cycle (Patterson, 1982). This process of transmission is further discussed later in the review.

Aggression. In relation to aggression, parental warmth (one parenting style) is important to the association between parental control and child outcomes. The literature addressing the link between parenting and child aggression has universally discussed this topic within the context of parental warmth and control. These two constructs are the basis for the parenting style construct (Maccoby and Martin, 1983). Darling and Steinberg (1993) argue that these parenting styles create an emotional climate for the parent-child relationship. Deater-Deckard and Dodge (1997) found that the parent-child relationship significantly impacts the positive association between harsh parenting and child aggression outcomes. Specifically, a negative relationship strengthens the association between harsh parenting and child aggression. On the other hand, a positive relationship may shield the impact of harsh parenting on children (Deater-Deckard & Dodge, 1997). Researchers have also found that a lack of parental warmth increases aggressive behavior in children (Shaw, Bell, & Gilliom, 2000). However, the presence of parental warmth can protect against the effects of harsh discipline (Deater-Deckard & Dodge, 1997; McLoyd & Smith, 2002). Consequently, parenting style seems to significantly affect the connection between parenting behaviors and child outcomes.

Summary

Throughout this review, the concept of emotional climate has been discussed with relation to both communication (Chang et al., 2003), as well as the development of children's social schemas of aggression (Weinfield, Sroufe, Egeland, & Carlson, 1999). The impact of warmth extends beyond the parent-child relationship. It may be the mechanism by which children learn socially dominant behaviors that present themselves in the peer group. This transmission and extension of the emotional climate has a significant impact on child outcomes.

Process of Transmission

Through an array of proposed mechanisms, theorists have suggested that children learn aggressive behavior if their parents use aggressive forms of discipline. There is significant evidence that authoritarian discipline is correlated with behavior problems in children (Baumrind, 1993; Rothbaum & Weisz, 1994). Specifically, researchers have found evidence supporting the link between the use of harsh physical discipline by parents and child externalizing outcomes (Baumrind, 1993; Deater-Deckard & Dodge, 1997). Other studies have shown that ratings of parental harsh discipline is related to later observations of child social aggression, peer nomination of aggression, and teacher observed externalizing problems (Dodge et al., 1990; Dodge, Pettit, Bates, & Valentine, 1995). The next question is: what are the possible mechanisms for this transmission?

Modeling

Bandura (1969) believed that people not only learn through their own experiences, but also by observing the actions of others and the result of those actions. Consequently, he concluded that learning is a social interactive process (Goldhaber, 2000). Specifically, modeling is considered an observational learning process. Social learning principles suggest that children

of parents who rely on either harsh or permissive parenting tactics will utilize the same type of strategies with their peers (Sandstrom, 2007) because they have observed and thus learned to use these strategies.

Researchers suggest that there is both a direct effect on child aggression, as well as an indirect effect. Chang et al. (2003) found that fathers' harsh parenting had a direct effect on child school aggression. Further, the effects of fathers' and mothers' harsh parenting were both mediated by emotion regulation. The transfer of negative emotional responses from parent to child explains this effect. Chang et al. (2003) argue that this is the basis for emotional dysregulation, which can lead to child aggression. As well, Rubin et al. (1998) found that emotional dysregulation in children was linked to aggressive behavior and maternal negative dominance played a key piece in this relationship. Among children whose mothers displayed high amounts of negative dominance, the most emotionally dysregulated children exhibited the most aggressive behavior (Rubin et al., 1998). This interaction suggests that parental control can inflate childhood aggression among children with emotional dysregulation.

The indirect link between parenting and child aggression may be explained by the variation in child emotional regulation. Some researchers have suggested that child emotion dysregulation is actually a reflection of the learned behavior through parental modeling of inappropriate emotions (Alink, 2008). The parental modeling of dysregulated behaviors, such as parental control or harsh parenting, may impact a child's capacity for emotional regulation (Eisenberg et al., 1999), which may in turn lead to an array of social problems in schools (Fabes Eisenberg, & Miller, 1990). Sroufe and Fleeson (1986) have suggested that aggressive physical and emotional interactions between parents and children form a basis for children's future social

interactions. These studies essentially suggest that the effects of harsh parenting can be moderated by parental warmth.

Social Reward

On the other hand, multiple studies have suggested that harsh parenting actually moderates the relationship between warmth and child outcomes. Patterson (1982) argues that coercion theory, which is a multistep process in which families are essentially trained to reproduce coercive strategies, exemplifies this moderation. Through a series of interactive steps, both parent and child use coercive strategies to obtain control over the situation. The extended period of conflict typically leads to the escalation of coercive tactics, and often the parent resorts to harsh attempts to gain control. Snyder and Patterson (1995) report that mothers' use of negative reinforcement in these coercive conflicts increases child aggressive behavior over time. Not only are parents using negative reinforcements in these coercive interactions, but they are also employing inconsistent parenting strategies. Parke and Deur (1972) demonstrated that when parents are inconsistent in disciplining their children, the children are more likely to behave aggressively.

In line with a social information processing model (Dodge, Pettit, McClaskey, & Brown, 1986), Dodge and colleagues (1990; 1995) suggest that children may develop internal working models in response to the harsh discipline. Processing patterns, such as poor attention to cues, hostile attributional biases, and accessing aggressive strategies may explain the connection between harsh parenting and child externalizing behaviors. Dodge, Pettit, Bates & Valentine (1995) found that the development of these cognitive processing patterns accounts for up to half of the variance in the link between harsh parental discipline and child externalizing behaviors. Another study found that children who were exposed to harsh parenting were more likely to

pursue hostile goals (Heidgerken, Hughes, Cavell, & Wilson, 2004). This would then, in turn, increase the child's likelihood of attributing hostile intent to ambiguous situations, reacting aggressively and expecting positive consequences from their behavior. Although there are a variety of explanations for how children may internalize harsh parenting, there is a significant body of literature that substantiates the connection between harsh parenting and child aggression.

Conclusion

The emotional climate parents provide children (parenting styles) and the specific parenting behaviors used with the intent of child socialization (parenting behaviors) have been shown to interact in complicated ways (Baumrind, 1967; 1971; Maccoby & Martin, 1983). Research on parenting style and behavior suggests a complex link between parenting and child outcomes. This review has focused on several components including parent-child relationships, parental control, harsh parenting, and psychological and behavioral control (Scaramella et al., 2008; Karreman et al., 2006; Barber, 1996; Morris et al., 2002). In addition, children's abilities to establish or maintain social dominance through a variety of strategies were reviewed (Pellegrini et al., 2007; Roseth et al., 2007). Specifically, prosocial and coercive strategies were examined. Together these controlling behaviors from both parents and children create the initial interest in for this study.

Next the review introduced the link between maternal controlling behavior and child dominance strategies. Research has concluded that parental control, in many different forms, can put children at risk for future developmental problems (Patterson, 1992). Although researchers have found a solid link between harsh parenting and child outcomes, parenting style has been found to be an important component in this relationship. Parenting style may, in fact, moderate the association between parental control and child outcomes. The emotional climate concept was

discussed with relation to both communication (Chang et al., 2003), as well as the development of children's social schemas of aggression (Weinfield, Sroufe, Egeland, & Carlson, 1999). This climate may be the mechanism by which children learn socially dominant behaviors that present themselves in the peer group. The transmission and extension of the emotional climate may have a significant impact on child outcomes.

This review has proposed two possible mechanisms by which controlling behaviors may be transmitted from parent to child: Social Learning Theory and the concept of Social Reward. Social learning principles suggest that children of parents who rely on either harsh or permissive parenting tactics will utilize the same type of strategies with their peers (Sandstrom, 2007). It has also been suggested that children may develop internal working models in response to the harsh discipline through the concept of social reward (Dodge et al., 1990; Dodge et al., 1995). Researchers have found that the development of cognitive processing patterns accounts for up to half of the variance in the link between harsh parental discipline and child externalizing behaviors (Dodge, Pettit, Bates & Valentine, 1995).

All of the important aspects of controlling behavior in both parents and children have been reviewed as a basis for the interest in the following study. Not only does this study explore the frequency of which these behaviors occur in both the parent-child relationship and the child-peer relationship, but this study also assesses the association between the two. A more detailed description of this study and hypothesis will be addressed in the next section.

The Current Study

The current study examined parent influence on the development of dominant behaviors in young children's social relationships. Specifically, this study descriptively examined mothers' controlling behavior frequency and overall relationship quality with their children in tasks

requiring parent participation or direction and children's use of coercive behaviors in a peer interaction. In addition, bivariate correlations between the frequency of mothers' controlling behavior and children's use of coercive behavior in peer interactions were assessed. The final goal of the study was to explore the associations between maternal behaviors and children's dominance and coercive behaviors in the peer group while controlling for child and family characteristics that may influence child behavioral outcomes.

Research Goals

This empirical study had two fundamental research goals. The first goal of this study was to describe the frequency and basic correlations of control strategies and relationship characteristics in mother-child interactions and child-peer interactions. The maternal control behaviors examined in this study included verbal demands, verbal restrictions and physical control or restrictions. In addition, global ratings of mother-child relationship characteristics (e.g., relationship negativity) were assessed. In children, dominant behaviors examined include resource control, verbal demands, and physical control or restrictions. Child dominance hierarchy status and child coercion were used to examine correlations between maternal control, mother-child relationship quality and child social behavior.

Research Question 1: How frequent are controlling/coercive behaviors, and is greater frequency of negative maternal controlling behaviors related to increased child coercion?

H1: Children of mothers who frequently use negative controlling behaviors will have a higher use of coercive behaviors.

The second goal of this study was to assess the association between mother-child controlling behaviors and child-peer interactions, as well as child externalizing behaviors. Due to

the research that has linked harsh and inconsistent parenting with child externalizing behavior (Calkins, 1994; Eisenberg et al., 2001), it was expected that more maternal control and greater relationship negativity would predict greater coercion in children's peer interactions and higher levels of externalizing behaviors in the classroom as reported by teachers. Because relationship negativity may moderate the relationship between maternal control and child outcomes (Chang et al., 2003), the interaction between relationship negativity and maternal control in predicting child outcomes was also examined. It was expected that the association between mother and child behaviors would be present even when controlling for potential confounding influences like family socioeconomic status and child age.

Research Question 2: Are mothers' negative controlling behaviors and a negative relationship quality associated with children's coercion and dominance?

H2a: More maternal use of negative controlling behaviors and a negative relationship quality will be independently associated with more coercion and dominance in children.

H2b: Children whose mothers use more negative controlling behaviors and who have a more negative relationship quality will be more coercive and dominant than children whose mothers use less negative controlling behaviors and who have a less negative relationship quality.

In the following section, the methodology, sample, and measures used to assess these questions in this study are discussed.

CHAPTER THREE

METHOD

Participants

Participants in the current study were drawn from a larger, 2 cohort study of early childhood social development. Children attending sixteen classrooms in seven preschool programs or child care centers in the Pullman, WA/Moscow, ID area were recruited for participation in the larger study. Parents of 231 children (53% female) ranging in age from 3 to 5 years old agreed to participate. Parents of only the children who would be going to kindergarten in the following year for Cohort 1 (n=130) and all children in Cohort 2 (n=53) were contacted again to invite the mother to participate with her child in a laboratory assessment and for the child to participate in a playgroup assessment at the child's school. For the laboratory assessment, 116 mothers agreed to and 90 completed the laboratory assessment. For playgroup participation, 119 parents granted permission for the child to participate and 97 completed the playgroup assessment. Children for whom parent consent was given for playgroup participation who were not included in the playgroup were either absent on the days when playgroups were conducted or there were not enough children in the class to make complete playgroups. A total of 57 children (31 boys) ranging in age from 36 to 70 months ($M=.53$ mos, $SD=.85$) participated in both the mother-child laboratory interaction and the playgroup and were, therefore, eligible for the current study. This study included only on those children with both laboratory and playgroup data. The ethnic composition of the sample included 78.9% White, 1.8% Asian /Asian American and 1.8% other race. Unfortunately 17.5% of the sample did not complete the ethnicity information and therefore data on child ethnicity was only available for 47 out of the 57 children in the sample. In the sample mothers' highest education completed was 28.1% for high school degree, 50.0% for AA or BA degree, and 21.1% for a graduate or

professional degree. Families earning less than \$40,000 annually make up 35.7% of the sample. Those earning between 40 and \$70,000 annually make up 30.3% of the sample, while 33.5% made over \$70,000 annually. There were no significant differences between the sample and the larger study, except for ethnicity. Fewer minority children were in the final sample compared with the full sample ($\chi^2=10.14, p<.001$).

Data Collection Overview

The data used in this portion of the study comes from two projects within the Department of Human Development at Washington State University. The first cohort comes from the Preschoolers and Pals Project and the second cohort comes from the Family and Peers Interaction Study. The first cohort was a larger study sample of preschool children from 14 classrooms in six early childhood centers in Pullman, Washington. The second cohort data was collected the following year and was gathered from five early childhood centers. Parents provided parental consent for their children to come into the lab and for teachers to complete surveys on their children's behaviors.

Laboratory Assessment Procedures

The laboratory engaged participants in a series of structured and semi-structured interaction tasks. The laboratory session lasted approximately 60 minutes, and interactions were videotaped using remote cameras positioned in the laboratory observation room. During the first segment, mothers engaged in free play with children using provided toys (i.e., kitchen, dolls, puzzles and blocks). In the second segment, mothers independently completed surveys in another room while children completed a structured interview designed to assess empathy and social cognitions with an experimenter in the observation room. The third and fourth segments consisted of the "controlled mess" and mother-initiated clean up tasks. The fifth segment was the

social coaching task, and in the final task, the parent-child dyad jointly completed two mazes using a modified Etch-A-Sketch. Following the final task, participants were thanked for their time and compensated \$50. Children were allowed to pick a prize, and families were allowed to ask any questions they had about the laboratory procedures. Observational data for the present study were taken from the clean up task and Etch-A-Sketch task.

Clean Up Task. The clean up task consisted of a supervised clean-up task in which the mother was instructed to get the child to clean up a standardized, controlled mess in order to get ready for the next task. The mothers were instructed to get their child to put away the blocks but were not to assist the child in picking up the blocks. In this task, the child had to sort the blocks into boxes of plain and colored blocks. A total of seven minutes was allotted for the task.

Etch-A-Sketch Task. The etch-a-sketch task is a challenging task using an Etch-a-Sketch in which the mother and child had to traverse a maze attached to the Etch-a-Sketch with the mother and child each controlling different knobs. The participants are instructed to stay within the blue lines and move from the start to the finish. Once the participants finish the first maze they are instructed to try the second, more difficult maze. Five minutes were allotted for this task.

Play Group Assessment Procedures

The semi-structured playgroup activities occurred within the children's early childhood education centers. Children whose parents had consented to their participation were placed in groups of three or four children from the same classroom and asked for assent to play a game. Playgroup activities took place in a separate room from the rest of the classmates, so as to minimize interference. Children were seated along one side of a table, facing a video camera. They were told they would be making a movie about a trip to the zoo and that during the first

part of the activity they would have five minutes to color in the background pages for the zoo scene. The video camera was pointed out as necessary for filming the movie. A five-minute sand-timer was provided along with some coloring pages and a limited number of crayons. The number of crayons was equivalent to the number of children participating in each activity, but one crayon was always white, meaning it would not work on the white coloring pages provided. During this first part of the activity, researchers remained out of view but within earshot of the children in the room where the playgroup was taking place in case serious conflict ensued. Researchers did not interact with the children or respond to questions during the procedure. During the second part of the activity, the sand timer was reset and the background pages were removed. Children were given pictures of animals to color, a new set of limited crayons, and two pairs of children's safety scissors. They were told to color and cut out the animals for five minutes. Researchers again remained within view and earshot of the children and refrained from interaction. During the third and final part of the activity, the background pages were hung on a simple stage and children were given some toys, including a picnic table and some people figurines. They were encouraged to make a story about a trip to the zoo. Researchers devised a specific coding system to categorize behaviors exhibited during the playgroup activities. The coding system is shown in Appendix B.

Measures

Maternal Control

The coding system that was developed for the current study was initially based on observational coding systems used by Rand Conger and colleagues at Iowa State University and later revised by Greg Pettit and colleagues at Auburn University. It was further adapted by Teresa Schmidt (Schmidt, 2008) to code the playgroup data for her thesis. For this study, this

coding system was modified to create parallel constructs for coding the mother-child interaction that were used for the child-peer interactions coding. The coding system is given in Appendix A. Mothers' and children's speaking turns during the clean-up and Etch-a-Sketch portions of the laboratory assessment were transcribed and then coded by trained coders who identified the type of communication used by the mother. Communications that were teaching or facilitating, guiding, or relationship building were coded as "prosocial" while behaviors that were directive, controlling, or put the child down were coded as "controlling." Mother prosocial and controlling scores were computed by dividing the number of speaking turns in which the mother displayed prosocial or controlling behavior by the total number of speaking turns to give a proportion score. Twenty-five percent of the mother-child interactions were independently coded to establish reliability. Cohen's Kappas for the maternal prosocial and control variables were .76 and .70, respectively.

Overall Relationship Quality

The global codes in the study assess general ratings of relationship quality throughout the task on a 1-5 scale. The global codes include four categories: Control/dominance ($\kappa=.78$), encouraging independence/autonomy ($\kappa=1.0$), relationship negativity ($\kappa=.71$), and positive relationship ($\kappa=.65$). The control/dominance code assesses the degree to which the mother tries to control or dominate the child in the task. High control/dominance focuses on *attempts to* and *success* in controlling the child's behavior to get the child to conform to the intentions and desires of the mother. The encouraging independence/autonomy code assesses the mother's behaviors that encourage the child to succeed and teaches the child independence. Mothers high in encouraging independence/autonomy demonstrate encouragement for the child to be able to accomplish the task through such means as providing supportive encouragement and seeking the

child's input and suggestions for accomplishing the task. The relationship negativity code assesses the coder's perception of overt and covert negativity in the mother-child relationship. This code assesses behaviors relating to maternal critical behavior, passive aggression, and psychological control. Finally, the positive relationship code assesses the coder's perception of overt and covert positive interaction in the mother-child relationship. This code assesses behaviors relating to maternal warmth, encouragement (separate from encouraging independence), praise, and acceptance of the child. Together these codes assess the coder's perception of the mother-child interactions performed in the laboratory. Due to this study's focus on maternal control and overall relationship quality, only the code assessing negative relationship quality was used in analyses.

Child Prosocial and Coercive Strategies

All behaviors, including verbal communications, nonverbal gestures, and resource control attempts by children during the first two segments of the playgroup tasks were coded by two trained coders. Frequencies of behavior codes were then collapsed into categories, including *prosocial control* (including *equitable resource control, facilitation of others' efforts, teaching, and group advocacy*), and *coercive control* (including *verbal, material, physical and relational control, self aggrandizing, and general dominance*). The intra-class correlation coefficients (ICC) for assessing inter-rater reliability of coercive behavior frequency was .94, and .91 for prosocial behavior frequency (both $ps < .001$).

Unfortunately, due to data loss, the prosocial communication data was unavailable at the time of analysis. In addition, the data that allowed for examining the proportion of coercive communication by speaking turn was also lost. As a result, scores for child communication included the total number of behaviors children used across two, five-minute tasks.

Child Dominance

Global measures of social dominance hierarchies were assigned to children for all three segments of the playgroup tasks by two coders, with dominant children receiving a rank of 1 and less dominant children receiving ranks of 2, 3, and sometimes 4, depending on the number of children participating in the activity. For the playgroups with 4 children, the lowest dominant child (ranked “4”) was recoded as “3” for the analysis. The score was averaged across three tasks. Interrater reliability (intra-class correlation) on the dominance rankings was .69 ($p < .05$).

Ethical Considerations

Data collection included a special population (children). At the start of the playgroup and laboratory procedures, children were asked to provide verbal assent and informed that they could stop participating at any time during the procedure if they so desired. Mothers were compensated with a gift of \$50 for participating in the laboratory interaction with their child and children received a sticker as a gift to thank them for their participation in the playgroup activity.

Although neither the mothers nor children were informed about the purpose of each aspect of the study prior to participation, no explicit deception was used. For both the laboratory and the playgroup procedures, researchers monitored the activities at all times—from behind a one-way mirror for the mother-child interaction and from a different part of the room or an adjacent room within hearing range but out of the children’s visual sight for the playgroup procedure.

Following the procedures, the participants were debriefed about the procedures and invited to discuss their experience as participants. All study procedures were approved by the Washington State University Institutional Review Board.

Plan of Analyses

Correlation analysis and regression analysis will be used to test the association between mother-child dominance and child-peer dominance. The sample unit will be individual children, but information (scores) about the child's interactions with his or her mother and the child's peers will be used for analysis.

CHAPTER FOUR

RESULTS

This study had three empirical goals. First the frequency of control strategies in mother-child interactions and child-peer interactions were analyzed. In addition, bivariate correlations between the frequency of mothers' controlling behavior and children's use of coercive behavior in peer interactions were assessed. The second goal of this study was to assess the association between mother-child controlling behaviors and child-peer interactions, as well as child externalizing behaviors. This was done through correlation and regression analyses. The results of the proposed analyses are discussed below.

Descriptive Analyses

Descriptive analyses of the main study variables are reported in Table 1. To assess the use of controlling behaviors in mother-child relationships and in child-peer relationships we reviewed the frequency of the use of control. Descriptive analyses for both the mother-child control and child-peer coercion variables showed that the variables violated the assumptions of normalized distributions of data (skewness ± 1.0). The skewness for the child data was 1.46. However, upon examination of the data distribution, it was evident that this skewness was due to one extreme outlier. One child was observed using 69 coercive behaviors across the playgroup procedure while the next highest value was 41 coercive behaviors. The outlying case was re-coded to be equal to the next highest value (41) and as a result, the skewness was reduced to .49.

As shown in Table 1 the use of maternal control was quite low, with over half of the mothers (56 %) using no maternal coercion. The use of maternal control in the laboratory assessments ranged from 0 to 38% of mothers' speaking turns, with a mean of mothers using controlling behaviors/communication in five percent of the speaking turns. In terms of the frequency of prosocial communication for mothers, 97% of all speaking turns included some

form of prosocial communication. The minimum use of prosocial communication for mothers was 76%. Unfortunately, the children's data that allowed for examining the proportion of coercive communication by speaking turn in the playgroup was lost due to computer failure. As a result, the child coercion score used in this study was the total number of coercive behaviors children used across two, five-minute portions of the playgroup procedure. Because the time for each segment of the playgroup was standardized across all children, the tally score for the number of coercive actions used was deemed an appropriate measure of child coercive behavior. For children, the mean frequency of coercive behavior displayed was 15.26 behaviors (after recoding the outlier) during the playgroup activity.

Association between Maternal Control and Child Dominance

Bivariate Correlation

Table 2 shows bivariate associations between key study variables. Relationship negativity, but not maternal control, predicted child coercion in the playgroup. The child scores of coercion were correlated with the dominance hierarchy score with children using more coercion rated as being more dominant. Finally, age was correlated with both child coercion and child dominance.

Maternal Influence Predicting Child Behavior

As shown in Table 3, relationship negativity significantly predicted child coercion at the .05 level. This finding was also significant when controlling for age, income and education. In terms of control variables, age significantly predicted child coercion and dominance. Older children used more coercion in the current study and children who used more coercion were more likely to be ranked higher in dominance. In addition, the interaction of coercion and relationship negativity was examined following the guidelines for examining moderation effects

described by Jaccard, Turrisi, and Wan (1990). An interaction term representing the product of mother coercion and global relationship negativity was entered in the third step of a hierarchical regression model with mother coercion and relationship negativity in step 1; age, parent education, and family income in the second step. As shown in tables 3 and 4, no interaction effects were found between maternal coercion and relationships in predicting either child coercion or child dominance. Hypothesis 2a and 2b were not supported.

CHAPTER FIVE

DISCUSSION

This study was designed to expand the understanding of the processes through which parents influence the development or maintenance of dominance in young children's social relationships. Specifically, this study examined mothers' controlling behaviors and overall relationship quality with their children and children's use of dominant and coercive behaviors in the peer group. The study also explored the associations between maternal behaviors and children's dominance and coercive behaviors in the peer group. The main findings from this study were that relationship negativity, but not observed controlling behaviors, predicting children's coercive behaviors in peer interactions. In this section, possible influences on a meaning of these findings in relation to understanding children's social development will be discussed.

Contributions

This study focused on children's experience in two separate environments: in mother-child interactions and in child-peer interactions. This allowed for comparison between behaviors in the two environments and provided assessment of possible associations between mother-child interactions and child-peer interactions. In addition, this research used observational methods to examine similar constructs in both parent-child and child-peer contexts.

Maternal Control and Child Dominance Behaviors

The frequency scores for maternal communication showed that prosocial communication was much more common than was coercive communication. Two possible explanations for this are that mothers' use of coercive communication is quite limited in mother-child interactions or that the coding system did not accurately distinguish between the two categories of

communication. For the first explanation, it could be that mothers in this sample really did primarily use more prosocial guidance strategies when interacting with their children. This may have occurred because the mothers knew that their interactions with their children were being observed and assessed. Mothers may have been careful to primarily use prosocial guidance strategies as a result of being in a laboratory interaction setting. For the second possibility, coders rating the mothers' behavior sometimes found it difficult to differentiate between two specific codes: the prosocial teaching code and the verbal coercion code. The differences between these two codes seemed very subtle at times, which caused difficulty in the coding and consequently limited the number of coercive codes for mothers. Some of the behaviors coded as "helping" by giving directions may, in fact, have been mild, verbal coercion. Inter-rater reliability analysis showed that, although the Cohen Kappa coefficients were "acceptable" (κ for maternal coercion was .70), there was still moderate disagreement and potential error in the measurement. This error in measurement may have limited the ability to detect associations between mother and child variables in this study. Additional analysis and refinement of the coding system is necessary to rule out this possibility and to improve the observational coding system.

Although no associations were found between maternal controlling behaviors and negative relationship quality in predicting either child coercion or child dominance, other main effects were found. Negative relationship quality significantly predicted child coercion. This is an important finding in that negative relationship quality may actually play a larger role in predicting child coercion than maternal coercive behaviors. This result is also echoed in Dodge and Pettit's study (1997) which found that the medium by which parents communicate with their children is important in the development of peer relationships. In addition, Alink and colleagues

(2008) found that parenting behaviors moderated parenting style. Interestingly, in the current study there was no interaction between maternal coercion and negative relationships in association with child coercion as predicted. This may be due in part to the difficulties regarding coding and the maternal control items.

Other Influences on Child Behavior

Age was a significant predictor of child coercion and child dominance in this study. This finding is in line with Hawley's (2002) theory that coercion is used as a means of social dominance in line with prosocial tactics. The use of child coercive behaviors increases with age and social experience. Specifically, Hawley (2002) discusses how aggressive or coercive behavior increases with social, cognitive, and verbal development. Although there were not significant age differences within the playgroups, the variance in age among 3-5 year olds may be significant in terms of development.

In addition, age was related to dominance among the participants. This may be similar to the increase in coercion with age. Older children may have the social, cognitive, and verbal development to successfully balance prosocial and coercive strategies to obtain dominance among their peers.

Limitations and Future Directions

This study has a few limitations that require acknowledgement. Primarily, the sample size is quite small. There were only 57 children who participated in both studies, limiting the statistical power to find associations among study variables and increasing the risk of Type II error (Hinton, 2004). The small sample size is especially problematic when attempting to make group comparisons, such as for examining differences between boys and girls. Finally, the generalizability of these results is limited because the population was primarily non-minority

mothers in the Pullman/Moscow area. To account for potential effects from education or income, both variables were controlled for in the regression analyses, but the findings in this study may be influenced by the relatively homogeneous, high-educated, primarily white sample used. Repeating this study with a larger, more diverse sample would be beneficial in further examining the effects of maternal control and negative relationship quality on children's peer behavior.

Future research should focus on the possible associations between maternal control and child dominance. Possible adjustments could be made to the coding system in order to eliminate confusion between prosocial and coercive behaviors and communication in the mother-child laboratory assessment. As previously mentioned, there were some difficulties coding teaching behaviors and verbal coercive. There were similarities between these two codes and this may have limited the number of coercive codes for mothers. A distinction is needed between direct verbal coercion and mild verbal coercion in the form of providing direction. This distinction would allow for increased coding reliability, as well as a more accurate frequency of coercive behaviors in the mother-child interaction. An adjustment to the global codes may also be able to assist coders in distinguishing between these forms of communication.

In addition, the codes were limited to only one of a specific code per speaking turn. Although proportion scores were used to compensate for this, the limitation of the scores may have inadvertently impacted a mother's frequency score for coercive behaviors. Future research could adjust transcription procedures to allow for additional coding not based on speaking turns. Some of the behaviors coded as "helping" by giving directions may, in fact, have been mild, verbal coercion. This may allow for a better assessment of the association between maternal control and child dominance. Finally, an increased sample size may offer more insight into this important topic.

Conclusion

In this study, associations between negative relationship quality and children coercion were found. This supports the idea that maternal behaviors may predict behavioral outcomes in children, although no associations were found when examining micro-level behaviors. The findings in this study suggest that parent education regarding the importance of parent-child relationships would be beneficial in aiding children in social skill development. In addition, these findings may be important to early childhood educators in addressing possible links between parenting and child social behavior in the classroom.

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Table 1

Demographic Variables, Frequencies of Maternal Coercion, Negative Relationship Quality, Child Coercion, and Child Aggression: Descriptive Statistics (N = 57)

Variables	<i>M(MDN)</i>	<i>SD</i>	Range
Child Age in Months	53.21	6.43	36 – 70
Child Gender ^a	.46	.06	0 – 1
Child Minority Status ^b	.05	.03	0 – 1
Mothers' Education	(6.0)	1.21	4 – 8
Household Income	(5.0)	2.94	0 – 9
Negative Maternal Control	.05	.09	.00 – .38
Negative Relationship Quality	2.04	.71	1 – 4
Child Coercion	15.82	13.17	0 – 69
Child Dominance	2.04	.71	1 – 3

^aChild gender: 0 = boy, 1 = girl. ^bMinority status: 1=*minority*. ^cEducation: 4=completed high school, 8=Ph. D. ^dIncome: 0=<\$10,000, 9=>\$90,000.

Table 2

Correlations among Maternal Coercion, Negative Relationship Quality, Child Coercion, Child

Dominance, Gender, Education and Income (N = 57)

Measures	2	3	4	5	6	7
1. Child Age in Months	-.11	-.09	-.04	.06	.44**	-.37**
2. Mother's Education		.45**	.07	-.21	.00	.04
3. Household Income			-.11	-.17	.06	-.08
4. Negative Maternal Control				.19	-.09	.10
5. Neg. Relationship Quality					.30*	.01
6. Child Coercion						-.34*
7. Child Dominance						

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

Table 3

Summary of Hierarchical Regression Analysis for Variables Predicting Child Coercion (N = 57)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
NMC ^a	-10.34	8.59	-.17	8.84	8.14	-.15	17.22	28.42	.29
NRQ ^b	5.39	2.29	.34*	5.21	2.15	.33*	9.19	4.68	.58
Child Age				.74	.23	.42**	.69	.24	.39**
Parent Education				1.04	1.43	.11	.94	1.43	.10
Household Income				.35	.60	.09	.48	.61	.21
NRQ x NMC							-12.28	12.825	-.57
$R^2\Delta$.12			.17*			.02	

^aNMC: Negative Maternal Coercion. ^bNRQ: Negative Relationship Quality. * $p < .05$. ** $p < .01$.

Table 4

Summary of Hierarchical Regression Analysis for Variables Predicting Child Dominance (N = 57)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
NMC ^a	.33	.57	.08	.09`	.54	.02	-.79	1.90	-.21
NRQ ^b	-.01	.15	-.01	.04	.14	.04	-.09	.31	-.10
Child Age				1.05	.02	-.43**	-.046	.02	-.42**
Parent Education				.08	.10	.13	.08	.10	.14
Household Income				-.05	.04	-.21	-.06	.04	-.23
NRQ x NMC							.41	.86	.31
R ² Δ		.01			.21*			.21	

^aNMC: Negative Maternal Coercion. ^bNRQ: Negative Relationship Quality. **p* < .05. ***p* < .01.

APPENDIX A

PRESCHOOLERS AND PALS MOTHER-CHILD INTERACTION CODING SYSTEM

Preschoolers and Pals Mother-Child Interaction Coding System

<u>Prosocial Control</u>	
Task Facilitation/Teaching (leadership):	
Behavior that is used to promote completing the task at hand. Behaviors include Collaboration, Teaching, Helping, Support, Guidance, Reciprocity, Alliance Building (<i>inclusion</i> not exclusion).	
<u>Code:</u>	
PROC	Prosocial Control/Teaching
PROC 1 1.11	Giving (helpful) directions/Teaching (Providing information or skills so that that child will be able to accomplish the task) -Giving or clarifying instructions (e.g., “It says here that you are supposed to put the plain blocks in one box and the colored blocks in the other box.”) - Questions as directions (“Which bin do you think this green block should go in?” “Which way do you need to turn the knob to make the line move up?”) Teaching others (e.g., “This block is red so it goes in the bin with the colored blocks.”) -Expression of (helpful) knowledge. -Updates on status (“We only have a few more blocks to put away.”) -Physically demonstrating what the child should do (e.g., showing the child how turning the knob on the Etch-a-sketch gets the line to move). - <u>Task-focused</u> commentary to teach (e.g., “See how I turn my knob slowly to get the line to move on the Etch-a-sketch?”) Passive instructions or commentary -Rhetorical questions not requiring an answer (e.g., “[commenting on child’s activity] It’s easy to put the blocks in the right boxes if you separate them out first, isn’t it?”) Drawing attention to the task at hand—refocusing. -“That is a nice tower, but right now we are supposed to be putting the blocks away.” -Attention Directing
PROC 2 1.12	Facilitating /Guiding—(Helping the child accomplish the task.) -Offering to help (e.g.: ”Here, let me put some of the blocks away with you.”) -Offering resources or help when not specifically asked for (e.g., “Here’s another block for you.”; “Let me hold the Etch-a-sketch still so it is easier for you to turn the knob.”) Physical Facilitation -Offering resources (e.g., “Here’s the box to put the blocks in.”) -Helping or supporting the child through helpful actions (e.g., Holding the box for the child to place blocks in.).

PROC3 1.13	<p>Coalition/Relationship building (inclusion)</p> <ul style="list-style-type: none"> -Statements or comments to build “team” status (“See, when we work together, we can get the blocks put away quickly.”) -“We can work together to move the line through the maze.” -“Can you help me separate the blocks to put away?” (said to child) <p>Encouraging Verbal Response (eliciting positive verbal communication from others-asking questions to involve others; e.g., “What do you think would be the easiest way for us to make it through this Etch-a-sketch maze?”) NOTE: Eliciting verbal response must be more than a simple yes/no question. It must be intended to gain new information from the child.</p> <p>Offering a positive response or supportive approval.</p> <ul style="list-style-type: none"> -Agreeing with or supporting claims or statements of others (e.g., “You did a great job sorting all of the blocks.”) -Saying “thank you” -Offering supportive approval to others who seek it (e.g., “Yes, you did a great job staying in the lines of the maze.”) -Making jokes that do not demean the child -Drawing attention to parent’s own performance (non-teaching) (e.g., “Wow, see how I made a really straight line on the Etch-a-sketch?”) -Commentary to about the task to describe what is going on rather than to serve as a teaching or guiding tool (e.g., “You want to turn the up-and-down knob? Okay, I guess that means I will get the side-to-side knob.”) <p style="text-align: center;"><i>NOTE: Code these commentary comments for both the child and mother tasks (e.g., the mother comments on her work filling out the questionnaires would also be coded PROC3).</i></p>
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Coercive Control

Interactions characterized by control, exclusion, domination, or suppression of the child.

VC Verbal Control

VC1 2.11	<p>Coercive Verbal <i>Directions</i></p> <p>Making demands to get the child to do something (e.g., “Just put the block in the box!” “Okay, turn your knob now.”)</p> <p><i>Includes coercive complaints (e.g., “You’re not giving me a chance to turn my knob!”)</i></p> <p>Threatening to get the child to do something (e.g., “If you don’t start putting the blocks away now, you won’t be able to play the next game.”)</p> <p>Leading questions to elicit a controlled response</p> <ul style="list-style-type: none"> -e.g., “What is it you’re supposed to be doing now? Aren’t you supposed to be putting the blocks in the bin?” -e.g., “Why don’t you just drop the block in the box so you can pick up another one?” <p>Note: The distinction between leading questions and teaching/guiding questions may be difficult. If the question is a veiled demand, it should be coded here rather than under PROC1.</p>
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VC2 2.12	<p>Coercive Verbal <i>Restrictions</i> Interrupting/constraining verbal expression. (e.g., “Shhh!”; “Don’t ask me that anymore.”) Making demands to get the child to <i>not</i> do something (“Don’t touch your dial until I say it is okay!”)</p>
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PC	Physical Control/Constraint
PC1 2.21	<p>Coercive Physical Directives (physically controlling or manipulating the child’s movement to get the child to do something) - Pushing, physically moving the other child, constraining, or guiding the other person’s hand/arm to control the child’s action. (e.g., moving the child’s hand with a block to the correct box for the child to put the block in; turning the Etch-a-sketch knob by moving the child’s hand.)</p>
PC2 2.22	<p>Coercive Physical Restrictions - Blocking or otherwise impeding the child’s behavior or position. - Preventing the child from accessing or using materials - Blocking the child from passing by - Blocking a child’s arm from reaching an object (e.g., a block or Etch-a-sketch knob). - Physical threats to harm or physically control (e.g., raising hand as to hit. etc.) - Taking (or attempting to take) materials or toys away from the child (e.g., pulling the Etch-a-sketch or blocks out of the child’s hands). Controlling or dominating resources. - Moving materials out of the child’s reach - Covering materials (e.g., the Etch-a-sketch knob) with a hand <i>to control access</i></p>
SA	Self Aggrandizing —setting up or strengthening the <i>vertical-ness of the parent-child relationship (showing the child that the parent is superior to the child)</i>
SA1 2.31	<p>Taking on the role of authority or rule enforcer - “Now you just stop for a moment and listen to me!” - Enforcing rules (e.g., “You can’t take the blocks back out of the bin once they are put away!”)</p>
SA2 2.32	<p>Withholding approval, withholding information, and ignoring questions. -E.G., covering the Etch-a-sketch screen so the child cannot see.</p>
SA3 2.33	<p>Boasting. Bragging about self to elevate or maintain the parent’s position of power/superiority - “My line is straighter than yours (on the Etch-a-sketch).” - Boastful comparisons <i>Does not include “put-downs”.</i></p>
SA4 2.34	<p>Taking over the task—putting the blocks away <i>for</i> the child (rather than “helping” the child) or turning the child’s Etch-a-sketch knob. – communicates to the child that he or she is not capable of performing the task</p>

SA5 2.35	Calling “dibs” on materials. (In present or past tense) -“I get to control the side-to-side knob!” (This controls the child’s behavior because the child does not get the option to choose—the parent is in control. If the parent “calls dibs” on the “leftover” option, then it would be coded as Proc3—ongoing commentary not related to teaching or guiding).
SA6 2.36	Non-Verbal Coercion Dominant or Intimidating Posturing (e.g., encroaching on the child’s space)
OL	Other Lowering
OL1 2.41	Negating claims or statements of others Dismissing or demeaning the ideas or suggestions of the child. -Also includes <i>refusing help attempts provided by others</i> .
OL2 2.42	Name-calling, put-downs, criticisms, and negative comparisons -“your line isn’t as good as mine.” -“I can put the blocks away a lot faster than you can.”

APPENDIX B

PRESCHOOLERS AND PALS PLAYGROUP CODING SYSTEM

Preschoolers and Pals Playgroup Coding System

<u>Prosocial Control</u>	
Group Facilitation (leadership):	
Behavior that is used to promote group functioning, inclusion, and involvement as well as completing the task at hand. These behaviors still contribute to the establishment or maintenance of dominance hierarchies. Behaviors include Collaboration, Teaching, Helping, Support, Guidance, Reciprocity, Alliance Building (<i>inclusion</i> not exclusion).	
<u>Code:</u>	
PROC	Prosocial Control
PROC1 1.11	Giving (helpful) directions. Teaching others (e.g., “Bears can be white.”) -Expression of (helpful) knowledge. -Updates on time status
PROC2 1.12	Facilitating (e.g., let me hold the paper still for you while you cut) -Offering to help -Offering resources when not specifically asked for them (e.g., “Here, you can have my scissors.”) Facilitating resource availability with others in the group -“We need to all take turns. Let [other child] use the green crayon now.” -“Here, let’s break this crayon in half. That way we can both use it.” -Asking another child for resources (e.g., “Can I use the blue one now?”) -Expressing a need (e.g. “I need the scissors.”) -Giving other child resources when asked for them (not at own expense)
PROC3 1.13	Advocating for the group, self or other group members (e.g., “Hey, we need another crayon, the white one doesn’t work!”) -Advocating for a peer to adults (e.g., “She needs scissors.”) -Advocating for self in the context of assisting the group. Drawing attention to oneself (<i>not</i> the same as submissive seeking attention) -Using (positive) humor to get attention -Making jokes that do not demean others -Drawing attention elsewhere (e.g., “Hey, look outside!”) - <u>Task-focused</u> commentary (e.g., to “update” the other children or alert/appraise the other children about what the child is doing) Encouraging Verbal Response (eliciting positive verbal communication from others-asking questions to involve others; e.g., “What do you think you should use to color the trees?”) Offering a positive response or supportive approval. -Agreeing with or supporting claims or statements of others -Saying “thank you” -Offering supportive approval to others who seek it (replies to SB3).
GP 1.00	General Prosocial —Use this code for any behaviors that are clearly “Prosocial Control” but do not clearly fit into any of the other Prosocial Control codes.
<u>Coercive Control</u>	
Dominance that is used to facilitate one’s own goals, activity and/or status at the expense	

	of the other. (Elevates self/denigrates others). Control, exclusion, domination, suppression.
VC	Verbal Control
VC1 2.11	Making demands of others (e.g., “Give me the blue!”) <i>Includes coercive complaints (e.g., “You’re hogging all the crayons!”)</i> Tattling or threatening to tattle on another child (e.g., for not sharing) Leading questions to elicit a controlled response -“We’re almost out of time, right Scott?”
VC2 2.12	Interrupting/constraining verbal expression. (e.g., “Shhh!”) (verbal suppression)
PC	Physical Control/Constraint
PC1 2.31	Physical-Direct: Pushing, physically moving the other person, constraining, or guiding the other person’s hand/arm to control child’s action.
PC2 2.32	Controlling or dominating resources. Preventing another child from using materials <i>without touching the child</i> . -Moving materials out of a child’s reach -Grabbing resources from table center -Covering materials with a hand <i>to control access to materials</i> as another child attempts to grab them -Crouching over materials/holding them in towards chest -Turning away to protect materials. -telling another child to wait their turn for resources. Taking (or attempting to take) materials or toys away from another child <i>without touching the child</i> (e.g., pulling the toy out of their hands). Physical-Indirect: <i>Physically</i> blocking or otherwise impeding another child’s desired behavior or position. -blocking a child from passing by -blocking a child’s arm from reaching an object Non-Verbal Coercion -Dominant Posturing (e.g., Standing up to appear “bigger.” Extending personal space/encroaching on other children’s space) -Intimidation (e.g., sticking out tongue; “Death Stare”)
PC3 2.33	Coloring or cutting another child’s materials for the other child (without invitation). Physical threats to harm or physically control (e.g., spitting, hitting, etc.)
RC	Relational Control
	Controlling and establishing dominance through inclusion and exclusion
RC1 2.41	Threatening damage to relationship if another child does not comply -“I won’t play with you unless you let me be the animals.”
RC2 2.42	<i>Explicit</i> coalition building that excludes -Designating friendship boundaries (e.g., “You can’t play with us.”) -“Cindy, you can work on this picture with me, but Sally can’t.” <i>Implicit</i> coalition building that excludes, creating an “us and them” situation. -whispering with other children in a way that the others cannot hear.
SA	Self Aggrandizing
SA1	Taking on the role of authority or rule enforcement

	-“Let me tell you what you need to do next.” -Enforcing rules (e.g., “You can’t color on the table—the teacher said so!”)
SA2	Withholding approval, withholding information, and ignoring questions. -E.G., covering the timer so others cannot see.
SA3	Boasting. Bragging about self to elevate or maintain one’s position in the group -“My picture turned out best.” -Boastful comparisons (e.g., “My picture looks better than your picture.”) <i>Does not include “put-downs” directed at the group.</i>
SA4	Calling dibs on toys or materials. (In present or past tense) -“I’m going to be the animals!” -“Hey, I was going to be the animals.”
SA5	Defending self against lowering attempts from others -E.g., “Nuh uh, you can too make Giraffes yellow!” (in response to another child’s statement such as in OL1)
OL	Other Lowering
OL1	Negating claims or statements of others e.g., “No, giraffes are orange, not yellow.”) Dismissing or demeaning the ideas or suggestions of others. -Also includes <i>refusing help attempts provided by others.</i>
OL2	Name-calling, put-downs, criticisms, and negative comparisons -“your coloring isn’t as good as mine.” -“you’re cutting it out wrong.”
GD	General Dominance
	Use this code for behaviors that are clearly coercive and dominant in nature but do NOT fit into any of the other coding categories.
<u>Submissiveness</u>	
SB	Submissive Behavior
SB1	Submissive posture: Lowering head when interacting with others. -Making self appear “smaller.” -Taking up less space to yield to others.
SB2	Giving in to the requests or demands of others at the expense of accomplishing one’s own task.
SB3	Seeking approval of others (e.g., “Did I do a good job on my picture?”)
SB4	Looking to others to see what to do (in order to copy behavior)
SB5	Self deprecating (e.g., “My pictures not very good” or, “ I can’t do it.”)
GS	General Submissiveness
	Use this code for submissive behavior that does NOT fit into any of the other “submissive” categories.
<u>Withdrawal</u>	
WD1	Not engaging in interactions with the other group members—negative affect. -Sitting apart from others in a group with negative affect. -Pouting.
WD2	<i>Contentedly</i> working on one’s own.