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The purpose of this study was to identify 2 theoretical constructs of parenting and assess the relation of these constructs to children's kindergarten peer acceptance.

Participants included 274 children, their mothers, and kindergarten peers. General maternal style at this time point was found to be distinct from specific strategies mothers used to cope with their children's displays of negative emotions. The 3-way interaction of these 2 parenting variables with gender was found to have a significant relation with kindergarten peer status. This interaction was such that positive maternal style acted as a protective factor when mothers' specific emotion-coping strategies were non-supportive. The combination of low positive maternal style with non-supportive strategy use was most detrimental for boys' peer relations. Findings are discussed in terms of a theoretical framework for understanding parenting.

EARLY PARENTING AND CHILDREN'S KINDERGARTEN PEER ACCEPTANCE

by

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TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF FIGURES	v
CHAPTER	
I. INTRODUCTION	1
II. METHOD	17
III. RESULTS	22
IV. DISCUSSION	29
REFERENCES	35
APPENDIX A. TABLES	43
APPENDIX B. FIGURES	50

LIST OF TABLES

	Page
Table 1. Rotated Components Matrix for Maternal Global Codes	43
Table 2. Descriptive Statistics	45
Table 3. Zero-Order Correlations	46
Table 4. Parenting Style Groups	47
Table 5. Moderating Effects of Positive Parenting on Kindergarten Social Preference ...	48
Table 6. Moderating Effects of Directiveness on Kindergarten Social Preference	49

LIST OF FIGURES

	Page
Figure 1. Interaction of Positive Parenting and Supportive Strategy Use Predicting Kindergarten Social Preference for Boys	50
Figure 2. Interaction of Positive Parenting and Supportive Strategy Use Predicting Kindergarten Social Preference for Girls	51

CHAPTER I

INTRODUCTION

There is overwhelming consensus that peer relationships play an important role in children's healthy development (Kupersmidt, Coie & Dodge, 1990; Parker & Asher, 1987; Rubin & Coplan, 1998). Both theory and research indicate that children's peer relationships remain fairly stable across development (Coie, 1990; Pettit, Clawson, Dodge, & Bates, 1996; Sandstrom & Coie, 1999), highlighting the need to understand what factors may lead to early peer acceptance or rejection. Parents have unique opportunities to shape children's socialization through family interactions, as well as exposure to social experiences beyond the home and school. Early opportunities for socialization may be particularly important for children to develop successful peer relationships as they transition into the formal school system. Data show that general parenting style as well as parents' involvement and support predict children's kindergarten social preference ratings from their peers (Clark & Ladd, 2000), suggesting that children entering school from supportive home environments are better able to navigate the new world of structured peer interactions. However, many questions remain concerning the developmental trajectories leading to peer acceptance or rejection and the specific ways in which parenting may influence these trajectories. This study attempts to

address these issues by identifying parenting constructs that may be particularly important in understanding early peer status.

Parenting

Considerable research has focused on aspects of parenting behavior and the parent-child relationship in order to understand the many ways in which parents influence their children's functioning. Researchers have found correlations between parenting and a range of child outcomes including academic success, moral development, emotion regulation, and social competence (Baumrind & Black, 1967; Davidov & Grusec, 2006; Denham, Workman, Cole, Weissbrod, Kendziora, & Zahn-Waxler, 2000; Laible, 2004; Pettit et al., 1996; Spera, 2005). Extensive research linking harsh parental discipline practices and negative control to child outcomes shows that these parenting styles correlate with children's aggression, externalizing problems, and peer status (Calkins, Smith, Gill, & Johnson, 1998; Denham et al., 2000; Pettit et al., 1996). Puttalez (1987) has shown that child behavior with peers mirrors maternal social behavior. Specifically, first-graders who were well-liked by their peers had mothers who were more agreeable and less demanding. More recently, Davidov and Grusec (2006) have shown that maternal responsiveness is positively correlated with children's empathy and prosocial behavior in early elementary school.

In order to understand parents' influences on their children, theorists and researchers have attempted to conceptualize and operationalize parenting styles into meaningful categories or dimensions. Though many approaches have been used over the last century to identify types of parenting, few theories have received as much attention

and support as Baumrind's theory of parenting styles (Baumrind, 1966). Baumrind's theory stands apart from others because it conceptualizes parenting as varying in terms of a single domain: control. Baumrind divides parenting control into three types that have almost become colloquialisms: authoritative parents, authoritarian parents, and permissive parents. These groups are considered to be qualitatively different in when and how they use control during interactions with their children.

Although Baumrind's theory has been influential, her work has been criticized as having relevance for only a limited number of families (Darling & Steinberg, 1993). Baumrind's typology does not account for parents who do not clearly fit into a single category, nor does it account for parents who do not belong in any of the categories. Maccoby and Martin (1983) proposed a model theoretically similar to Baumrind's in an effort to create typologies that would be applicable to a broader population. This model identifies two dimensions of parenting: demandingness and responsiveness. Both dimensions are continuums, with parents' particular styles represented by a combination of their locations on the continuums for both demandingness and responsiveness.

These different typologies have been operationalized in a variety of ways. Maccoby and Martin's (1983) theory integrates aspects of Baumrind's conceptualization of parenting, though most researchers prefer to assess parenting styles along dimensions based on aspects of both theoretical models. Systems for coding parenting style from mother-child interactions (e.g., Rubin, Booth, Rose-Krasnor, & Mills, 1995; Winslow, Shaw, Bruns, & Kiebler, 1995) typically examine features of maternal warmth, responsiveness, and control or demandingness. Measuring these dimensions of parenting

style affords researchers more flexibility than the rigid three-category model Baumrind proposed; however, the question remains, are there distinct clusters of parenting style or is parenting best understood using a dimensional model?

Darling and Steinberg (1993) have proposed that parenting style should be considered the “emotional climate” (p. 488) in which parents raise their children, whereas specific parenting behaviors can be thought of as the methods parents use to help their children reach particular socialization goals. Darling and Steinberg argue that specific parental behaviors should be considered distinct within the overall parenting style. This idea allows researchers to examine various aspects of parenting as dimensional, rather than attempting to identify qualitatively different clusters of parents. The distinction between parenting style and more specific parenting behaviors has received much attention in the literature on parenting and adolescence (e.g., Spera, 2005); however, to date, little research has specifically examined the degree to which it is possible to separate broad measures of parenting style from measures of specific parenting behaviors or strategies.

As early as 1967 Baumrind herself acknowledged the need to separate parenting style from more specific socialization goals. Based on her early work on parenting styles, Baumrind concluded that general parental warmth is too broad a construct to be predictive of specific child outcomes (Baumrind & Black, 1967). Thus, when studying the effects of parenting on children’s development it is important to understand not only parents’ overall style, but also the specific strategies they use to achieve socialization goals.

Work by Mize and Pettit (1997) suggests that separating parenting styles and specific parenting behaviors may be appropriate. In their study, Mize and Pettit examined the effects of mothers' general responsive style and their use of social coaching strategies, assessed during laboratory observations, on preschoolers' peer competence, as assessed by teachers and peers. Results indicated a low degree of association for the two parenting constructs ($r_s = .02-.10$). In addition, Mize and Pettit found that style (responsiveness) and specific parenting behaviors (social coaching) differentially predicted child outcomes, and that each explained unique variance when entered simultaneously in regression equations. Although these results are not definitive, they do lend support to Darling and Steinberg's contention that parenting style and specific behaviors should be examined separately.

Considering parenting style as distinct from specific parenting behaviors could also help researchers to understand changes in parenting throughout children's development. Presumably, different strategies should be used for toddlers than for adolescents; strategies should be consistent with children's developmental stage and age-appropriate socialization goals. The specific socialization goals parents have for their children will change throughout children's development based on influences from school, peers, and parents' own evolving values. Socialization goals often include developing skills like self-confidence and competitiveness, caring for others, listening to adults, and appropriately expressing needs, wants, and emotions (Keller, Lamm, Abels, Yovsi, Borke, Jensen et al., 2006). Parenting style, on the other hand, should represent a more stable characteristic of parents' affective interactions with their children.

Although it is difficult to determine the direction of effect in the relation between changing parenting behaviors and changing child behavior, evidence from a recent study by Aunola and Nurmi (2005) does support the idea that some aspects of parenting are more stable than others. These researchers followed a sample of mother-child dyads from kindergarten through second grade, assessing child behavior and parenting styles at six time points. Their results showed that mothers' use of behavioral control decreased as their children got older, and mothers' use of psychological control and affection remained constant during the two years. These findings can be interpreted to indicate that behavioral control is a specific strategy used by parents that becomes less relevant as children become more capable of regulating their own behavior. Conversely, the measures of psychological control and affection indicate more stable characteristics that the mother brings to her interactions with the child throughout the child's development. In addition, these results suggest that parenting style is, at least to some extent, independent of changes in child behavior. This is important given the growing literature on the interaction between child temperament and parenting style and "goodness-of-fit" in parent-child relationships. Though child temperament and behavior certainly influences parenting, considering parenting styles and behaviors alone can still be informative when examining changes in child functioning over time.

Socialization of Negative Emotion

A particularly important socialization goal for children during the preschool and kindergarten years is the regulation, expression, and recognition of emotion. Parents are primarily responsible for children's early socialization of emotion not only through

providing appropriate peer interactions for their children, but also by modeling appropriate emotional responding in their own behavior and in their responses to children's emotional displays. A child's ability to express his or her emotions in a socially appropriate way is a skill typically expected in school-aged children.

Children's displays of negative emotion are notoriously difficult for parents to handle. Parenting when a child is in a good mood, versus parenting a fussy, nervous, or aggressive child, may result in very different parenting behaviors, even from the same parent. Particularly in public settings, social pressures may lead parents to react quickly and decisively when their children begin to show sadness, fear, or anger. This sort of abrupt response is likely to be used to some extent by all parents, but Fabes, Leonard, Kupanoff, and Martin (2001) suggest that parents will be particularly likely to respond harshly to children's negative emotions when the parents themselves become easily distressed. These emotionally volatile parents may be more motivated to avoid the unpleasant experience of witnessing their children's negative emotions, prompting them to act in punitive or dismissing ways toward their children in the hopes of avoiding the aversive negative emotions themselves. These parental responses could in turn teach children to suppress negative emotions to avoid punishment or ridicule. This suppression undermines other regulation techniques and coping strategies that young children are expected to learn. Through the effects of parental emotion dysregulation on children's emotional responses, a cycle of emotional dysregulation in families is established.

Fabes et al. (2001) further explain how the suppression of negative emotion can result in long-term dysregulation for the child. It is thought that the suppression of

negative emotions leads to heightened sensitivity and physiological response to these emotions. This increased arousal is evident in behavioral responses, such as aggression or social withdrawal. The lack of specificity in predicting behavioral responses is not surprising given findings that even though externalizing and internalizing are distinct behavior categories, both are characterized by deficits in effortful control (Eisenberg, Cumberland, Spinrad, Fabes, Shepard, Reiser et al., 2001). Deficits in effortful control have frequently been conceptualized as child-centered, innate temperamental problems, but the role of parenting in helping children to develop situationally appropriate emotional control may be crucial (Fox & Calkins, 2003).

Children's abilities to cope with their negative emotions are particularly crucial because strong displays of negative emotion are typically less socially acceptable than similar displays of positive emotions. Specific parenting strategies for helping children learn to cope with emotions like sadness, fear, and anger may range from trying to reduce or eliminate the feeling by minimizing or punishing expression of the emotion, to trying to help the child resolve the emotion through constructive problem-solving. Fabes, Eisenberg, and Bernzweig (1990) have suggested six theoretical types of parental responding to children's negative emotions in their Coping with Children's Negative Emotions Scale (CCNES). These six types of responding are: distress reactions, punitive reactions, minimization reactions, expressive encouragement, emotion-focused reactions, and problem-focused reactions. The combination of these response categories used by parents can be considered their strategy for teaching their children to appropriately express negative emotions.

Fabes, Eisenberg, and colleagues (Fabes et al., 1990; Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002) have conceptualized parental distress reactions as the degree to which parents are unable to regulate their own emotions when responding to their children's emotions. The CCNES operationalizes this concept through items like: "I would feel upset and uncomfortable because of my child's reactions." Parents who rate these CCNES items highly tend to have children who are less skilled in recognizing emotions in others. Conversely, parents who more strongly endorse CCNES items aimed at helping their children resolve the negative emotions tend to have children who are better at identifying emotions in others (Fabes et al., 2002). The goals of this latter parental approach include trying to make the child feel better and solving the problem that caused the distress to begin with. In the expressive encouragement approach, parents respond to their children's negative emotions by explaining to the child that it is okay to have those feelings. This approach is related to children's greater physical expression of emotion, both positive and negative, whereas the opposite is true for parental responses that are punitive or minimizing of children's emotions (Fabes et al., 2002). Because greater emotional expressiveness is not always considered a positive trait, parents must encourage children to express their emotions while also providing cues for appropriate expression. This might be accomplished through use of other specific practices for coping with children's negative emotions, like modeling non-distress reactions to displays of negative emotions, or it may be accomplished more through general parenting style characteristics.

Parents who have a style that is highly responsive, supportive, and warm may provide an environment in which parenting practices related to the socialization of negative emotion are more effective in helping young children develop emotion coping and regulation strategies; these children will not need to use elaborate emotional displays in order to gain attention from their parents. Further, in families where parents are generally warm and responsive but occasionally use non-supportive strategies for dealing with their children's negative emotions (i.e., punitive or minimizing responses,) these non-supportive strategies will likely be less detrimental to children's development of their own regulation and coping strategies. These children will be more resilient to the negative effects of harsh parental responses due to the overall positive context of the parent-child relationship. In contrast, for children whose parents are generally less warm and responsive, the adverse effects of non-supportive responses to negative emotions will not be buffered by the overall parent-child relationship. In other words, an overall positive parenting style may act as a protective factor for children when specific parenting behaviors are non-supportive.

Peer Relationships

Typical preschoolers are able to regulate their emotions to match social expectations (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996). During the transition to kindergarten and a more structured peer environment, this skill is crucial for children to form and maintain peer relationships. Keane and Calkins (2004) found that fighting behavior in boys and sneaky behavior (relational aggression) in girls, as rated by kindergarten peers, were negatively associated with peer liking. Conversely, children's

sharing was positively associated with peer liking. This finding indicates that as early as kindergarten children's behaviors influence their peer acceptance. This is consistent with past research suggesting that peer status is identifiable and even somewhat stable in early childhood (Mize, Russell, & Pettit, 1998).

Although peer status has the potential to be dynamic across development, Coie (1990) predicted that once a child has established a social ranking, it is difficult to change despite changes in the child's behavior. Gazelle, Putaliez, Li, Grimes, Kupersmidt, and Coie (2005) found that anxious-solitude in girls predicted more peer victimization, and that such victimization in turn increased anxious-solitary behavior, creating a cycle of limited peer interaction and rejection. This finding suggests that poor peer relationships are not merely a transient phase of childhood. Given that researchers consistently find a link between poor peer relationships in childhood and psychopathology in adolescence and adulthood (see Kupersmidt et al., 1990 for a review), it is important to understand the specific mechanisms that influence the development of children's early social competence.

Research has identified a number of parenting characteristics associated with children's social competence and early peer acceptance. For example, warmth and closeness in the mother-child relationship has been shown to be related to higher numbers of mutual friendships and greater peer acceptance in early elementary school (Clark & Ladd, 2000). Further, high warmth and supportiveness from mothers has been found to be a protective factor for African American children living in dangerous and impoverished neighborhoods (Dearing, 2004) as well as an indicator of less deviance

within the peer group in adolescence (Chung & Steinberg, 2006). Quality and content of mother-child discourse has also been shown to relate both to children's peer acceptance and their emotional understanding (Harrist & Waugh, 2002; Laible, 2004). Restrictive discipline and high levels of maternal control are associated with early and chronic peer rejection (Pettit et al., 1996) as well as greater emotional dysregulation and suppression of anger (Berlin & Cassidy, 2003). Such findings highlight the need for additional research that attempts to address the multi-faceted nature of parenting and how different aspects of parental behavior may work together to influence child development, particularly in the domains of social competence and peer acceptance.

Gender, Parenting, and Peer Acceptance

Gender is both salient and important to young children; by three-years of age children have developed detailed gender schemas (Edwards & Liu, 2002). Mothers seem to behave differently with boys and girls, and maternal behavior seems to influence boys' and girls' development differently (Leaper, 2002). Although it is often difficult to address the extent to which children's biological traits and emerging understanding of gender roles elicit different treatment from parents, versus the degree to which parents have different expectations and behaviors with boys and girls, gender effects are present throughout the literature on child development. This is particularly true in the domain of emotion socialization where expectations for the two genders diverge substantially. Girls are typically expected to be more emotionally expressive while boys are expected to control their emotional responses, especially for negative emotions such as sorrow and

fear. Parenting is important in determining the extent to which young children develop their emotional expressiveness in accordance with gender expectations.

In infancy, boys are generally observed to have more negative and reactive temperamental styles (Blackford & Walden, 1998; Kohnstamm, 1989; Weinberg, Tronick, Cohn, & Olson, 1999). Mothers of infant boys have been shown to be more responsive to their children's emotional displays and demonstrate warmth more consistently and with more physical contact. Mothers of young girls tend to be more directive whereas mothers of young boys allow their children greater autonomy (Leaper, 2002). These differences may be understood in terms of boys' early tendency to be more emotionally reactive and parental attempts to socialize boys to be less expressive.

Even when parents behave similarly with boys and girls, outcomes may not be the same for both genders. For example, Turner (1991) found that insecure attachment in preschool was associated with more aggressive, disruptive behavior in boys, but insecurely attached girls displayed greater dependency. Other studies looking at attachment style have found the association between early attachment and later emotional and behavioral difficulties to be stronger for boys than for girls (Leaper, 2002). It is likely that these findings are a product of both differential parental socialization goals for boys and girls as well as different patterns of behavior and emotional reactivity from boys and girls. Regardless of the direction of effect, child gender is an important variable to consider, particularly when trying to understand the influence parents may have on children's developing social competence.

Given gender differences in the rates of behavior problems (Shaw, Keenan, & Vondra, 1994) and research indicating boys and girls may have different paths to peer liking (Crick & Rose, 2000; Keane & Calkins, 2004), considering gender in models predicting peer acceptance is also important. Although it is beyond the scope of this study to thoroughly examine gender differences in maternal care, gender is included in all analyses involving child outcomes.

The Current Study

The current study aimed to provide empirical validation for a theoretical model of the relation between two aspects of parenting and children's kindergarten peer acceptance. The theoretical model of interest was proposed by Darling and Steinberg (1993) and posits that the effect of specific parenting behaviors on child outcomes will be moderated by general parenting style. The two parenting dimensions addressed in the current study were mothers' specific strategies for coping with children negative emotions and more general maternal style, as defined by warmth and control.

The first goal of the current study was to assess the appropriateness of defining specific parenting behaviors as separate from general parenting style. Although other researchers have utilized this distinction (e.g., Fletcher, Walls, Cook, Madison, Bridges, & Hunter, 2006; Lagacé-Séguin & Coplan, 2005; McLoyd & Smith, 2002; Mize & Pettit, 1997), it remains unclear whether parenting styles and behaviors are truly distinct constructs, or whether specific behaviors are merely a subset of style. This distinction is further complicated in the literature by the use of different labels for similar parenting constructs and the frequent operationalization of parenting style constructs through

measures assessing behavior. It was hypothesized that the parenting variables assessed in the current study, maternal strategy for responding to children's negative emotions and warmth and control, would be modestly related. Specifically, we expected that supportive strategy use would be associated with greater warmth and lower control. Although we predicted this modest relation, it was further hypothesized that the degree of overlap between the variables would not support combining strategy and style into a single parenting composite. Thus, it was expected that supportive strategy use and style would represent separate parenting constructs.

The second goal of this study was to empirically evaluate Darling and Steinberg's (1993) model by examining the effects of these two dimensions of parenting on children's kindergarten peer acceptance. It was hypothesized that mothers' use of strategies for dealing with negative emotions in their children when children were four-years-old would be related to acceptance by kindergarten peers. This relation was expected such that children whose mothers used more supportive strategies would be better liked and children whose mothers used more less supportive, or more non-supportive, strategies would be less liked by their peers. Children whose parents have helped them to develop strategies for effectively managing their own negative emotions are likely to have more opportunities to experience positive interactions with peers, thus garnering greater peer acceptance. Those children who are less able to regulate their emotional reactions may spend more time engaged in negative emotional outbursts, detracting from the time they are able to spend effectively interacting with peers.

Maternal style, also measured when children were four-years-old, was not expected to have a direct effect on children's kindergarten peer acceptance; however, it was expected to moderate the relation between maternal strategies for dealing with children's negative emotions and peer outcomes. This moderation was expected such that the detrimental effects of non-supportive maternal strategies on peer outcomes would be attenuated by high levels of maternal warmth. Children whose mothers do not help them develop adaptive strategies for coping with negative emotions, but do provide a positive relational context may be able to develop similar relationships with peers despite lacking strong, specific coping strategies for difficult emotions.

The current study focuses on parenting before children enter kindergarten as predictors of kindergarten peer acceptance for a number of reasons. The transition from preschool to kindergarten is ideal for understanding the effects of parenting on children's social competence. Once children enter kindergarten their experiences become less dependent on parents than they were during infancy, toddlerhood, and even preschool. Parents are primarily responsible for socializing their children during the years before kindergarten; as children enter the formal educational system, the school, teachers, and peers become more directly involved in social development. This transition to kindergarten provides a unique opportunity to examine the influence of parenting on early peer relationships and social competence (Rimm-Kaufman & Pianta, 2000).

CHAPTER II

METHOD

Participants

Participants were recruited as part of the RIGHT-Track project, an ongoing longitudinal study that began when children were 2-years-old. The original sample included 447 2-year-old children (215 male, 232 female) obtained from three cohorts. Sixty-seven percent were white, 27% were African American, 4% were multi-racial, and 2% were from other minority groups. At age 2, the children were primarily from intact families (77%) and families were economically diverse with Hollingshead (1975) scores ranging from 14 to 66 ($M = 39.64$). Families were invited to participate in the study based on 2-year maternal reports on the Child Behavior Checklist (CBCL 2-3; Achenbach, 1992). 170 children in the total sample were considered to be in the externalizing risk group, with externalizing T-scores of 60 or greater on this initial CBCL screening. Further recruitment details can be found in Smith, Calkins, Keane, Anastopoulos, and Shelton (2004) and Calkins and Dedmon (2000).

The current study utilizes participants from the first two cohorts of the larger study ($N = 307$) and focuses on the 4-year and kindergarten assessments. There were no significant differences between the cohorts included in the present study and the excluded cohort with regard to gender, $\chi^2(1, N = 447) = .08, p = .79$, race, $\chi^2(3, N = 447) = 4.92, p$

= .18, or mean 2-year SES, $t(432) = .38, p = .71$; however the cohort of children not included in the current study had a significantly lower average 2-year externalizing T-score ($M = 50.15$) compared to the two cohorts that were included in the current study ($M = 54.51$), $t(445) = 4.47, p < .001$.

Attrition

Of the 307 participants in the cohorts included in this study, 275 participated in at least one aspect of the 4-year assessment. Families lost to attrition included: 8 who could not be located, 9 who moved out of the area, 6 who declined participation, and 9 who did not respond to phone and letter requests to participate. Slightly more families with boys discontinued participation, $\chi^2(1, N = 307) = 4.18, p = .04$. There were no significant differences between families who did and did not participate in terms of race, $\chi^2(3, N = 307) = 2.40, p = .49$, 2-year SES, $t(305) = .41, p = .68$, or 2-year externalizing T-score, $t(305) = -.23, p = .82$. At 5-years of age 187 families included in this study participated in the kindergarten assessment, although 253 families participated in some portion of the 5-year assessment. Reasons for not participating in the school assessment included principal refusal ($N = 17$), teacher refusal ($N = 1$), parent refusal ($N = 4$), and homeschooling ($N = 4$). In addition, 7 children attended schools too far outside of the study area for data collection to be feasible and 33 families did not respond to phone and letter requests for school participation. There were no significant differences between families who did and did not participate in the kindergarten school assessment in terms of gender, $\chi^2(1, N = 307) = 1.24, p = .27$, race, $\chi^2(3, N = 307) = .55, p = .91$, 2-year SES, $t(305) = 1.31, p = .19$, or 2-year externalizing T-score, $t(305) = -1.13, p = .26$.

Materials and Procedures at the 4-Year Assessment

When children were 4-years-old, families were contacted by mail and phone and asked to participate in a follow-up study of the children at preschool. Families that agreed to participate in the follow-up came to the laboratory twice when the children were four-years-old and children's preschool teachers were asked to complete a number of questionnaires.

Coping with Children's Negative Emotions. Mothers completed the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990) during a laboratory visit. The CCNES assesses how parents respond to their children's displays of negative emotions by asking parents to rate how likely they would be to behave in certain ways in a given situation, with items such as: "If my child loses some prized possession and reacts with tears, I would..." Six responses follow (e.g., "tell my child that s/he is over-reacting") and mothers rate how likely they would be to use each of the six responses on a seven point scale, ranging from "very unlikely" to "very likely". This scale yields six subscales: Distress Reactions, Punitive Reactions, Expressive Encouragement, Emotion-Focused Reactions, Problem-Focused Reactions, and Minimization Reactions (Fabes et al., 1990). These scales represent specific strategies employed by parents to deal with children's negative emotions.

Global coding of mother-child interactions. During a laboratory visit, mother-child dyads completed a series of tasks intended to measure mother-child interactions. The tasks included a *teaching task* in which mothers were asked to help their children construct a duplo tower to look like a model (4 min.); a *puzzle task* in which children

completed a difficult puzzle and mothers were asked to help their children as needed (4 min.); a *freeplay task* in which mother-child dyads were given a selection of age-appropriate toys and asked to play as they normally would at home (5 min.); a *compliance task* in which mothers were asked to have their children pick-up the toys from the freeplay task (3 min.); and a *pretend play task* (6 min.) in which mothers and children were given a train set and asked to play as they normally would at home. Maternal behavior received codes for *warmth/positive affect* (displaying positive affect and warmth to the child), *sensitivity/responsiveness* (promptly and appropriately responding to the child's bids to her), *strict/directive methods* (directing child's behavior so that there are few child initiated actions), and *hostility* (expression of anger toward the child). These were coded on 4-point scales ranging from *low* to *high*. The global codes were adapted from the Early Parenting Coding System (Winslow et al., 1995) and broadly represent maternal interaction styles.

Reliability. Two research assistants coded together 10% of the total sample on all tasks. Another 10% was coded separately to assess reliability; weighted kappas for all items were above 0.7.

Materials and Procedures at the Kindergarten Assessment

When children entered kindergarten, families were contacted to obtain consent for an assessment in kindergarten classrooms. 187 children participated in the school assessment.

Sociometric nominations. Parents of children in the target child's class were asked to provide consent to allow their child to participate in sociometric data collection.

Data was collected from January to April during the kindergarten year to allow the children time to become familiar with one another. A modified version of Coie, Dodge, and Coppotelli's (1982) procedure was used and is described below. Trained research assistants individually interviewed each child who had parental consent. Pictures were used as prompts to aid in gathering reliable data. Cross-gender nominations were used, which has been shown to improve stability (Terry & Coie, 1991).

Unlike the Coie et al. (1982) procedure, children provided unlimited nominations of the children they "liked most" and "liked least". An unlimited nomination procedure has been shown to reduce measurement error and allows for reliable assessment with fewer classmates than is required by limited nominations procedures (Terry, 2000). In addition, children nominated classmates in eight behavioral categories: starts fights, shares, cries, is sneaky, acts wild, gets picked on, is shy, and bosses others. Children were trained on sample items until they understood the task.

Scores were calculated following Coie et al. (1982). "Liked most" and "liked least" nominations were standardized within the classroom. *Social preference* scores were calculated by subtracting the "liked least" z-score from the "liked most" z-score. These scores were then restandardized within the class. Higher social preference scores indicate more peer liking within the classroom; scores close to zero indicate average peer acceptance in the classroom. Z-scores were also calculated for each of the eight behavioral categories.

CHAPTER III

RESULTS

Data Reduction

Given the large number of subscales for both the CCNES and the global codes of maternal behavior, preliminary analyses were used to reduce the number of independent variables in subsequent analyses and create parenting variables representative of the theoretical constructs of interest.

The six CCNES subscales were averaged, with the three negative subscales (Distress Reactions, Punitive Reactions, and Minimization Reactions) reverse scored, to form a single measure of parenting strategy, referred to as “*supportive strategy use*” in subsequent analyses. This procedure has been employed by Davidov and Grusec (2006) and is consistent with factor analytic findings from the scale authors (Fabes et al., 2002). Cronbach’s alpha for the composite measure was 0.85, indicating good internal consistency. High scores on this composite were associated with more supportive maternal strategies for dealing with children’s negative emotions and low scores were associated with more non-supportive strategies.

Maternal scores from the global codes for warmth/positive affect and sensitivity/responsiveness were averaged to create an index of positive parenting style. The decision to combine these variables was based on the theoretical relatedness of the

two constructs as well as results of a principal components analysis with varimax rotation. This analysis included maternal scores for warmth/positive affect, sensitivity/responsiveness, strict/directive methods, and hostility and resulted in three factors, accounting for 55.65% of the total variance. As expected, both positive affect and responsiveness loaded highly and positively on the first factor. Directive methods loaded highly and positively on the second factor. Hostility loaded highly and positively on the third factor. Factor loadings are presented in Table 1, however in order to improve generalizability items were averaged for use in further analyses rather than using factor scores (Hair, Anderson, Tatham, & Black, 1998). Maternal directive methods during the teaching task loaded highly and positively on the second factor, but also loaded highly and negatively on the first factor. Thus, this score was included in both composites. In subsequent analyses the variable comprised of maternal warmth and responsiveness is referred to as “*positive parenting*” and the variable comprised of maternal directive methods is referred to as “*directiveness*.” Maternal hostility was not included in further analyses due to low variability (66.7% of mothers displayed no hostility during interactions with their children).

Children’s race was recoded to create two groups: white and minority.

Preliminary Analyses

Given the different assessments and the varying procedures for data collection, the number of participants varies across measures (see Table 2 for exact N values and descriptive statistics). For each analysis, all available data were used. Preliminary analyses examined gender, race, and SES difference on all study measures and these

results are presented in Table 3. Race and SES, but not gender, were significantly related to the parenting variables and were therefore included in analyses examining the relation between parenting style and use of specific strategies. Gender was marginally related to kindergarten social preference, but race and SES were not. Although gender was not strongly related to kindergarten social preference, given gender differences in other sociometric outcomes (i.e., peer-nominated behaviors such as “fights” and “shares”) and evidence from Keane and Calkins (2004) that different behaviors lead to peer acceptance for boys and girls, gender was included in all analyses involving social preference.

Predicting Parenting Strategies

To test the hypothesis that maternal interaction style and supportive strategy use should be considered distinct but related constructs, the bivariate correlations were first examined (Table 3). As expected, positive parenting and supportive strategy use were modestly positively related. Conversely, directiveness was modestly negatively related to supportive strategy use.

In order to better understand these relations, parenting style groups were created based on mothers’ scores for positive parenting and directiveness. These groups were constructed to reflect the four theoretical parenting styles proposed by Maccoby and Martin (1983): permissive, neglectful, authoritarian, and authoritative. Mothers in the current study who fell below the median on directiveness and above the median on positive parenting were classified as permissive. Mothers who fell below the median on both style variables were classified as neglectful. Mothers above the median on directiveness, but below the median on positive parenting were classified as authoritarian.

Finally, mothers above the median on both positive parenting and directiveness were considered authoritative. The number of mothers in each group is presented in Table 4.

An ANOVA was used to examine differences in supportive strategy use among the four style groups. Hollingshead score was included in this analysis as a covariate given its significant correlation with supportive strategy use. The results indicated a non-significant effect of style on supportive strategy use ($F(3,244) = 2.48, p = .06$). Given the limited degree of overlapping variability in the measures of parenting style and strategy, these variables were entered separately in subsequent analyses.

Predicting Kindergarten Peer Acceptance

To test the hypothesis that parenting style would moderate the relation between maternal supportive strategy use and kindergarten peer acceptance, hierarchical regression analyses were used. One outlier was excluded from these analyses due to an extreme Cook's statistic. Positive parenting, directiveness, and supportive strategy use variables were all centered to increase interpretability of results and reduce problems associated with multicollinearity. Interaction terms were created by multiplying the centered variables.

Positive parenting as a moderator. Given the marginal significance of gender as a predictor of kindergarten social preference, hierarchical linear regression was used to explore the possibility of both two- and three-way interaction between gender, positive parenting, and supportive strategy use. The results of this analysis are presented in Table 5. Positive parenting, directiveness, and gender were entered together in the first step of the regression predicting kindergarten social preference because these variables were

theorized to represent the context in which other parenting behaviors occur. Supportive strategy use was added in the second step, followed by all two-way interactions (Positive parenting x Supportive strategy use, Positive parenting x Gender, Supportive strategy use x Gender) in the third step. Finally, the three way interaction term was entered in the fourth step of the model.

Gender, positive parenting, and directiveness were all non-significant. Contrary to expectations, supportive strategy use was also non-significant in the model when controlling for gender and parenting style. The interaction of positive parenting and supportive strategy use in the third step of the model was the only significant two-way interaction, though this interaction was qualified by the three-way interaction term (Positive parenting x Supportive strategy use x Gender), which added significantly to the model. Interpretations of these significant interactions are discussed in a subsequent section.

Directiveness as a moderator. A similar analysis was used to examine the moderating effects of directiveness. The hierarchical regression used in this case differed only in the inclusion of interaction terms related to directiveness (Directiveness x Supportive strategy use, Directiveness x Gender) and the exclusion of interaction terms related to positive parenting. This analysis revealed no significant main effects or interactions (Table 6).

Interpretation of three-way interaction. Following procedures outlined by Aiken and West (1991), the significant three-way interaction of gender, positive parenting, and supportive strategy use was further examined. First, the interaction of positive parenting

and supportive strategy use was plotted separately for boys and girls (Figures 1 & 2). From these graphs it is apparent that boys with mothers who are low in positive parenting have the steepest slope across types of maternal strategy use. Specifically, boys with mothers who are low in positive parenting and use non-supportive strategies for dealing with negative emotions are not well-liked by their kindergarten peers.

The next step was to determine whether the slopes of the lines plotted in Figures 1 and 2 were significantly different from zero. To accomplish this, kindergarten social preference was regressed on supportive strategy use at high and low levels of positive parenting (one standard deviation above and below the mean) for both boys and girls. The resulting regression coefficients for supportive strategy use indicated that for both boys and girls, differences in supportive strategy use did not significantly impact social preference when mothers were high in positive parenting ($\beta = -.02, t = -.12, p = .92$ for boys; $\beta = -.18, t = -1.36, p = .18$ for girls). However, when mothers were low in positive parenting, supportive strategy use significantly impacted social preference scores for boys ($\beta = .33, t = 2.35, p < .05$), but not for girls ($\beta = .16, t = 1.13, p = .26$).

To further understand the relation between these variables, a second set of regression equations were computed. This time kindergarten social preference was regressed on positive parenting at high (supportive) and low (non-supportive) levels of strategy use (one standard deviation above and below the mean) for both boys and girls. The resulting regression coefficients for positive parenting indicated that for both boys and girls, positive parenting did not have a significant impact on social preference when mothers reported using primarily supportive emotion coping strategies ($\beta = -.03, t = -.19,$

$p = .85$ for boys; $\beta = -.06$, $t = -.52$, $p = .61$ for girls). When mothers reported using more non-supportive emotion coping strategies, positive parenting did have a significant or nearly significant impact ($\beta = .43$, $t = 2.41$, $p < .05$ for boys; $\beta = .33$, $t = 1.90$, $p = .06$ for girls).

A final set of regression equations were computed to examine gender differences. In this case kindergarten social preference was regressed on gender at high and low levels of both positive parenting and supportive strategy use (one standard deviation above and below the mean in both cases). These analyses indicated that boys and girls had marginally different levels of peer acceptance when mothers were both low in positive parenting and reported using more non-supportive emotion coping strategies ($\beta = .27$, $t = 1.89$, $p = .06$). For all other combinations of maternal behavior (low positive parenting/supportive strategies, high positive parenting/supportive strategies, high positive parenting/non-supportive strategies) boys and girls did not differ on kindergarten peer acceptance ($\beta = .03$, $t = .22$, $p = .83$; $\beta = .01$, $t = .05$, $p = .96$; $\beta = .16$, $t = .89$, $p = .37$, respectively). Thus, the combination of low positive parenting and non-supportive strategy use was most detrimental for boys, and the effects of high positive parenting served as a protective factor for boys and girls whose mothers used non-supportive strategies to deal with negative emotions.

CHAPTER IV

DISCUSSION

This goal of this study was to assess the relation between two theoretical constructs of parenting and their effects on early peer acceptance. Past research has demonstrated the importance of successful peer relationships for normative child development as well as the presence of a link between parenting and children's peer outcomes. The current study added to this body of literature by identifying specific domains of parenting and their influence on children's kindergarten peer acceptance.

The first question addressed in this study dealt with the relation between different parenting domains. Although parenting is commonly assessed in research within the fields of child and family development, there is no clear consensus on how parenting should be operationalized. In the present study, we chose to focus on a specific parenting behavior, mothers' strategies for responding to children's negative emotions, as well as a broader, more general assessment of parenting style. Consistent with the original hypothesis, mothers' reports of the specific strategies they employ to deal with their children's negative emotions were modestly related to the measures of general parenting style. The distinction in supportive strategy use across four groups of parents who differed in their use of warmth, responsiveness, and directive methods was non-significant. This suggests that although there are some differences in supportive strategy

use that are associated with overall maternal style, parenting cannot be easily distilled into specific clusters; parenting is multi-faceted. Thus, this study next sought to understand how different parenting domains interact to influence child outcomes.

The first parenting domain addressed was style. Parenting style has been defined as the overall context, or “emotional climate,” of the parent-child relationship (Darling & Steinberg, 1993; Mize & Pettit, 1998), and as such was assessed through global ratings of maternal behavior during mother-child interactions. These ratings were not expected to have strong relations with children’s peer status because of the global nature of the construct. Consistent with this hypothesis, the index of maternal positive parenting did not significantly correlate with children’s kindergarten peer status.

The correlation between maternal directiveness and kindergarten peer status was significant; however, this correlation was only modest in strength ($r = -.20$). This result indicates maternal directiveness has somewhat more direct impact on child behavior than positive parenting, though the direction of effect in this study is somewhat counterintuitive: directiveness was found to be *negatively* associated with peer acceptance. This may suggest that directiveness, as assessed in this study, may represent a more negative aspect of parental control than what other theorists have conceptualized. Indeed, directiveness in this study was operationalized as strict, demanding, or harsh maternal behavior. Had directiveness been conceptualized as a broader range of maternal control, including maternal monitoring and scaffolding of children’s behavior, the findings might have suggested a curvilinear relation between directiveness and peer acceptance. Such a curvilinear relation would be consistent with past findings that have

found maternal control to be positively associated with better behavioral outcomes in children (e.g., Suchman, Rounsaville, DeCoste, & Luthar, 2007), but would also indicate that extreme levels of parental control do not produce these same benefits. The null findings from the regression analysis involving directiveness can also be understood in terms of the restricted range of behavior measured in the current study. Conceptualizing directiveness as an extreme form of maternal control suggests that this variable does not fully represent a global parenting style construct. Thus, it would not be expected that directiveness would moderate the effect of mothers' supportive strategy use on children's peer outcomes. Moderation is only expected when specific parenting behaviors are considered in the context of more general parenting style.

The second parenting domain addressed in this study was maternal strategies for dealing with children's negative emotions. Contrary to expectations, mothers' reports of their supportive strategy use were not significantly related to children's peer acceptance. Although this null finding was unexpected, it was qualified by significant two- and three-way interactions involving supportive strategy use, positive parenting, and gender. Given the impact of these interactions, it is not surprising that supportive strategy use did not directly relate to peer acceptance.

The hypothesis that positive parenting would moderate the effects of supportive strategy use on peer acceptance was supported; however, this finding must be interpreted in the context of the presence of a significant three-way interaction that included gender. As expected, when mothers used more non-supportive emotion coping strategies, high positive parenting acted as a protective factor for both boys and girls. For boys, however,

the combined effect of low positive parenting and non-supportive strategy use was particularly pronounced, resulting in significantly lower peer-liking compared with girls of similar mothers as well as with other boys whose mothers were also low in warmth, but high in supportive strategy use.

This finding is consistent with other research that has found maternal care to have different effects for boys and girls (Kraemer, 2000; Morrell & Murray, 2003; Prinstein & La Greca, 1999). Further, Barber and Olsen (1997) observed that for 5th and 8th grade girls, the source (home, school, peer group, or neighborhood) of positive socialization experiences was not important as long as positive socialization was experienced in some context. This finding was not present for boys, which may indicate that the mother-son, or parent-son, relationship has a unique impact on boys' social development. Although the gender differences found in the present study seem to be consistent with other research in this area, these results should be interpreted with caution as they were not predicted a priori. These results highlight the importance of looking at gender differences when studying parenting effects, even when gender is not directly related to the outcome of interest.

Limitations

Although including observational measures and measures of both maternal and peer report is an overall strength of this study, these measures were not ideal for assessing the distinction between general parenting style and specific parenting behaviors. The distinction between these two constructs is confounded by reporter differences in the current study. Ideally, both maternal style and specific behaviors would have been

measured in laboratory observations as well as maternal report. This approach would lend itself to greater confidence in the validity of the constructs. It is important that future research assess this issue as there remains no clear consensus on the relation between general parenting style and specific parenting behaviors.

Also, this study did not address the impact that fathers may have on children's social-emotional development. Future research is needed to examine the possibility that paternal behavior may influence children's early peer relationships differently from the effects of maternal behavior.

Finally, social preference scores may not fully capture variation in children's peer acceptance. For example, children who are well-liked by some children in their class, but disliked by other children, receive social preference scores similar to children who are not nominated as either liked or disliked by their classmates. Such distinctions are better captured by examining groups of children with similar patterns of nominations. This study did not make specific predictions regarding the pattern of peer nominations children would receive based on maternal style and strategy use. Examining groups based on peer nominations rather than using social preference as a continuous outcome could offer additional insight to our understanding of parental influences on children's peer relationships.

Summary and Implications

The primary goal of this study was to identify early parenting variables that contribute to children's peer acceptance in kindergarten. Results indicate that positive parenting and maternal supportive strategy use when children are 4-years-old interact

with child's gender to predict kindergarten peer acceptance. These findings are important to our understanding of the impact of parenting on children's development because they indicate that the relation between these constructs is complex; the inclusion of multiple facets of parenting was necessary in order to understand the impact of parenting on children's peer relationships.

This study also highlights the importance of considering gender differences when examining developmental processes. Although the general trends identified in this study are the same for both boys and girls, the impact of variations in maternal behavior was more pronounced for boys. Future research should attempt to replicate this finding as well as examine other factors, such as the development of self-regulatory abilities, which may contribute to the gender differences seen here.

Finally, this study indicates the importance of understanding the mother-child relationship as a predictor of peer success. Parents clearly play a role in helping children develop characteristics that lead to greater peer liking during the transition to kindergarten. These findings may help researchers and clinicians identify strategies to help children in need of interventions to prevent or alleviate peer rejection. Future research is needed to better define different aspects of parenting, as well as to identify other parenting behaviors that are particularly important for children's development of peer relationships.

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APPENDIX A. TABLES

Table 1

Rotated Components Matrix for Maternal Global Codes

	Component		
	1	2	3
<i>Teaching Task</i>			
Hostility	-.207	.190	.615
Positive affect	.808	-.144	-.041
Directive methods	-.252	.667	-.055
Responsiveness	.636	-.415	-.121
<i>Puzzle Task</i>			
Hostility	-.112	.195	.802
Positive affect	.829	.083	-.182
Directive methods	-.051	.685	.052
Responsiveness	.743	-.079	-.192
<i>Freeplay</i>			
Hostility	-.126	-.081	.596
Positive affect	.807	-.001	-.134
Directive methods	-.117	.751	.117
Responsiveness	.707	-.312	-.183

Clean-up

Hostility	-.144	.199	.684
Positive affect	.803	.009	-.146
Directive methods	-.151	.556	.311
Responsiveness	.556	-.152	-.099

Pretend Play

Hostility	-.073	.093	.579
Positive affect	.844	-.129	-.032
Directive methods	-.012	.638	.235
Responsiveness	.719	-.279	-.180

Table 2

Descriptive Statistics

	N	%	Mean	SD	Min.	Max.
<i>Gender</i>						
Male	126	46.7				
Female	144	53.3				
<i>Race</i>						
White	177	65.6				
Minority	93	34.4				
Hollingshead score	263		43.05	10.82	19.00	66.00
CCNES	260		1.45	0.43	-0.04	2.33
Positive parenting	264		2.95	0.69	1.20	4.00
Directiveness	264		2.28	0.51	1.17	4.00
Kindergarten Social Preference	187		-0.07	0.97	-2.48	2.16

Table 3

Zero-Order Correlations

	2	3	4	5	6	7
1. Gender	.02	-.03	-.06	-.07	-.04	.11
2. Race	—	-.22***	-.48***	.40***	-.06	-.09
3. Hollingshead score		—	.28***	-.31***	.16*	-.09
4. Positive parenting			—	-.48***	.20**	.13
5. Directiveness				—	-.13*	-.20**
6. CCNES					—	.09
7. Social preference						—

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 4

Parenting Style Groups

	N	Mean CCNES
Permissive	91	1.53
Neglectful	43	1.32
Authoritarian	88	1.39
Authoritative	42	1.46

Table 5

Moderating Effects of Positive Parenting on Kindergarten Social Preference

	ΔF	ΔR^2	β
<i>Step 1</i>	1.88	.05	
Gender			.16 ⁺
Positive parenting			.07
Directiveness			-.13
<i>Step 2</i>	1.67	.01	
Supportive strategy use			.12
<i>Step 3</i>	2.77*	.07	
Positive parenting x Supportive strategy use			-.30**
Positive parenting x Gender			.06
Supportive strategy use x Gender			-.11
<i>Step 4</i>	5.06*	.04	
Positive parenting x Supportive strategy use x Gender			4.61*
<i>Total</i>		.17	

⁺ $p < .10$; * $p < .05$; ** $p < .01$

Table 6

Moderating Effects of Directiveness on Kindergarten Social Preference

	ΔF	ΔR^2	β
<i>Step 1</i>	1.88	.05	
Gender			.16 ⁺
Positive parenting			.07
Directiveness			-.13
<i>Step 2</i>	1.67	.01	
Supportive strategy use			.12
<i>Step 3</i>	0.31	.01	
Directiveness x Supportive strategy use			.05
Directiveness x Gender			-.22
Supportive strategy use x Gender			-.08
<i>Step 4</i>	.78	.01	
Directiveness x Supportive strategy use x Gender			.29
<i>Total</i>		.08	

⁺ $p < .10$

APPENDIX B. FIGURES

Figure 1
Interaction of Positive Parenting and Supportive Strategy Use Predicting Kindergarten Social Preference for Boys

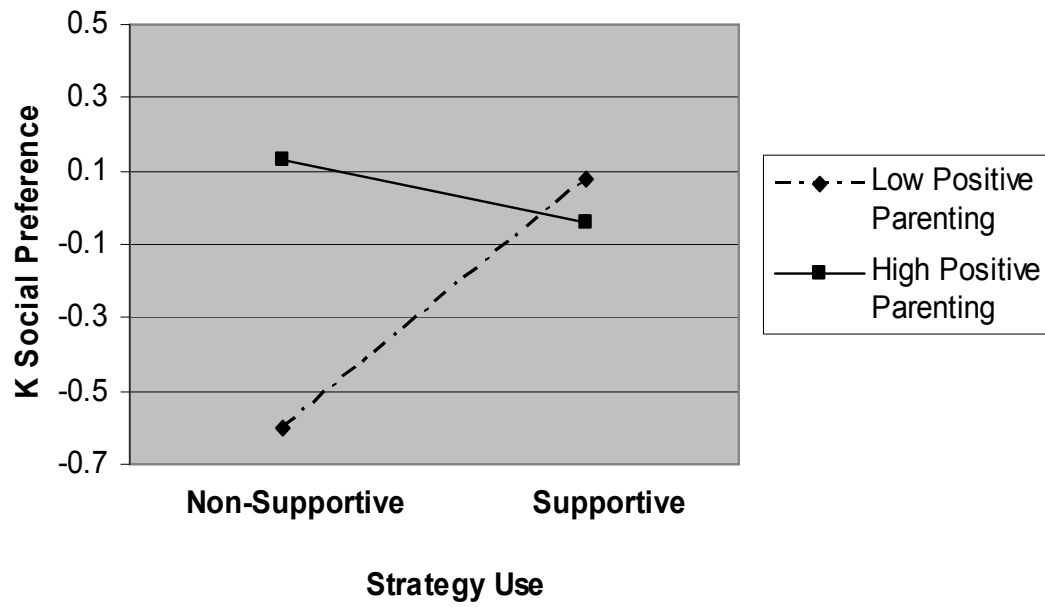


Figure 2

Interaction of Positive Parenting and Supportive Strategy Use Predicting Kindergarten Social Preference for Girls

