

THE RELATIONSHIP BETWEEN PARENTING
STYLES, PARENTAL READING INVOLVEMENT,
CHILD BEHAVIOR OUTCOMES, CHILD
CLASSROOM COMPETENCE, AND EARLY
CHILDHOOD LITERACY

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CHAPTER I

INTRODUCTION

Decades of research have suggested that parenting behaviors and practices associated with parenting styles are related to child outcomes of classroom competence and externalizing behavior problems (Baumrind, 1968; Bretherton, 1985; Camp, Swift, & Swift, 1982; Jewell, Krohn, Scott, Carlton, & Meinz, 2008; Raikes, Luze, Brooks-Gunn, Raikes, Pan, Tamis-LeMonda, et al., 2006). More recently researchers have made exceptions to the conclusion that parenting style and child outcomes are consistently related. Instead, they have argued that parenting style is not related to child outcomes for children living in poverty. McWayne, Owsianik, Green, and Fantuzzo (2008) found no significant relation between parenting styles and children's social and behavioral outcomes for families living in poverty. Although McWayne et al. (2008) listed possible explanations for the lack of relations between the parenting styles and child outcomes, prior research firmly supports how the behaviors associated with authoritative, authoritarian, and permissive parenting styles influence the child's development. The inconsistency between the findings of McWayne et al. (2008) and others suggests that two characteristics of families living in poverty, family income and education, could

moderate the relation between parenting styles and child outcomes. This idea of unaddressed moderation will be a focus of this thesis.

In addition to how parenting styles relate to children's sociability, cognition, and behavior, the parenting practice of reading involvement and literacy activities also has been found to influence child outcomes, specifically child cognition (Foster, Lambert, Abbott-Shim, McCarthy, & Franze, 2005; Lyytinen, Laakso, & Poikkeus, 1998). It has been established that parental reading involvement is positively associated with authoritative parenting (Holden & Miller, 1999) and that parental reading involvement is associated with higher levels of cognition (Foster et al., 2005). Although pairs of these three variables have been studied, research is lacking in specifically studying relations among all three variables. For the purpose of this thesis, all three variables will be addressed in examining if parental reading involvement helps explain the link between authoritative parenting and child cognition. Furthermore, due to the sample utilized in this thesis and the sample characteristics of McWayne et al.'s (2008) paper, the literature review will focus on research on preschool and elementary age children.

To further address these topics, four research objectives will be investigated in this thesis:

- (1) To evaluate the relations between parenting styles (authoritarian and authoritative) and child classroom competence (sociability and cognitive performance).
- (2) To evaluate the relations between three parenting styles (authoritarian, authoritative, and permissive) and child externalizing behavior problems.

- (3) To evaluate whether parental income and education moderate the relations between parenting styles and child outcomes.
- (4) To examine whether parental reading involvement/parental literacy activities is a mediator of the relations between authoritative parenting and child early emergent literacy/cognition.

CHAPTER II

REVIEW OF LITERATURE

Conceptual Definitions

Parenting styles have been widely studied since the 1970s. A parenting style is similar to the emotional climate of parent-child interaction; this climate is inferred from how parents communicate, interact, discipline, support, monitor, and relate to their children. Within these key components, variations occur between parents; these specific variations of parenting behaviors are parenting practices whereas the underlying tone or theme across all such interactions is the parenting style (Darling & Steinberg, 1993). Schaefer (1965) was one of the first contributors in organizing and classifying parental behaviors. The ideas of strict and lax behavior control, approving and rejection behavior, and psychological control and autonomy were addressed by Schaefer (1965). Building on Schaefer's (1965) ideas, Baumrind (1968; 1971) furthered the organization of parenting behaviors by conceptualizing them as authoritative, authoritarian, and permissive parenting styles. Maccoby and Martin (1983) added to Baumrind's original ideas by developing a contingency table featuring warmth/responsiveness and control/demandingness. Each parenting style is then defined by the intersection of the two sets of variables, with parents either being rated high or low on each set of variables

(Maccoby & Martin, 1983). Defining these parenting styles helps researchers determine the differences and similarities in how the types of parents rear their children, leading to the discovery of similarities and differences in the outcomes for the children (Holden & Miller, 1999).

Two major dimensions characterizing authoritative, authoritarian, and permissive parenting styles are the responsiveness and demandingness of the parents towards the children (Maccoby & Martin, 1983). Responsiveness is categorized as the degree to which parents support and attend to their child's needs. Parental demandingness is the expectation for mature and responsible behavior by the child. Authoritarian parents place high importance on conformity and obedience, but do not value warmth and responsiveness (Baumrind, 1968; Gadeyne, Ghesquière, & Onghena, 2004; Nelson, Nelson, Hart, Yang, & Jin, 2006). Authoritarian parenting involves power and asserting that power without showing respect for the child's thoughts or opinions. As a result, parents believe in a set of standards that are to be followed without question, generally attempting to control and instill obedience in their children (Baumrind, 1968). Furthermore, authoritarian parents are more likely to use parent-centered goals in their parenting techniques rather than empathic, child-centered goals that authoritative parents use (Coplan, Hastings, Lagacé-Séguin, & Moulton, 2002).

As opposed to authoritarian parents, authoritative parents exhibit rational reasoning and encourage reciprocal reasoning yet still direct children's behaviors. These parents take on the responsibilities of parenthood by setting rules and limits but also respect their children as individuals (Baumrind, 1968). Authoritative parents display moderate to high responsiveness and demandingness, high warmth and reasoning, and

consistent discipline (Baumrind, 1968; Holden & Miller, 1999; Maccoby & Martin, 1983; Nelson, Nelson, Hart, Yang, & Jin, 2006).

A third parenting style discussed by Baumrind (1968) is the permissive parenting style. This style encompasses different characteristics than authoritative and authoritarian parenting, resulting in different outcomes in children. Baumrind (1971) found that permissive parents do not value punishment or authority, which is associated with low enforcement of child responsibility and disregard for age-appropriate behavior. In terms of the dimensions of parenting styles, permissive parents are low on demandingness and control and high on warmth and responsiveness. With regard to being a resource for children, permissive parents make themselves available for their children to connect with as they wish; when children use parents as a resource, parents do not react in a manner that addresses the idea of responsibility for shaping their children's future. Reason is sometimes used within the permissive parenting style, but this does not represent an attempt to control or influence the overall outcome of the situation (Baumrind, 1971). These three parenting styles, authoritarian, authoritative, and permissive, tend to be associated with different behavioral and classroom competence outcomes in preschool children (Baumrind, 2010).

Although this thesis will focus on authoritarian, authoritative, and permissive parenting, it is important to note that Baumrind, Larzelere, and Owens (in press) have reorganized the parenting style typologies into seven categories. Although most research finds that Baumrind's (1968) original typologies correspond to parents' behaviors and children's outcomes, some research does not find significant relations between parenting behaviors and children's outcomes, specifically children and parents who live in poverty

(McWayne et al., 2008). Thus, Baumrind et al.'s (in press) newly developed typologies may better relate to the parenting practices and behaviors displayed by parents who live in poverty. Baumrind et al. (in press) have organized parenting styles into the following groups: authoritative, authoritarian, directive, permissive, democratic, good enough, and disengaged. The parenting styles of authoritative, authoritarian, and permissive are still defined as described above. Authoritarian and directive are two divisions of directorial parenting; directive parenting is defined as being highly demanding and moderately responsive. Permissive and democratic parenting styles are subdivisions of lenient parenting; democratic parents are highly supportive of autonomy, highly responsive, and moderately demanding. Parents who support autonomy and are demanding and responsive are classified as good enough parents. Being characterized as the least committed to parenting, the disengaged parents are low in demandingness, responsiveness, and supporting autonomy. These additional parenting styles allow for further description and classification of the overarching climate of the parent child interactions. Due to the vast amount of research related to the three original parenting styles and to the measures utilized in this study, authoritative, authoritarian, and permissive parenting styles will be the primary focus of the literature review.

The three targeted parenting styles – authoritative, authoritarian, and permissive – have not been directly linked to children's classroom competence and development of early literacy skills, although behaviors that are characteristic of these parenting styles have been associated with these child outcomes (Bryant, Burchinal, Lau, & Sparling, 1994; Raikes et al., 2006). Across the literature, classroom competence has been characterized by various child behaviors and teacher ratings; child behavior, rule

compliance, academic success, and cognitive abilities have all been included in this overarching definition (Adams, Ryan, Ketsetzis, & Keating, 2000; Speer & Esposito, 2000).

For the purpose of this thesis the definition of classroom competence consists of child social and cognitive abilities, evaluated and rated by the primary teacher and measured through standardized tests (Speer & Esposito, 2000). Associated with child cognitive abilities is early emergent literacy during childhood. Early emergent literacy is described as a continuous process that begins in early childhood and progresses across the lifespan. To measure the concept of emergent literacy, children are assessed on their phonological sensitivity, being able to manipulate the sounds of single letters and letter clusters, print knowledge and conventions of print, being able to recognize letters and know that words are used in sentences and stories, level of vocabulary development, being able to state meanings of words and matching words given verbally to pictorial illustrations, and rhyme sensitivity, being able to associate rhyming words (Lonigan, Burgess, & Anthony, 2000; O'Connor, & Yasik, 2007). In the current study, vocabulary development and word knowledge were both assessed.

Behavioral outcomes in preschool children can be conceptualized positively in terms of competence or negatively in terms of behavior problems. This study will focus on externalizing behavior problems and will refer to overt negative behaviors. The children that exhibit these externalizing behavior problems are characterized by how they direct negative manifested emotions of frustration, anger, and aggression towards others. Self-regulation of children who demonstrate negative externalizing behaviors is underdeveloped, resulting in the negative overt behaviors that can be observed (Aunola &

Nurmi, 2005; Gilliom & Shaw, 2004). Another branch of aggression that is now being addressed in preschool children is relational aggression, which will be considered a part of externalizing problem behaviors in this thesis. Children exhibit relational aggression when they spread rumors or overtly exclude another child in a social setting in attempts to retaliate against the targeted child (Casas, Weigel, Crick, Ostrov, Woods, Jansen-Yeh, & Huddleston-Casas, 2006). Children with a cluster of negative externalizing behaviors are classified as having disruptive behavior. This disruptive behavior can be attributed to family, biological, and environmental factors. Children are most often referred to mental health services for disruptive behaviors (Calzada, Eyberg, Rich, & Querido, 2004). Additionally, it is very common for children with disruptive behaviors to have a diagnosis from the DSM-IV-TR of attention deficit hyperactivity disorder (ADHD) (Calzada et al., 2004; McKee, Harvey, Danforth, Ulaszek, Friedman, 2004).

Theoretical Perspectives

When addressing how parenting styles relate to child classroom competence, early emergent literacy, and child behavior problems, several theories have been applied. One theory pertaining to family research that has been a contributor in the parenting styles research is the coercive cycles theory. This mid-level theory was developed from social learning theory, addressing parents' modeling and reinforcement of negative behavior; consequently, children view their defiant or aggressive behavior as an acceptable action and continue to display the negative behaviors (Patterson, 1997). For example, when a child has a tantrum, the parent does not redirect the child's actions but rather engages in a form of surrender, giving in to the child's demands and negatively reinforcing the behaviors included in the tantrum. The child learns from the parents' lack

of involvement that tantrums are appropriate; thus, the likelihood of subsequent tantrums increases. Caron, Weiss, Harris, and Catron (2006) conclude that research is lacking in the specificity of effects pertaining to the coercive cycles theory. According to Caron et al. (2006), research has not fully addressed the direct effect between parenting behaviors and the co-occurrence of negative child behaviors. Furthermore, Caron et al. (2006) support the idea of investigating the relation of how specific parenting behaviors uniquely influence specific externalizing child behaviors. For the current thesis, the coercive cycles theory applies to the initiation and response of the parent; however, the child's contribution to the cyclic nature of this theory does not apply because dyadic interactions were not measured.

Another theory that has been applied to parent and child relationships is family resilience theory. Masten, Cutuli, Herbers, and Reed (2009) state that within the last four decades, resilience research has been a major contributor to the total child development research literature. In general, resilience refers to successfully overcoming and adapting after or during an adverse event or when faced with high-risk situations. Resilience theory defines a risk factor as a characteristic that can be measured that has been found to be associated with a negative outcome. For children to be resilient against challenging risk factors, they rely on people and social contexts to positively influence their choices and provide positive opportunities. These people and social contexts are referred to as protective factors, which are specifically defined as characteristics that can be measured that have been found to produce positive effects when the level of risk is high. Applied to this thesis, resilience relates to parenting styles and child behavior in that authoritative parenting, child self-control, and parental involvement are protective factors and

permissive and authoritarian parenting and temperamental predisposition toward negative externalizing behaviors can be considered as risk factors (Masten et al., 2009).

Lastly, not all theories that are applicable to the content of this paper have been fully developed. Baumrind's parenting styles have been addressed in research since the late 1960s. With the development of these ideal types of parenting, characteristics and practices associated with each style – authoritative, authoritarian, permissive, and indifferent – have been used to understand the relation between parenting styles and children's development. Currently, there is an emerging theory stemming from the behaviors and practices characteristic of the parenting typologies. Sorkhabi (2010) and Pellerin (2005) have proposed the development of a socialization theory based on Baumrind's parenting styles. Successful socialization takes place when children learn and apply the proper skills necessary to succeed in society. Thus, when parents implement the authoritative parenting style, characterized by warmth, reasoning, and responsiveness, children are more likely to have fewer behavior problems and higher classroom competence due to the socialization style and behaviors of the parents.

Parenting Styles and Child Classroom Competence/Literacy

Sociability and child cognition are the two major components of child classroom competence (Speer & Esposito, 2000). When relating parenting styles to child outcomes, it is important to examine both the cognitive and social competencies. Studying both of these factors allows a better understanding of children's overall development related to the classroom environment. One aspect of child classroom competence is a child's cognitive performance. Parenting styles have been associated with the child's cognitive development. Authoritarian parenting tends to have a negative relation with child

cognitive performance on developmental tests and academic self-conceptions (Camp et al., 1982; Miller, 1988; Steinberg, Lamborn, Darling, & Mounts, 1994). Although there are not many studies specifically focusing on the relation between authoritarian parenting and verbal abilities of children, one study did find a significant correlation, Camp et al. (1982) did find a significant negative correlation between mothers' authoritarian parenting and their kindergarten child's performance on two verbal tests, the Peabody Picture Vocabulary Test and the Illinois Test of Psycholinguistic Ability. The authoritarian parents' beliefs about children have been found to directly correlate with low cognitive performance in children. These negative parenting beliefs are most frequently found in authoritarian parents, when compared to authoritative parents (Miller, 1988).

In contrast to authoritarian parenting, authoritative parenting has been linked to different cognitive outcomes. The positive parental emotional support that is associated with the authoritative parenting style has been found to positively impact the overall cognitive functioning of children (Bretherton, 1985; Estrada, Arsenio, Hess, & Holloway, 1987; Mattanah, 2005). Children of authoritative parents tend to have more support, increasing the likelihood of forming more meaningful relationships with their parents. These relationships guide the children in higher levels of cognition (Bretherton, 1985; Pratt, Kerig, Cowan, & Cowan, 1988). As a result of these positive relationships, children begin to become competent in problem-solving skills, an ability that is linked to cognitive achievement (Hubbs-Tait, Culp, Culp, & Miller, 2002). Furthermore, positive parent-child relationships are linked to more responsiveness, which has been found to contribute to higher cognitive performance. The parents' responsiveness is correlated

with appropriate tutoring and scaffolding techniques, leading to better cognitive outcomes, when compared to children of authoritarian parents (Pratt et al., 1988).

Sociability is another dimension of classroom competence. In current literature, sociability in children related to parenting styles has received little attention. Sociability is defined by Adams et al. (2000) as effective interpersonal relations. More specifically, peer sociability, being accepted, enjoyed, and liked by peers, is facilitated by having high enough self-esteem to extend oneself to others while demonstrating tolerance to the frustrations that are associated with frequent interactions with peers, especially when peers show a preference to do or initiate something different from what the child desires. Furthermore, Coie, Dodge, and Coppotelli (1982) found sociability, specifically sociable-prosocial behavior, to be associated with peer acceptance, leadership in peer relationships, and academic achievement. In a study by Chen, Dong, and Zhou (1997), with 304 second-grade children from Beijing, China, mothers' authoritarian parenting was found to be significantly and positively correlated with children's aggression and negatively associated with sociability, shyness, and inhibition, while mothers' authoritative parenting was positively and significantly correlated with sociability; both findings for mother's authoritarian and authoritative parenting were significant for girls, but not for boys. In addition, sociability-leadership was defined as a child who makes new friends easily and one whose peers respect and look to for direction. Sociability-leadership was significantly and positively correlated with both academic achievement and involvement in student activities; these factors were all significantly and negatively correlated with aggression and disruption in the classroom (Chen et al., 1997).

Although many studies do not label children's cognitive performance combined with their sociability as classroom competence, previous research has conjointly addressed a child's level of cognition and social abilities, along with parental behaviors characteristic of authoritative and authoritarian parenting styles. Children who live in poverty have been found to have poorly developed social skills and lower levels of cognition than children who have middle to high socioeconomic statuses (SES) (Speer & Esposito, 2000). Contrary to this finding, McWayne et al. (2008), who studied a low-income sample, found no relation between parenting and child outcomes, suggesting the idea of a moderation factor related to the high-risk environment. Although children of low SES have been found to have more negative social and cognitive outcomes (National Institute of Child Health and Human Development [NICHD] Early Child Care Research Network [ECCRN], 2005), economically disadvantaged children who are prepared to enter school and have successful transitions have been found to have better outcomes than their peers who are of low SES and not prepared for the school transition (Speer & Esposito, 2000). Congruent with resilience theory, this preparedness represents a protective factor for the low SES children. The children who have the ability to successfully adjust to the new school situation, the social skills to relate to their peers, and cognitive levels to master the academic tasks, possess valuable resources and demonstrate their capabilities to overcome stressful home situations (Masten et al., 2009). Speer and Esposito (2000) found children from exceptionally impoverished families have the competency and academic ability to perform well on academic tasks, demonstrating their resilience; however, the children in this group were rated poorly by their teachers in classroom competence. Similarly, children of parents who focus on controlling their

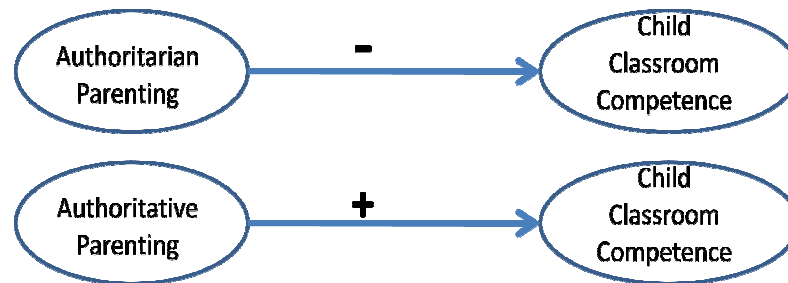
children and having them conform to rules (which are characteristic of authoritarian parenting) have been found to have problems socially adjusting in school settings (Searight, Searight, & Scott, 1987). Combining social and cognitive child abilities, children with highly demanding and pressuring parents have been found to have lower classroom competence when compared to their peers who have parents who exert less pressure to achieve in school and social settings (Adams et al., 2000). Although it is not directly stated that the overly demanding and pressuring parents are authoritarian parents, one can infer this style from the previous explanation of characteristics of authoritarian parenting.

Maternal sensitivity is another factor that contributes to a child's classroom competence. Mother sensitivity focuses on the mother's greater support towards the child, lower anger/hostility, and greater autonomy supporting; one way to determine maternal sensitivity is through videotaped mother child interactions (Downer & Pianta, 2006). The NICHD longitudinal study of child care found that maternal sensitivity mediated the relation between family poverty and children's language and cognitive performance (NICHD ECCRN, 2005). When examining the developmental timing of poverty and the duration of poverty, the duration of poverty had the most consistent and significant relations to child outcomes; these findings applied throughout the birth to third-grade range. Consistent with the authoritarian parenting style, the families with low maternal sensitivity had children who had lower scores on the language and cognitive assessments (NICHD ECCRN, 2005). Additionally, high maternal sensitivity, characteristic of authoritative parents, was associated with high performance on math

skills and emergent literacy skills, specifically phoneme knowledge (Downer & Pianta, 2006).

Thus, parenting behaviors characteristic of authoritative parenting have been linked with children's classroom competence even though the authoritative style to classroom competence link has not been directly tested. Similarly, the parenting behaviors and practices characteristic of authoritarian parenting have been linked with children's the two components of children's classroom competence, sociability and cognition, even though the authoritarian style to classroom competence relation has not been directly tested. Therefore, this study tested the hypothesis that authoritarian (coercive) parenting would be negatively associated with child classroom competence, and authoritative (warm, limit setting) parenting would be positively related to child cognition and sociability (see Model 1).

Model 1.



To enrich the child's early literacy skills, improve cognitive levels, and allow the child to gain the most information from parent-child interaction during reading, parents need to focus on explaining the illustrations or point out the words they are reading (Phillips, Norris, & Anderson, 2008). Although research has not directly linked the authoritative and authoritarian parenting styles to the level of involvement by parents in reading to their children, Baumrind's (1968) authoritative parenting style parallels the

qualities mentioned above as necessary for promoting early literacy skills. Authoritative parents display more warmth and reciprocal reasoning than authoritarian parents, which corresponds to the patience required to respond to questions about illustrations or events (Holden & Miller, 1999; Maccoby & Martin, 1983). When children begin to attempt to read independently, the more assistance parents offer to children, the higher their reading achievement. Parental assistance refers to positive encouragement and coaching of the children (Hewison, & Tizard, 1980). Furthermore, Bryant, Burchinal, Lau, and Sparling (1994) found that the impact of a child's home environment on emergent literacy skills is of high importance. When comparing the curriculum of the Head Start program to the child's home environment, the quality of love, care, and attention the child received at home was a better predictor of the child's language development than the curriculum the Head Start center implemented. Although this study did not specify the amount of reading in the home environment, the idea is that the quality of care the child receives at home enhances his or her literacy skills. These findings further support the characteristics associated with Baumrind's parenting typology; the warmth and support that authoritative parents offer correspond to the home environment that is best for the child's development (Baumrind, 1968; Holden & Miller, 1999; Maccoby & Martin, 1983).

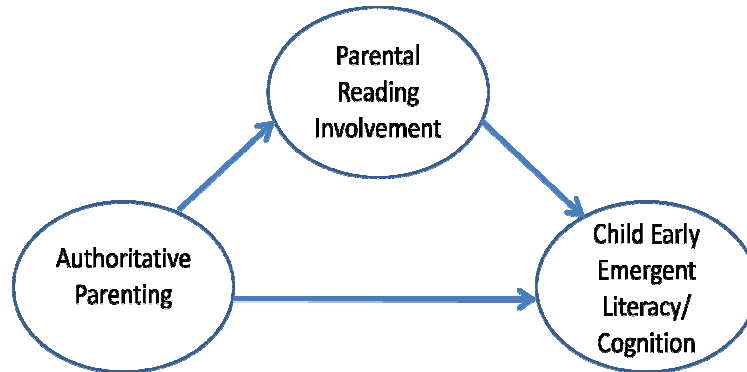
Just as parenting style may influence parental reading involvement, parental reading involvement can influence child outcomes. Reading to children has been linked to various child outcomes. The amount of reading and the environment in which the reading takes place influences the cognitive and behavioral outcomes of children (Raikes et al., 2006). As mentioned previously, the environment the parent creates at home

directly impacts the child's overall cognitive functioning. An environment designed for learning contributes to children's level of cognition. When parents read to children frequently (e.g., several times per week), the children's cognitive level increases and early literacy skills become further developed (Foster et al., 2005; Lyytinen et al., 1998; Raikes et al., 2005). For example, reading to children several times weekly or on a daily basis during the ages of 14 to 36 months significantly increases their vocabulary level, as measured by a parent questionnaire and a standardized verbal ability test (Raikes et al., 2006). Bingham (2007) found that the quality of parent/child interaction during reading is most important for predicting children's later literacy skills, when compared to the instructional methods used during the reading activity. Thus, while reading to children, parents should implement the practices and behaviors associated with authoritative parenting to further develop children's reading skills (Bingham, 2007). Children's high interest of books, developed by parents reading to children, has been associated with larger vocabularies, when compared to children with a low interest in books (Lyytinen et al., 1998). Foster et al. (2005) found that any reading involvement with a caregiver significantly increases the child's cognitive level, specifically early literacy skills, when compared to children who were not read to frequently. It appears that reading to a young child is an exercise that can benefit the child's outcomes.

Thus, parenting behaviors and practices characteristic of authoritative parenting have been linked with parents' reading involvement and children's early emergent literacy/cognition, even though the mediating relation of parental reading involvement to authoritative parenting and child emergent literacy/cognition has not been directly tested. Therefore, this study tested the hypothesis that parental reading involvement would

mediate the relation between authoritative parenting and child early emergent literacy/cognition (see Model 2).

Model 2.



Parenting Styles and Child Externalizing Behaviors

In family research, authoritarian parenting has been found to be positively related to negative child behavioral outcomes. Compared to elementary-aged children of authoritative parents, children of authoritarian parents are more likely to engage in negative behaviors (Caron et al., 2006; Gadeyne et al., 2004), and develop higher aggression and anger levels and behavior disorders (Hollenstein, Granic, Stoolmiller, & Snyder, 2004; Robinson, Mandlco, Olsen, & Hart, 1995). Additionally, negative outcomes resulting from authoritarian parenting have been found in preschool children. Jewell et al. (2008) studied 39 preschool children with authoritative and authoritarian parents. Results revealed that authoritarian parenting styles of mothers and fathers were significantly and positively correlated with child negative externalizing behavior at home and at school (Jewell et al., 2008). van Aken, Junger, Verhoeven, van Aken, and Deković (2007) supported these conclusions by finding that maternal high control was related to child low impulse control, high hyperactive characteristics, and greater frustration.

Harsh corporal punishment is a behavioral control strategy that is associated with authoritarian parenting. Corporal punishment was found to uniquely contribute to 36 month olds' and first graders' negative behaviors, especially when the young children had a difficult temperament (Mulvaney & Mebert, 2007). Although this research found a significant positive relationship between corporal punishment and children's overt negative behavior, other studies argue that data about authoritarian parenting, particularly the corporal punishment associated with the style, is misconstrued. Often, severe physical punishment is grouped with spanking, resulting in analyses yielding significant positive results for the link between discipline and child overt negative behavior. Thus, the unique conclusions that could be drawn from data pertaining to spanking cannot be drawn due to confounding of spanking with harsher disciplinary tactics (Baumrind, Larzelere, & Cowan, 2002; Baumrind et al., in press). Although conclusions cannot be drawn, the power that parents try to gain through corporal punishment is demonstrated through self-reports of high overcontrolling behaviors, which were found to be significantly correlated with children's externalizing behaviors. These externalizing behaviors associated with high parental controlling behavior consisted of poor attention problems and poor social behavior with peers. Furthermore, in a longitudinal study teacher reports of the child's behaviors significantly correlated with the next year's parent reports of controlling behavior (Gadeyne et al., 2004). Other qualities of authoritarian parenting that are characteristic of punitive parenting, defined as yelling, reprimanding, lecturing, and physically punishing, were linked to children's negative externalizing behaviors at four and six years of age (Miller-Lewis, Baghurst, Sawyer, Prior, Clark, Arney, & Carbone, 2006). Congruent with Patterson's (1997) coercive cycles theory, in

which punitive characteristics can be seen, Calzada et al. (2004) found that when parents make numerous harsh commands of their children, the demandingness is a significant predictor of children's non-compliance.

The authoritative parenting style of mothers and fathers has been linked to well-adjusted children, when comparing authoritative parenting to other parenting styles (Mattanah, 2005). Children of authoritative parents have been found to be affected by this parenting style in a number of positive ways. They are reported to be more independent, friendly, self-assertive, cooperative with parents, motivated to achieve, more successful in accomplishing their goals (Baumrind, 1971), and less aggressive (Robinson et al., 1995). These resulting behaviors may stem from authoritative parents' tendency toward being more responsive and using more reasoning with their children (Robinson et al., 1995). Chen et al. (1997) found that the parental authoritative style was positively associated with maximal levels of social adjustment and negatively with adjustment problems in school in second-grade children (Chen et al., 1997). When focusing on authoritative parenting and children's transition to school, authoritative parents encourage individual and independent development; these authoritative parents listen to the child's comments and jointly make decisions by using reasoning techniques. The encouragement of autonomy predicts healthy adaptation to the school environment. When parents allow and promote independence, the children are able to show responsibility in completing tasks in the classroom, to focus on a current task, to interact positively with peers, and to sit in a desk. Thus, preschool measures of the structure and warmth aspects of authoritative parenting predicted (inversely) first grade children's aggressive and hyperactive behaviors (Mattanah, 2005).

Moderate to high control with high affection or warmth is also characteristic of the authoritative parenting style. Aunola and Nurmi (2005) found two relationships associated with parenting styles and children's behaviors in their longitudinal study. There were two relations between parents' control and affection and their kindergarten to second-grade children's behavior. First, when mothers displayed high warmth and psychological control, there was an increase in child externalizing behaviors. Behavioral control with low levels of psychological control decreased children's externalizing behavior problems (Aunola & Nurmi, 2005). This latter pattern may be construed as congruent with authoritative parenting whereas the former includes features of permissive (warmth) and authoritarian (psychological control) parenting (Baumrind, 2010).

In a sample of fourth graders and their parents, Caron et al. (2006) found that significant correlations between parental warmth and behavior of children were not dependant on a specific interaction between the parent and child; parental warmth was consistent across situations. However, parental control was dependant on the interaction between the parent and child and was not consistent across time. Also, there was a moderating relationship found; when parental warmth was low, high levels of parental control were associated with higher levels of externalizing behaviors (Caron et al., 2006). This high control and low warmth that was found to be associated with externalizing behavior problems is characteristic of authoritarian parenting (Baumrind, 1968).

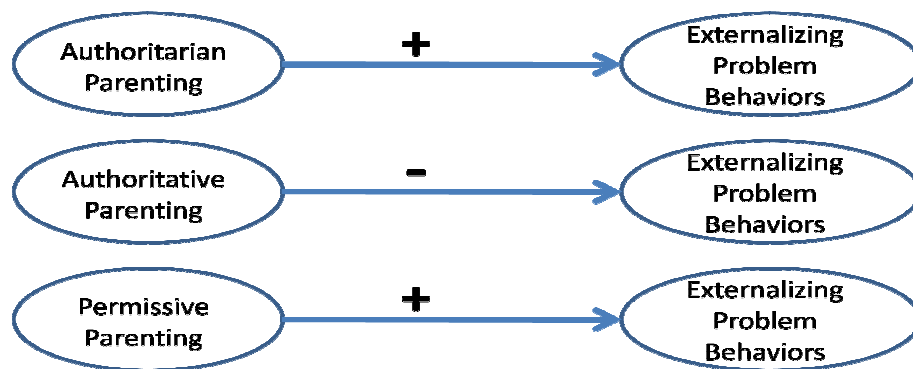
Although much of family research is focused on authoritarian and authoritative styles, there are a few studies that specifically address permissive parenting. Baumrind (1968) was the first to argue against the qualities of permissive parents. Others had stated that permissive parents are not characterized as having authority, which frees children of

control and should produce positive outcomes. Rather than having no effect or a positive effect, when a parent does not demonstrate authority during a child's misbehavior, the child internalizes their parent's behavior as approval of the act. As a result, the misbehavior increases; for example, when authority was not demonstrated, aggressiveness of preschoolers increased amongst the group (Baumrind, 1968). Casas et al. (2006) found that mothers who were classified as having a permissive parenting style had daughters with the highest relational aggressive behaviors, when compared to other parenting styles and other two to five year-old girls, even when the child's age was controlled for. When considering boys' relational aggression, mothers' permissive parenting styles showed a significant positive relationship to boys' relationally aggressive behaviors. Fathers' authoritarian parenting styles predicted their daughters' relationally aggressive behaviors. Furthermore, the relation between fathers' authoritarian parenting styles and sons' relational aggression approached the level of significance (Casas et al., 2006). When addressing conflicting parenting styles of authoritarian and permissive, Jewell et al. (2008) found that authoritarian mothers and permissive fathers had children with the most reported disruptive externalizing behaviors in the classroom and at home. Thus, the research supports the idea of parents needing to communicate and co-parent in the same style. Furthermore, when fathers were permissive, regardless of the mothers' parenting style, the children exhibited the most negative externalizing behaviors.

Thus, parenting behaviors and practices characteristic of authoritative, authoritarian, and permissive parenting have been linked with children's externalizing problem behaviors, even though the links between authoritative, authoritarian, and permissive styles and the targeted externalizing behavior problems of aggression,

hyperactivity, and relational aggression have not been directly tested. Therefore, this study tested the hypothesis that authoritarian parenting would be positively associated with children's externalizing problem behaviors, authoritative parenting would be negatively associated with children's externalizing problem behaviors, and permissive parenting would be positively associated with children's externalizing problem behaviors (see Model 3).

Model 3.



Lastly, externalizing behaviors that are associated with ADHD will be discussed in more depth. Hyperactive and distractible, associated with ADHD, will be measured in the current study using The Preschool Behaviour Questionnaire. This is a more specific topic discussed within the parenting style literature, specifically in the literature on authoritative and authoritarian parenting styles that focuses on the relation between parenting behavior and child ADHD. McLaughlin and Harrison (2006) found that parents of children with ADHD exhibited negative parenting practices. Furthermore, it was found that maternal competence accounted for the most variance in the relationship between parenting practices and child behavior. Thus, it is understood that maternal competence can be a protective factor when discussing the relationships between mothers and their children with ADHD (McLaughlin & Harrison, 2006). Also, parenting

practices consistent with authoritarian parenting style have been linked to higher instances of ADHD in children. The responsiveness and understanding found in authoritative parenting is lacking in authoritarian parenting, exacerbating the severity of ADHD (Alizadeh & Andries, 2002). Additionally, permissive parenting characteristics have been associated with ADHD. Ellis and Nigg (2009) studied elementary children's ADHD behaviors and their parents' parenting styles. Parents' inconsistent discipline and poor supervision, characteristic of permissive parenting, were significantly correlated with children's inattentiveness and hyperactivity.

Moderators May Explain Different Findings of Parenting Styles and Child

Outcomes

Moderators are variables that affect the strength and/or direction of the relation between the independent variable and dependent variable when they are present. Moderators are proposed in a given area of research when some proportion of the research finds negative relationships, some research supports positive relationships, and/or some research finds no significant relations between the independent and dependent variables. These differences suggest that a moderator may split the population of findings into at least two distinct groups (Holmbeck, 2002). Because this pattern of findings applies to the discrepant results reviewed in the next paragraph moderators were proposed in the current study.

Although some studies have found that parent behaviors are related to children's social skills (Coie et al., 1982), cognitive development (Mattanah, 2005), and behavior problems (Jewell et al., 2008), McWayne et al. (2008) found that for parents living in poverty, parent behaviors did not have a significant relationship with children's social

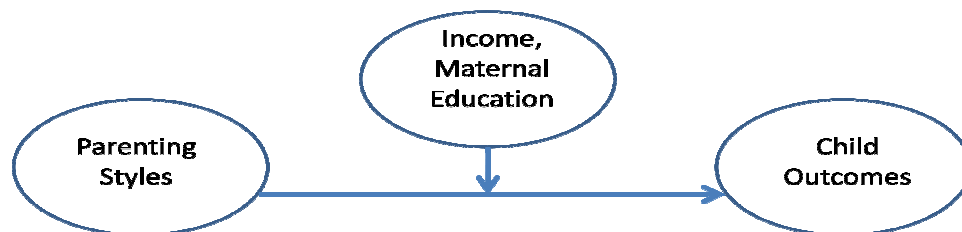
skills and problematic behaviors. Contrary to McWayne et al.'s (2008) findings, Querido, Warner, and Eyberg (2002), found that parenting styles were associated with children's outcomes, in a low-income, African American, preschool sample; specifically, authoritative parenting was the greatest predictor of fewer childhood behavior problems. Furthermore, Conger, Conger, and Martin (2010) add to this literature by stating that income has been found to be a buffer for low income families. Thus, within low-income families variations in income protect children from the negative impact of authoritarian and permissive parenting styles. These findings are of particular interest because this thesis intends to address the relationship between a parent's parenting style and child classroom competence and externalizing behaviors. The low income, Head Start sample in McWayne et al.'s (2008) study parallels the sample for this paper, although the current sample does not consist of a majority or even large percentage of African American children. Additionally, the same measure, The Parenting Behavior Questionnaire-Head Start (PBQ-HS), was used to gather information about parenting behaviors to identify the parents' parenting style in McWayne et al.'s (2008) study as will be used in this paper; McWayne et al (2008) found this measure to accurately identify the three measured parenting dimensions.

McWayne et al. (2008) identified four possible reasons for the lack of significant relations between parenting style and child outcomes in a sample of low socioeconomic status children. First, social desirability should be considered when addressing the findings of parenting behaviors related to child outcomes; because the measure is self-report, parents had the opportunity to respond in manner that they deemed more socially acceptable, biasing the results. Second, there could have been a restricted range of

parenting style or child outcome measures. Third, the measures may not capture the constructs that are crucial in influencing the development of the preschool children. Lastly, the measures do not address the importance of more than one or two people sharing the responsibility of child rearing; this shared role may be highly influential in low-income, African American culture, affecting the results of the parenting styles measure. These explanations are important considerations; examining the relationships between parenting styles and child outcomes is central to this paper.

Thus, parenting behaviors and practices characteristic of authoritative, authoritarian, and permissive parenting have been linked with children's behavioral, classroom competence, and literacy outcomes in high-risk samples, particularly low education and income, even though moderation by maternal education and monthly household income of the relation between authoritative, authoritarian, and permissive styles and child outcomes has not been directly tested. Therefore, this study tested the hypothesis that income and maternal education moderate the relations between parenting styles and child outcomes, such that children with authoritarian or permissive parents have poorer outcomes and a children with authoritative parents have more positive outcomes, but the difference between the children's outcomes becomes larger when there is low income or lower maternal attainment of education (see Model 4).

Model 4.



Conclusions, Research Goals, Hypotheses

With the exception of McWayne et al. (2008), research generally supports the idea that parenting behaviors and practices that characterize parenting styles are significantly related to children's classroom competence and externalizing behavior outcomes. Literature on parenting styles and child outcomes is also consistent with the hypothesis that moderators influence this relation. Some studies have found significant relationships between parenting behavior and child sociability and child behavior, while other research has indicated non-significant relationships between the dependent and independent variable.

Although studies of parenting practices abound, little research has specifically focused on authoritarian, authoritative, and permissive parenting styles related to child verbal abilities and sociability. Furthermore, when compared to research on authoritative and authoritarian parenting styles, permissive parenting practices and styles have not been adequately addressed. Additionally, research has not addressed the three targeted parenting styles in conjunction with both child classroom competence and problematic externalizing behaviors or the possible moderators of these independent and dependent variables.

To address the previously stated gaps in the literature, this study examined the relations of authoritarian and authoritative parenting styles to children's sociability and McCarthy verbal scores (classroom competence). It also evaluated the relation of authoritarian, authoritative, and permissive parenting styles to children's aggression, hyperactivity, and relational aggression (externalizing behavior problems). Next, the study tested moderation by maternal education and monthly household income of the

relation between the three parenting styles and the five child outcomes. Finally, the mediating relations of trips to the library and frequency of reading mediating the relation between authoritative parenting and children's McCarthy verbal scores were tested.

Hypotheses

I compared clear coercive parenting, indicative of authoritarian parenting, warm, limit setting parenting, indicative of authoritative parenting, and dismissive, uninvolved parenting, indicative of permissive parenting, with child classroom competence, defined by child sociability and cognition. I hypothesized (Hypothesis 1(a)) that authoritarian (coercive) parenting would be negatively associated with child classroom competence and (Hypothesis 1(b)) authoritative (warm, limit setting) parenting would be positively related to child cognition and sociability.

I also investigated if authoritarian, authoritative, and permissive parenting styles were significantly related to child externalizing problem behaviors. I hypothesized (Hypothesis 2(a)) that authoritarian parenting would be positively associated with child problem behaviors, (Hypothesis 2 (b)) authoritative parenting will be negatively associated with child problematic externalizing behaviors, and (Hypothesis 2(c)) permissive parenting would be inversely correlated with child externalizing behavior problems.

Because of discrepancies in the literature, I tested a moderation model to discover if the moderators of parental income and maternal education moderated the relationship between continuous parenting styles and the child outcomes. I hypothesized (Hypothesis 3) that income and maternal education moderated the relationship between parenting styles and child outcomes, such that a child with authoritarian or permissive parents

would have poorer outcomes and a child with authoritative parents would have more positive outcomes, but the difference between the child outcomes would become larger when there was low income or lower maternal attainment of education.

I examined the links between parenting styles, parental reading involvement/literacy activities, and child cognition. I hypothesized (Hypothesis 4) that parental reading involvement/literacy involvement would mediate the relation between authoritative parenting and child early emergent literacy/cognition.

CHAPTER III

METHODOLOGY

Sample

Participants included 175 three- to four-year old children with a M age= 4.08 (SD = .53) years attending Head Start facilities in four rural communities in central and north-central Oklahoma, their primary caregivers, and their teachers. Of the three and four-year old children, 56.6% were male and 43.4% were female. Primary caregiver's relationship to the child consisted of 84% mothers, 8.6% fathers, 4.6% grandmothers or grandfathers, 2.3% stepmothers or stepfathers, and .6% great grandmothers or great grandfathers. The majority of the primary caregivers were Caucasian (59.4%), with 16% Hispanic, 11.4% African American, and 6.3% Native-American. Of the household incomes, 61.5% were in the \$0-\$1499 per month income bracket. Assistance received by the sample consisted of 32% receiving TANF (Temporary Assistance to Need Families) and 26.3% receiving benefits from the Free and Reduced School Lunch Program. A complete list of sample characteristics is reported in Table 1.

Procedures

Primary caregivers were recruited in the fall of the child's prekindergarten year of

Head Start. A letter explaining the study was sent home with each child. Several days after the parents received the letter, the researchers returned to each site to collect the signed informed consents. The primary caregivers were then given three questionnaires to complete about the family and the target child, allowing collection of information about parent behaviors, and demographics. After the primary caregiver consent was obtained, the research team tested the cognitive abilities of each child individually at his or her Head Start facility. Also, after parental consent was obtained, the children's primary teachers were given a questionnaire to fill out about each participating child, assessing their views of the child's behavior and sociability.

Measures

For a complete list of the measures' means, internal consistencies, and sample size for variables, see Table 2.

Parent Reports

Home Practices Questionnaire (HPQ). Four literacy questions were adapted from Senechal, LeFevre, Hudson, and Lawson (1996) and completed by the primary caregiver to determine the *parent's reading involvement* (see Appendix A). Examples of items that primary caregivers rated included "please estimate the number of children's books in your home." This question was answered by the parent choosing a specific range of numbers 1-5, 6-10, 11-15, 16-20, and 21-25; for answers more than 25, the parent wrote in the specific number. A second question that was asked was "how often do you teach your child to read words in a typical week?" To complete this question, the parent circled a number on a Likert-type scale, where 1 = never, 2 = not often, 3 = sometimes, 4 = often, 5 = very often.

Parenting Behavior Questionnaire-Head Start (PBQ-HS). This 22-item questionnaire, (Coolahan, McWayne, Fantuzzo, & Grim, 2002) was directly derived from the PBQ by Robinson, Mandlco, Olsen, and Hart (1995). For the current study the PBQ-HS was used to measure parenting characteristics of the primary caregiver, specifically warmth, involvement, and support (see Appendix A). The PBQ-HS (Coolahan et al., 2002) was used because it is more appropriate for low SES populations and minority groups such as the present sample, when compared to the original PBQ (Robinson et al., 1995). Coolahan et al. (2002) performed factor analysis on the entire questionnaire. The questions used for this study loaded the highest on the confirmatory factor analysis. Hubbs-Tait, Mulugeta, Bogale, Kennedy, Baker, and Stoecker (2009) concluded it was necessary to eliminate some of the questions after many years of contact with other rural Head Start samples. The PBQ-HS uses three subscales, active-responsive (authoritative), active-restrictive (authoritarian), and passive-permissive (permissive). "I encourage my child to think about consequences of their behavior," is included in the active-responsive scale, "if my child resists going to bed, I let them stay up" is included in the passive-permissive scale, and "when my child asks why they must do something, I say, I said so" is included in the active-restrictive scale. Responses to the questions were measured on a Likert-type scale ranging from 1-4, where 1=almost never and 4=almost always. The questionnaire included seven passive-permissive questions, nine active-responsive questions, and six active-restrictive questions.

In the study by Coolahan et al. (2002) internal consistency reliability for the authoritative items was .87, the authoritarian items had a Cronbach's α of .74, and the permissive items had a Cronbach's α of .77. Cronbach's alphas were also calculated for

each subscale using the current sample. For the current study, internal consistency reliability for the authoritative items was .78, the authoritarian items had a Cronbach's α of .60, and the permissive items had a Cronbach's α of .75. Coolahan et al. (2002) also report concurrent validity. The PBQ-HS was compared with a measure that assesses the same parenting characteristics as the PBQ-HS, the PCRI. The correlations were significant and in the expected direction.

Researcher Reports

McCarthy Scales of Children's Abilities (MSCA). The MSCA (McCarthy, 1972) is designed for children aged 2 ½ to 8 ½ to evaluate verbal and non-verbal capabilities using 18 subtests. This study only utilized the 10 subtests that are included in the *Perceptual-Performance* and *Verbal-Knowledge* scales. Subtests of the *Perceptual-Performance* subscale are block building (e.g., child copies examples using six blocks), puzzle solving, tapping sequence (e.g., child repeats a sequence on a xylophone), draw-a-design (e.g., child mimics a drawn design), draw-a-child (e.g., child draws a child of the same gender), and conceptual grouping (e.g., child demonstrates understanding of colors, shapes, and sizes "find all of the big yellow ones"). Included in the *Verbal-Knowledge* scale are the subtests of word knowledge (e.g., picture vocabulary: "show me the house"; oral vocabulary: "what is a coat?"), verbal fluency (e.g., "tell different animals you can think of"), verbal memory (e.g., child repeats words spoken by examiner), pictorial memory (e.g., child verbally states names of objects that were presented visually and verbally), and opposite analogies (e.g., "I throw the ball up, and then it comes down"); the child verbally completes this statement by answering down because it is the opposite of up. For both the *Verbal-Knowledge* and *Perceptual-*

Performance scales, raw scores were calculated by summing scores on the respective subtests. These were then transformed to a *Verbal Scale Index* score and a *Perceptual-Performance Scale Index* score.

During the development of the MSCA, split-half reliabilities were conducted using ten age groups, ranging from two-and-a-half to eight-and-a-half years-old. For this study's targeted age group, children from three to four-and-a-half years of age, verbal scale reliabilities ranged from .88 to .92; perceptual scale reliabilities ranged from .86 to .90 (McCarthy, 1972).

Teacher Reports

The Preschool Behaviour Questionnaire (PBQ). The PBQ (Behar, 1977) is a 30-item questionnaire assessing *behavioral outcomes* that the child's primary teacher completed for each child (see Appendix B). Included in the PBQ are three behavior scales, *Anxious-Fearful*, *Hostile-Aggressive*, and *Hyperactive-Distractible*. "Squirmy fidgety child," is included in the *Hyperactive-Distractible* scale, "bullies other children" is included in the *Hostile-Aggressive* scale, and "gives up easily" is included in the *Anxious-Fearful* scale. Teachers answered the questions using a 0-2 Likert-type scale, where 0= doesn't apply, 1= applies sometimes, and 2= certainly applies. Concurrent validity has been reported by Hoge, Meginbir, Khan, and Weatherall (1985). When scores were compared between the three scales of the PBQ, *Aggression*, *Hyperactivity*, and *Anxiousness*, and behavioral observations, the standardized scores from the PBQ significantly related with the behaviors that were observed. Furthermore, Behar (1977) found high teacher inter-rater reliability. Because the current study only proposes hypotheses about externalizing behavior problems, the *Anxious-Fearful* scale was not

analyzed. For the *Hostile-Aggressive* and, *Hyperactive-Distractible* scales, raw scores will be calculated by summing scores on the respective subtests. For the current study, internal consistency reliability for the hostile-aggressive items was .92 and the hyperactive-distractible items had a Cronbach's α of .92.

Teacher Ratings of Children's Behavior In Childcare (TRCBC). Howes' (1988) questionnaire is an 18-item questionnaire assessing child *sociability* (see Appendix C). For each question, teachers rated the child's behavior on a Likert-type scale, ranging from 1 to 5, where 1= not at all like and 5= very like. An example item is "shows concern and/or offers help when a child is distressed." Cronbach's alpha for the *sociability* scale in the original sample was .91. In the current study, three additional items were adapted from the Drexel Early Childhood Behavior Rating Scale (DECBERS, Shure, 2005) and added to the TRCBC questionnaire. Cronbach's alpha for the TRCBC for the current study was .81.

Relational Aggression. Two items measured relational aggression across the TRCBC and DECBERS: "bosses and/or dominates other children" (TRCBC, Howes, 1988) and "when angry at peers, excludes them from play group, whispers mean things about a child behind his/her back, tells others not to play with, or be the child's friend" (DECBERS, Shure, 2005). Internal consistency of these items for the current study was .74.

Analysis Overview

Objectives, Analyses, and Hypotheses

- (1) To evaluate the relations between authoritarian and authoritative parenting styles and child classroom competence (sociability and cognitive performance). To

evaluate the links between parenting styles and classroom competence, zero-order (bivariate) correlations were used. Also, hierarchical regressions were conducted with maternal education and income controlled in the first block of the regressions. It was hypothesized that authoritarian (coercive) parenting would be negatively associated with child classroom competence (Hypothesis 1(a)), and authoritative (warm, limit setting) parenting would be positively related to child cognition and sociability (Hypothesis 1(b)).

(2) To evaluate the relations between three parenting styles and child behavior problems. Zero-order (bivariate) correlations were used to assess the link between parenting styles and child externalizing behaviors. Also, hierarchical regressions were conducted with education and income controlled in the first block of the regressions. It was hypothesized that authoritarian parenting would be positively associated with the problem behaviors (Hypothesis 2 (a)), authoritative parenting would be negatively associated with child problematic externalizing behaviors (Hypothesis 2 (b)), and permissive parenting would be positively associated with child externalizing behavior problems (Hypothesis 2 (c)).

(3) To evaluate how parental income and education moderate the relations between parenting styles and child outcomes. Moderators are variables that affect the strength and/or direction of the relation between the independent variable and dependent variable when they are present (Holmbeck, 2002). Hierarchical regression analyses were conducted with the parenting style predictor and one moderator (either income or education) entered in the first block followed by the

predictor X moderator interaction in the second block. To probe for any significant moderator effects, steps outlined by Holmbeck (2002) were followed. It was hypothesized that maternal education and income would moderate the relationship between parenting styles and child outcomes, such that a child with authoritarian or permissive parents would have poorer outcomes and a child with authoritative parents would have more positive outcomes, but the magnitude of the link between child outcomes and parenting style would become larger when there was lower income or lower maternal attainment of education (Hypothesis 3).

- (4) To examine whether parental reading involvement or other literacy activity was a mediator of the relations between authoritative parenting and child outcomes. Mediation explains how or why a predictor is related to an outcome, such that the predictor variable is related to the mediator, which is, in turn, related to the outcome variable (Holmbeck, 2002). To test mediation by parental reading involvement or other literacy activity of the link between authoritative parenting and child outcomes, hierarchical regression analyses were conducted. Steps outlined by Holmbeck (2002) were followed. First, authoritative parenting was related to children's cognitive and literacy outcomes. Second, authoritative parenting was related to parental reading involvement/literacy activities. Third, parental reading involvement/literacy activities were related to children's early emergent literacy/cognition. Fourth, authoritative parenting and parental reading involvement/literacy activities was related to children's early emergent literacy/cognition. For correlations attaining significance levels of $\leq p = .05$,

Sobel tests were conducted. It was hypothesized that parental reading involvement mediated the relation between authoritative parenting and child early emergent literacy/cognition (Hypothesis 4).

CHAPTER IV

RESULTS

Overview

Data analyses were conducted for each objective. In the following paragraphs results are organized according to each of the four objectives discussed in Chapter 1. The analyses used to examine the four objectives are those proposed at the conclusion of Chapter 3. Descriptive statistics, reliabilities, and number of items per variable for predictor, outcome, mediator, and moderator variables are listed in Table 2.

Objective 1

The first objective in this study was to evaluate the links between authoritarian (active-restrictive) and authoritative (active-responsive) parenting styles and the two classroom competency outcomes, McCarthy verbal scores and teachers' ratings of children's sociability. Correlational analyses were conducted to examine the relation between each parenting style and the two classroom competence outcomes and to test hypothesis 1(a) that authoritarian parenting would be inversely correlated with classroom competence and hypothesis 1(b) that authoritative parenting would be positively correlated with classroom competence. As indicated in Table 3, in support of Hypothesis 1(b), responsive parenting was significantly and positively correlated with McCarthy

verbal scores.

To further examine the relations between parenting styles and child classroom competence, two regression analyses controlling for maternal education and household income were conducted. In the first set of analyses the two variables, income and maternal education, were dichotomized as greater than or equal to versus less than \$1000 per month and high school diploma versus dropout. With these variables controlled, the regression revealed a ΔR^2 of .035, $p = .014$, for the relation between responsive parenting style and McCarthy verbal scores. In the second set of analyses the two variables were continuous. Maternal education ranged from 6 to 16 (6th grade through college graduate) and household monthly income was labeled 1-10, ranging from \$0-\$4000 plus per month. With these variables controlled, the regression analysis revealed a ΔR^2 of .028, $p = .028$, for the relation between responsive parenting style and McCarthy verbal scores. Thus, hypothesis 1(b) was supported even with income and education controlled.

Objective 2

Objective two addressed the relation between the three parenting styles -- authoritarian (active-restrictive), authoritative (active-responsive), and permissive (passive-permissive) -- and the three externalizing behavior problem outcomes -- aggression, hyperactivity, and relational aggression. Correlational analyses were conducted to examine the relation between each of the three parenting styles and the three child externalizing problem behavior outcomes and to test hypothesis 2(a) that authoritarian parenting would be positively correlated with child externalizing behavior problems, hypothesis 2(b) that authoritative parenting would be inversely correlated with child behavior problems, and hypothesis 2(c) permissive parenting would be positively

associated with child externalizing behavior problems. As indicated in Table 4, contrary to Hypothesis 2(b), responsive (authoritative) parenting was found to be significantly and positively correlated with child hyperactivity.

To further examine the relations between parenting styles and child externalizing behavior problems, two regression analyses controlling for maternal education and household income were conducted. In the first set of analyses the two variables, income and maternal education, were dichotomized as greater than or equal to versus less than \$1000 per month and high school diploma versus dropout. With these variables controlled, the regression revealed a ΔR^2 of .032, $p = .021$, for the relation between responsive parenting style and McCarthy verbal scores. In the second set of analyses the two variables were continuous. Maternal education ranged from 6 to 16 (6th grade through college graduate) and household monthly income was labeled 1-10, ranging from \$0-\$4000 plus per month. With these variables controlled, the regression analysis revealed a ΔR^2 of .033, $p = .020$, for the relation between responsive parenting style and externalizing behavior problems. Thus, hypothesis 2(b) was supported even with income and education controlled.

Objective 3

Objective three focused on whether maternal education and/or monthly household income moderated the relation between the three parenting styles and child outcomes, specifically McCarthy verbal scores and teachers' ratings of sociability, aggression, hyperactivity, and relational aggression. To test for moderation, the steps outlined by Holmbeck (2002) were followed. First, maternal education and monthly household income were dichotomized, where education was classified as 0= no high school diploma

and 1= greater than or equal to high school graduate, and income was classified as 0= income below \$1000 per month and 1= income equal to or above \$1000 per month. Second, the mean for each parenting style was computed for all subjects with complete data on the outcome and predictor variables. Next, the parenting style variable was centered by subtracting the mean of the sample from each score. Lastly, the interaction term was computed and the regressions were conducted. As indicated in Tables 5-16, three interactions were significant, confirming the hypothesized moderation.

First, maternal education significantly moderated the relation of responsive parenting to McCarthy verbal scores. Second, maternal education significantly moderated the relation of responsive parenting to child relational aggression. Third, income significantly moderated the relation of permissive parenting to child aggression. To determine the relation of the predictor and outcome for the two groups of each moderator, post hoc probing was conducted by following steps outlined by Holmbeck (2002). First, new conditional predictors and moderators were computed. Next, the conditional predictor variable (parenting style) and moderator variables were multiplied for each case in the sample. Then, regressions were conducted to test for the significance of the relation of the predictor to the outcome for each level of the moderators. Lastly, the slopes were computed and graphed for each predictor and outcome association per group (see Figures 1-3). Analyses revealed, for the high school dropout group, more responsive parenting is related to higher McCarthy verbal scores (see Figure 1). Second, higher responsive parenting is related to more child relational aggression when the mothers are high school dropouts (see Figure 2). Third, when families' monthly

household income is less than \$1000 per month, more permissive parenting is related to higher child aggression scores (see Figure 3).

Objective 4

The final objective addresses whether parental reading involvement/literacy activities mediate the relation between authoritative parenting and early emergent literacy/cognition. Initial correlations were conducted using authoritative parenting, McCarthy verbal scores, and the four literacy variables (books in the home, access to books, trips to the library, and frequency of reading to the child). Results revealed frequency of reading and trips to the library to be significantly related to authoritative parenting and McCarthy verbal scores. To test this mediation relationship, steps outlined by Holmbeck (2002) and Baron and Kenny (1986) were followed. First, the prerequisite regression was conducted to confirm the relation between authoritative parenting (predictor) and McCarthy verbal scores (outcome); the coefficient was significant (see Tables 17 and 18). Second, the prerequisite regressions were conducted to assess the relation between authoritative parenting (predictor) and trips to the library (mediator) or frequency of reading to the child (mediator); the coefficients were significant (see Tables 17 and 18). Third, the mediator (literacy activities) to outcome (McCarthy verbal scores) relations were assessed through regressions; the coefficients were significant (see Tables 17 and 18). Lastly, predictors and mediators were both entered into the same regression equation to determine their contribution to the outcome using regression analyses. As indicated in Table 17, the mediator is not significant when both the predictor and frequency of reading are entered in to the final equation, suggesting that frequency of reading does not mediate between authoritative parenting and McCarthy verbal scores. A

Sobel test confirmed that frequency of reading did not mediate the relation between authoritative parenting and McCarthy verbal scores, ($Z= 1.543, p > .05$). As indicated in Table 18, the coefficients for the trips to the library (mediator) and authoritative parenting (predictor) decrease from the earlier regression to the final regression, but both the mediator and predictor are significant in the final regression. Thus, both relations are direct. The absence of an indirect effect was confirmed by a Sobel test which revealed that the relation of responsive parenting to children's McCarthy verbal scores was not significantly mediated by trips to the library ($Z= 1.439, p > .05$).

CHAPTER V

DISCUSSION

This purpose of this thesis was to explore the relations between parenting styles, children's classroom competence, children's externalizing behavior problems, maternal education level, monthly household income, and parental involvement in literacy activities. Relating to these variables, the four proposed hypotheses were partially confirmed. Results confirmed that responsive parenting is significantly and positively correlated with McCarthy verbal scores and hyperactivity. Moderation analyses confirmed that maternal education significantly moderated the relation of responsive parenting to McCarthy verbal scores and the relation of responsive parenting to child relational aggression. In addition, monthly household income significantly moderated the relation of permissive parenting to child aggression. In the mediation analyses, neither trips to the library nor frequency of parents reading to their children were found to mediate significantly the relation of authoritative parenting to McCarthy verbal scores. These findings provided support for hypotheses 1 and 3 but not for 2 and 4, all of which will be discussed in more detail in the following paragraphs.

Hypothesis 1

Currently there is literature available supporting a relation between authoritarian

and authoritative parenting and children's cognition and sociability (Bretherton, 1985; Camp et al., 1982; Chen et al., 1997; Pratt et al., 1988; Steinberg et al., 1994). However, there is little research examining relations among parenting styles, children's cognition, and sociability in high-risk samples. From findings presented in previous literature, hypothesis 1(a) proposed that authoritarian (restrictive) parenting would be negatively associated with child classroom competence and hypothesis 1(b) proposed that authoritative (responsive) parenting would be positively related to child cognition and sociability. Correlation analyses found that responsive parenting was significantly and positively related to McCarthy verbal scores. However, authoritarian (restrictive) parenting was not significantly correlated with either child classroom competence outcome. The lack of significant relations corresponds with Querido et al.'s (2002) findings – but for behavior problems rather than classroom competence. Furthermore, in the current study the authoritarian parenting style measure had low reliability, thus reducing statistical power. When controlling for maternal education and monthly household income, the relation between responsive parenting and McCarthy verbal scores was still significant. Although this study had a sample of about 45% minority groups as opposed to the majority of McWayne et al.'s (2008) sample being African American families, the results of tests of hypothesis one differ from those of McWayne et al. (2008) who concluded that in high-risk samples there is not an association between parenting styles and children's cognitive and emotional outcomes. In this study's high-risk sample, parenting behaviors and practices did have a significant relation to children's cognitive outcomes.

Hypothesis 2

Research is limited in jointly addressing the relation of parenting styles to children's aggression, hyperactivity, and relational aggression; however, research is available relating parenting styles to children's behavior outcomes. Due to findings in previous research, it was hypothesized that authoritarian parenting would be positively associated with the problem behaviors (Hypothesis 2(a)), authoritative parenting would be negatively associated with child problematic externalizing behaviors (Hypothesis 2(b)), and permissive parenting would be positively associated with child externalizing behavior problems (Hypothesis 2(c)). Through correlation analyses, it was found that authoritative (responsive) parenting was positively correlated with children's hyperactivity, contrary to Hypothesis 2(b). Furthermore, when monthly household income and maternal education were controlled, associations were still significant for the relation of responsive parenting to children's hyperactivity. This finding does not support proposed hypothesis 2 (b) nor does the finding correspond with existing research. Previous research has found that negative parenting characteristics associated with authoritarian parenting were related to higher level of children's hyperactivity (Alizadeh & Andries, 2002; McLaughlin & Harrison, 2006).

In an additional post-hoc exploratory analysis, it was found that two items from the authoritative (responsive) scale were significantly and positively correlated with children's hyperactivity: "I tell my child I'm proud when they are good" and "I show sympathy when my child is hurt." From the significantly correlated items, one can conclude that parents are trying to encourage their child to be good. Also, hyperactive children may tend to be clumsy; as a result, the parents may be showing the children

sympathy when they fall. In turn, this sympathy may be encouraging the children's hyperactive behaviors; the parents show responsiveness and warmth, but setting limits -- by explaining consequences, giving the child reasons to obey rules, or encouraging the child to think about consequences -- is absent. Although hypothesis 2 was not supported, the democratic parenting style developed by Baumrind et al. (in press) may help explain the two specific parent behaviors that were significantly correlated with children's hyperactivity. Baumrind et al.'s (in press) revised typology, democratic parents are highly supportive of autonomy, highly responsive, and moderately demanding.

A further explanation could be that in the presence of higher socioeconomic risk, parental responsiveness may not be the best parenting style. When living in a high risk environment, children may need greater limit setting, firm control, and stricter rule enforcement by parents than is typical of the responsive style in order to learn to limit their hyperactive behaviors. Colder, Lochman, and Wells (1997) found support for this conclusion. High levels of monitoring were particularly important for active children in order to decrease aggressive behaviors (Colder et al., 1997). An alternative conservative explanation for the findings pertaining to hypothesis 2 is that parents in this sample recognized their children were hyperactive and, in turn, were more responsive to try to help with this problematic behavior.

Hypothesis 3

Recall that McWayne et al. (2008) found no relation between parenting styles and children's social, cognitive, and behavior outcomes in a high-risk, poverty sample. However, others have found significant relations between these variables, when studying samples of varying incomes. Due to the inconsistencies across the literature, it was

hypothesized (Hypothesis 3) that income and maternal education would moderate the relationship between parenting styles and child outcomes, such that a child with authoritarian or permissive parents would have poorer outcomes and a child with authoritative parents would have more positive outcomes, but the difference between the child outcomes would become larger when there was low income or lower maternal attainment of education. Although not all twelve moderating relationships were found to be significant, three were significant. The results of post hoc probing revealed, first, for the high school dropout group, more responsive parenting is related to higher McCarthy verbal scores (see Figure 1). Relating back to resilience theory, this result supports the argument that authoritative parenting is a protective factor in high-risk populations. In the resilience literature, protective factors may be moderators that split the population into more and less protected groups or they may be predictors that have a direct protecting impact (Plunkett, Henry, Houlberg, Sands, & Abarca-Mortensen, 2008). The latter is the case here. The child is protected from the risks of the low-education environment by the parents' practices and behaviors, resulting in higher cognition and literacy skills.

The second finding revealed by post hoc analyses was not expected: higher responsive parenting was related to more child relational aggression when the mothers were high school dropouts (see Figure 2). As noted above in the discussion of hypothesis two, it may be the case that in the presence of higher risk, responsiveness may not be the best parenting style for this group. Children surrounded by a high-risk environment may require stricter rules and limits, characteristic of the directive parenting style recently proposed by Baumrind et al. (in press), in order to decrease negative behaviors and

adhere to societal rules. A more firm parenting style has been found to decrease children's negative behaviors (Colder et al., 1997).

The third result revealed by post hoc probes was that when families' monthly household income is less than \$1000 per month, more permissive parenting is related to higher child aggression scores (see Figure 3). This result supports the proposed hypothesis; low socioeconomic status (SES) exacerbated the relation between permissive parenting and children's aggression. These findings are consistent with the findings by Topham, Page, Hubbs-Tait, Rutledge, Kennedy, Shriver, and Harrist (2010). Topham et al. (2010) found that SES moderated the relation between permissive parenting and child obesity. Although the outcome variables are not the same, child obesity has been found to be related to child behavior problems (Griffiths, Wolke, Page, Horwood, & the ALSPAC Study Team, 2006; Okwonga, Henry, Kennedy, Richardson, & Hubbs-Tait, 2010). Furthermore, the initiation and response factors of the coercive cycles theory help explain this finding. Permissive parents do not show regard for or validation of their children's behaviors; thus, the children may view their parents' dismissiveness as acceptance of the behavior, resulting in the children's aggression continuing to be displayed.

Hypothesis 4

Previous research supports the idea of the emergent parenting socialization theory based on Baumrind's parenting typologies (Pellerin, 2005; Sorkhabi, 2010). This emerging theory supports the idea of warm, limit-setting, responsive parents socializing children to be better prepared to excel in cognitive and literacy tasks. Furthermore, the parents' initiation to take the children to the library and read to them may explain why the

authoritative style is positively associated with children's cognition and early emergent literacy. Previous research has found practices and behaviors characteristic of authoritative parenting to be associated with parent-initiated practicing of literacy skills (Holden & Miller, 1999; Maccoby & Martin, 1983). Additionally, parental reading involvement has been found to increase children's cognition (Lyytinen et al., 1998; Raikes et al., 2006). Furthermore, practices and behaviors, specifically maternal sensitivity, characteristic of authoritative parenting have been found to be correlated with children's cognition and early emergent literacy skills (Downer & Pianta, 2006). Based on findings of previous research, hypothesis four proposed that parental reading involvement will mediate the relation between authoritative parenting and child early emergent literacy/cognition. Contrary to the expected results, this hypothesis was not supported. When analyzing the mediation of trips to the library and frequency of reading, Sobel tests revealed that the relation of responsive parenting to children's McCarthy verbal scores was not significantly mediated by either proposed mediator. However, there was evidence of significant direct effects of both the predictor (authoritative parenting) and mediator (trips to the library) for McCarthy verbal scores. Trips to the library do require transportation and in rural samples like the current one, variations in income as well as parental education may influence a family's ability to make trips to the library.

Limitations, Strengths, and Future Directions

It is important to note the limitations within in this study. First, a cross-sectional sample was used to test mediating relationships in this study. In future research, it will be important to examine the mediation of literacy involvement in relation to parenting styles

and child cognitive outcomes with a longitudinal study to gain a better understanding of how these relationships develop across time. In addition, the results gained from the study cannot be generalized outside of the Head Start population. To better address these findings, future research should broaden the sample to high and low-income three- to five-year-old children, allowing for generalizability across several populations. Lastly, in the sample the primary caregivers were not limited to just mothers. This is important to note when interpreting findings in light of other research because generally, previous research only includes mothers as primary caregivers and not fathers, grandparents, and great grandparents who were included in this sample.

Despite the limitations of this study, there are strengths to note. First, this low-income, high-risk sample, allows research to reconcile opposing findings of previously published research. This is important due to the lack of published research relating to parenting styles and children's cognitive and behavioral outcomes of families in high-risk environments. Second, this study adds to literature by filling gaps in the existing research. By examining three parenting styles, children's social competence, literacy, and behavior outcomes, and education and income levels, the information is gained as to why these relations exist across multiple variables. Lastly, the methodology was strengthened by collecting data from multiple informants.

Implications for Theory

Throughout this study, theory has played an important role in guiding the research. The results suggest how the coercive cycles theory, family resilience theory, and Baumrind's emerging socialization theory can help explain parent-child relationships. Family relationships are the key component within these theories. Within

the initial actions of the coercive cycles theory, the parents' permissiveness or lack of attention do not encourage the child to display appropriate behaviors and exacerbate inappropriate behaviors. Family resilience theory and Baumrind's emerging socialization theory both address some of the same aspects of the parent-child relationship. The behaviors and practices the parents display allow them to socialize the child. These behaviors can be a protective factor, promoting the children's positive outcomes. For example, when parents show children respect and set firm limits and are warm and responsive, this nurturing parenting style helps protect the children from the risks of low income (Hubbs-Tait et al., 2002) or low attainment of maternal education (current study). Thus, it is important to have research informed by theory and, in turn, let research inform the theory. This process will better develop the emerging theories in current literature. The steep slope of the relation between responsive parenting and children's MSCA verbal scores for dropouts in Figure 2 suggests that responsive parenting is particularly protective of the verbal skills of children of parents who do not complete high school.

Implications for Families in Head Start: Program and Policy

Using data collected in Head Start centers, this study was able to better understand primary caregiver-child interactions. From the current study, the author has formulated several ideas pertaining to the programs and policies of Head Start. While the majority of families who have children who attend Head Start have a low attainment of education and low income, this thesis identified positive outcomes for the children in the studied families. Thus, parents can have positive impacts on their children regardless of their own education attainment and income level. When the authoritative parenting style is implemented, it buffers the impact of the high-risk family characteristics. Thus,

parents' behaviors and practices are existing strengths within the family. Highlighting parenting strengths rather than deficits promotes positive parenting involvement and education sessions at Head Start parent meetings. Based on the current findings, Head Start programs and policies can be better informed, resulting in more encouraging information that can be relayed to the parents.

Final Conclusions

When addressing parenting practices and behavior characteristics of parenting styles in relation to children's classroom, behavioral, and early emergent literacy outcomes, the type of parenting really does matter. In this study of high-risk Head Start families, results concluded that responsive parenting leads to more positive outcomes and permissive parenting leads to more negative outcomes for preschool children, particularly when children's parents have lower education or income than the parents of these children's Head Start peers. Thus, the characteristics of responsive parenting are essential in enhancing children's abilities to excel in behavioral and academic tasks. From the information gained in this study, Head Start programs across Oklahoma can be better informed of best parenting practices to present to parents. Furthermore, this study exemplifies how research, theory, and practice can work together to inform each other.

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APPENDICES

Appendix A

Home Practices Questionnaire

(adapted from Senechal, LeFevre, Hudson, & Lawson, 1996)

Parenting Behavior Questionnaire-Head Start (PBQ-HS)

(adapted from Coolahan, McWayne, Fantuzzo, & Grim, 2002)

Please complete the questions on both sides of this paper.

(1) How often do you read to your child **in a typical week**?

Times at bedtime:

_____ Never _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 times _____
more (write number)

Other times

_____ Never _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 times _____
more (write number)

(2) How many minutes did you read to your child **yesterday**?

Times at bedtime:

_____ 0 min. _____ 5 min. _____ 10 min. _____ 15 min. _____ 20 min. _____ 30 min. _____ 40 min. _____ more (please
write number)

Other times

_____ 0 min. _____ 5 min. _____ 10 min. _____ 15 min. _____ 20 min. _____ 30 min. _____ 40 min. _____ more (please
write number)

(3) How many minutes did **other family members** read to your child **yesterday**?

Times at bedtime:

_____ 0 min. _____ 5 min. _____ 10 min. _____ 15 min. _____ 20 min. _____ 30 min. _____ 40 min. _____ more (please
write number)

Other times

_____ 0 min. _____ 5 min. _____ 10 min. _____ 15 min. _____ 20 min. _____ 30 min. _____ 40 min. _____ more (please write number)

(4) During a typical week, how often does **your child** ask to be read to? Never Not often Sometimes Often Very often

(5) How often does **your child** go to the library? Never Not often Sometimes
 Often Very often

(6) How often do you teach your child to **read** words in a typical week? Never Not often Sometimes Often Very often

(7) How often do you teach your child to **print** words in a typical week? Never Not often Sometimes Often Very often

(8) How old was your child when you started reading picture books to him or her? _____(please write age)

(9) Please estimate the **number of children's books** in your home:
 _____None _____1-5 _____6-10 _____11-15 _____16-20 _____21-25 _____more (please write number)

(10) How many books does your child have access to from the library, Head Start, church, and other sources?
 _____None _____1-5 _____6-10 _____11-15 _____16-20 _____21-25 _____more (please write number)

11. I find it difficult to discipline my child. _____Almost Never _____Sometimes _____Often _____Almost Always

12. I give praise when my child is good. _____Almost Never _____Sometimes _____Often _____Almost Always

13. I spank when my child is disobedient. _____Almost Never _____Sometimes _____Often _____Almost Always

14. I have a hard time saying "no" to my child. _____Almost Never _____Sometimes _____Often _____Almost Always

- | | | | | |
|---|-------------------|----------------|------------|--------------------|
| 15. I show sympathy when my child is hurt. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 16. My family says I spoil my child . | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 17. When my child doesn't do what I ask, I let it go or do it myself. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 18. I tell my child I'll punish them but don't do it. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 19. I respond to my child's feelings or needs. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 20. I tell my child reasons to obey rules. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 21. I tell my child I'm proud when they try to be good. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 22. I encourage my child to think about the consequences of their behavior. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 23. When my child misbehaves, I say things I regret. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 24. I express affection to my child by hugging, kissing, and holding them. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 25. If my child resists going to bed, I let them stay up. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 26. I apologize to my child when I make a mistake involving them. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 27. When my child and I disagree, I tell my child to keep quiet. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |
| 28. When my child acts up, I get visibly upset. | _____Almost Never | _____Sometimes | _____Often | _____Almost Always |

29. When I want child to stop doing something, I ask many times.

_____Almost Never

_____Sometimes

_____Often

_____Almost Always

30. I scold or criticize my child, when they don't do what they are told.

_____Almost Never

_____Sometimes

_____Often

_____Almost Always

31. When my child asks why they must do something, I say, "I said so."

_____Almost Never

_____Sometimes

_____Often

_____Almost Always

32. I explain the consequences of my child's behavior to them.

_____Almost Never

_____Sometimes

_____Often

_____Almost Always

Appendix B

THE PRESCHOOL BEHAVIOR QUESTIONNAIRE

Lenore Behar, Ph.D.
Samuel Stringfield, Ph.D.

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Child's Name _____	School Attending _____
Parent's Name _____	Sex (circle) M F
Address _____ (Street)	
_____	Month Day Year
(City, State, Zip Code)	Present Date _____
Rated by _____	Child's Birthday _____
Title of Rater _____	Age of Child _____
Length of time rater has worked with child (months or weeks) _____	

Following is a series of descriptions of behaviors often shown by preschoolers. After each statement are three columns, "Doesn't Apply," "Applies Sometimes," and "Certainly Applies." If the child shows the behavior described by the statement frequently or to a great degree, place an "X" in the space under "Certainly Applies." If the child shows behavior described by the statement to a lesser degree or less often, place an "X" in the space under "Applies Sometimes." If, as far as you are aware, the child does not show the behavior, place an "X" in the space under "Doesn't Apply."

Please put ONE "X" for EACH statement.

	Doesn't Apply	Applies Sometimes	Certainly Applies	For Scorer's Use Only			
1. Restless. Runs about or jumps up and down. Doesn't keep still.	_____	_____	_____	_____	_____	_____	_____
2. Squirmy fidgety child	_____	_____	_____	_____	_____	_____	_____
3. Destroys own or others' belongings	_____	_____	_____	_____	_____	_____	_____
4. Fights with other children	_____	_____	_____	_____	_____	_____	_____
5. Not much liked by other children	_____	_____	_____	_____	_____	_____	_____
6. Is worried. Worries about many things	_____	_____	_____	_____	_____	_____	_____
7. Tends to do things on his own, rather solitary	_____	_____	_____	_____	_____	_____	_____
8. Irritable, quick to 'fly off the handle'	_____	_____	_____	_____	_____	_____	_____
9. Appears miserable, unhappy, tearful, or distressed	_____	_____	_____	_____	_____	_____	_____

	Doesn't Apply	Applies Sometimes	Certainly Applies	For Scorer's Use Only			
10. Has twitches, mannerisms, or tics of the face and body	—	—	—	—	—	—	
11. Bites nails or fingers	—	—	—	—	—	—	
12. Is disobedient	—	—	—	—	—	—	
13. Has poor concentration or short attention span	—	—	—	—	—	—	
14. Tends to be fearful or afraid of new things or new situations	—	—	—	—	—	—	
15. Fussy or over-particular child	—	—	—	—	—	—	
16. Tells lies	—	—	—	—	—	—	
17. Has wet or soiled self this year	—	—	—	—	—	—	
18. Has stutter or stammer	—	—	—	—	—	—	
19. Has other speech difficulty	—	—	—	—	—	—	
20. Bullies other children	—	—	—	—	—	—	
21. Inattentive	—	—	—	—	—	—	
22. Doesn't share toys	—	—	—	—	—	—	
23. Cries easily	—	—	—	—	—	—	
24. Blames others	—	—	—	—	—	—	
25. Gives up easily	—	—	—	—	—	—	
26. Inconsiderate of others	—	—	—	—	—	—	
27. Unusual sexual behaviors	—	—	—	—	—	—	
28. Kicks, bites, or hits other children	—	—	—	—	—	—	
29. Stares into space	—	—	—	—	—	—	
30. Do you consider this child to have behavior problems?	—	—	—	—	—	—	
TOTALS				Total	1	2	3

Appendix C

Teacher Ratings of Children's Behavior in Child Care

C. Howes

University of California at Los Angeles

Child's Name _____ Date Completed _____

Head Start Center _____ Teacher's Initials _____

_____ Researcher's Initials _____

Please assign a score of 1 to 5 from least (1) to most (5) characteristic of the child.

	1	2	3	4	5	
	not at all like		somewhat like		very like	
1.	Persists when told s/he cannot have something; nags, demands					_____
2.	Easily upset when interfered with by peers					_____
3.	Bosses and/or dominates other children					_____
4.	Gets very upset or over emotional with adults if things don't go his/her way					_____
5.	Hits, bites, pushes or in other ways hurts other children					_____
6.	Reacts with immediate anger or upset if some other child interferes with his/her play or takes something that is his/hers					_____
7.	Unable to wait proper time or to share; grabs toys; unable to take turns					_____
8.	Acts defiant, will not do what he/she is asked					_____
9.	Shows concern and/or offers help when a child is distressed					_____
10.	Seeks physical closeness to teacher					_____
11.	Withdraws from excitement and commotion					_____
12.	Is liked by peers; they seek him/her out to play					_____
13.	Initiates activities with peers					_____
14.	Is a spectator rather than a participant in group activities					_____
15.	Is characteristically unoccupied					_____
16.	Is socially hesitant					_____
17.	Is a peer leader					_____
18.	Is socially withdrawn					_____

- 19. When angry at peers, excludes them from play group, whispers mean things about a child behind his/her back, tells others not to play with, or be the child's friend. _____
- 20. Is teased, picked on, threatened, or otherwise bullied _____
- 21. *Verbally* threatens to hit, push, ruin others' things, or in other ways threatens to hurt or attack peer. _____

*Items 19, 20, & 21 adapted from Drexel early Childhood Behavior Rating Scale (Shure, 2000).

Table 1

Sample demographics

Variable	Mean, Median, % ^a	+ SD or interquartile range	N
Child age in years	<i>M</i> = 4.08	± 0.53	175
Child Gender			
Male	56.6%		99
Female	43.4%		76
Relation to Child ^b			175
Mother	84.0%		147
Father	8.6%		15
Grandparent	4.6%		8
Great Grandparent	0.6%		1
Stepparent	2.3%		4
Household income per month	Median:\$1000-\$1499	\$500-\$999 to \$2000-\$2499	175
\$0-\$499	13.2%		23
\$500 - \$1499	46.3%		81
\$1500 - \$2499	23.4%		41
\$2500 - \$3499	8.6%		15
\$3500 – \$3999	1.7%		3
\$4000 plus	3.4%		6
Not stated	3.4%		6
Maternal ethnicity			
White	59.4%		104

Native American	6.3%	11
African-American	11.4%	20
Hispanic	16.0%	28
Asian	1.7%	3
Multiethnic	4.0%	7
Other minority	1.1%	2
Not stated	0.0%	0
Paternal Ethnicity		
White	48.6%	85
Native American	6.3%	11
African-American	18.9%	33
Hispanic	15.4%	27
Asian	2.3%	4
Multiethnic	2.3%	4
Other minority	1.7%	3
Not stated	4.6%	8
Maternal Education	Median=some vo-tech	High school graduate to vo-tech graduate
Less than 12 th grade	17.8%	31
High school diploma	20.6%	36
Some vo-tech	11.4%	20
Some college courses	24.0%	42
Vo-tech graduate	8.6%	15
College graduate	16.0%	28
Not stated	1.7%	3

Number of Types of Assistance ^c	Median=1	1 to 2 types of assistance
0	19.4%	34
1	32.0%	56
2	26.3%	46
3	12.6%	22
4	9.1%	16
5	0.6%	1

^aValues are mean \pm SD, median with interquartile range in parentheses, or percent.

^bThe informant's relation to the target child.

^cThe reported number of federal assistance programs received (out of 7). These included: WIC

(Supplemental Assistance to Women, Infants, and Children), TANF (Temporary Assistance for

Needy Families), Free and Reduced School Lunch Program, Food Stamps, Unemployment,

Energy Assistance, Supplemental Social Security Income

Table 2

Mean, internal consistency, and sample size for variables, n = 175.

Questionnaire-Subscale	<i>Item Mean (SD) [n for mean]^a</i>	<i>Cronbach's α (Original α)^b</i>	<i>Items (n for α)^c</i>
Predictors			
PBQ-HS—Active-Responsive ^d	3.61 (0.39) [174]	0.78 (0.87)	9 (170)
PBQ-HS—Active-Restrictive ^d	1.67 (0.42) [174]	0.60 (0.74)	5 (168)
PBQ-HS—Passive-Permissive ^d	1.76 (0.48) [175]	0.75 (0.77)	7 (166)
Classroom Competence Outcomes			
QUESTIONNAIRE—Sociable	3.25 (1.01) [170]	0.81 (0.91)	4 (170)
McCarthy Scales of Children's Abilities	44.01 (10.07) [170]	NA	
Behavior Problems Outcomes			
PBQ—Hyperactive	1.61 (0.67) [170]	0.92	4 (169)
PBQ—Aggressive	1.42 (0.46) [170]	0.92	11 (169)
Relational Aggression (DECBERS, TRCBC)	1.93 (1.09) [170]	0.74	
Moderators			
Income	4.50 (2.03) [169]	NA	
Maternal Education	13.12 (2.10) [172]	NA	
Mediators			
Books in the Home	4.48 (1.61) [170]	NA	

Access to Books	3.44 (2.23) [159]	NA
Trips to Library	2.24 (0.97) [174]	NA
Frequency of Reading to Child	4.25 (2.13) [173]	NA

Note. Abbreviations: PBQ-HS, Parental Behavior Questionnaire – Head Start. DECBRS, Drexel Early Childhood Behavior Rating Scale. TRCBC, Teacher Ratings of Children’s Behavior In Childcare

^aItem means (sum of item scores/total items per respondent) allowed one missing item.

^bCronbach’s α based on standardized items. Value in parentheses is α for original items.

^cCronbach’s α does not allow missing items. Value in parentheses is the sample size for parents with no missing items.

^dAll PBQ-HS scales: 1=never, 2=once in awhile, 3=about half the time, 4=very often, 5=always.

Table 3

Correlation Matrix for Objective 1

	Restrictive	Permissive	Responsive	Sociable	McCarthy
Restrictive	1				
N	174				
Permissive	-.006	1			
N	174				
Responsive	-.044	-.096	1		
N	173	174	174		
Sociable	-.081	-.065	-.059	1	
N	169	170	169	170	
McCarthy	-.036	-.064	.197*	.306***	1
N	169	170	169	165	170

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

Table 4

Correlation Matrix for Objective 2

	Restrictive	Permissive	Responsive	Hyperactive	Aggressive	Relational Aggression
Restrictive	1					
N	174					
Permissive	-.006	1				
N	174	175				
Responsive	-.044	-.096	1			
N	173	174	174			
Hyperactive	.096	.103	.179*	1		
N	169	170	169	170		
Aggressive	.037	.119	.114	.664***	1	
N	169	170	169	170	170	
Relational Aggression	.068	.003	.111	.364***	.700***	1
N	169	170	169	170	170	170

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

Table 5

Regressions Evaluating Moderation by Maternal Education of the Relation between Responsive Parenting Style and Children's Classroom Competence

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.075	2, 163	0.002				
High School Diploma				0.196	5.023	1.931	0.010
Centered Responsive Parenting				0.186	4.716	1.914	0.015
Block 2	0.021	1, 162	0.053				
Interaction				-0.353	-9.854	5.046	0.053
Teacher Ratings of Sociability							
Block 1	0.003	2, 164	0.767				
High School Diploma				-0.015	-0.038	0.203	0.850
Centered Responsive Parenting				-0.055	-0.140	0.200	0.485
Block 2	0.001	1, 163	0.633				
Interaction				-0.091	-0.256	0.535	0.633

Note. Interaction refers to Diploma X Centered Responsive Parenting

Table 6

Regressions Evaluating Moderation by Maternal Education of the Relation between Permissive Parenting Style and Children's Classroom Competence

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.041	2, 164	0.032				
High School Diploma				0.189	4.909	1.986	0.014
Centered Permissive Parenting				-0.060	-1.230	1.598	0.432
Block 2	0.031	1, 163	0.021				
Interaction				-0.475	-10.679	4.580	0.021
Teacher Ratings of Sociability							
Block 1	0.005	2, 165	0.660				
High School Diploma				-0.022	-0.058	0.202	0.775
Centered Permissive Parenting				-0.069	-0.146	0.165	0.377
Block 2	0.001	1, 164	0.624				
Interaction				-0.102	-0.233	0.475	0.624

Note. Interaction refers to Diploma X Centered Permissive Parenting

Table 7

Regressions Evaluating Moderation by Maternal Education of the Relation between Restrictive Parenting Style and Children's Classroom Competence

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.041	2, 163	0.032				
High School Diploma				0.202	5.158	1.962	0.009
Centered Restrictive Parenting				-0.017	-0.414	1.814	0.820
Block 2	0.000	1, 162	0.830				
Interaction				0.030	0.849	3.949	0.830
Teacher Ratings of Sociability							
Block 1	0.008	2, 164	0.529				
High School Diploma				-0.022	-0.058	0.202	0.773
Centered Restrictive Parenting				-0.086	-0.207	0.188	0.271
Block 2	0.003	1, 163	0.481				
Interaction				-0.099	-0.288	0.407	0.481

Note. Interaction refers to Diploma X Centered Restrictive Parenting

Table 8

*Regressions Evaluating Moderation by Maternal Education of the Relation
between Responsive Parenting Style and Children's Externalizing Behaviors*

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.017	2, 164	0.248				
High School Diploma				-0.050	-0.059	0.092	0.520
Centered Responsive Parenting				0.121	0.142	0.091	0.119
Block 2	0.019	1, 163	0.072				
Interaction				-0.339	-0.436	0.240	0.072
Hyperactive							
Block 1	0.035	2, 164	0.052				
High School Diploma				-0.048	-0.083	0.133	0.533
Centered Responsive Parenting				0.183	0.313	0.131	0.018
Block 2	0.016	1, 163	0.098				
Interaction				-0.309	-0.580	0.349	0.098
Teacher Ratings of Relational Aggression							
Block 1	0.016	2, 164	0.268				
High School Diploma				-0.047	-0.131	0.218	0.548
Centered Responsive Parenting				0.119	0.329	0.215	0.128
Block 2	0.024	1, 163	0.047				
Interaction				-0.373	-1.136	0.569	0.047

Note. Interaction refers to Diploma X Centered Responsive Parenting

Table 9

Regressions Evaluating Moderation by Maternal Education of the Relation between Permissive Parenting Style and Children's Externalizing Behaviors

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.016	2, 165	0.259				
High School Diploma				-0.040	-0.047	0.092	0.607
Centered Permissive Parenting				0.118	0.114	0.075	0.129
Block 2	0.003	1, 164	0.463				
Interaction				-0.152	-0.159	0.216	0.463
Hyperactive							
Block 1	0.012	2, 165	0.381				
High School Diploma				-0.038	-0.066	0.135	0.627
Centered Permissive Parenting				0.098	0.139	0.110	0.208
Block 2	0.005	1, 164	0.344				
Interaction				-0.196	-0.300	0.316	0.344
Teacher Ratings of Relational Aggression							
Block 1	0.002	2, 165	0.841				
High School Diploma				-0.046	-0.129	0.220	0.559
Centered Permissive Parenting				0.000	0.000	0.179	0.998
Block 2	0.012	1, 164	0.154				
Interaction				-0.296	-0.734	0.512	0.154

Note. Interaction refers to Diploma X Centered Permissive Parenting

Table 10

Regressions Evaluating Moderation by Maternal Education of the Relation between Restrictive Parenting Style and Children's Externalizing Behaviors

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.003	2, 164	0.772				
High School Diploma				-0.045	-0.054	0.093	0.562
Centered Restrictive Parenting				0.031	0.035	0.086	0.688
Block 2	0.000	1, 163	0.999				
Interaction				0.000	0.000	0.187	0.999
Hyperactive							
Block 1	0.010	2, 164	0.426				
High School Diploma				-0.039	-0.068	0.135	0.614
Centered Restrictive Parenting				0.092	0.149	0.125	0.237
Block 2	0.001	1, 163	0.774				
Interaction				-0.040	-0.078	0.272	0.774
Teacher Ratings of Relational Aggression							
Block 1	0.006	2, 164	0.623				
High School Diploma				-0.041	-0.115	0.219	0.600
Centered Restrictive Parenting				0.062	0.162	0.103	0.425
Block 2	0.002	1, 163	0.598				
Interaction				-0.074	-0.233	0.441	0.598

Note. Interaction refers to Diploma X Centered Restrictive Parenting

Table 11

Regressions Evaluating Moderation by Monthly Household Income of the Relation between Responsive Parenting Style and Children's Classroom Competence

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.043	2, 160	0.030				
\$1,000 Per Month				0.070	1.539	1.714	0.371
Centered Responsive Parenting				0.201	5.144	1.988	0.011
Block 2	0.011	1, 159	0.181				
Interaction				0.220	6.405	4.765	0.181
Teacher Ratings of Sociability							
Block 1	0.008	2, 161	0.524				
\$1,000 Per Month				0.064	0.143	0.176	0.419
Centered Responsive Parenting				-0.057	-0.149	0.203	0.467
Block 2	0.003	1, 160	0.462				
Interaction				0.123	0.362	0.491	0.462

Note. Interaction refers to Income X Centered Responsive Parenting

Table 12

*Regressions Evaluating Moderation by Monthly Household Income of the Relation
between Permissive Parenting Style and Children's Classroom Competence*

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.005	2, 161	0.682				
\$1,000 Per Month				0.043	0.952	1.755	0.588
Centered Permissive Parenting				-0.053	-1.113	1.658	0.503
Block 2	0.000	1, 160	0.951				
Interaction				0.009	0.233	3.772	0.955
Teacher Ratings of Sociability							
Block 1	0.011	2, 162	0.399				
\$1,000 Per Month				0.064	0.143	0.175	0.415
Centered Permissive Parenting				-0.082	-0.175	0.167	0.296
Block 2	0.001	1, 161	0.720				
Interaction				-0.054	-0.135	0.376	0.720

Note. Interaction refers to Income X Centered Permissive Parenting

Table 13

Regressions Evaluating Moderation by Monthly Household Income of the Relation between Restrictive Parenting Style and Children's Classroom Competence

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
McCarthy Verbal Score							
Block 1	0.001	2, 160	0.918				
\$1,000 Per Month				0.028	0.621	1.782	0.728
Centered Restrictive Parenting				-0.023	-0.537	1.892	0.777
Block 2	0.001	1, 159	0.640				
Interaction				-0.081	-2.173	4.633	0.640
Teacher Ratings of Sociability							
Block 1	0.016	2, 161	0.277				
\$1,000 Per Month				0.095	0.213	0.179	0.236
Centered Restrictive Parenting				-0.102	-0.245	0.191	0.200
Block 2	0.004	1, 160	0.400				
Interaction				0.141	0.389	0.461	0.400

Note. Interaction refers to Income X Centered Restrictive Parenting

Table 14

Regressions Evaluating Moderation by Monthly Household Income of the Relation between Responsive Parenting Style and Children's Externalizing Behavior

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.035	2, 161	0.058				
\$1,000 Per Month				-0.157	-0.160	0.079	0.045
Centered Responsive Parenting				0.089	0.105	0.092	0.254
Block 2	0.007	1, 160	0.289				
Interaction				-0.172	-0.231	0.221	0.298
Hyperactive							
Block 1	0.039	2, 161	0.040				
\$1,000 Per Month				-0.075	-0.112	0.116	0.338
Centered Responsive Parenting				0.177	0.306	0.134	0.024
Block 2	0.018	1, 160	0.079				
Interaction				-0.289	-0.567	0.321	0.079
Teacher Ratings of Relational Aggression							
Block 1	0.033	2, 161	0.066				
\$1,000 Per Month				-0.141	-0.343	0.189	0.071
Centered Responsive Parenting				0.104	0.291	0.218	0.184
Block 2	0.000	1, 160	0.905				
Interaction				-0.020	-0.063	0.527	0.905

Note. Interaction refers to Income X Centered Responsive Parenting

Table 15

*Regressions Evaluating Moderation by Monthly Household Income of the Relation
between Permissive Parenting Style and Children's Externalizing Behavior*

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.040	2, 162	0.038				
\$1,000 Per Month Centered Permissive Parenting				-0.162	-0.166	0.079	0.037
				0.108	0.106	0.075	0.163
Block 2	0.025	1, 161	0.039				
Interaction				-0.305	-0.350	0.168	0.039
Hyperactive							
Block 1	0.018	2, 162	0.235				
\$1,000 Per Month Centered Permissive Parenting				-0.088	-0.132	0.117	0.260
				0.096	0.137	0.112	0.222
Block 2	0.002	1, 161	0.540				
Interaction				-0.092	-0.154	0.252	0.540
Teacher Ratings of Relational Aggression							
Block 1	0.024	2, 162	0.140				
\$1,000 Per Month Centered Permissive Parenting				-0.154	-0.374	0.189	0.049
				-0.025	-0.059	0.180	0.743
Block 2	0.001	1, 161	0.651				
Interaction				-0.068	-0.184	0.407	0.651

Note. Interaction refers to Income X Centered Permissive Parenting

Table 16

Regressions Evaluating Moderation by Monthly Household Income of the Relation between Restrictive Parenting Style and Children's Externalizing Behavior

Outcome	Model Summary			Coefficients			
	ΔR^2	df	<i>p</i>	β	B	SE	<i>p</i>
Block and Predictors							
Aggression							
Block 1	0.036	2, 161	0.052				
\$1,000 Per Month				-0.190	-0.196	0.081	0.017
Centered Restrictive Parenting				0.068	0.075	0.086	0.387
Block 2	0.015	1, 160	0.114				
Interaction				-0.262	-0.330	0.208	0.114
Hyperactive							
Block 1	.022	2, 161	0.167				
\$1,000 Per Month				-0.123	-0.185	0.119	0.123
Centered Restrictive Parenting				0.109	0.175	0.127	0.171
Block 2	.001	1, 160	0.689				
Interaction				-0.067	-0.124	0.309	0.689
Teacher Ratings of Relational Aggression							
Block 1	.035	2, 161	0.057				
\$1,000 Per Month				-0.180	-0.440	0.193	0.024
Centered Restrictive Parenting				0.093	0.243	0.205	0.238
Block 2	.002	1, 160	0.521				
Interaction				-0.107	-0.320	0.497	0.521

Note. Interaction refers to Income X Centered Restrictive Parenting

Table 17

Regressions Testing Mediation by Frequency of Reading of the Relation between Responsive Parenting and Early Emergent Literacy

Outcome	Model Summary			Coefficients			
	R^2	df	p	β	B	SE	p
Block and Predictors							
McCarthy Verbal Score							
Responsive Parenting	0.05	1, 165	0.006	0.21	5.38	1.92	0.006
Frequency of Reading							
Responsive Parenting	0.05	1, 165	0.005	0.22	1.20	0.42	0.005
McCarthy Verbal Score							
Frequency of Reading	0.03	1, 165	0.018	0.18	0.84	0.35	0.018
McCarthy Verbal Score							
Test of Mediation	0.07	2, 164	0.004				
Responsive Parenting				0.18	4.59	1.96	0.020
Frequency of Reading				0.14	0.66	0.36	0.066

Table 18

Regressions Testing Mediation by Trips to the Library of the Relation between Responsive Parenting and Early Emergent Literacy

Outcome	Model Summary			Coefficients			
	R^2	df	p	β	B	SE	p
Block and Predictors							
McCarthy Verbal Score							
Responsive Parenting	0.05	1, 165	0.006	0.21	5.38	1.92	0.006
Trips to the Library							
Responsive Parenting	0.02	1, 165	0.050	0.15	0.38	0.19	0.050
McCarthy Verbal Score							
Trips to the Library	0.04	1, 165	0.015	0.19	1.93	0.78	0.015
McCarthy Verbal Score							
Test of Mediation	0.07	2, 164	0.003				
Responsive Parenting				0.19	4.77	1.93	0.014
Trips to the Library				0.16	1.64	0.78	0.037

Figure 1. Post hoc probes examining the moderation of parental responsiveness to MSCA verbal scores by maternal education.

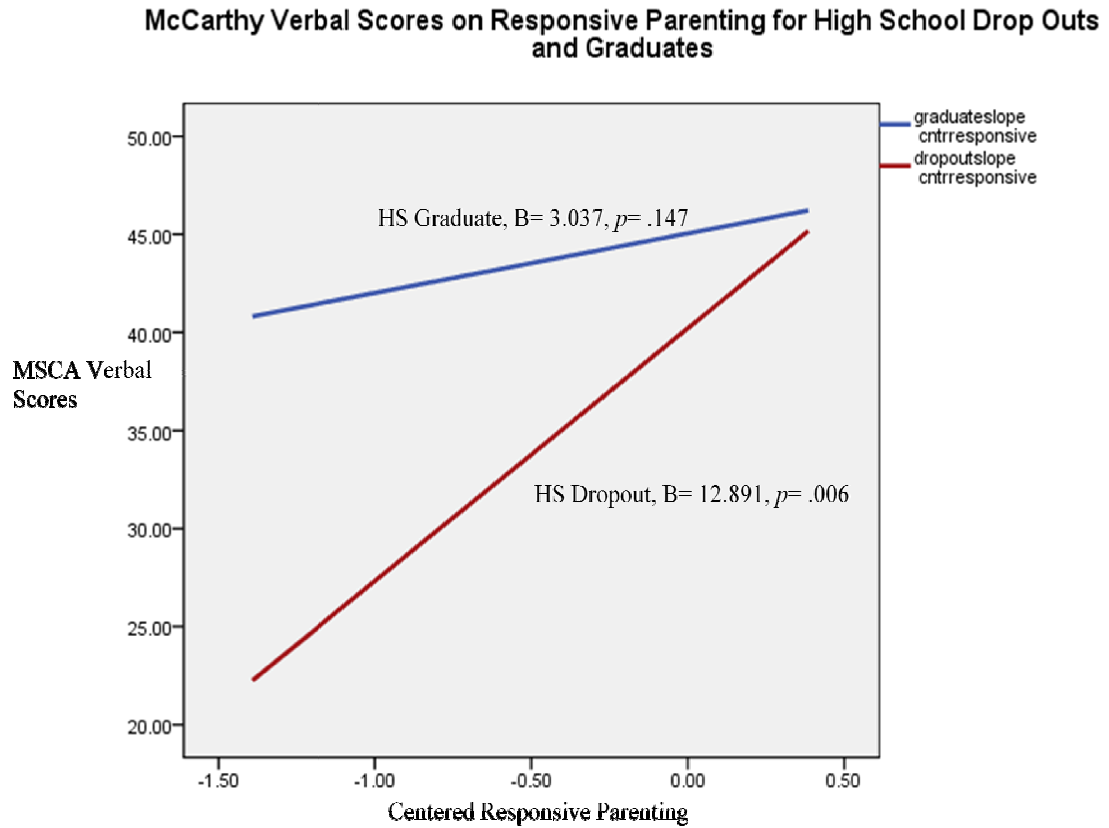


Figure 2. Post hoc probes examining the moderation of parental responsiveness to child relational aggression scores by maternal education.

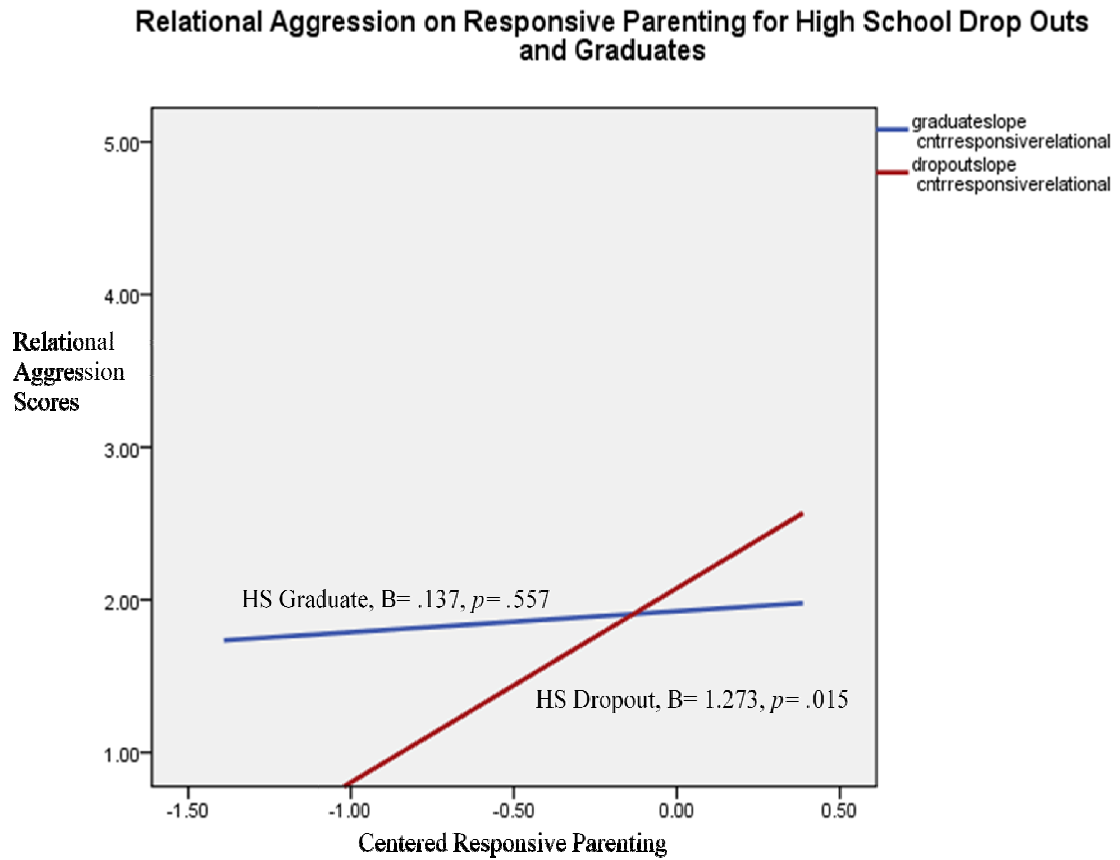
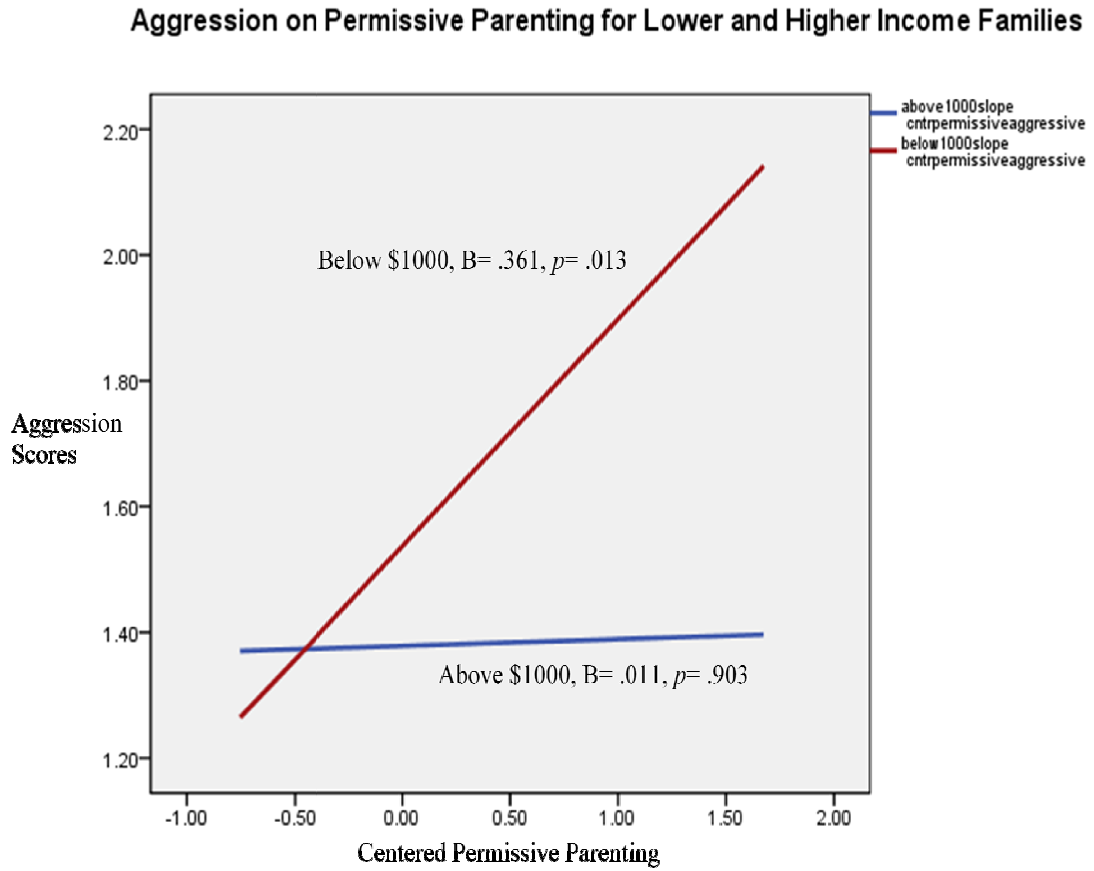


Figure 3. Post hoc probes examining the moderation of parental permissiveness to aggression scores by household monthly income.



VITA

Kristal L. Sommer

Candidate for the Degree of

Master of Science

Thesis: THE RELATIONSHIP BETWEEN PARENTING STYLES, PARENTAL READING INVOLVEMENT, CHILD BEHAVIOR OUTCOMES, CHILD CLASSROOM COMPETENCE, AND EARLY CHILDHOOD LITERACY

Major Field: Human Development and Family Science

Biographical:

Personal Data: Born in Joplin, Missouri, on October 2, 1984, the daughter of Gary and Brenda Sommer.

Education: Graduated from Miami High School, Miami, Oklahoma in May 2003; received a Bachelor of Science degree in Human Development and Family Science from Oklahoma State University in Stillwater, Oklahoma in December 2007. Completed the requirements for the Master of Science in Human Development and Family Science at Oklahoma State University, Stillwater, Oklahoma in July, 2010.

Experience: Employed by Oklahoma Department of Human Services as a child welfare worker, January 2008 to August 2008; employed by Oklahoma State University, Department of Human Development and Family Science as a graduate teaching assistant, 2008 to 2010; assisted in preparing for and grading assignments for Infant and Child Development and Non-Normative Development classes; employed by Oklahoma State University, Department of Human Development and Family Science as a graduate research assistant, 2008 to present; assessed Oklahoma Native American children's cognitive development using the Peabody Picture Vocabulary Test and the McCarthy Scales of Children's Abilities.

Name: Kristal Lea Sommer

Date of Degree: July, 2010

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE RELATIONSHIP BETWEEN PARENTING STYLES,
PARENTAL READING INVOLVEMENT, CHILD BEHAVIOR
OUTCOMES, CHILD CLASSROOM COMPETENCE, AND EARLY
CHILDHOOD LITERACY

Pages in Study: 100

Candidate for the Degree of Master of Science

Major Field: Human Development and Family Science

Scope and Method of Study: The purpose of this study was to examine the links among authoritative, authoritarian, and permissive parenting, parental involvement in literacy activities, child classroom competence, and child behavior problems. Participants in the study included 175 three- to four-year old children attending Head Start facilities in rural Oklahoma, their primary caregivers, and their teachers. Caregivers completed the revised Preschool Behavior Questionnaire-Head Start (PBQ-HS) and a literacy involvement questionnaire. Each child was evaluated using the McCarthy Scales of Children's Abilities (MSCA). Teachers completed a modified version of The Preschool Behaviour Questionnaire (PBQ). Correlation and regression analyses tested the four hypotheses.

Findings and Conclusions: In support of hypothesis 1(b), authoritative parenting was significantly and positively related to children's MSCA scores, before and after education and income were controlled. Contrary to hypothesis 2, authoritative parenting was not negatively related to behavior problems; instead it was significantly and positively related to children's hyperactivity, before and after education and income were controlled. In support of hypothesis 3 (moderation), results of post hoc probing revealed, first, for the high school dropout group but not for the high school graduate group, authoritative parenting is related to higher McCarthy scores. The second finding related to hypothesis 3 was not expected. Revealed by post hoc probing, authoritative parenting was related to more child relational aggression when the mothers were high school dropouts. The third finding supporting hypothesis 3, revealed by post hoc probes, was that when families' income is less than \$1000 per month, permissive parenting is positively related to child aggression. Consistent with hypothesis 4 (mediation), β for authoritative parenting decreased when either frequency of reading or trips to the library were entered simultaneously into the regression equation, predicting MSCA scores. However, contrary to hypothesis 4, results of the Sobel test indicated that trips to the library and frequency of reading did not significantly mediate the relation between authoritative parenting and children's MSCA scores.

ADVISER'S APPROVAL: Dr. Laura Hubbs-Tait
