

2015

## The influence of parent expectations, the home literacy environment, and parent behavior on child reading interest

Tammy Matvichuk

Follow this and additional works at: <https://commons.emich.edu/honors>

---

### Recommended Citation

Matvichuk, Tammy, "The influence of parent expectations, the home literacy environment, and parent behavior on child reading interest" (2015). *Senior Honors Theses & Projects*. 436.  
<https://commons.emich.edu/honors/436>

This Open Access Senior Honors Thesis is brought to you for free and open access by the Honors College at DigitalCommons@EMU. It has been accepted for inclusion in Senior Honors Theses & Projects by an authorized administrator of DigitalCommons@EMU. For more information, please contact [lib-ir@emich.edu](mailto:lib-ir@emich.edu).

---

# The influence of parent expectations, the home literacy environment, and parent behavior on child reading interest

## Abstract

An important first step to children gaining early literacy skills that can shape academic achievement is a child's interest in reading. Early interest is an important predictor of long-term academic success among children and is therefore important to study. Many children are considered at risk for poorer academic outcomes, including African American children growing up in poverty and children who are overweight. Therefore, it is especially important to understand influences on early reading interest in these populations. Very little is currently known about what influences child literacy interest. Therefore, the overall goal of this study was to examine the relation between parental expectations, the home literacy environment, parental behavior and child interest in reading. Specifically, the current study focused on African American children from low socio-economic status families who were overweight because these children may be at risk for less developed literacy skills. Twenty-six mother child dyads participated in the current study and were recruited from an urban Head Start preschool program. Results revealed significant correlations between a child's home environment and child literacy interest, as well as between parental behavior and literacy interest. No relationship was found between parental expectations and child literacy interest.

## Degree Type

Open Access Senior Honors Thesis

## Department

Psychology

## First Advisor

Heather C. Janisse

## Keywords

child, literacy, parent, environment, at-risk, interest

THE INFLUENCE OF PARENT EXPECTATIONS, THE HOME LITERACY  
ENVIRONMENT, AND PARENT BEHAVIOR ON CHILD READING INTEREST

By

Tammy Matvichuk

A Senior Thesis Submitted to the

Eastern Michigan University

Honors College

in Partial Fulfillment of the Requirements for Graduation

with Honors in Psychology

Approved at Ypsilanti, Michigan, on this date April 20, 2015

## TABLE OF CONTENTS

List of Tables.....	5
Abstract.....	6
Introduction.....	7
Literature Review.....	7
Child Interest in Reading.....	7
Parental Expectations.....	9
Home Literacy Environment.....	13
Parental Behavior.....	15
Children at Risk.....	17
Current Study.....	23
Methods.....	23
Participants.....	24
Procedure.....	24
Measures.....	26
Demographics.....	26
Parent Report Questionnaire.....	26

INFLUENCES ON CHILD READING INTEREST	3
Home Literacy Environment.....	27
Parental Behavior.....	28
Data Analysis.....	29
Results.....	29
Descriptive Statistics.....	30
Child Reading Interest.....	30
Parental Expectations.....	30
Home Literacy Environment.....	31
Parental Behavior.....	31
Correlation Analyses .....	32
Demographic Correlations.....	32
Parent Expectation Correlations.....	32
Home Literacy Environment Correlations.....	33
Parental Behavior Correlations.....	34
Discussion.....	35
Parental Expectations.....	37
Home Literacy Environment.....	40

Parental Behavior.....42

Limitations and Strengths.....43

Implications for Interventions and Policy.....44

Directions for Future Research.....45

Conclusions.....45

References.....46

Appendices.....52

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Sample Demographics.....	25
2. Descriptive Statistics for Child Reading Interest.....	30
3. Descriptive Statistics for Parental Expectations.....	31
4. Descriptive Statistics for Parent Behavior.....	32
5. Correlations between Parent Expectations and Child Interest.....	33
6. Correlations between the HOME and Child Interest.....	34
7. Correlations between Parenting Behavior and Child Interest.....	35

## Abstract

An important first step to children gaining early literacy skills that can shape academic achievement is a child's interest in reading. Early interest is an important predictor of long-term academic success among children and is therefore important to study. Many children are considered at risk for poorer academic outcomes, including African American children growing up in poverty and children who are overweight. Therefore, it is especially important to understand influences on early reading interest in these populations. Very little is currently known about what influences child literacy interest. Therefore, the overall goal of this study was to examine the relation between parental expectations, the home literacy environment, parental behavior and child interest in reading. Specifically, the current study focused on African American children from low socio-economic status families who were overweight because these children may be at risk for less developed literacy skills. Twenty-six mother child dyads participated in the current study and were recruited from an urban Head Start preschool program. Results revealed significant correlations between a child's home environment and child literacy interest, as well as between parental behavior and literacy interest. No relationship was found between parental expectations and child literacy interest.

*Keywords:* child, literacy, parent, environment, at-risk, interest

THE INFLUENCE OF PARENT EXPECTATIONS, THE HOME LITERACY ENVIRONMENT, AND PARENT BEHAVIOR ON CHILD READING INTEREST

Children's academic achievement relies heavily on reading and writing skills (Elder, 2004). It seems that emergent literacy skills influence many aspects of schooling. For example, children who are considered to be poor readers tend to develop their vocabularies slower than children at an average reading level, which creates an additional achievement gap between the students (Pagan, 2010). In order to reduce achievement gaps and help all children succeed academically, it is important to study what variables contribute to reading and writing performance. Numerous studies have been conducted on how the home literacy environment impacts reading and writing abilities (e.g., McQuillan & Au, 2001; Phillips & Lonigan, 2009; Yeo, Ong, & Ng, 2014). However, little is known about how parental expectations and behaviors impact a child's early interest in reading. Therefore, this study will examine how parental expectations, the home literacy environment, and parental behavior influence child reading interest.

### **Child Interest in Reading**

It seems imperative to study children's reading abilities and interests from an early age because early literacy skills are known to form the foundation of reading success in later years (Baroody & Dobbs-Oates, 2011). It appears that children who are read to from an early age are generally more interested in reading later in life (Laakso, Poikkeus, Eklund, & Lyytinen, 2004).

Senechal (2009) seems to agree that the more children are read to before formal schooling, the more likely they are to report reading for pleasure. Specifically, the

preschool years are important for the development of emergent literacy skills that have an impact on later reading and writing abilities (Elder, 2004). Yaden et al. (2000) also claimed that early informal learning experiences from birth to about 5 or 6 years old in the child's home setting are especially beneficial. These early experiences are a crucial stepping stone for future literacy success (Elder, 2004).

Early exposure to books has been known to contribute to reading achievement, oral language capabilities, and emergent literacy skills (Laakso et al., 2004). In fact, storybook exposure alone is significantly related to kindergarten vocabulary achievement, later reading comprehension, and how often children read for pleasure later in life (Senechal, 2009). Exposure to print has a positive impact on reading, spelling, and vocabulary skills (Pagan, 2010). In addition, home literacy experiences, such as book exposure, are known to be directly related to early literary skills and child language which have an impact on later reading outcomes (Senechal, 2009).

Children's interest level in reading may be an important indicator of later academic success. Pagan (2010) noted that child reading interest may optimize the learning that happens from book exposure. Moreover, a study by Laakso et al. (2004) found that children who are interested in literacy activities have an increased chance of gaining language skills from the activities than children who are not as interested. So, the amount of interest children have in literacy may be linked to how much they learn from literacy activities. If children are learning more from activities, they most likely will achieve more than those not interested in literacy and those learning less. Furthermore, a study by Elder (2004) demonstrated that children who frequently read books for pleasure tended to obtain higher scores on the Stanford Achievement Test, Ninth Edition (SAT-9).

Parents are known to significantly impact children's attitudes about reading, their motivation to read, and amount of reading their child does (Pagan, 2010). Parents can facilitate reading development by creating an environment that promotes reading for enjoyment and supports children's interest in books (Elder, 2004). Ultimately, the more children are given the opportunity to practice reading, the more their knowledge and cognitive strategies grow, which increases reading comprehension (Pagan, 2010). Therefore, the amount of reading children do outside of school influences reading achievement (Pagan, 2010).

It is important to study children's interest in reading for the overall long lasting impact literacy skills have on academic achievement and outcomes. Yet, it may also be important to study preschooler's reading interest and what contributes to their reading motivation to target possible intervention needs. Laakso et al. (2004) discerned that children who are at risk for reading difficulties may find books less interesting due to their language abilities being underdeveloped. Therefore, it may be advantageous to examine preschooler's reading interest in order to catch children early on that may have reading trouble and to determine if the child needs extra help and services for literacy. Pagan (2010) offers hope by suggesting that if parents play an active role in their child's reading and if children are given access to books, children's literacy skills can improve (Pagan, 2010).

### **Parental Expectations**

A factor that could impact children's reading interest may be parental expectations. The concept of the self-fulfilling prophecy is well known and was defined

by Robert Merton in 1948 as being “a false definition of the situation evoking a new behavior which makes the originally false conception come true” (p. 195). Therefore, if parents hold high expectations for their children to achieve, the children may actually succeed even if they normally display lower functioning behaviors of achievement. If parents expect their children to get good grades and attend college, their children should strive to do well in school and obtain the skills necessary to do so. Since education relies heavily on literacy, children from high expectation families may obtain the reading abilities to do well in school and meet those expectations.

A study by Davis-Kean (2005) added to the research suggesting a link between parent expectations and achievement outcomes. Davis-Kean (2005) mentioned that parents who expect their child to go college versus parents with lower expectations may create a different environment and connection with their child in order for their child to achieve these expectations. For example, Davis-Kean (2005) noted that parents with high expectations may have a more cognitively stimulating and emotionally supporting home environment than those with lower expectations. These high expectation parents may also have a more flexible environment to adjust to their child’s needs and to foster their child’s academic abilities (Hoover-Dempsey & Sandler, 1997).

Baroody and Dobbs-Oates (2009) suggested that parent’s expectations about the level of schooling their child will obtain is not related to their child’s literacy interest. Yet, it is argued that parental expectations of school achievement, such as grades children will receive, are significantly related to their child’s interest in literacy (Baroody & Dobbs-Oates, 2009). Hence, different parental expectations may yield different outcomes and there are still unknowns when it comes to understanding the role of

parental expectations on child outcomes. Additional research conducted by Martini and Senechal (2012) examined parents' beliefs and expectations about reading, the parent's role in helping their child learn literacy skills, and what their child should know before first grade. This study showed a strong relationship "between parent expectations and child early literacy" (Martini & Senechal, 2012). However, if parents hold too high of expectations that the child feels are unattainable, this could create maladaptive consequences for the child.

There seems to be many influences affecting the directionality and relationship between parental expectations and child academic outcomes. According to Yeo et al. (2014) parental beliefs about the value of reading and ways of encouraging children to read may guide the literacy opportunities parents make available to their children. So, parents with higher expectations for their children's academic achievement and higher values of reading may feel the need to teach their child themselves instead of having their child just learn from their teachers at school. For example, Martini and Senechal (2012) found that parents who taught their children about literacy frequently had high expectations for what knowledge their child should grasp before first grade.

Parents who hold high expectations for their children's knowledge about reading, writing, and the alphabet tend to take more time to teach their children outside of school than parents holding lower expectations (Martini & Senechal, 2012). Children are also more interested in learning about literacy if their parents teach them often (Martini & Senechal, 2012). Specific beliefs about reading that parents hold are also related to children's reading interest, such as parents' views on verbal participation and affect (Martini & Senechal, 2012). Yet, it may be children's interests influencing parent

expectations. For instance, Baroody and Dobbs-Oates (2009) explain that parents who view their children being more interested in literacy skills hold high expectations for their children to do well in school.

Another experiment by Englund, Luckner, Whaley, and Egeland (2004) discovered that children who did well in first grade had parents that had high expectations for them. In turn, these parents participated more in their child's schooling in third grade (Englund et al., 2004). When parent's had high expectations for their child in third grade, they were more likely to be involved in their child's education and had higher achieving children (Englund et al., 2004). As a result, it may be that the child and parent both influence each other.

While it seems that the child, parent, and the child's environment all interact to influence the child's literacy interest and academic achievement, it is suggested that the child's home environment and parent teaching may not contribute to the child's outcomes. For instance, Weigel, Martin, and Bennett (2006) stated that children's emergent writing skills may be more linked to the parent's beliefs than the home literacy environment. Similarly, Martini and Senechal (2012) found that even after controlling for parent teaching, socio-economic status, and child intelligence, parent expectations were significantly related to child interest.

In general, the literature suggests that there are several influences on child academic achievement. Parental expectations seem to have an impact on child educational outcomes, although directionality, generalization, and specifics are not wholly determined. However, it is important to study how parent expectations are

associated with child interest in literacy because parent expectations seem to be somehow related to achievement and reading interest. Yeo et al. (2014) clarifies that children's literacy skills and learning are contingent on their parent's beliefs and the home literacy environment they create.

### **Home Literacy Environment**

It seems that one cannot study children's interest in reading without studying the child's home literacy environment (HLE). Phillips and Lonigan (2009) summarize that the HLE is a vast array of variables such as literacy artifacts, parents' value of reading, parent attitudes, parental modeling of reading behaviors, verbal references to books, children's interest, and so on. Since the HLE has so many aspects, many researchers divide home literacy activities into being known as formal or informal activities (Yeo et al., 2014). Formal home activities consist of structural activities when learning about print (Yeo et al., 2014). Informal activities focus more on the meaning of the print and could be activities such as a parent teaching a child what the word "dog" means (Yeo et al., 2014).

Another division of the HLE is similar to the formal and informal categories. In 1998, Whitehurst and Lonigan came up with the idea of inside-out and outside-in domains (Phillips & Lonigan, 2009). The inside-out domain is similar to the formal category because it includes structural dimensions of literature that allow the individual to correctly decode words, have context knowledge, and acquire phonological awareness (Phillips & Lonigan, 2009). In turn, the outside-in domain is similar to informal home activities. The outside-in strategy is important for reading abilities because having

narrative understanding skills tends to help individual's reading comprehension (Phillips & Lonigan, 2009).

Due to the HLE having numerous aspects that influence children's literacy performance and reading interest, a limited review will be presented on informal book exposure. Yeo et al. (2014) suggest that it is essential to study the HLE because factors of the HLE can contribute to children's future academic success. Also, it seems fundamental that parents create an active HLE early on in their child's life because the HLE is known to have an impact on children's literacy development (Yeo et al., 2014). In the study by Yeo et al. (2014) it was suggested that the HLE had a significant positive connection to preschooler's reading abilities and motivation. Parents who were more involved in home literacy activities tended to have children with higher reading capabilities (Yeo et al., 2014). Parents actively engaging their children at home in reading and writing were correspondingly known to have children who were more competent and interested in reading (Yeo et al., 2014).

Access to reading materials is also known to influence the amount of reading children choose to do (McQuillan & Au, 2001). Children appear to read more frequently when given more access to reading materials regardless of their reading abilities (McQuillan & Au, 2001). So, the number of books children own tends to be related to reading frequency as well as reading achievement (McQuillan & Au, 2001). In addition, the more parents engage their children in literacy activities with books, the more support they should give their children, and the more reading practice the children should receive (Yeo et al., 2014). Greater print exposure results in more experience with word recognition, reading comprehension, and vocabulary building (Hood, Conlon, &

Andrews, 2008). Storybook exposure is also shown to be directly related to the development of language skills (Senechal, 2009).

Early storybook exposure may additionally be linked to the amount of pleasure reading children do in the future (Senechal, 2009). Furthermore, experiences with books are shown to be related to children's vocabulary skills (Senechal, 2009). However, storybook exposure may not be related to written language skills (Senechal, 2009). McQuillan & Au (2001) suggest that the HLE may create interest in reading, which may lead to more motivation, and ultimately to greater participation in literacy activities.

### **Parental Behavior**

It is well established in the literature that parents play a large role in their child's academic success. As previously mentioned, parent's expectations and the home environment they create can influence a child's interest in reading, which in turn can impact the child's academic achievement. In addition to parental expectations and the HLE, parents may also contribute to their child's academic success and literacy skills by their parenting styles and behaviors. For example, a study by van Duijvenvoorde, Zanolie, Rombouts, Raijmakers, and Crone (2008) suggested that young children learn more and perform better with positive feedback versus negative feedback. Thus, a child with parents who offer praise instead of criticism may perform better academically.

Another study by Simpkins, Weiss, McCartney, Kreider, and Dearing (2006) stated that a mother's warmth toward her child can contribute to the child's achievement. It is suggested that the warmth of a child's mother may make the child more likely to engage in behaviors related to academics, such as reading, because the child may

internalize academic values (Simpkins et al., 2006). So, if the mother is warm to the child when reading together, the child may enjoy reading more than if the mother and child have other problems (Simpkins et al., 2006).

Other parenting dimensions such as proactive parenting, limit setting, and positive behavior support can be linked to later childhood outcomes, such as the child's behaviors (McEachern et al., 2012). Parents who use positive behavior support tend to have children who better understand expectations, change problem behaviors more upon request, and act properly in organized settings compared to parents using different methods (Brennan et al., 2013). Therefore, parents with a positive behavior support model of parenting may also prepare their children better for school (Brennan et al., 2013).

On the other hand, parents with authoritarian beliefs usually have less interactive communication with their children, which results in lower language functioning leading to lower academic success (Im-Bolter, Zaden, & Ling, 2013). Parents with authoritarian styles of parenting may influence their children very early on (Im-Bolter et al., 2013). Results from a study by Im-Bolter et al. (2013) indicated that children with authoritarian parents at one month old had lower levels of language abilities when the children were 36 months old. These results were related to lower levels of academic achievement in kindergarten which seemed to cause lower achievement in first grade as well (Im-Bolter et al., 2013).

Brennen et al. (2013) had a similar finding, noting the impact of parenting on children's futures. Brennen et al. (2013) stated that parents who displayed positive

parenting techniques when their children were 2 years old and 3 years old were more likely to have children achieving more academically when the children were 5 years old and 7.5 years old. Therefore, it seems important to intervene early on with parenting styles in order for children to have the best possible opportunity for academic success (Im-Bolter et al., 2013). Brennan et al. (2013) also recorded that when doing a positive behavior support intervention, members of the intervention had higher levels of academic achievement compared to the control group.

It is particularly valuable to study parenting behavior and the effects of parenting skills on academic achievement and literacy because certain parenting styles and beliefs can lead to negative consequences. Im-Bolter et al. (2013) concludes that negative parenting beliefs early on can damage children's development in the language and academic domains. For example, children growing up in an authoritarian-type home setting may have less positive interactions with their parents, which may put their language skills at more risk than children who have parents with authoritative parenting styles (Im-Bolter et al., 2013). Interventions may be needed to reduce the risks of children growing up with parents who have less positive parenting styles.

### **Children at Risk**

It is crucial to examine children who may be at risk of less developed literacy skills to help inform intervention efforts and policy. It is possible that risk might result from the child's lack of interest in literacy at an early age, or at least be an important influence. It is well established that children who come from lower socioeconomic status (SES) families are at risk for poorer school performance than children from higher status

backgrounds (Wu & Qi, 2006). It has also been suggested in the literature that minority children may struggle more with reading than Caucasian children (Charity, Scarborough, & Griffin, 2004). Poverty and ethnicity as potential risk factors are likely to be the result of multiple environmental stressors more prevalent in these communities.

In addition to considering the risks present in low-income populations, there are other factors that might put children at risk for poorer school or reading performance. A less examined risk factor is childhood obesity. However, there is some evidence that children who are obese tend to achieve less academically than normal weight children (Clark, Slate, & Viglietti, 2009). For these reasons, this study will focus on children who are from low SES families, are African American, and are currently considered overweight (at or above the 85<sup>th</sup> percentile for BMI).

A study by Chatterji (2006) found that reading gaps apparent in kindergarten were most associated with a child's level of poverty. These reading differences tended to follow the children into first grade, which may be caused by lower socioeconomic status children having less reading preparation before the start of first grade (Chatterji, 2006). It is suggested that gaps in reading and mathematics are caused by differences in children's early experiences (Chatterji, 2006). Low socioeconomic status families may not provide as cognitively stimulating environments and the same level of care as families of higher economic statuses (Chatterji, 2006). Bracken and Fischel (2008) seem to agree that there are differences in literacy experiences resulting from different socioeconomic groups, which cause differences in language and literacy skills.

Family income seems to not only influence the literacy materials and experiences in the home, but also behaviors and relationships in the home (Davis-Kean, 2005). In an African American sample, it was noted that family income was related to the educational expectations that parents held for their child and the warmth of parent-child interactions, which influenced achievement for the child (Davis-Kean, 2005). Also, Wu and Qi (2006) stated that family SES is the most powerful predictor of achievement in elementary school. In general, low SES seems to have a significant influence on the early stages of a child's development (Davis-Kean, 2005).

Even though children from higher SES families are more likely to have higher academic achievement than those families that have a lower SES, many children are resilient and there is hope for children from low SES families to improve their academic achievement (Wu & Qi, 2006). Davis-Kean (2005) claims that if parents can create a stimulating and supportive environment for their children, the negative effects of a low SES can be reduced. Wu and Qi (2006) also discuss that there are more factors contributing to academic achievement and if parents have high expectations for their child, constructive discipline, and positive beliefs, their child may be able to achieve as much as a child from a higher SES.

Reading gaps were also found in African American students compared to other groups (Chatterji, 2006). It is important to keep in mind when evaluating data that compare ethnic groups that African American families are disproportionately likely to be living in poverty in the United States. Therefore, ethnic differences are often confounded with economic differences. Data from Charity et al. (2004) suggest that race and SES can ultimately influence reading acquisition, phonological scores, and grammatical

scores. Charity et al. (2004) discuss that African American children may have more difficulty learning to read because their oral dialect may not match up with School English in written form. Findings from the study indicate that familiarity with School English is related to SES and schools with the highest amounts of children relying on federal lunches have lower phonological and grammatical scores (Charity et al., 2004). Thus, living in an African American household or in a predominately African American community may give children less opportunities to learn School English during their early school years, which may result in more difficulties with reading and related tasks (Charity et al., 2004).

Another study by Qi, Kaiser, Milan, and Hancock (2006) examined how well African American preschool children from low-income families did on the Peabody Picture Vocabulary Test – Third Edition (PPVT – III). The results indicated that preschool African American children scored significantly lower than the national mean on the PPVT-III (Qi et al., 2006). Although these children scored lower than average, African American children from low SES may not have a deficiency in their ability to learn language (Qi et al., 2006). Instead, interventions, earlier screening, and more educational opportunities to support language development should be put into place for this at-risk population (Qi et al., 2006).

An additional group of children who are at risk for lower academic achievement are children who are overweight or obese (Clark et al., 2009). A study by Clark et al. (2009) noted that obese elementary school children scored significantly lower than non-obese students on both unstandardized measures and standardized measures. Academic achievement for both measures also decreased as weight status increased (Clark et al.,

2009). Moreover, children who were overweight scored lower on math and reading than children at a normal weight (Clark et al., 2009).

A study by Azurmendi et al. (2005) had a similar finding. Azurmendi et al. (2005) discussed that as BMI increases, cognitive abilities tended to decrease. For both genders combined in the study, there was a negative relationship between crystallized intelligence and BMI (Azurmendi et al., 2005). Also, certain cognitive abilities in 5 year olds were predicted by BMI and androstenedione, such as crystallized intelligence, IQ composite, and affective labeling (Azurmendi et al., 2005).

Furthermore, another study by Li, Dai, Jackson, and Zhang (2008) recorded a connection between BMI percentiles, cognitive abilities of visuospatial arrangements, and overall mental aptitudes of young children. Li et al. (2008) argue that children need to be fit in more aspects of life than what schools notice. If a child does not have a healthy body, they may not have as healthy of a mind as they could (Li et al., 2008). Clark et al. (2009) seem to agree that obesity can have a negative effect on one's health, but can also have a negative effect on one's achievement.

Krukowski et al. (2009) note that psychosocial influences must be taken into account when studying the relationship between weight and academic achievement. Krukowski et al. studied how weight-based teasing has an influence on school performance. It was found that overweight children performed poorer in school than children who were not overweight (Krukowski et al., 2009). However, when examining weight-based teasing along with weight status effects on academic performance, it was found that weight status was not a significant predictor of school achievement

(Krukowski et al., 2009). Yet, children who experienced weight-based teasing were over 50% less likely to do as well in school as children who have not experienced this form of teasing (Krukowski et al., 2009). So, since overweight children are more at risk of being teased for their weight, weight-based teasing could be causing the negative influence on their achievement (Krukowski et al., 2009).

Girls who are overweight may also experience more negative outcomes of school performance than boys (Krukowski et al., 2009). A study by Davison and Birch (2001) studied a sample of 5 year old girls, their weight status, self-concept, and the parent's responses to the child's weight. Girls who had higher weight statuses in the study had lower self-esteem and less perceived cognitive abilities compared to girls of lower weights (Davison & Birch, 2001). Additionally, higher concern from mothers about her child's weight was associated with the child feeling less competent physically and cognitively (Davison & Birch, 2001). Mothers who restricted their child's access to food also had children who felt less capable in the physical and cognitive domains (Davison & Birch, 2001).

There may be a variety of factors that contribute to the association of poorer school performance for overweight children. Stigmatization of overweight children may begin as early as preschool and can have negative effects on one's self-concepts which may contribute to achievement (Davison & Birch, 2001). However, it is important to note that more research must be done to fully understand the connection between childhood overweight status and academic achievement. While teasing and self-concepts can influence achievement in school, these connections are not fully resolved in the literature.

### **Current Study**

Relatively little research has been done that examines the contributing factors of child reading interest. Early literacy has a big impact on life-long outcomes for individuals and is therefore an important construct to understand and predict. Therefore, the purpose of this study was to determine whether or not parental expectations for their child, the home literacy environment, and parental behaviors are related to child reading interest in preschool age children. In addition, this study specifically focused on children who come from low-income, African American families and who were considered overweight. These characteristics represent risk factors for lower reading achievement and are underrepresented in the literature on child reading interest. This study allows for the examination of predictors of reading interest that could inform future intervention and policy efforts.

It was hypothesized that there would be a positive correlation between parental expectations for their child and child reading interest. A second hypothesis was children with better home environments would be more interested in literacy. Specifically, it was hypothesized that there would be a positive relationship between the amount of books a child has in their home and how much the child is interested in reading. Lastly, it was hypothesized that parents who used proactive parenting, set limits, and support positive behavior would have children who were more interested in reading than children from parents who do not use these parenting techniques as often.

### **Methods**

#### **Participants**

This study is part of a larger research study examining an in-home intervention for overweight children enrolled in Head Start. Therefore, the participants of the current study were drawn from this larger study. Participants for the current study consisted of 26 primary caregivers of preschool age children who were enrolled in Head Start programs in the Detroit, Michigan area. Complete sample demographics can be seen in Table 1. The children in the study were between the ages of 3 and 5 years and the majority were girls. The primary caregivers of the children were between the ages of 21-42 years ( $M = 30.2$  years,  $SD = 5.8$  years) and caregivers were predominately African American (96.2% African American). The majority of caregivers had a high school education and were considered low-income.

### **Procedure**

As previously stated, this study was part of larger research study examining an in-home intervention for overweight children enrolled in Head Start. The larger study is a randomized clinical trial of a childhood obesity intervention. However, the current study utilized baseline data from this ongoing project which took place before randomization to any intervention arm. Eligible participants were determined by a Head

Table 1. Sample Demographics

Child Age	$M = 50.7$ months, $SD = 6.5$ , Range: 41-62 months
Child Gender	65.4% girls 34.6% boys
Child Ethnicity	92.3% African American 7.7% Multiracial
Caregiver Age	$M = 30.2$ years, $SD = 5.8$ , Range: 21-42 years
Caregiver Ethnicity	96.2% African American 3.8% Caucasian
Caregiver Education	65.4% high school 34.6% college or higher
Caregiver Income	52% less than \$5,000 16% \$5,000-\$9,999 16% \$10,000-\$14,999 4% \$15,000-\$19,999 8% \$20,000-\$29,999 4% \$30,000-\$49,999

Start nutrition coordinator that identified children who had a BMI at or above the 85<sup>th</sup> percentile. Once eligible families were identified, flyers giving parents a brief overview of the larger study were handed out to parents by Head Start staff or mailed to the home. The flyer informed families about the study and let them know they may be contacted via phone. Therefore, participants who were eligible to participate in the study were finally contacted by phone asking for their participation. If a family was interested in the study, a home visit was scheduled.

The baseline informed consent process and data collection took place in the participant's home. The home visit took approximately 2.5 hours and included multiple measures and assessments used for the larger study. Measures relevant to the current study included a demographic questionnaire, a parent report questionnaire, the Early Childhood HOME Record Form and a parenting behavior survey. Measures that were utilized in the present study are detailed below. Participants were paid \$30 for this initial data collection visit.

### **Measures**

**Demographics.** Participants completed a demographic questionnaire that included self-reported items such as ethnicity, education, and income. Parents filled out the demographic survey and answered questions about themselves, their child, and family during the first baseline home visit.

**Parent Report Questionnaire.** Child reading interest and parental expectations were assessed using items from the parent report questionnaire developed by Baroody and Dobbs-Oates (2009; See Appendix A). The parent report questionnaire consisted of two sections. The first section contained items used to analyze child reading interest. The second section was comprised of questions assessing parental expectations.

To determine child reading interest, parents completed a series of three questions. Parents were asked how often their child asks to be read to, how much their child enjoys being read to, and how often their child reads books by themselves. Parents placed a check mark next to the most appropriate answer provided. Answers consisted of 5-point scales: (*hardly ever*) coded as 1, (*once or twice a month*) coded as 2, (*once or twice a*

*week*) coded as 3, (*almost daily*) coded as 4, and (*more than once per day*) coded as 5.

The child reading interest section had an internal consistency ( $\alpha$ ) of .73 when employed by Baroody and Dobbs-Oates (2009).

In order to determine parental expectation, parents were asked to answer two questions. The first question asked how much schooling the parent expects the child to complete. The second question asked parents what grade they expect their child to receive in elementary school. Parents selected their answers by checking what year of school and grade best applied. Expectations about levels of schooling were coded as follows: (*less than ninth grade*) coded as 1, (*some high school, but not finish*) coded as 2, (*high school degree*) coded as 3, (*high school + some college or trade school*) coded as 4, (*four-year college degree*) coded as 5, and (*beyond college*) coded as 6. The average grades parents expected their child to receive were coded in a similar fashion ranging from (*A*) coded as 1 to (*D-*) coded as 11.

**Home Literacy Environment.** To measure the Home Literacy Environment, the Early Childhood HOME Record Form developed by Caldwell and Bradley (1984) was used. The Early Childhood HOME Record Form is meant to gather information about a child's home environment and the amount of support a child receives by observation and interviews from professionals. The HOME Record Form in its entirety includes 55 separate items. However, for the current study, only items that could be directly observed were utilized. Therefore, the total possible HOME items for this study were 28. Individual items on the HOME can be grouped into eight different subscales: Learning Materials (e.g., "Child has at least 10 children's books"), Language Stimulation (e.g., "Parent uses correct grammar and pronunciation"), Physical Environment (e.g., "Outside

play environment appears safe”), Responsivity (e.g., “Parent usually responds verbally to child’s speech”), Academic Stimulation (e.g., “Child is encouraged to learn numbers”), Modeling (e.g., “Parent introduces Visitor to child”), Variety (e.g., “Parent uses complex sentence structure and vocabulary”), and Acceptance (e.g., “Parent does not use physical restraint during visit”). For the current study, both a total score (out of 28) and five of the subscales were used in analyses (Learning Materials, Language Stimulation, Physical Environment, Responsivity and Variety). Subscales are based on 28 possible items; therefore they do not include all of the items originally intended in the construction of the HOME scale. Although this may have some impact on reliability and validity of the scale, using observation items only from the HOME is often done in research where an interview cannot take place (e.g., Trentacosta et al., 2008).

Two trained research assistants completed the HOME inventory during the baseline data collection visit. Information about the child’s environment was recorded in a binary manner by placing a plus (yes, present in the home, coded as 1) or minus (no, not present in the home, coded as 0) next to each of the items utilized. Each of the two research assistants completed the HOME independently and then reviewed codes to come to a consensus on the final coding. The Early Childhood HOME Record Form has been frequently employed and has been used with many diverse groups of children. The HOME Record Form has excellent internal consistency ( $\alpha$ ) and inter-observer agreement ( $\kappa$ ) for all measures, both being above .90 (Caldwell & Bradley, 1984).

**Parental Behavior.** Parenting behavior was assessed using the Parenting Young Children Questionnaire (PARYC; McEachern et al., 2012). A copy of this measure can be found in Appendix B. This measure is a self-report measure and contains 21 items

that describe parenting behaviors. When parents filled out the PARYC questionnaire, they indicated on a 6-point Likert scale how often they participate in each behavior, with a score of 1 indicating “*not all at*” and a score of 6 indicating “*most of the time.*” Three separate subscales are derived from the items on the PARYC, *Support*, *Limit Setting*, and *Proactive* parenting. Seven questions make up the Support subscale, which includes items like, “Notice and praise your child’s good behavior?” The support subscale has been shown to have an internal consistency ( $\alpha$ ) of .78 (McEachern et al., 2012). Seven items make up the Limit Setting subscale, which includes items like, “Explain what you wanted your child to do in clear and simple ways?” The setting limits subscale had an internal consistency ( $\alpha$ ) of .79 (McEachern et al., 2012). The proactive parenting subscale is comprised of seven items, which includes questions like, “Avoid struggles with your child by giving clear choices?” This subscale has been shown to have great internal consistency ( $\alpha$ ) of .85 (McEachern et al., 2012). For analyses in the current study, the three subscales described will be used.

### **Data Analysis**

Statistical analyses were performed using SPSS 20 statistical software (SPSS Inc., 2011). Data was screened for outliers and errors and descriptive analyses were run by using SPSS frequencies. Next, correlational analyses were conducted to examine relationships between variables and examine study hypotheses.

## **Results**

### **Descriptive Statistics**

*Child Reading Interest*

Frequencies were run on the three child reading interest questions in order to obtain means, standard deviations and range values of parent report on these items. Results from these analyses can be seen in Table 2. As can be seen in the table, parents reported that their children had fairly high rates of reading interest for all three items. Eighty-one percent of mothers said their child asks to be read to at least daily, 84% said their child enjoys being read to at least daily, and 77% said the child looks or reads books on their own at least daily. Although these values are quite high, only 46% of mothers reported actually reading to their child daily. Forty-two percent of caregivers reported reading to their child several times a week, 4% reported reading to their child once a week, and 8% reported only reading to their child a couple times a month.

Table 2. Descriptive Statistics for Child Reading Interest

Child asks to be read to	$M = 3.8, SD = .98, \text{Range: } 1-5$
Child enjoys being read to	$M = 4.5, SD = .96, \text{Range: } 2-5$
Child reads books by himself or herself	$M = 3.8, SD = .92, \text{Range: } 1-5$

*Parental Expectations*

Descriptive statistics for the two parent expectation items can be seen in Table 3. All parents also reported very high expectations of their children on the two items assessed, as displayed. Seventy-three percent of parents expected their child to go beyond college and to be an “A” student. In fact, none of the parents thought their child would be less than a “B-” student on average.

Table 3. Descriptive Statistics for Parental Expectations

<p>Years of school expect child to complete</p>	<p>73% Expected beyond college 7.7% Expected a four-year college degree 15.4% Expected high school + some college or trade school 3.8% Expected a high school degree</p>
<p>Average grade expect child to receive</p>	<p>73% Expected an "A" student 3.8% Expected an "A-" student 15.4% Expected a "B+" student 3.8% Expected a "B" student 3.8% Expected a "B-" student</p>

*Home Literacy Environment*

When examining the HOME Record Form, the total score for the 28 items was analyzed for descriptive purposes. Therefore, a participant’s home could score up to 28 points if they met criteria on all items. The higher the score, the more positive the environment was. Results show that total scores for participants’ homes ranged from 5-22 points (mean = 12.8, *SD* = 4.89).

*Parental Behavior*

Frequencies for the parent behavior subscales can be seen in Table 4. Overall, parents rated themselves highly on engaging in positive parenting behaviors. Parents, on average, scored about 5 out of 6 possible points on all parental behavior subscales. This suggests that parents reported exhibiting these positive parenting behaviors “most of the time.”

Table 4. Descriptive Statistics for Parent Behavior

Support	$M = 5.4, SD = .46, \text{Range: } 4.57\text{-}6$
Limit Setting	$M = 5.2, SD = .54, \text{Range: } 4.14\text{-}6$
Proactive Parenting	$M = 5.02, SD = .62, \text{Range: } 3.71\text{-}6$

### Correlation Analyses

Since recruitment and data collection for the larger study is still ongoing, the current study utilizes a small sample size. Because of this limitation to power, significant relations at a  $p$ -value of .10 or better are highlighted throughout the results. Pearson Correlations were run using SPSS 20 (SPSS Inc., 2011). For correlations between dichotomous variables and continuous variables, point biserial correlations were run.

#### *Demographic Correlations*

Prior to hypothesis testing, correlations were run between family demographic variables and reading interest variables. Based on these analyses, significant relationships were found between child age, child gender, and how much the child enjoyed being read to. Mothers reported that the older their child was, the more they enjoyed being read to  $r(25) = .52, p < .01$ . Girls also were reported to enjoy being read to significantly more than boys  $r(25) = .35, p < .10$ .

#### *Parent Expectation Correlations*

It was hypothesized that there would be positive correlations between the parent expectation items and the child interest items. However, no significant correlations were

found, as can be seen in Table 5. Although not statistically significant, many of the relationships had a negative correlation.

Table 5. Correlations between Parent Expectations and Child Interest

	Years of school expected	Average grade expected
Asks to be read to	.11	-.15
Enjoys being read to	-.18	-.20
Reads books by self	.14	-.06

#### *Home Literacy Environment Correlations*

It was hypothesized that the home environment would be significantly related to child reading interest. Correlations were run to test this. As can be seen in Table 6, there were several correlations between home environment total score, subscales and child reading interest. Children with better overall home environments were shown to ask to be read to more often and read on their own more often. The amount of language stimulation in the home was also related to how much the child asks to be read to and reads on their own, with more stimulation relating to more child interest. Responsivity was also significantly related to how often the child read by himself or herself. The variety section of the HOME Record Form was significantly correlated to how much the child enjoys being read to and how often the child reads by themselves. Variety correlated with more reading by oneself, as predicted, but less enjoyment of reading, which was not in the expected direction. Learning materials and physical environment sections of the home showed no significant correlations with child reading interest. Generally, with a few exceptions, most correlations were in the expected direction with better home environments relating to more child literacy interest. Also, many of the

relations were strongest with how much the child asks to be read to and reads on their own. The HOME measure especially related to how often parents reported their child reading by himself or herself.

Table 6. Correlations between the HOME and Child Interest

	Overall HOME	Language Stimulation	Responsivity	Variety	Learning Materials	Physical Environment
Asks	.36 <sup>†</sup>	.42*	.28	.17	.06	.26
Enjoys	.07	-.01	.05	-.37 <sup>†</sup>	.09	.23
Reads by self	.43*	.58**	.39*	.42*	.12	.09

<sup>†</sup>  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$

As a follow up to examining correlations with the total score and subscales, specific home items that indicated having books in the home was looked at separately. These items were part of the learning material subscale, which was found to be unrelated to the child interest items. When specifically looking at the amount of books in the home, no correlations were found between the child reading interest items and this variable. Visitors in the home observed if child had at least 10 children's books and if there were at least 10 books of any kind visible in the apartment or home (Caldwell & Bradley, 1984). It was noted in the data that almost no families met this criteria for books in the home. Only 2 participants had sufficient child books in the home and only 4 participants had enough of any kind of book. This likely contributed to the lack of significant correlation in these analyses.

#### *Parental Behavior Correlations*

It was hypothesized that parenting behavior would relate to child reading interest. Correlations were run to examine these relationships and can be seen in Table 7. There were 2 significant correlations relating parental behavior to child literacy interest items.

Parents who scored higher on levels of support evaluated their child as asking to be read to more often. Likewise, parents who rated themselves as setting more positive limits for their children rated their children as reading books more on their own.

Table 7. Correlations between Parenting Behavior and Child Interest

	Support	Limit Setting	Proactive Parenting
Asks to be read to	.36 <sup>†</sup>	.31	.18
Enjoys being read to	.31	-.08	-.17
Reads books by self	.14	.43*	.28

†  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$

Correlations were also run between parenting behavior and the parent's expectations for the child. A significantly strong positive correlation was found between proactive parenting and the average grade a parent expected their child to receive in school  $r(26) = .62, p < .01$ . Therefore, parents who rated themselves as engaging in more proactive parenting expected their child to do better in school than parents who did not rate themselves as engaging in proactive parenting as often.

### Discussion

The current study adds to the literature examining influences on child literacy interest, distinctively focusing on at-risk populations that are underrepresented in this area of research. The purpose of the study was to determine if parental expectations, the home literacy environment, and parental behaviors influenced child reading interest for preschool age children who were of low socio-economic status, were African American, and were overweight. It was hypothesized that there would be positive correlations between parental expectations, the home literacy environment, parental behaviors, and child reading interest items.

Prior to hypothesis testing, relations between demographic characteristics and study variables were found. It was found that the older the child's age, the more they were rated as enjoying being read to. Children may enjoy being read to more at older ages because they may have gained some initial literacy/cognitive skills that allow them to make sense of the books being read to them and they may have a greater attention span for focusing on books (Berk, 2011). Another explanation is offered by Laakso et al. (2004) that proposed the earlier children are read to, the more interested they are in reading later on. So, literacy interest may grow with age. For example, if a child is read to at age 3, the child may show more literacy interest at age 5 compared to a child who starts being read to at age 5. Therefore, children who are read to at an early age and who have had the opportunity to be exposed to more reading opportunities, possibly because of their older age, may show more literacy interest throughout the years.

Another finding between demographic characteristics and reading interest in the present study was that girls enjoyed being read to more than boys. This finding is consistent with previous literature that has also showed girls being more interested in reading than boys, such as the study by Baroody and Dobbs-Oates (2009). Girls' brains are shown to mature earlier than boys (Gurian & Stevens, 2011). Consequently, often preschool girls display better vocabulary and grammar skills contributing to reading (Gurian & Stevens, 2011). Due to the faster maturation of girls, girls may exhibit increased early reading interest at a younger age than boys. Parents may have assessed girls enjoying being read to more than boys in the current study because of the girls' maturation levels at the preschool age. It would be interesting to study if the girls who

were ranked as having more literacy interest also performed better academically than the boys in the present study.

### **Parental Expectations**

Surprisingly, the current study found no relationship between parental expectations and child literacy interest. Therefore this hypothesis was not supported. There is little past research examining the relationship between parental expectations and child literacy interest. The study by Baroody and Dobbs-Oates (2009) found that there was a significant correlation between the grade the parent expected their child to receive and child literacy interest. However, Baroody and Dobbs-Oates (2009) also did not find a relationship between the level of schooling parents expected their child to complete and reading interest. Therefore, the current study added to research by suggesting that there is not a relationship between how far a parent expects their child to go in school and their child's interest in literacy, at least as measured by a single self-report item for parental expectation. The current study also suggests that more research should be done to determine the link between the grade a parent expects their child to complete and literacy interest. It may be possible that the relationship between grade expectancies and child literacy interest differ in at-risk populations.

Furthermore, the current study raises questions about why a relationship was not found between parental expectations and child literacy interest in the population studied. It is possible that parents over-emphasized their expectations because they wanted to look good or say the right thing on this self-report measure. On the other hand, parents may truly believe that their child will be an "A" student and go to school beyond college. Since the children in the current study were all preschool age, parents may not have been

provided with much feedback about what type of student their child generally is yet. Parents may believe that their child has the potential to be a high academically achieving child, but when the child gets into high school and has had numerous opportunities to receive grades, the parent may notice that their child is more of a “C” student, for example.

It is also possible that the current study and the study by Baroody and Dobbs-Oates (2009) both did not find a relationship between the level of schooling a parent expected their child to obtain and their child’s reading interest because of the wording of the question. The parent report questionnaire utilized in both studies asked “how many years of school do you expect your child to complete” (Baroody & Dobbs-Oates, 2009). Parents could select answers ranging from less than ninth grade to beyond college. Parents may have read the answer of “beyond college” as getting a job after college, instead of going on to graduate or doctoral school like the answer intended on measuring. It seems like these two questions did not measure with enough specificity the expectations of parents. A better scale of measurement may affect future results.

Other possible explanations for there not being a significant relationship between parental expectations and child literacy interest could be that the sample size was small. Yet, when looking at the relationships between the parental expectation items and child literacy interest items in the present study, many of the correlations were negative in direction. For example, although not significant, the results show that parents expected higher grades for children that they rated as having less reading interest, particularly when looking at the item that asked how much the child enjoys being read to. There was also a negative relationship between how much the child enjoys being read to and the

amount of school the parent expects the child to complete. It may be possible that if parents hold too high of expectations or put too much pressure on their children, negative outcomes may arise, such as a decreased interest in reading.

A study by Castro and Rice (2003) studied the relationship between perfectionism and ethnicity. Parent expectations were examined as a cause of perfectionism. Castro and Rice (2003) found that African American and Asian American students rated their parents holding higher expectations of them than Caucasian students. Students who reported their parents holding higher expectations of them were more at risk of experiencing symptoms of depression (Castro & Rice, 2003). Parents who also had more criticizing behaviors had students more at risk for depression (Castro & Rice, 2003).

Even though African American students rated their parents as having higher expectations than Caucasian students, they did not rate their parents as displaying excessive criticism (Castro & Rice, 2003). Therefore, African American students may not be at as high of a risk for depression or other symptoms of psychological distress (Castro & Rice, 2003). Yet, the study by Castro and Rice (2003) found that African American students reported having lower grade point averages compared to Asian American and Caucasian students. Therefore, African American students seem to be at an even higher risk for the negative impacts of perfectionism and self-doubt on academic achievement (Castro & Rice, 2003). Castro and Rice (2003) offer the explanation that when students do not meet their parents' high expectations they may feel guilty and to avoid feeling guilty they may strive for perfectionism. It was found that academic achievement was related more to perfectionism in minority groups (Castro & Rice, 2003).

Since the current study examined a minority population that is shown in the literature to have parents holding higher expectations, these children may be at a higher risk of maladaptive outcomes if parental expectations are high and the child displays perfectionism and self-doubt. Therefore, children in the present study may display less interest in reading if they have parents that hold too high of expectations of them, possibly because they are afraid to fail or have given up trying to meet their parent's expectations. However, more research must be done examining the relationship between high parental expectations and child reading interest at a young age.

### **Home Literacy Environment**

The results of the present study did show some support for the hypothesis that the home literacy environment would be related to child reading interest. Results revealed numerous significant positive correlations between these variables. The overall score of the HOME, Language Stimulation subscale, Responsivity subscale, and Variety subscale being positively correlated to child reading interest is consistent with work by Yeo et al. (2014). Yeo et al. (2014) stated that the home literacy environment was positively related to a child's reading interest and motivation. The current study showed a similar relationship, with the overall home environment being positively correlated to how often a child asked to be read to and how often a child read on their own. The current study expands on the research of the home environment, suggesting that specific factors of the home environment, such as language stimulation, may relate to certain aspects of child literacy interest. In the current study, Variety was negatively related to the child being rated as enjoying being read to. This was unexpected and inconsistent with the positive

relation this subscale showed with the child reading on their own. Understanding the nature of this relation will require further investigation.

Several studies show that book exposure as part of a child's home literacy environment is positively correlated with child reading interest and skills related to reading (e.g. Hood, Conlon, & Andrews, 2008; McQuillan & Au, 2001; Senechal, 2009). However, no significant correlations between the amount of books in the home and child reading interest were found in the present sample. When further examining what may be the cause of the lack of correlation, it was discovered that almost no families had sufficient learning materials, like books in the home, present when the initial home visit observation took place. The researchers at the home visit only observed 2 families that had the sufficient amount of children's books and only 4 families out of the 26 participants that had 10 or more books visible in their home. The lack of books in the home raises concerns for the at-risk population examined. It may be possible that lack of reading material in the home contributes to the poorer reading achievement outcomes noted in the literature. For example, Chatterji (2006) noted that families of lower socio-economic statuses may not provide sufficiently stimulating environments for their children, which can cause children from low socio-economic statuses to perform lower in reading when compared to children from higher statuses. So, it was not possible to properly investigate the effects of the presence of books in this sample because too little variability on this variable existed. In a larger sample, sufficient numbers of families with books may have emerged and allow for better evaluation of this hypothesis. The descriptive data here still raises important questions and highlights important community needs. It is likely that this lack of books relates to children's reading achievement later in

school. Interventions and policy efforts may want to focus on providing low-income families with books for their home in order to reduce reading gaps and possibly enhance interest in reading.

### **Parental Behavior**

Results from the current study revealed that positive parent behaviors were related to more child literacy interest. This supported study hypotheses. Relatively little research has been conducted examining how parent behaviors relate to literacy interest. It is well established in the literature that increased positive parenting is related to better academic outcomes for children. However, the current study adds to the literature by demonstrating that increased positive parenting behaviors, especially support and limit setting, are related to child literacy interest items. Therefore, it is possible that positive parenting leads to better reading skills later because of the child's interest in literacy early on. In the present study, parental support was related to how much the child asked to be read to and parental limit setting was related to how often the child read books on their own.

In addition to testing study hypotheses, the parenting technique of proactive parenting was found to be related to the average grade the parent expected their child to receive in school. So, parents who displayed more positive parenting held more optimistic views about how their child would perform in school. This finding seems to clarify a link between parental expectations and parental behaviors hinted at in the literature on child academic achievement (e.g. Brennan et al., 2013; Martini & Senechal, 2012). For example, Brennan et al. (2013) states that parents who display more positive parenting skills may prepare their children better for school. Likewise, Martini and

Senechal (2012) note that parents who hold high expectations for their children spend more time teaching their children at home compared to parents with lower expectations. Hence, it seems that parents with more proactive and positive styles of parenting prepare their children better academically, which may lead to these parents holding higher expectations for their children to perform in school. Parents who are not as positive may not teach their children as often. Therefore, these parents may not expect their child to do as well as parents who do take time to teach their children outside of school.

### **Limitations and Strengths**

There are several limitations in the present study that should be noted. First, because data for the current study was taken from an ongoing study that was not yet complete, there was a small sample size. If the study had a larger sample size, it would have more power to detect significant relationships and more sophisticated analysis of the data could occur. In addition, the study only sampled at-risk populations. On one hand this is a strength of the study since research with at-risk populations is needed. However, the very specific nature of the sample also makes the study findings hard to generalize. A second limitation is that the study was correlational. Therefore, directionality and causality cannot be determined from the current study. Establishing clear cause and effect relationships cannot be done. A third limitation of the study was that it used self-report measures for all study variables except the home observation. Since parents filled out surveys about their expectations, behaviors, and their child's interest in literacy, over-reporting of positive qualities could have taken place. Observations of these measures would strengthen the results of the study. Lastly, the present study only examined a few

variables relating to child literacy interest. More variables may influence how interested a child is in reading besides the variables examined in the current study.

Despite these limitations, the current study contributes valuable information needed in the literature. Multiple correlations were found, which leads to some insights into what affects early reading interest in an at-risk population. The current study used an observational measure for examining the home environment, which had significant correlations to the child literacy interest outcome. Furthermore, correlations were found between parental behaviors measured and child literacy interest. These findings expand on the literature because not many studies have used observational measures or examined a link between parental behaviors and reading interest.

### **Implications for Interventions and Policy**

In attempts to close reading gaps, intervention and policy changes need to occur. This study focuses on children who may be at risk of less developed literacy skills and therefore offers valuable insights into areas where family improvements and interventions might be beneficial. Many of the homes the children were living in did not have sufficient learning materials, which is likely to contribute to low-income students performing less well academically than students of higher statuses. Therefore, interventions may need to be put in place to ensure that all school children have learning materials in their home, such as books. Also, since parental behaviors were related to child reading interest, it may be important to educate parents about the effects their parenting styles can have on their children's interests. While more research needs to be done on the topic of child reading interest, it seems that children interested in literacy

have positive outcomes. Therefore, more policies should be put in place to encourage children's interest in literacy, especially in at-risk populations.

### **Directions for Future Research**

There are numerous directions that future research on the topic of child literacy interest could go. Future directions for the current study would include increasing the sample size and determining if any of the measures used could be improved. Other directions would be running regression analyses to better determine unique predictors of child literacy interest. In addition, other more advanced forms of analyses would be recommended. Future research should include examining other variables that may influence child literacy interest. Also, determining the directionality of relationships may be important for later research. Moreover, studying the link between child reading interest and academic achievement is a relationship notable of researching.

### **Conclusions**

In summary, the current study added to the research on child literacy interest. Some findings the present study note are that parental expectations may not influence child literacy interest. Yet, many aspects of a child's home environment may play crucial roles in reading interest. Parental behavior also was found to influence child literacy interest. While more research needs to be done, interventions and policy efforts should be put in place for at-risk populations studied to increase reading interest and possible academic outcomes.

## References

- Azurmendi, A., Braza, F., Sorozabal, A., Garcia, A., Braza, P., Carreras, M.R., Munoz, J.M., Cardas, J., & Sanchez-Martin, S. (2005). Cognitive abilities, androgen levels, and body mass index in 5-year-old children. *Hormones and Behavior* 48, 187-195.
- Baroody, A.E., & Dobbs-Oates, J. (2011). Child and parent characteristics, parental expectations, and child behaviours related to preschool children's interest in literacy. *Early Child Development and Care* 181(3), 345-359.
- Berk, L.E. (2011). *Infants and Children: Prenatal Through Middle Childhood*. Boston, MA: Pearson.
- Bracken, S.S., & Fischel, J.E. (2008). Family Reading Behavior and Early Literacy Skills in Preschool Children From Low-Income Backgrounds. *Early Education and Development* 19(1), 45-67.
- Brennan, L.M., Shelleby, E.C., Shaw, D.S., Gardner, F., Dishion, T.J., & Wilson, M. (2013). Indirect Effects of the Family Check-Up on School-Age Academic Achievement Through Improvements in Parenting in Early Childhood. *Journal of Educational Psychology* 105(3), 762-773.
- Caldwell, B.M., & Bradley, R.H. (1984). *Administration Manual: Home Observation for Measurement of the Environment*. University of Arkansas at Little Rock.

- Castro, J.R., & Rice, K.G. (2003). Perfectionism and ethnicity: Implications for depressive symptoms and self-reported academic achievement. *Cultural Diversity and Ethnic Minority Psychology* 9(1), 64-78.
- Charity, A. H., Scarborough, H.S., & Griffin, D.M. (2004). Familiarity With School English in African American Children and Its Relation to Early Reading Achievement. *Child Development* 75(5), 1340-1356.
- Chatterji, M. (2006). Reading Achievement Gaps, Correlates, and Moderators of Early Reading Achievement: Evidence From the Early Childhood Longitudinal Study (ECLS) Kindergarten to First Grade Sample. *Journal of Educational Psychology* 98(3), 489-507.
- Clark, D., Slate, J.R., & Viglietti, G.C. (2009). Children's Weight and Academic Performance in Elementary School: Cause for Concern? *Analyses of Social Issues and Public Policy* 9(1), 185-204.
- Davis-Kean, P.E. (2005). The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. *Journal of Family Psychology* 19(2), 294-304.
- Davison, K.K. & Birch, L.L. (2001). Weight Status, Parent Reaction, and Self-Concept in Five-Year-Old Girls. *Pediatrics* 107(1), 46-53. doi: 10.1542/peds.107.1.46
- Elder, B.N. (2004). *Early Predictors of Emergent and Conventional Literacy Skills: A Longitudinal Investigation*. (Doctoral dissertation). Retrieved from PsychINFO. (3171873)

- Englund, M.M., Luckner, A.E., Whaley, G.J.L., & Egeland, B. (2004). Children's Achievement in Early Elementary School: Longitudinal Effects of Parental Involvement, Expectations, and Quality of Assistance. *Journal of Educational Psychology* 96(4), 723-730.
- Gurian, M. & Stevens, K. (2011). How the Brain Learns: Inherent Differences Between Boys and Girls, *Boys and Girls Learn Differently! A Guide for Teachers and Parents* (13-42). San Francisco, CA: Jossey-Bass.
- Hood, M., Conlon, E., & Andrews, G. (2008). Preschool Home Literacy Practices and Children's Literacy Development: A Longitudinal Analysis. *Journal of Educational Psychology* 100(2), 252-271.
- Hoover-Dempsey, K.V. & Sandler, H.M. (1997). Why Do Parents Become Involved in Their Children's Education? *Review of Educational Research* 67(1), 3-42.
- Im-Bolter, N., Zadeh, Z.Y., & Ling, D. (2013). Early parenting beliefs and academic achievement: the mediating role of language. *Early Child Development and Care* 183(12), 1811-1826.
- Krukowski, R.A., West, D.S., Perez, A.P., Bursac, Z., Phillips, M.M., & Raczynski, J.M. (2009). Overweight children, weight-based teasing and academic performance. *International Journal of Pediatric Obesity* 4(4), 274-280.
- Laakso, M.L., Poikkeus, A.M., Eklund, K., & Lyytinen, P. (2004). Interest in early shared reading: Its relation to later language and letter knowledge in children with and without risk for reading difficulties. *First Language* 24(3), 323-345.

- Li, Y., Dai, Q., Jackson, J.C., & Zhang, J. (2008). Overweight Is Associated With Decreased Cognitive Functioning Among School-age Children and Adolescents. *Obesity 16*, 1809-1815.
- Martini, F., & Senechal, M. (2012). Learning Literacy Skills at Home: Parent Teaching, Expectations, and Child Interest. *Canadian Journal of Behavioural Science 44*(3), 210-221.
- McEachern, A.D., Dishion, T.J., Weaver, C.M., Shaw, D.S., Wilson, M.N., & Gardner, F. (2012). Parenting Young Children (PARYC): Validation of a Self-Report Parenting Measure. *J Child Fam Stud. 21*(3), 498-511.
- McQuillan, J., & Au, J. (2001). The Effect of Print Access on Reading Frequency. *Reading Psychology 22*(3), 225-248.
- Merton, R.K. (1948). The Self-Fulfilling Prophecy. *The Antioch Review 8*(2), 193-210.
- Pagan, S.L. (2010). *Children Reading for Pleasure: Investigating Predictors of Reading Achievement and the Efficacy of a Paired-Reading Intervention to Foster Children's Literacy Skills*. (Doctoral dissertation). Retrieved from PsychINFO.
- Phillips, B.M., & Lonigan, C.J. (2009). Variations in the Home Literacy Environment of Preschool Children: A Cluster Analytic Approach. *Scientific Studies of Reading 13*(2), 146-174.
- Qi, C.H., Kaiser, A.P., Milan, S., & Hancock, T. (2006). Language Performance of Low-Income African American and European American Preschool Children on the PPVT-III. *Language, Speech, and Hearing Services in Schools 37*, 5-16.

- Senechal, M. (2009). Testing the Home Literacy Model: Parent Involvement in Kindergarten Is Differentially Related to Grade 4 Reading Comprehension, Fluency, Spelling, and Reading for Pleasure. *Scientific Studies of Reading* 10(1), 59-87.
- Simpkins, S.D., Weiss, H.B., McCartney, K., Kreider, H.M., & Dearing, E. (2009). Mother – Child Relationship as a Moderator of the Relation Between Family Educational Involvement and Child Achievement. *Parenting: Science and Practice* 6(1), 49-57.
- SPSS 20.0 [Computer Software]. (2011). Chicago, IL: SPSS, Inc.
- Trentacosta, C.J., Hyde, L.W., Shaw, D.S., Dishion, T.J., Gardner, F., & Wilson, M. (2008). The relations among cumulative risk, parenting, and behavior problems during early childhood. *Journal of Child Psychology and Psychiatry* 49(11), 1211-1219. doi: 10.1111/j.1469-7610.2008.01941.x
- van Duijvenvoorde, A.C.K., Zanolie, K., Rombouts, S.A.R.B., Raijmakers, M.E.J., & Crone, E.A. (2008). Evaluating the Negative or Valuing the Positive? Neural Mechanisms Supporting Feedback-Based Learning across Development. *The Journal of Neuroscience* 28(38), 9495-9503.
- Weigel, D.J., Martin, S.S., Bennett, K.K. (2006). Contributions of the home literacy environment to preschool-aged children's emerging literacy and language skills. *Early Child Development and Care* 176(3-4), 357-378.

- Wu, F., & Qi, S. (2006). Longitudinal Effects of Parenting on Children's Academic Achievement in African American Families. *The Journal of Negro Education* 75(3), 415-429.
- Yaden, D.B., Rowe, D.W., & MacGillivray, L. (2000). Emergent Literacy: A Matter (Polyphony) of Perspectives. In: M.L. Kamil and P.B. Mosenthal (Eds.), *Handbook of Reading Research Vol. III* (pp. 425-454). Mahwah, NJ: Lawrence Erlbaum Associates.
- Yeo, L.S., Ong, W.W., & Ng, C.M. (2014). The Home Literacy Environment and Preschool Children's Reading Skills and Interest. *Early Education and Development* 25(6), 791-814.



## Appendix B

**Parenting Young Children (PARYC) Measure:**

**Please rate how often you were able to engage in each of the following parenting strategies on a scale from 1 (not at all) to 6 (most of the time) during the last month.**

## Supporting good behavior

1. Play with your child in a way that was fun for both of you?
2. Stand back and let your child work through problems s/he might be able to solve?
3. Invite your child to play a game with you or share an enjoyable activity?
4. Notice and praise your child's good behavior?
5. Teach your child new skills?
6. Involve your child in household chores?
7. Reward your child when s/he did something well or showed a new skill?

## Setting limits

1. Stick to your rules and not change your mind?
2. Speak calmly with your child when you were upset with him or her?
3. Explain what you wanted your child to do in clear and simple ways?
4. Tell your child what you wanted him or her to do rather than tell him/her to stop doing something?
5. Tell your child how you expected him or her to behave?
6. Set rules on your child's problem behavior that you were willing/able to enforce?
7. Make sure your child followed the rules you set all or most of the time?

## Proactive parenting

1. Avoid struggles with your child by giving clear choices?
2. Warn your child before a change of activity was required?
3. Plan ways to prevent problem behavior?
4. Give reasons for your requests?
5. Make a game out of everyday tasks so your child followed through?
6. Break a task into small steps?
7. Prepare your child for a challenging situation?