## Academic Reading Attitudes and Performance as a Function of Gender

by

### Robert Bradley Cook

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama December 8, 2012

Copyright 2012 by Robert Bradley Cook

## Approved by

Jill Salisbury-Glennon, Chair, Associate Professor of Educational Foundations,
Leadership and Technology
Lynne Patrick, Associate Clinical Professor of Educational Foundations,
Leadership and Technology
Paris Strom, Professor of Educational Foundations, Leadership and Technology
Libba McMillan, Assistant Professor of Nursing

#### Abstract

Childhood reading levels are important predictors of later childhood academic success. A child's reading ability and reading attitude is a strong indicator of future academic success and lifelong reading (Kush & Watkins, 1996; Wigfield & Guthrie, 1997). There is a strong correlation between a child's reading attitude and their actual reading ability (Cunningham, 2008). Closing the gaps in reading between certain demographics has been a key focus for educational leaders, both locally and nationally for years. In this study, the reading gap focus is between genders.

Females have consistently outperformed males in reading from before kindergarten (McClelland, Morrison, & Holmes, 2000) until graduation. Female children have higher reading levels and far greater learning style scores than boys when they enter schools (McClelland, Morrison, & Holmes, 2000). Males fall further behind their female schoolmates as each year progresses. A study by Madhabi Chatterji (2006) at Columbia University found that males were behind females when they entered kindergarten by -0.168 Standard Deviation (SD) units. At the end of first grade, the gap had grown to -0.313 SD units. These numbers were determined after controlling for poverty and ethnicity (Chatterji, 2006).

Educational leaders need to foster a climate of reading acceptance at school. Some ways to accomplish this is to provide a learning environment filled with reading role models. Posters depicting popular students, parents, community members reading books should be placed in schools. Communications with the student body should contain references to reading. Schools

should include opportunities for students to participate in clubs or activities that provide a positive reading climate. Schools should maintain large quantities of reading materials that include all student reading levels and interests. Teachers should be given professional development and instructed on how to provide interesting and relevant reading opportunities for their students. Texts that were traditionally explored in English classes could be reevaluated for relevance and interest. This should be done on both the local and the State levels.

Parents need to be educated on the benefits of reading as well. Parents are able to educate their children about reading well before they enter school, whether it be from modeling or reading aloud to their children. Parents need to understand the importance of reading in all academic areas. Schools should attempt to build more community conscience about reading. Schools should also take the opportunity to educate the community on the benefits of reading. These reading initiatives can be obtained with school outreach. School libraries can open doors to parents who need reading or technology resources but cannot afford them. School leaders can coordinate opportunities for community leaders and school personnel to appear in low socioeconomic areas to promote reading.

#### Acknowledgements

This has been a journey in which I owe acknowledgement and appreciation to many people. I would first like to thank my committee: Dr. Jill Salisbury-Glennon, Dr. Lynne Patrick, and Dr. Paris Strom. You have each helped either through guidance or support. I appreciate all you have done for me throughout this process.

During my doctoral degree, I have been exposed to many peers and professors that have helped shape my thought process to be a more effective instructional leader. Thank you Dr. Ellen Reames and Dr. Lisa Kensler. You, along with others, have provided me a wealth of knowledge that will help me to grow great teachers, create positive learning environments, and shape young minds. Dr. Keisha Brackins, thank you for showing me the way. It was important to have a cohort member like you that I could lean on for information and laugh with to keep from crying.

Thank you to all of those who told me that I could do this, even when I did not believe it myself. A special thanks in this category is due to a professor, and friend, from my Bachelors degree, Dr. Terry Ley. You always believed in me. I am forever indebted to you Dr. Ley.

I owe the greatest debt of gratitude to my loving family. Without their love and support, this dissertation would not have been written. Wherever this journey has led me, there has always been a strong woman behind me. Thank you to that strong woman, my wife, Genesee, and my daughters, Emilee, Sydnee, and Marlee for putting up with me during this process. I love you. It hasn't been easy for any of us, but we made it. We have all earned this degree.

## Table of Contents

Abstract	ii
Acknowledgments	iii
List of Tables	viii
List of Figures	ix
Chapter I: Introduction	1
Statement of the Problem	1
Purpose of the Study	4
Significance of the Problem	5
Research Questions and Hypotheses	5
Definition of Terms	6
Assumptions	7
Limitations and Delimitations	7
Chapter II: Review of Literature	8
Introduction	8
The Effects of Early Reading Ability on Later Academic Achievement as a Function of Gender	9
Positive Motivational Processes which Influence Reading Attitudes	13
The Effects of Self-Efficacy on Reading Achievement	14
Differences in the Reading Achievement of Boys and Girls	15
Factors that Influence Early Reading Attitudes	22

Parental Effects on Early Literacy Development	22
Teacher, Classroom, and Curriculum Effects on Early Literacy Development	24
Peer Effects on Early Literacy Development	27
The Effects of Availability of Literary Resources	28
Brining it all Together: The Effects of Early Reading Ability on Academic Success	30
Programs Being Utilized to Address the Gender Gap in Reading Achievement	32
The Necessity for Further Research into the Effects of Early Reading Ability on Later Academic Achievement Amongst Males in the United States	35
Summary and Conclusions	36
Chapter III: Methodology	38
Introduction	38
Study Design	39
Population and Sample	40
Instrumentation	40
Materials and Procedures	41
Scoring	42
Research Questions	42
Chapter IV: Results	44
Overview	44
Data Screening and Check for Missing Data	44
Normality Test	47
Factorial ANOVA	49
ANOVA for Recreational Reading	49
ANOVA for Academic Reading	53

ANOVA for Total Reading	57
Discussion	61
Chapter V: Summary, Conclusions, and Recommendations	63
Introduction	63
Study Procedures	65
Interpretations and Conclusions	66
Discussion	69
Future Research	69
Conclusion	70
References	72
Appendix 1: Parental Permission Form	78
Appendix 2: Survey Instrument	80

## List of Tables

Table 1.	Type of Reading by Gender	. 45
Table 2.	Type of Reading by Grade	. 46
Table 3.	Test of Normality (Reading Scores by Grade)	. 48
Table 4.	Test of Normality (Reading Scores by Gender)	. 49
Table 5.	Descriptive Statistics of Between-Subjects Factors	. 50
Table 6.	Descriptive Statistics of Dependent Variable: Recreational	. 50
Table 7.	Levene's Test of Equality of Error Variances for Dependent Variable: Recreational	. 52
Table 8.	Tests of Between-Subjects Effects for Dependent Variable: Recreational	. 53
Table 9.	Descriptive Statistics for Dependent Variable: Academic	. 54
Table 10.	Levene's Test of Equality of Error Variances for Dependent Variable: Academic .	. 55
Table 11.	Tests of Between-Subject Effects – Academic	. 52
Table 12.	Descriptive Statistics for Dependent Variable: Total	. 58
Table 13.	Levene's Test of Equality of Error Variances <sup>a</sup> for Dependent Variable: Total	. 59
Table 14.	Levene's Test of Equality of Error Variances – Total	. 54
Table 15.	Tests of Between-Subject Effects – Total.	. 55
Table 16.	Estimated Marginal Means of Total	. 56

# List of Figures

Figure 1.	Academic Marginal Means by Grade and Gender	57
Figure 2.	Total Marginal Means by Grade and Gender	61

#### CHAPTER I: INTRODUCTION

#### **Statement of the Problem**

The reading gender gap is a current and persistent issue with a history of panic and controversy (Connell, 1996; Weaver-Hightower, 2003). Female students have long been the gender that has had to fight for equality in education. There has been much light shed on the gaps between females and males in science and math since the feminist movement began. And this light has brought about much change in education and has closed the gaps in science and math. However, the shift of the focus to the struggling female students has caused many males to cry foul.

A movement in the 1960s attempted to shift the focus back to the struggling male student. Many in the United States protested that the use of mostly female teachers was choking out the "boy culture." And boys were being denied their "reading rights" due to the feminine elementary education they were being provided. In Detroit in 1991 a proposal to assign some public schools as boys-only was halted just before it was enacted (Connell, 1996).

Arguments from both sides have been heated throughout the decades. Men have long cited the fact that they experience earlier deaths, higher incarcerations, and higher injury rates as being reasons for being the disadvantaged sex. Women have focused on "eating disorders, depression, self-esteem drops, and even self-mutilation" (Weaver-Hightower, 2003, p. 471) as evidence to being the disadvantaged sex. In education, males have long contended that they experience higher drop-out rates, higher special education populations, and higher discipline

levels (Connell, 1996); females have cited that they are "called on less often by teachers, show score and enrollment gaps in math and science, and receive fewer and lower-quality comments from teachers" (Weaver-Hightower, 2003, p. 471). The voices for equality in education have helped in providing focus on gender issues and educational change.

One issue, however, seems resilient to change: male reading attitude and achievement.

Females have consistently outperformed males in reading from before kindergarten (McClelland, Morrison, & Holmes, 2000) until graduation. Female children have higher reading levels and far greater learning style scores than boys when they enter schools (McClelland, Morrison, & Holmes, 2000). The reading gap between genders only widens over time. A study by Madhabi Chatterji (2006) at Columbia University found that males were behind females when they entered kindergarten by -0.168 Standard Deviation (SD) units. At the end of first grade, the gap had grown to -0.313 SD units. These numbers were determined after controlling for poverty and ethnicity (Chatterji, 2006).

The gender gap in reading is not only an issue in the United States. The International Association for the Evaluation of Educational Achievement (IEA) conducted gender gap research in 32 countries. The IEA found that females maintained higher performance in all modes of literary samples. The only exceptions to this consistent pattern was in expository tasks in which 28% of countries found boys exceeding the levels of girls, and in workplace literacy tasks in which 56% of countries found boys exceeding the levels of girls (Kerachsky, 2010).

Male reading difficulties, or alienation from reading, could come from many various sources of influence. Parental influence has been found to be a key factor in reading motivation. Reading support by parents relates to school interest and competence (Ahmed et al., 2010). As the child sees the parent as the reading role model (Meece, Glienke, & Askew, 2009), the child

relates the activity of reading to a positive experience (Cunningham, 2008). Shared reading activities, whether story time or participation in normal routines, provides a foundation for reading development and relevance for the child (Neuman & Gallagher, 1994).

Another factor that relates to reading motivation may come from parents or peers. The way that reading is viewed as a gendered activity could provide some of the strongest influence on the male reader. Research has provided evidence "that both mother's and father's perceptions of their children's abilities influence how children perceived their own abilities, even after controlling for difference in children's achievement" (Meece, Glienke, & Askew, 2009, p. 419). If parents perceive activities with gender stereotypes, then boys will perceive their own abilities in reading with the same gender bias. And peers may be the strongest influence of all in regards to the activity stereotype. This is the group that children spend the most time with each day (Ladd, Herald-Brown, & Kochel, 2009). Common responses to interview prompts about reading included reading conflicts with social goals, friends don't read frequently, and peers are not proficient readers (Guthrie & Coddington, 2009). Peer support of reading, however, has been linked to a higher intrinsic value and a higher self-concept (Ahmed et al., 2010).

Teachers have also been found to create a higher intrinsic value and self-concept with reading (Ahmed et al., 2010) if presented effectively. If reading is gauged solely on how fast a student can read or how many mistakes a student makes, then there is little being done to create a positive reading attitude (Kush & Watkins, 1996). Many researchers have proposed that reading attitude may be linked to the teacher gender. Little research has been shown to support these claims (Sokal et al., 2009).

Research has suggested that the curriculum itself may provide advantages in reading to females. The elementary classroom environment has been shown to provide more of the "needs,

interests, and skill levels" (Meece, Glienke, & Askew, 2009, p. 421) of the girls. This research suggests that reading activities, assignments, and interests are more suited for females in the elementary setting (Meece, Glienke, & Askew, 2009).

The availability of reading material of interest, whether at school or at home, has been shown to provide an increase of positive attitudes toward reading (Kush & Watkins, 1996).

Boys have been shown to not identify with the literature being taught at school (Smith & Wilhelm, 2004). Males and females have been found to have very different reading interests (Clark, Torsi, & Strong, 2005). Determining a male's reading interest is vital when analyzing and nurturing reading attitude and motivation.

The availability of interesting books at home has been found to have a strong impact as well. In a study of 15-year-olds in 43 countries, the research provided evidence that children with more books at home scored significantly higher than those with fewer books at home. In addition, gender, reading enjoyment, and number of books at home all had positive effects in almost every country studied (Chui & McBride-Chang, 2006).

## **Purpose of the Study**

The purpose of this study is to examine the current reading attitudes among early male students and provide a correlation between the reading attitude and academic performance. The reading achievement gap has persisted over the years. Awareness and focus on learning styles has helped close gaps between students in many areas, but the gap between males and females in reading has not decreased. This study sets out to discover current gender gaps in reading and the correlation to academic success.

## **Significance of the Problem**

A child's reading ability and reading attitude is a strong indicator of future academic success and lifelong reading (Kush & Watkins, 1996; Wigfield & Guthrie, 1997). There is a strong correlation between a child's reading attitude and their actual reading ability (Cunningham, 2008). The data and analysis from the Cunningham and Stanovich (1997) research provides evidence of early childhood predictors of reading success in adolescence. They found that there is a link between "1st-grade reading-cognitive measures and the 11th-grade outcomes" (p. 942). The first indicator evidenced is the "speed of initial reading acquisition...is at least moderately related to reading comprehension, vocabulary, and general knowledge in Grade 11" (p. 942). It also determined that if a student gets a quick start on reading and the acquisition of reading, then they are more likely to connect to and engage in later reading activities regardless of their 11<sup>th</sup> grade reading comprehension level. It was also determined that print exposure through the years predicts reading comprehension growth from elementary school and beyond (Cunningham & Stanovich, 1997). This research evidences a correlation between elementary school reading success and later reading engagement and comprehension. This engagement and comprehension of texts translates to other subject area achievement and possibly the likelihood of dropping out of school. All of these factors discussed can be predictors for a child's success in reading achievement and in turn, his success in school overall.

## **Research Questions and Hypotheses**

The research questions were as follows:

- 1. Are boys less likely than girls to have a positive reading attitude?
- 2. Are boys less likely to enjoy academic reading than girls?

- 3. Does the difference in reading attitude between males and females increase from grades 1 to 6?
- 4. Will the male students who have low reading attitudes also have low academic performance?

It was hypothesized that:

- Reading attitude gaps would be significant between genders in grades 1–6 in academic reading, recreational reading, and overall reading with females maintaining a higher reading attitude.
- 2. Reading attitude gaps would increase between genders over the elementary grades of 1–6 with females having a higher reading attitude.
- 3. Negative reading attitudes in males would correlate to poor academic marks on report cards in all academic areas, particularly reading based subjects.
- 4. Negative reading attitudes in males would correlate to poor State standards testing scores in reading.

#### **Definition of Terms**

**Reading Attitude** – The affect that reading has on the individual (Baker & Wigfield, 1999).

**Reading Interest** – "A characteristic of the person or of the text. Interest relates to text comprehension and other important reading outcomes" (Baker & Wigfield, 1999).

**Reading Literacy** – The ability to achieve one's goals, increase one's knowledge and aptitude, and effectively participate in society through using, understanding, and reflecting on texts (Chiu & McBride-Chang, 2006).

**Reading Self-Efficacy** – An individual's belief that they can achieve in reading (Baker & Wigfield, 1999).

## Assumptions

- 1. The sample studied was representative of the total population of students in grades 1 through 6 in the school district.
- 2. The participants in the study understood all questions posed to them.
- 3. All participants understood how to rate themselves.
- 4. All participants answered openly and honestly.
- Survey administrators effectively conveyed the survey directions and monitored participants.

#### **Limitations and Delimitations**

- 1. The study was limited to one elementary school in the Southeast.
- 2. The study was limited to one self-report instrument to assess reading attitude.
- 3. The study was limited to only those students that returned proper parent permission forms.
- 4. The survey was provided at the end of the school year which may reflect a different attitude result as opposed to beginning or mid-year.
- 5. The survey was only administered once during the school year.

#### CHAPTER II: LITERATURE REVIEW

#### Introduction

As children mature, the reading expectation shifts from an emphasis on decoding to fluency to content understanding and comprehension. The development of successful reading strategies necessitates a shift from learning to read to reading to learn. Eventually, as the child matures, content knowledge from reading is expected in every subject and more expectations are placed on the individual learner for success. "Within schooling, reading is self-evidently the pathway for success in English, science, history, geography, health, math, and the arts, and a predictive of high school completion" (Guthrie & Coddington, 2009, p. 503). Thus, reading comprehension is critical to successful academic achievement in all subjects.

Strong readers in elementary schools feel a sense of competency. This competency drives the desire to read. The more that a child reads, the better the reader that they become. The poor reader does not connect with readings, will not desire to engage in reading activities, and therefore will not become a proficient reader. This has been referred to as the Matthew Effect (Gower, 2010). If the student does not feel a sense of competency with reading, then s/he will not become a skilled enough reader to excel in later subject content. This research suggests that the poor reading skills of elementary students will later manifest themselves into poor fluency and comprehension skills as they mature through middle and high school and thus may significantly increase the chances of their dropping out of high school. Data from research by Cunningham and Stanovich (1997) found that "an early start in reading is important in predicting

a lifetime of literacy experience – and this is true regardless of the level of reading comprehension ability that the individual eventually attains" (Cunningham & Stanovich, 1997, p. 941).

# The Effects of Early Reading Ability on Later Academic Achievement as a Function of Gender

Many authors argue that the male gender is in crisis, particularly when it comes to academics. Many reports have stated that the male gender has been left behind in gender gap closing initiatives. Gaps have decreased between genders in math and science, but the reading gap remains consistent. Research has shown that females outperform males overall in both elementary and secondary levels. Females also have more academic honors and higher class rankings (Meece, Glienke, & Askew, 2009). Therefore, it is critical to analyze the reading levels of male students particularly at younger ages. Further, necessary strategy interventions and support must be implemented while these learners are young and in the early stages of their reading development.

It is important to note that this problem is not just a crisis in the United States.

Researchers from all over the world have conducted studies in an effort to draw correlations between academic attitudes and gender (Lever-Chain, 2008). Countries such as Australia, Belgium, Sweden, Germany (Younger & Warrington, 2005), and England have all conducted research studies in an effort to investigate why males consistently fall short of the success that females have with reading and writing. Research has shown that as the age increases, the gaps between reading proficiency and reading attitude increases between genders (Gower, 2010).

Therefore, it is vitally important to connect boys with positive reading experiences early on in

their childhood in order to create later connectivity with reading for pleasure and academic pursuits, and to create lifelong readers and learners.

A study by Katz and Sokal (2003) entitled Masculine literacy: One size does not fit all, found that 24% of second grade boys thought that reading was an activity that was for girls. This perspective was also shown in the study by the National Literacy Trust (NLT). The NLT found that boys who did not enjoy reading were more likely to perceive reading as a girl activity (Clark, Torsi, & Strong, 2005). If boys regard reading as a feminine activity, then most boys will want to disassociate themselves from the activity.

A study of national tests administered in England since 2000 shows a consistent disparity in reading and writing scores between boys and girls. The percentage of boys scoring a level two on the National Curriculum test in England was 81% in 2004 as compared to 89% of girls with only a moderate increase for both genders from the year 2000. There was decrease in writing scores over the five year period for both boys and girls with boys reporting 76% over the level two mark and 87% of girls. Level four scores maintained a similar difference with boys reporting a 79% in reading and 56% in writing in 2004. In 2004, girls reported 87% in reading and 71% in writing. In contrast, math and science percentages for level four have steadily improved year after year and the level of performance between genders is similar (Younger & Warrington, 2005).

In this same study, girls were found to make strong achievement gains in areas commonly found to be male dominated: Math, Science, Physical Education, and both Design and Information Technology. In comparison, boys failed to make similar gains in subjects thought to be female dominated such as English Language, Foreign Language, and Humanities. Data from the National Curriculum subjects tested provided evidence of girls out-performing boys in every

area at all levels of grading categories, with the exception of math at the highest level (Younger & Warrington, 2005). Research from the United States, England, and Australia has suggested that boys are less likely than girls to read for leisure or for academics as they grow into their teenage years (Love & Hamston, 2003). The issue of boys' connectivity with reading remains an international problem. Boys become increasingly disengaged from reading with each year in age. Girls consistently outperform boys in all reading categories. This relationship between boys and reading achievement is later reflected in data relating to drop-out rate and college admission rate. Boys are on average a year and a half behind girls in reading level. Girls are also enrolling in college at a higher rate. Today, approximately three million more girls than boys are entering colleges and universities (Gower, 2010).

Boys are more likely to drop out of school than girls (Kush & Watkins, 1996; Sokal et al., 2004). Research by Swanson (2002) has shown that 38% of boys leave school early. In comparison, 28% of girls leave school early (Swanson, 2002). Research has shown that the more time that a child spends engaged in reading, the better his/her academic achievement. A study by Guthrie et al (2000) examined reading in elementary schools in Maryland. Every school district in Maryland was extended an invitation to become involved in the research. A total of 33 elementary schools from three districts chose to take part in the study. All K–6 instructors in these schools were asked to fill out a questionnaire. The questionnaire included the following categories: "basal emphasis," "books and resources," "comprehension instruction," "integrated reading, writing and content," "social collaboration," and "writing" (Guthrie et al., 2000, p. 216). The results showed a strong correlation between the amounts of time spent reading and the academic achievement. Further, this research showed that it is important not only to spend time with reading, but that the reading needs to be purposeful and enjoyable as well.

Cunningham and Stanovich (1997) also demonstrated that early reading achievement was correlated to later academic success. This research studied 56 first graders. This sample was administered a reading program involving a "basal series," "phonics program with a workbook," and "a spelling and writing program developed by their teachers" (Cunningham & Stanovich, 1997, p. 936). The first graders were then administered the Peabody Picture Vocabulary Test (PPVT) and the Raven's Coloured Progressive Matrices. The students were also administered the Gates-MacGinitie Reading Tests (Form 2, Primary Level A) and the Wide Range Achievement Test (WRAT). Ten years later, this same sample was given the Comprehension portion of the Nelson-Denny Reading Test (Form F). The participants were also given the PPVT (Form L) as a group. The eleventh graders in this study were given the Raven's Advanced Progressive Matrices and the Author Recognition Test (ART). The ART is designed to check student's knowledge of authors of popular texts. The sample was also given the Magazine Recognition Test (MRT) which is similar in concept with the ART. The Activity Preference Questionnaire was also administered to the sample. The next set of tests given to the eleventh grade sample focused on general knowledge. These tests included the Cultural Literacy Test (CLT) Form A, 20 questions from the NAEP, and a Culture and Knowledge Checklist (CKC) (Cunningham & Stanovich, 1997). The results of extensive statistical analyses provided evidence that early childhood predictors of reading success were significant contributors to reading achievement in adolescence. They found that there is a link between "1st-grade readingcognitive measures and the 11<sup>th</sup>-grade outcomes" (Cunningham & Stanovich, 1997, p. 942). The first indicator evidenced was the "speed of initial reading acquisition...is at least moderately related to reading comprehension, vocabulary, and general knowledge in Grade 11" (Cunningham & Stanovich, 1997, p. 942). It was also determined that if a student gets a quick

engage in later reading activities regardless of their 11<sup>th</sup> grade reading comprehension level. It was further determined that print exposure through the years predicts reading comprehension growth from elementary school and beyond (Cunningham & Stanovich, 1997). This research evidences a correlation between elementary school reading success and later reading engagement and comprehension and suggests that the prediction of student achievement can be made early on in the educational process. In conclusion, the aforementioned research has demonstrated that child's reading ability and reading attitude is a strong indicator of future academic success and lifelong reading (Kush & Watkins, 1996; Wigfield & Guthrie, 1997). Further, the results of this research strongly suggest that early reading achievement is critical to later academic success throughout middle school and high school. It is also important to note that this research also demonstrated that there still remains a blatant disparity among the reading achievement of males and females.

#### Positive Motivational Processes for Reading which Influence Reading Attitudes

Research has suggested multiple processes which contribute to both positive and negative reading association and achievement. One of the processes is referred to as intrinsic motivation. Intrinsic motivation is the desire to engage in or complete a task for the satisfaction of the engagement in the task itself. Students who find intrinsic motivation in reading read for the internal satisfaction of reading. There are no external rewards attached to intrinsic motivation. The reward comes from self-satisfaction in the completion of the reading. Intrinsic motivation has been linked to positive reading achievement in students (Guthrie & Coddington, 2009).

Another positive process is the autonomy of reading. Autonomy of reading refers to the choice that a student has in selecting the reading material. This provides the student with a sense

of control of the direction in their reading. Studies have shown that the more autonomy that a student feels towards reading, the more positive a student's achievement in reading. Students also become more engaged in the classroom as an indirect result of this autonomy (Guthrie & Coddington, 2009).

### The Effects of Self-Efficacy on Reading Achievement

An early predictor of reading success is self-efficacy. This is the belief that one has in their ability to successfully complete a task. Children will use their past experience with the same or a similar task to create an individual judgment of their self-efficacy (Gower, 2010). This process of reading self-efficacy begins early on for a boy. Boys' reading struggles often begin at home. Parental reading time with children, media's representation of gender roles, and peer interactions in the neighborhood all serve to help create an awareness of which activities are "appropriate" for boys and which ones are for girls. A study by Stott, Green, and Francis (1983) found that boys enter school with a significantly lower learning style score than the girls. It also determined that girls entered school with a significantly higher reading level than boys (McClelland, Morrison, & Holmes, 2000).

Boys have been found to take an interest in and to demonstrate motivation in activities in which they are competent and excel. Further, boys reject or avoid activities in which they feel incompetent (Smith & Wilhelm, 2004). Boys are more likely to struggle in subjects which rely on print-based material as the primary mode of content transmission (Love & Hamston, 2003). Boys must be able to "first feel, connect with, and interact with a text before they can dissect that text" (Gower, 2010). If boys do not feel competent in reading skills early on, then they will continue to reject reading. This will affect later success in subjects relying on reading and they will struggle to connect and interact with any text.

## **Differences in the Reading Achievement of Boys and Girls**

Reading motivation is a multifaceted issue (Kush & Watkins, 1996; Wigfield & Guthrie, 1997). Prior research into the gender differences in reading motivation have found that girls have a higher reading self-efficacy and value the activity more overall (Baker & Wigfield, 1999). Prior research has suggested many possible factors that contribute to this gender achievement gap. These factors include: differences in brain development, the rejection of authority, prior academic achievement by boys, different goals and attitudes, the social nature of girls, the increased maturity and strategies employed by girls, and differing interactions with the instructor based on gender (Younger & Warrington, 2005).

A study by Stott, Green, and Francis (1983) found that boys enter school with a significantly lower learning style score than the girls. It was also determined that girls entered school with a significantly higher reading level than boys. A study conducted by McClelland, Morrison, and Holmes (2000) used 540 children ages 4 years, 10 months to 5 years 11 months. Of the 540 children, 82 were chosen based on their low work-related skills. These students were then compared with the larger sample based on several "child, family, and sociocultural factors" (McClelland, Morrison, & Holmes, 2000, p. 312). The Cooper-Farran Behavioral Ratings Scales (CFBRS) were used. A background questionnaire was filled out by the parents to gauge variables such as "ethnicity, gender, intellectual functioning, health, maternal and paternal occupation, preschool experience, and school entrance age" (McClelland, Morrison, Holmes, 2000, p. 313). With the questionnaire, a "home literacy environment score" (McClelland, Morrison, Holmes, 2000, p. 313) was created for analysis. To measure intelligence, the short version of the Stanford-Binet Intelligence Scale–Revised was given. This test scored students on such factors as "comprehension, vocabulary, sentence memory, and pattern analysis"

(McClelland, Morrison, & Holmes, 2000, p. 314). The general information, math, and reading recognition subscales of the Peabody Individual Achievement Test–Revised (PIAT-R) were used. To measure the student's vocabulary skills, the Peabody Picture Vocabulary Test–Revised (PPVT-R) was used. The final measure used was an alphabet recognition test. The researchers tested the students in the fall of their kindergarten year and in the spring of their second grade year. The results of this research supported prior research findings that boys have lower work-related skills than girls at this early age (McClelland, Morrison, & Holmes, 2000).

The Program for International Student Assessment (PISA) identifies reading literacy as the ability to achieve one's goals, increase one's knowledge and aptitude, and effectively participate in society through using, understanding, and reflecting on texts (Chiu & McBride-Chang, 2006). Studies of gender difference have shown consistent gaps between boys and girls in reading in all levels of K–12 education. PISA's 2009 study showed that females in the United States scored higher on average than males. The gap is not unique to the United States. Females scored higher on average in all 65 countries and school systems surveyed in the PISA study (Kerachsky, 2010). The International Association for the Evaluation of Educational Achievement (IEA) studied reading achievement in 32 countries. In this study, girls outperformed boys in all modes of literacy samples with the exceptions of expository tasks in which 28% of the countries reported boys outperforming girls and workplace literacy tasks in which 56% of the countries reported higher scores in boys (Kerachsky, 2010).

The Educational Testing Service (ETS) in the United States reported that girls are six times farther ahead of boys in reading than boys are ahead of girls in math. The National Assessment of Educational Progress (NAEP) has shown that the gap between genders has been longstanding. The NAEP provided evidence of the gap in 1996 when it showed that girls

maintained a 25 point gap over boys in reading on a 500 point scale. Other research has shown that boys with low reading scores continued to struggle and decline with literacy. Research has also shown that the gap between boys and girls in reading achievement continues to grow throughout the K–12 school years (Smith & Wilhelm, 2004).

In a study of 2,296 kindergarten and first grade students from 184 schools, a reading gap was revealed between girls and boys. The students were screened and those who were repeating a grade level were omitted from the study. Of the 2,296 students, 49% were males, 66% were White, and 12% of the sample was African American. The group analyzed was a subset of the Early Childhood Longitudinal Study which conducted research on kindergartners through 1<sup>st</sup> grade. The boys in this study were -.168 SD behind the girls upon entry to kindergarten. The gap grew to -.313 in the first grade. This study also controlled for ethnicity and poverty (Chatterji, 2008). In line with prior research, the findings of this study demonstrated that boys were more extrinsically motivated, while girls were found to be more intrinsically motivated in regards to reading. Children with higher intrinsic motivation are known to read a wider range of books more frequently than those with extrinsic motivation (Wigfield & Guthrie, 1997).

A study by Baker and Wigfield (1999) found strong gaps between genders in regards to various aspects of reading motivation. The study analyzed data from a sample of 371 fifth and sixth graders from six elementary schools. Of this sample, 192 were girls and 178 were boys. This sample was comprised of 140 fifth graders and 230 sixth graders. The students were given the Motivation for Reading Questionnaire (MRQ) containing 54 questions. The questions were used to analyze the 11 different areas of reading motivation determined by the researchers: Self-efficacy, challenge, work avoidance, curiosity, involvement, importance, recognition, grades, competition, social, and compliance. The results of the MRQ provided evidence of gender

difference in all categories except competition and work avoidance. In the categories of self-efficacy, challenge, curiosity, involvement, importance, recognition, grades, social, and compliance, females demonstrated a significantly higher mean score than the males (Baker & Wigfield, 1999).

In a study by Kush and Watkins (1996), girls were found to have a more positive attitude toward reading than boys. The study included 190 students in grades 1–4 in a middle-class southwestern, suburban school district. The participants included 94% White, 4% Hispanic, 1% Black, and 1% Asian students. The Elementary Reading Attitude Survey (ERAS) was used to rate the reading attitudes of the students. The ERAS is a 20 item questionnaire that asks a brief question about reading and then has the student use a Garfield the Cat comic strip to rate their feelings. The study used these items to analyze recreational reading attitude and academic reading attitude. The ERAS was given to students in the fall of 1990 and again in the spring of 1993. This study concluded that girls maintained more positive attitudes toward reading as opposed to boys. This was found to be most prevalent in reading done outside of the school (Kush & Watkins, 1996).

A study by the National Literacy Trust analyzed reading attitude using a nine question survey from 1,512 pupils from various levels of schooling. This study indicated that girls enjoyed reading at a significantly higher rate than boys (Clark, Torsi, & Strong, 2005). Reading requires motivation because it is an activity that requires individual effort. Children can choose to read or not to read. A child's motivation to read is determined by his or her reading attitude (Baker & Wigfield, 1999). Reading attitude has been defined as the feelings one relates to the activity of reading and how those feelings inspire one to move toward or to avoid the situation (Cunningham, 2008). One with a positive reading attitude would be described as "a literate

person (child, adolescent or adult) is not only one who can read but one who chooses to read and who has established a habit of reading" (Lever-Chain, 2008). "The motivational consequences of reading attitudes are that children with more positive attitudes are more motivated to read" (Baker & Wigfield, 1999). A recent PIRL study indicated a positive correlation between boys' reading attitudes and their reading achievement (Lever-Chain, 2008). Based on the definitions of reading attitude and its correlation to reading achievement, it is important to examine all possible factors that determine a boy's reading attitude.

There has been little research conducted that has analyzed the reading attitudes of young boys. This may be because young children's attitudes are often unstable (Lever-Chain, 2008). It is important, however, to tap into the thoughts of young people to determine ways in which educators may better serve the needs of the students. These young children are participants in the educational process and deserve to have a voice (Lever-Chain, 2008).

Students with a higher level of reading proficiency tend to have a more positive attitude toward reading. A study by the National Literacy Trust to analyze reading enjoyment, proficiency and attitude concluded that girls were significantly more likely to believe themselves to be good readers. The study used a nine question survey of 1,512 pupils from kindergarten to high school to analyze gender differences in attitude toward reading. They found that boys were more likely to think of reading as boring and that books of interest were difficult to locate. Boys were also found to read only in a school setting. Boys, more so than girls, felt as though reading was an activity in which girls become engaged (Clark, Torsi, & Strong, 2005).

A study of five-year-old boys in England provided a voice for the young, male reader. A sample of 60 boys was chosen. These boys were randomly selected from 18 schools throughout six local education authorities (LEAs). Of the 60 boys, 29 had at least one term of pre-school

and 31 had no schooling experience. All of the boys selected were between 4 years and nine months old to 5 years and one month old when the study began. Boys who were identified with special needs were excluded from the study. The Photographic Reading Attitude Instrument (PRAI) was used to gather qualitative data on the students. The PRAI contains 15 photographs and four drawings, 16 of which depict boys their ages engaged in reading. Three of the pictures depicted boys engaged in activities that were not reading related. In addition to this data, the researchers also conducted interviews with the boys individually for up to 20 minutes. During this time, the boys were allowed to respond to open-ended questions that were generated from the boys' responses to photographs. These interviews were informal and conversational. Results from the PRAI indicated that children of this age are able to make discernible choices for reading attitude. Approximately half of the students surveyed responded with negative and/or neutral attitudes toward reading (Lever-Chain, 2008).

From the results of this study, the researchers took 15% of the top scoring respondents and 15% of the low scoring respondents and analyzed their interview transcripts. This analysis provided the inclination that boys with positive feelings toward reading have more openness toward reading and less predetermined bias. Of these nine boys with positive feelings toward reading, three could not recall a favorite book. Two years later, these same three boys had lost their positive attitude toward reading. The other boys that were able to identify a favorite book title still maintained a positive attitude toward reading. "These vivid experiences with specific books seemed to lay the foundation for positive and lasting reading attitudes among a small group of boys." The study also provided insight into reading attitude based on early entry into school. One group had previous experience in a pre-school setting while another group did not have any formal educational experience. The study showed that many young boys that enter into

pre-school begin to formulate a negative reading attitude due to the activity being mandatory and not of interest. From this, the boys enter into 1<sup>st</sup> grade with a set negative attitude that disregards reading as an activity for enjoyment. The research, therefore, suggests that boys that enter directly into 1<sup>st</sup> grade from nursery school are still open to the activity as one of pleasure (Lever-Chain, 2008).

It is important to note that there is also research that opposes the findings of the aforementioned study. Research by Cunningham (2008) analyzed five and six year-olds for their reading attitude. The purpose of her study was to ensure that early age children would be provided a benefit from early reading involvement and later involvement in classroom instruction. Cunningham studied 201 students from 11 magnet schools in a large, urban, Midwestern school setting. The study included 104 girls and 97 boys. Of the participants, 61.6% were Black, 28.8% were White, 3.9% were Hispanic, 2.9% were Asian, and 2.4% were Other. Of the 201 students, 73% qualified for free or reduced lunch. Kindergarten teachers or reading coaches administered the Student Attitudes Toward Reading and Writing Survey to children in groups of two or three. This survey asks four questions: How do you feel when someone reads to you? How do you feel about writing a message or story? How do you feel about sharing a book with a friend? How do you feel about sharing your writing with a friend? Children are then provided four faces to choose from: a very happy face, a smiley face, a neutral face, and a sad or frown face. Her data revealed a negligible difference between gender and attitude. Independent T-tests were used which revealed no significant differences (Cunningham, 2008). There are several limitations which could account for the lack of significance. The limited test of gender attitudes did not address how a child feels about reading a book on their own. The influence of the different test administrators could have influenced the findings. The

test was also administered during the first week of school which could have influenced the children to not respond negatively.

#### **Factors that Influence Early Reading Attitudes**

### **Parental Effects on Early Literacy Development**

Research has evidenced that parental support in reading is strongly related to student competence and school interest (Ahmed et al., 2010). A child's literary development begins at home. Additionally, parents are crucial literacy role models (Meece, Glienke, & Askew, 2009). Literacy development in children centers on the parent-child interaction in the activity, not necessarily the reading of the book itself. This development usually takes the form of storybook reading to the children; however, development can also be attained through normal routines at home (Cunningham, 2008), such as paying bills or making grocery lists. These shared experiences with print garners a foundation for reading development and its relevance to the child (Neuman & Gallagher, 1994).

Many parents do not recognize forms of reading other than the common forms, such as a novels or newspapers. However, boys engage more readily with text involving communication or information in an electronic form. Due to boys rejecting the more accepted forms of leisure reading, both parents and teachers label the boys as 'reluctant readers' (Love & Hamston, 2003). Boys form a negative reading attitude if they feel like reading is a compulsory activity. Boys feel more positively engaged with books when the parent is reading with them as opposed to being forced to read alone or to the parent (Lever-Chain, 2008). The attitudes of children toward academics are shown to be more positive with parent engagement with reading and the child prior to beginning school. They also become more positive when parents maintain positive attitudes in reading (Kush & Watkins, 1996).

In a study by the National Literacy Trust, boys and girls of all school levels were surveyed about who taught them to read. The choices in the survey were mother, father, grandparent, sibling, friend, teacher, librarian, teaching assistant, older boy/girl, younger boy/girl, other adult male, and other adult female. Both boys and girls responded highest to mothers teaching them to read. Boys responded with a distant next with their father and then their teacher (Clark, Torsi, & Strong, 2005). This relationship with reading and the mother could be a factor in why boys relate reading with a feminine activity.

When these same children were asked about who they would prefer as a reading partner between mother, father, grandparent, friends, teacher, teaching assistant, librarian, younger boy/girl, older boy/girl, other adult female, and other adult male, more girls than boys chose their mother and more boys than girls chose their fathers. However, both sexes had higher percentages of choosing their mother over their father. Around 68% of boys and 76% of girls would like to read with their mothers. In comparison, 53% of boys would like to read with their fathers while 48% of girls would prefer their fathers (Clark, Torsi, & Strong, 2005). A qualitative study by Hamston and Love (2005) revealed that when fathers are asked about reading with their sons, their replies are incomplete or unresponsive. This further indicates that more research needs to be done on father/son relationships with reading (Hamston & Love, 2005).

Another factor in a boy's perception of reading being a gendered activity may come from the parental perception of the activity as well. Research has shown that a parent's belief in stereotypes such as males excel in mathematics shape the parents belief in their child's ability (Jacobs & Eccles, 1992). Fathers have shown a greater belief in their son's ability in mastering mathematics as compared with their daughters. According to the research, fathers typically feel

as though their daughters need to work harder in mathematics than their sons. "Research has also shown that both mother's and father's perceptions of their children's abilities influence how children perceived their own abilities, even after controlling for difference in children's achievement" (Meece, Glienke, & Askew, 2009, p. 419),

Parental support and involvement in the early learning years also plays a significant role in a child's confidence. In research by Dearing, McCartney, Weiss, Kreider, and Simpkins (2004), it was found that the amount of involvement by the parent during kindergarten directly influence the child's confidence with literacy. And the support and modeling provided prior to kindergarten is equally important for gaining confidence in the early years of literacy. Girls enter school with stronger reading skills than boys and the literacy gap between genders widens throughout elementary school (Meece, Glienke, & Askew, 2009). The more prior reading experiences boys have, the more engaged and motivated they will be to continue to read (Kush & Watkins, 1996). A lack of early literacy skills have been correlated to dropping out of school (Meece, Glienke, & Askew, 2009).

## Teacher, Classroom, and Curriculum Effects on Early Literacy Development

Studies have provided evidence showing that support from teachers can greatly improve a student's self-concept and intrinsic value of reading (Ahmed et al., 2010). Teacher assessment of a student's reading attitude is often not accurate and is assessed by how fast the student can read. Teachers identify reading attitude as being important, but do very little to develop a positive attitude (Kush & Watkins, 1996).

A small study conducted by Sokal and Katz (2004) found that gender did not have a negative effect on the male students' success or their attitude. This study began with twenty-one children in first and second grades in an inner-city school in Winnipeg and randomly placed boys

with a male or female reading partner. The reading partner met with each boy twice a week for 22 weeks. The books were provided based on the research of male literary interest. At the end of this study, the boys responded that reading was a masculine or gender neutral activity. It also found that the reading level increases were not determined by the reading partner's gender. However, there were many factors which may have tainted the accuracy of this study. The study was limited to twenty-one children from one school. This small sample may not be an accurate representation of the population. In addition, these boys chose to take part in this study which may have shown their positive attitude with reading prior to the study and have created a bias due to self-selection. And finally, the overt nature of the questions asked may have clued the boys into what responses may be more favorable for the study (Sokal & Katz, 2004).

Later, Sokal and Katz (2004) teamed up with Thiem and Crampton to analyze the reading tutor's gender and how it affects struggling boy readers' impressions on reading. The analysis involved 180 third and fourth grade students from 12 Winnipeg schools. Of these schools, 76 percent were located in the city and 24 percent were not. The sample consisted of 87 third graders and 93 fourth graders. All of the boys in the study had female teachers in 2004 and 2005. The Alberta Diagnostic Reading Program (ADRP) was administered to the sample of struggling male readers. The boys were also administered the Gendered Activities Q-sort. This test was administered in order to find what gender the boys perceived as being related to reading. The Gendered Activities Q-sort provides pictures of nine activities which do not depict a boy or girl being involved. The tutors first built relationships with the boys and then administered the RSPS, the ADRP, and the Gendered Activities Q-sort. The results of this study provided evidence that the gender of the reading coach "was not a significant variable for boys who

perceived reading as feminine or for boys who did not" (Sokal et al., 2009, p. 12). There is a need for more research for male modeling's impact on boy's literacy achievement.

Some countries feel so strongly about male teachers as role models for the disengaged boys that they are amending anti-discrimination laws to allow preference for male teachers.

Australia began offering "male only" scholarships for men considering the educational field. In Canada, schools began soliciting for more male teachers in the early education levels in Ontario (Sokal & Katz, 2004).

Elementary classrooms and environments may also be a contributing factor to low male reading achievement. Elementary school teachers tend to favor behaviors that include "cooperative, conforming, respectful, and orderly" (Meece, Glienke, & Askew, 2009, p. 421). Elementary teachers are far less favorable of students that are "assertive, independent, and difficult to manage" (p. 421). Teachers, therefore, are more likely to be comforting and supportive to the female student since females are more likely to exhibit favorable behaviors (Meece, Glienke, & Askew, 2009).

In addition to the influence from the teacher, research has found that the curriculum itself is a strong factor in literacy development for boys. Research has provided evidence that "suggests that the learning environment of elementary classrooms may favor girls more than boys" because it fits the "needs, interests, and skill levels" (p. 421) of girls more than boys (Meece, Glienke, & Askew, 2009). This research suggests that activities, assignments, and interests in the elementary setting are more suited for the interests of the female student, "particularly in literacy" (Meece, Glienke, & Askew, 2009, p. 421).

#### **Peer Effects on Early Literacy Development**

It can be argued that peers are the most powerful influence on school engagement than any other group, including teachers and parents. And this argument makes sense when the time that a child spends with certain groups is examined (Ladd, Herald-Brown, & Kochel, 2009). A child spends the majority of the day at school around children of the same age. In addition to the time spent at school with peers, today's technology makes it even easier to stay in contact with their school-aged peers.

Peer support of reading has been linked to an intrinsic value and a higher self-concept (Ahmed et al., 2010). Peer rejection has been linked to poor attitudes toward school, avoiding school, and lack of performance in school (Ladd, Herald-Brown, & Kochel, 2009). In interviews about reading attitudes, students frequently responded with responses like reading conflicts with social goals, friends don't read frequently, and their peers are not proficient readers (Guthrie & Coddington, 2009). The sharing of books and experiences with others fosters a more positive attitude for both boys and girls (Kush & Watkins, 1996). However, reading with friends has also been shown to be one of the least enjoyable environments to read a book for both boys and girls (Clark, Torsi, & Strong, 2005).

The study of 460 University of California at Berkeley students concluded that females recalled experiencing greater peer support and autonomy, whereas males recall experiencing more confidence in their ability to achieve. Many studies have supported this finding that males tend to adhere to images of dominance, assertiveness, and competency (Wigfield & Eccles, 2002).

Many studies have provided evidence to show that boys link reading with activities related to females (Clark, Torsi, & Strong, 2005; Katz & Sokal, 2003). This is important since

children are most likely to want to emulate other children of the same age and gender (Ladd, Herald-Brown, & Kochel, 2009). Findings have also shown that the imitation of peer goals, attitudes, and behaviors impact school engagement either positively or negatively. A negative peer attitude toward academics will most likely produce a negative self-attitude toward academics. This attitude will then decrease academic achievement and academic value for the student (Ladd, Herald-Brown, & Kochel, 2009).

## The Effects of Availability of Literary Resources

The availability of texts to read has a direct impact on the reading opportunities of the children. The availability of reading materials has shown an increase in positive attitudes for boys and girls (Kush & Watkins, 1996). Further, extended exposure to texts provides for a stronger early reading development and achievement (Chui & McBride-Chang, 2006). A study by Feitelson and Goldstein (1986) found that neighborhoods with higher numbers of available books maintained a greater number of children with higher reading scores (Chiu & McBride-Chang, 2006).

Determining boys' reading interests is important when analyzing reading attitude and motivation. A child's reading interest can be defined as "a characteristic of the person or of the text. Interest relates to text comprehension and other important reading outcomes" (Baker & Wigfield, 1999). Boys are more likely to be interested in reading from websites, newspapers, closed captioning, joke books, graphic novels, comics, annuals, and manuals as opposed to magazines, non-fiction, fiction, text messages, emails, poetry, plays, catalogues, song lyrics, and posters (Clark, Torsi, & Strong, 2005). A common theme of concern that came from the Smith and Wilhelm (2004) research was how boys did not identify with the literature being taught at school. Boys stated that the literature had too many hidden meanings or that they had little

experience with the subject of the literature. In addition, boys stated that they felt little teacher support with grasping the literature (Smith & Wilhelm, 2004). Boys resist reading in subjects where they feel there is no pragmatic function (Love & Hamston, 2003).

If a boy does read fictional material, their interests are starkly different than a girl's interests. Boys tend to enjoy science fiction, comedy, crime, sports, war, and spy books more frequently than girls. Girls tend to enjoy literature about adventure, horror/ghost, romance, animal, teenage fiction, and poetry more than boys. A much larger percentage of boys are opposed to fiction altogether (Clark, Torsi, & Strong, 2005). It is important to find the different forms of recreational reading material and what demands it places on the reader (Love & Hamston, 2003).

The non-fictional material that boys enjoy more than girls involves encyclopedias, travel, sports, history, science, computing, hobbies and manuals. The areas of highest interest, in order, involve computing/games, sports, hobbies, and music books. Girls' survey data showed a higher interest than boys in books involving celebrities, autobiographies, fashion, how-to books, cookbooks, and music (Clark, Torsi, & Strong, 2005).

In addition to identifying books of interest for males, the books need to be available. In a study by Chiu and McBride-Chang (2006), it was found that reading achievement is influenced by availability of books at home. The research involved 199,097 15-year-olds from 43 different countries. The 15-year-olds and their principals were asked by the Organization for Economic Cooperation and Development's Program for International Student Assessment (OECD-PISA) to fill out questionnaires in the year 2000. In addition to the 30–40 minute questionnaire, the students were also asked to fill out a two-hour assessment booklet. The results of this study showed that children with more books at home scored substantially higher than those with fewer

books at home. In addition, gender, reading enjoyment, and number of books at home all had positive effects in almost every country studied (Chui & McBride-Chang, 2006).

## Bringing it all Together: The Effects of Early Reading Ability on Academic Success

Strong readers in elementary schools feel a sense of competency. This competency drives their desire to read. The more that a child reads, the better the reader they become. The poor reader does not connect with reading, will not desire to engage in reading activities, and therefore will not become proficient readers. This has been referred to as the Matthew Effect (Gower, 2010). If the student does not feel a competency in reading, then they will not become skilled enough readers to excel in subject content. Dropping out is associated with lower levels of achievement in reading and numeracy. This association is stronger for boys than it is for girls (House of Representatives, 2002). The argument made with this research is that the reading attitudes of male elementary students declines during the elementary school years, therefore further widening the reading achievement gap between genders.

Early reading skills build to more proficient and competent reading ability. This ability then translates to competency in other academic areas. Early competency also helps in creating readers for pleasure. The students that read for pleasure improve their ability at an even greater rate. They are also able to learn about the world and life experiences of others by engaging in external reading – external referring to reading outside of the school. Students are able to relate more to discussions in the classroom and to more of the world outside of the classroom. Others have stated that external readers are able to relate more relevant information to the classroom. In other words, they are able to make greater connections to material being taught based on their prior reading knowledge (Gower, 2010).

Reading self-efficacy is critical to reading achievement. This is the belief that one has in their ability to successfully complete a task. Children will use their past experience with the same or similar task to create self-efficacy (Gower, 2010). This process of assessing reading self-efficacy begins early on for a boy. A boy will begin to develop his reading self-efficacy at home. A boy will experience competency in reading with parental support and exposure. Boys' struggles will be compounded when they begin school without the support for reading at home.

Home is also where the child begins to associate stereotyping and value to reading. Parental reading time with children, media's representation of gender roles, and peer interactions in the neighborhood creates an awareness of what activities are for boys and which ones are for girls and what activities are valued by family and peers. A study by Stott, Green, and Francis (1983) found that boys enter school with a significantly lower learning style score than the girls. This study also determined that girls entered school with a significantly higher reading level than boys (McClelland, Morrison, & Holmes, 2000).

A child's reading ability and reading attitude is a strong indicator of future academic success and lifelong reading (Kush & Watkins, 1996; Wigfield & Guthrie, 1997). There is a strong correlation between a child's reading attitude and their actual reading ability (Cunningham, 2008). If the student develops a negative reading attitude early on, then it will affect their reading ability early. Research by Cunningham and Stanovich (1997) states that children can recover from low reading levels experienced in the first grade by third or even fifth grade (Cunningham & Stanovich, 1997). But the later that a child experiences negative reading attitude and competency, then the less likely he will recover to build a positive relationship with reading. In addition, the gap in reading between boys and girls widens as they become older (Meece, Glienke, & Askew, 2009). This would indicate that either more boys develop negative

attitudes over time or that the reading levels of boys with negative attitudes falls at a much larger rate.

The data and analysis from the Cunningham and Stanovich (1997) research provides evidence of early childhood predictors of reading success in adolescence. They found that there is a link between "1st-grade reading-cognitive measures and the 11th-grade outcomes" (p. 942). The first indicator evidenced is the "speed of initial reading acquisition...is at least moderately related to reading comprehension, vocabulary, and general knowledge in Grade 11" (p. 942). It also determined that if a student gets a quick start on reading and the acquisition of reading, then they are more likely to connect to and engage in later reading activities regardless of their 11th grade reading comprehension level. It was also determined that print exposure through the years predicts reading comprehension growth from elementary school and beyond (Cunningham & Stanovich, 1997). This research evidences a correlation between elementary school reading success and later reading engagement and comprehension. This engagement and comprehension of texts translates to other subject area achievement and possibly the likelihood of dropping out of school. All of these factors discussed can be predictors for a child's success in reading achievement and in turn, his success in school overall.

## Programs Being Utilized to Address the Gender Gap in Reading Achievement

There is an international movement to decrease the reading achievement gap between the genders. None seems stronger than the Parliament of the Commonwealth of Australia's movement to address the concerns of males and underachievement, specifically in reading. The Committee included teacher professional development in gender learning styles, parental education for how to help their children learn, and integrated reading techniques as areas to improve the education of boys in the early stages (The House of Representatives, 2002).

The study put together from the Parliament also included practices that work for boys. These strategies began with creating positive relationships between teachers and students in which trust and communication is utilized. The study also provided strategies from numerous researchers that included teacher professional development for literacy support, early identification and intervention for struggling readers, structured lessons in which the activities change and challenge the students, emphasis on teacher led instruction, clear objectives, detailed and simple instructions, challenging tasks with numerous activity changes, goal setting with students on a regular basis, positive reinforcements for improved work, effort, and behavior programs designed for "differentiated personal and social development" (p. 80), and employment experiences that help students learn about their role in the work force (The House of Representatives, 2002). It is important to note that these strategies would most likely be effective for students of both genders.

There are many effective practices and programs in the United States that were designed to keep students in school. In New Jersey, the graduation rate was 84.8% in 2006. New Jersey uses many programs that target at-risk students. One of those strategies is "The Governor's Prevention Strategy for Safe Streets & Neighborhoods" (Coe et al., 2010, p. 5). This program utilizes the Office of the Attorney General in promoting cooperation and coordination between all youth and family servicing programs, as well as increasing the focus on evidenced-based programs and strategies. This program includes a focus on training at-risk teens for the workforce and increasing truancy reduction programs (Coe et al., 2010).

Another program in New Jersey is "The New Jersey High School Graduation Campaign, Forging New Jersey's Cradle to College & Workforce Pipeline for All Children" (Coe et al., 2010, p. 5). This program includes creating strong relationships between the adults and the

students in the school and the community, increasing engagement with the family, creating safe and encouraging classrooms, creating approaches based on individual needs, increasing accountability and incentives for keeping students in school, focusing on a 100% graduation rate, using technology to support teachers and teaching as well as the students and families, using data to qualify positive results, creating community and school leaders, providing a wide range of training, building strong relationships between the schools and the communities, strengthening the process from beginning to end, and creating a variety of options for the students that include innovative practices (Coe et al., 2010).

In Minnesota, the average graduation rate in 2006 was 86.2%. In Minnesota, they use the "Minnesota Department of Education Dropout Prevention Initiative: Dropout Prevention Strategies and Programming" (Coe et al., 2010, p. 11). The strategies utilized in this initiative include increasing collaboration between the school and the community, providing professional development, creating safe and conducive learning environments, engaging families in the educational process, accommodating for individual learning, developing literacy, providing mentors and tutors, utilizing after-school resources, using service learning, and providing alternative school (Coe et al., 2010).

Over the past five decades, males have maintained a higher dropout percentage than females. In 2005, 58.1% of all people between the ages of 16 and 24 without a high school diploma or its equivalent were males even though males only accounted for 50.5% of the population. During this same year, males had a dropout rate of 10.8% and females had a dropout rate of 8.0%. This accounted for over 2 million males that were dropouts ages 16 to 24 during 2005. The females in the same age group in 2005 accounted for over 1.4 million (http://www.childtrendsdatabank.org/pdf/1\_PDF.pdf, 2011).

# The Necessity for Further Research into the Effects of Early Reading Ability on Later Academic Achievement Amongst Males in the United States

Intensive research has been conducted in several English speaking countries including England, Australia, and Canada. But there is less national attention to this issue in the United States. Therefore, there remains a paucity of research into the early reading challenges experienced by males in the United States.

Further, the ratio of boys placed in learning disability programs as compared to girls is 3:1. Boys show a larger sense of alienation with school and are the largest group in all categories of those students labeled as emotionally disturbed (Kush & Watkins, 1996). Boys are 11 percent more likely to be viewed by their teachers as disruptive (Dee, 2007). The majority of the students who maintain low averages, fail classes, and eventually drop out are boys (Sokal et al., 2004). Boys are more likely to repeat a grade and are less likely to attend college (Dee, 2006). Poor reading skills can be a strong predictor of social exclusion as an adult. Further, testing scores and educational attainment level can also be a strong predictor of social exclusion and success as an adult (Clark & Akerman, 2006).

Upon reviewing the literature on males and motivation in relation to reading, it was discovered that there is an important, yet largely unexplored area of research. The past research on gender differences has clearly shown differences in male and female motivation in different subject areas. In addition, there remains a paucity of research conducted into the motivational factors that affect a child's reading attitude. There has also been little research conducted that has focused on the factors that created the reading attitude as determined by the child.

## **Summary and Conclusions**

The present review of the literature has shown that there is a need for further research into the issues affecting male motivation towards literacy achievement. There have been several studies of global male disengagement from reading. A few researchers have demonstrated the effects of this early literacy disengagement and low reading achievement on later high school drop-out rates (Cunningham & Stanovich, 1997; Kush & Watkins, 1996; Wigfield & Guthrie, 1997). These effects are especially prevalent amongst males.

Gaining the perspective of the students in elementary school might help to gain insights into the various factors which may influence their motivation to read, as well as strategies to engage the boys in literacy. Understanding the reading attitudes of males and how these change over time is critical to our assisting male students to have a positive attitude toward reading and ultimately to improve their reading and overall academic achievement. Many programs have been enacted in an effort to address these reading challenges across the board, but none have specifically focused on addressing gender differences in attitudes toward reading. The following research questions are intended to guide this research with the goal of determining male reading attitudes, how quickly they change during elementary school, and how they correlate to academic achievement.

The following research questions and hypotheses will be used to guide the present study:

RQ1: Are boys less likely than girls to have a positive reading attitude?

 $H1_0$ : Boys have a more positive reading attitude than girls.

 $H1_1$ : Boys have a more negative reading attitude than girls.

RQ2: Are boys less likely to enjoy academic reading than girls?

H2<sub>0</sub>: Boys enjoy academic reading as much as or more than girls.

H2<sub>1</sub>: Boys enjoy academic reading less than girls.

RQ3: Does the difference in reading attitude between males and females increase from grades 1 to 6?

H<sub>30</sub>: The reading attitude gap between genders decreases from grades 1 to 6.

H3<sub>1</sub>: The reading attitude gap between genders increases from grades 1 to 6.

RQ4: Will the male students who have low reading attitudes also have low academic performance?

H4<sub>0</sub>: Male students who have negative reading attitudes will have positive academic performance.

H4<sub>1</sub>: Male students who have negative reading attitudes will have negative academic performance.

#### CHAPTER III. METHODOLOGY

### Introduction

Gender gaps in education have been reported and studied for decades (Meece, Glienke, & Askew, 2009). Much of the research into gender gaps has focused on gender gaps in math and science. A movement for females to close the achievement gap in these areas has provided the bulk of the research. As a result of this call, there has been a decreasing margin between the groups. "Among secondary school students, large gender gaps in mathematics and science performance have decreased, and for basic skills, have been eliminated" (Meece, Glienke, & Askew, 2009, p. 411). However, in the areas of reading and writing, there has been little movement in the past 30 years (Meece, Glienke, & Askew, 2009).

Research has shown that girls have a higher self-efficacy in the areas of literature and language arts. Boys have been found to have a more positive achievement belief in mathematics, science, and athletics (Meece, Glienke, & Askew, 2009). This belief has been shown to be developed by various factors as the child develops. The purpose of the present study was to examine the reading attitudes of males and females in grades 1 through 6 and in an effort to determine whether these attitudes differ significantly. In addition to finding a difference in reading attitude, this study will also identify the reading attitude gap between genders and determine whether it increases from first to sixth grade. Finally, this data will be compared to available testing and academic data to determine whether there is a correlation between low academic reading attitude scores and low academic reports and test scores.

Males come into school less equipped to read and write than the females. The gaps in reading proficiency and reading attitude are amplified as the children progress through school (Gower, 2010). An early positive start in reading is vitally important for later success in reading comprehension. Positive early connections with reading predict the literacy experience for the lifetime of the child, regardless of the eventual level of comprehension the child attains (Cunningham & Stanovich, 1997).

Students who enter and quickly become strong readers in elementary school gain a stronger sense of competency. As the students become better readers, they begin to read more. The students who do not form a positive reading attitude and who do not desire to enter into reading activities become less apt to become proficient readers, otherwise known as the Matthew Effect (Gower, 2010). If students do not become proficient readers, this will impact other subject areas throughout their educational years. The lack of reading proficiency might also increase the likelihood of the student dropping out of school. Research from England, Australia, and the United States has shown that boys are less likely to become engaged readers on an academic or leisurely level as they progress into their teenage years (Love & Hamston, 2003). This makes males more susceptible to academic disengagement and dropping out of school.

## **Study Design**

This quantitative research study will utilize a correlational design. Surveys will be used to gather initial data and determine male reading attitude from first to sixth grade. The surveys will be analyzed to determine whether the gender gap increases through elementary school overall and with academic reading. After analyzing the gender gap, low reading attitude scores for the males will be taken to create a subset. The subset will be used to determine whether a correlation exists between low reading attitude and academic performance.

## **Population and Sample**

The population for this study will include first through sixth grade students. The sample will be taken from one school district in the Southeastern United States. The potential sample will include approximately 750 students. This number will represent approximately 20% of first through sixth graders in the school district. Purposive sampling will be used to determine the sample. The student population will be selected based on availability to the researcher based on principal and parental permission. Only those students who have parental consent will be surveyed and used for the sample. A subset of this sample will be used to correlate testing data with reading attitude. The subset will be males with the lowest 10% of reading attitude in each grade level. This number should equate to approximately 50 male students from first to sixth grade.

#### Instrumentation

The instrumentation that will be used for the quantitative portion of this research will be the Elementary Reading Attitude Survey (ERAS). The ERAS was developed by McKenna and Kear (1990) and is intended for use as a public-domain instrument. The ERAS is a 20 item survey intended for an audience of children ranging from 1<sup>st</sup> grade to 6<sup>th</sup> grade. The answer scale uses a four response pictorial of Garfield the cat imitating the emotions of the responder to the questions. These emotions range from a big smile and excited stance to an angry scowl and tensed posture. The middle responses have Garfield with arms crossed and a slight smile or a slight frown (McKenna & Kear, 1990).

The first ten questions relate to recreational reading attitude and the second ten questions relate to academic reading attitude. Each scale will have a total score between 10 and 40 with a total reading attitude score between 40 and 80. The survey should take approximately 30

minutes to administer. This time includes the distribution of surveys, the reading of the procedures and a thorough reading of each question twice. Cronbach's alpha was used on the ERAS to determine reliability. The coefficients for the full scale ranged from .87 to .89. The range for the academic subscale was .81 to .83. Both the academic and recreational subscales were tested for validity. The recreational validity was tested twice and both tests provided statistical significance. One tested students that were library card holders versus those without cards. Cardholders had a mean equal to 30.0 and non-cardholders a mean of 28.9. Another test was given for those with books checked out of the school library versus those without books checked out. Those with books out had a mean of 29.2 and those without a book out had a mean of 27.3. As for the academic subscale, the validity was tested using teacher formed groups of low, mid, and high level reading ability. The mean of the high level readers was 27.7 and the low level readers was 27.0 (McKenna & Kear, 1990).

## **Materials and Procedures**

The materials to be used in this research will be surveys and pencils. Each teacher will be given letters for the students to take home. The letters will be for parental permission to participate in the research. After one week, a secondary letter will be given for students who have not returned the letters from the first round. After another week, the teacher will tally all eligible students and provide the numbers to the researcher. The researcher will then print the number of surveys needed for each class.

The surveys will be delivered to each teacher the day before the survey is to be administered. Each teacher will be given instructions in printed form to review. The teachers will be tasked with reading the instructions to their students, passing out the surveys, and administering the surveys. At the end of the surveys, the teacher will collect all surveys and

divide them by male and female. The surveys will be delivered to the front office and collected at the end of the day.

## **Scoring**

Scoring will be done in accordance with the scoring sheet provided by the researcher.

Scoring is done by awarding points based on each response. The range of points is from a 4 for a "happy face" response to a 1 for a "sad face." Questions 1 through 10 are scored for a recreational reading score. Questions 11 through 20 are scored the same as the recreational scale, but refer to academic reading. As previously stated, the two scales are combined for a total reading attitude score with a high of 80 and a low of 20. The full scale will be utilized in this research to observe change over time, but the focus will be on the academic scale. The academic scale will be utilized to draw the correlation between the academic reading and the academic performance.

## **Research Questions**

Following a review of the literature regarding male factors related to reading attitude, this study was developed to determine the change in the reading attitude of the male students enrolled in grades one through six. The purpose of the quantitative part of this study is to examine reading attitudes of male readers in comparison with female reading attitudes. The research questions guiding the survey are as follows:

RQ1: Are boys less likely than girls to have a positive reading attitude?

 $H1_0$ : Boys have a more positive reading attitude than girls.

H1<sub>1</sub>: Boys have a more negative reading attitude than girls.

RQ2: Are boys less likely to enjoy academic reading than girls?

H2<sub>0</sub>: Boys enjoy academic reading as much as or more than girls.

H2<sub>1</sub>: Boys enjoy academic reading less than girls.

RQ3: Does the difference in reading attitude between males and females increase from grades 1 to 6?

H3<sub>0</sub>: The reading attitude gap between genders decreases from grades 1 to 6.

H3<sub>1</sub>: The reading attitude gap between genders increases from grades 1 to 6.

The remainder of the research questions will be analyzed through an analysis of student records. The scores from the ERAS will be grouped by grade. The data of the students scoring in the lowest 10% of reading attitudes for males in each grade will be analyzed. These students will have their records from testing and academic progress compared. This data will be used to calculate correlations between reading attitudes and academic performance.

RQ4: Will the male students who have low reading attitudes also have low academic performance?

H4<sub>0</sub>: Male students who have negative reading attitudes will have positive academic performance.

H4<sub>1</sub>: Male students who have negative reading attitudes will have negative academic performance.

## CHAPTER IV. RESULTS

### Overview

There are many factors that enter into an individual's reading attitude. Since the effects of gender remain a controversial issue in reading research, this research attempted to analyze the factor of gender. The following interpretation of data provides an analysis of reading attitudes based on gender and grade levels. The researcher investigated to find whether a statistical significance (p < .05) existed between reading attitudes and the two dependent variables (gender and grade levels).

The research questions analyzed in this section are as follows:

- 1. Are boys less likely than girls to have a positive reading attitude?
- 2. Are boys less likely than girls to enjoy academic reading?
- 3. Does the difference in reading attitude between males and females increase from grades 1 to 6?

## **Data Screening and Check for Missing Data**

Prior to the testing of data, an initial data screening was done to identify the missing values and outliers. No missing values or outliers were found.

Table 1

Type of Reading by Gender

				(	Cases		
		Valid		Missing		Total	
	Gender	N	Percent	N	Percent	N	Percent
Recreational	Male	68	100.0%	0	.0%	68	100.0%
	Female	98	100.0%	0	.0%	98	100.0%
Academic	Male	68	100.0%	0	.0%	68	100.0%
	Female	98	100.0%	0	.0%	98	100.0%
Total	Male	68	100.0%	0	.0%	68	100.0%
	Female	98	100.0%	0	.0%	98	100.0%

Table 2

Type of Reading by Grade

					Cases		
		V	Valid	M	issing		Total
	Grade	N	Percent	N	Percent	N	Percent
Recreational	Grade1	26	100.0%	0	.0%	26	100.0%
	Grade 2	42	100.0%	0	.0%	42	100.0%
	Grade 3	38	100.0%	0	.0%	38	100.0%
	Grade 4	18	100.0%	0	.0%	18	100.0%
	Grade 5	16	100.0%	0	.0%	16	100.0%
	Grade 6	26	100.0%	0	.0%	26	100.0%
Academic	Grade1	26	100.0%	0	.0%	26	100.0%
	Grade 2	42	100.0%	0	.0%	42	100.0%
	Grade 3	38	100.0%	0	.0%	38	100.0%
	Grade 4	18	100.0%	0	.0%	18	100.0%
	Grade 5	16	100.0%	0	.0%	16	100.0%
	Grade 6	26	100.0%	0	.0%	26	100.0%
Total	Grade1	26	100.0%	0	.0%	26	100.0%
	Grade 2	42	100.0%	0	.0%	42	100.0%
	Grade 3	38	100.0%	0	.0%	38	100.0%
	Grade 4	18	100.0%	0	.0%	18	100.0%
	Grade 5	16	100.0%	0	.0%	16	100.0%
	Grade 6	26	100.0%	0	.0%	26	100.0%

The descriptive statistics show that there were 68 male students and 98 female students who participated in the study. Out of the 166 total students, 26 were in first grade, 42 were in second grade, 38 were in third grade, 18 were in fourth grade, 16 were in fifth grade, and 26 were in sixth grade.

## **Normality Test**

To test the normality, a Kolmogorov-Smirnov test was used because the data set is more than 50. The Kolmogorov-Smirnov test indicates that the distributions of recreational reading, academic reading, and total reading by grade are significantly normal (p > .05). Distributions of recreational reading, academic reading, and total reading by gender are also significantly normal (p > .05) except for the recreational reading score for male respondents (p = .047).

Table 3

Tests of Normality (Reading Scores by Grade)

		Kolmog	gorov-Sn	nirnov <sup>a</sup>	Sh	apiro-Wi	lk
	Grade	Statistic	df	Sig.	Statistic	df	Sig.
Recreational	Grade1	.132	26	.200*	.936	26	.110
	Grade 2	.077	42	.200*	.975	42	.489
	Grade 3	.099	38	.200*	.963	38	.246
	Grade 4	.152	18	.200*	.943	18	.331
	Grade 5	.150	16	.200*	.948	16	.459
	Grade 6	.121	26	.200*	.971	26	.661
Academic	Grade1	.150	26	.138	.943	26	.159
	Grade 2	.091	42	.200*	.954	42	.092
	Grade 3	.122	38	.163	.949	38	.082
	Grade 4	.163	18	.200*	.925	18	.159
	Grade 5	.142	16	.200*	.954	16	.552
	Grade 6	.103	26	.200*	.972	26	.665
Total	Grade1	.138	26	.200*	.925	26	.060
	Grade 2	.064	42	.200*	.978	42	.577
	Grade 3	.125	38	.142	.960	38	.191
	Grade 4	.140	18	.200*	.914	18	.102
	Grade 5	.138	16	.200*	.945	16	.416
	Grade 6	.127	26	.200*	.978	26	.829

<sup>&</sup>lt;sup>a</sup>Lilliefors Significance Correction

<sup>\*</sup>This is a lower bound of the true significance.

Table 4

Tests of Normality (Reading Score by Gender)

	Kolmog	gorov-Sn	nirnov <sup>a</sup>	Shapiro-Wilk			
Gender	Statistic	df	Sig.	Statistic	df	Sig.	
Male	.108	68	.047	.972	68	.130	
Female	.075	98	.199	.982	98	.192	
Male	.096	68	.194	.972	68	.125	
Female	.057	98	.200*	.981	98	.155	
Male	.100	68	.089	.972	68	.122	
Female	.061	98	.200*	.989	98	.627	
	Male Female Male Female Male	Gender Statistic  Male .108  Female .075  Male .096  Female .057  Male .100	Gender         Statistic         df           Male         .108         68           Female         .075         98           Male         .096         68           Female         .057         98           Male         .100         68	Male       .108       68       .047         Female       .075       98       .199         Male       .096       68       .194         Female       .057       98       .200*         Male       .100       68       .089	Gender         Statistic         df         Sig.         Statistic           Male         .108         68         .047         .972           Female         .075         98         .199         .982           Male         .096         68         .194         .972           Female         .057         98         .200*         .981           Male         .100         68         .089         .972	Gender         Statistic         df         Sig.         Statistic         df           Male         .108         68         .047         .972         68           Female         .075         98         .199         .982         98           Male         .096         68         .194         .972         68           Female         .057         98         .200*         .981         98           Male         .100         68         .089         .972         68	

<sup>&</sup>lt;sup>a</sup>Lilliefors Significance Correction

Since ANOVA is fairly robust to non-normality, no further transformations were performed.

## **Factorial ANOVA**

As mentioned earlier, data were screened to ensure that the assumptions of factorial ANOVA were fulfilled. Three factorial ANOVAs were conducted to determine if students' recreational, academic, and total reading scores varied among gender and grade level.

## **ANOVA for Recreational Reading**

A two-way analysis of variance (ANOVA) was conducted to determine whether recreational reading scores differ among male and female students and among students in different grades.

<sup>\*</sup>This is a lower bound of the true significance.

Table 5

Descriptive Statistics of Between-Subjects Factors

		Value Label	N
Gender	1	Male	68
	2	Female	98
Grade	1	Grade1	26
	2	Grade 2	42
	3	Grade 3	38
	4	Grade 4	18
	5	Grade 5	16
	6	Grade 6	26

Table 6

Descriptive Statistics of Dependent Variable: Recreational

Gender	Grade	Mean	Standard Deviation	N
Male	Grade1	30.38	6.265	13
	Grade 2	29.29	5.475	17
	Grade 3	26.95	6.100	20
	Grade 4	25.83	7.859	6
	Grade 5	27.60	1.673	5
	Grade 6	26.71	5.936	7
	Total	28.12	5.926	68
Female	Grade1	29.92	4.291	13
	Grade 2	30.60	5.575	25
	Grade 3	31.50	4.902	18
	Grade 4	30.67	5.314	12
	Grade 5	28.64	5.221	11
	Grade 6	25.00	6.110	19
	Total	29.38	5.692	98
Total	Grade1	30.15	5.266	26
	Grade 2	30.07	5.506	42
	Grade 3	29.11	5.954	38
	Grade 4	29.06	6.476	18
	Grade 5	28.31	4.377	16
	Grade 6	25.46	5.995	26
	Total	28.86	5.805	166

The descriptive table shows the descriptive statistics including the mean, standard deviation for the dependent variable (recreational reading) for each student for each separate group, by gender and by grade level as well as for the total respondents when all groups are combined (total). The mean score range for males in recreational reading attitude was 25.83–30.38 and the mean score range for the females was 25.00–31.50. The total range of the mean was from 25.46–30.15. In grades one and six, males held a higher recreational reading attitude than females; and in grades two through five, females held a higher reading attitude.

Table 7

Levene's Test of Equality of Error Variances<sup>a</sup> for Dependent Variable: Recreational

F	df1	df2	Sig.
.658	11	154	.776

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Levene's test of equality of variances was conducted within ANOVA. Using an alpha level of .05, the Levene's test indicated the assumption of homogeneity of variances was met, F(11, 154) = .658, p = .776.

<sup>&</sup>lt;sup>a</sup>Design: Intercept + Gender + Grade + Gender \* Grade

Table 8

Tests of Between-Subjects Effects for Dependent Variable: Recreational

	Type III							
	Sum of					Partial Eta	Noncent.	Observed
Source	Squares	df	Mean Square	F	Sig.	Squared	Parameter	Power <sup>b</sup>
Corrected Model	740.160 <sup>a</sup>	11	67.287	2.150	.020	.133	23.650	.916
Intercept	107543.229	1	107543.229	3436.276	.000	.957	3436.276	1.000
Gender	83.314	1	83.314	2.662	.105	.017	2.662	.368
Grade	293.773	5	58.755	1.877	.101	.057	9.387	.627
Gender * Grade	209.229	5	41.846	1.337	.251	.042	6.685	.464
Error	4819.653	154	31.296					
Total	143835.000	166						
Corrected Total	5559.813	165						

<sup>&</sup>lt;sup>a</sup> R Squared = .133 (Adjusted R Squared = .071)

ANOVA results showed no significant interaction between gender and grade F (5,154) = 1.337, p = .251, partial  $\eta 2 = .042$ . There was no significant main effect either for gender F (1,154) = 2.662, p = .105, partial  $\eta 2 = .017$  or for grade level F (5, 154) = 1.877, p = .101, partial  $\eta 2 = .057$ . The univariate ANOVA table shows there was no interaction effect. No main effect was found either, which indicates that students recreational reading score does not significantly vary either by gender or by grade or by both together.

## **ANOVA for Academic Reading**

A two way ANOVA was conducted to determine whether academic reading scores differ among male and female students and among students in different grades.

<sup>&</sup>lt;sup>b</sup> Computed using alpha = .05

Table 9

Descriptive Statistics for Dependent Variable: Academic

Gender	Grade	Mean	Standard Deviation	N
Male	Grade1	31.6154	6.14462	13
	Grade 2	28.8235	6.22731	17
	Grade 3	27.4000	6.26099	20
	Grade 4	22.8333	5.26941	6
	Grade 5	27.4000	5.31977	5
	Grade 6	26.8571	5.33631	7
	Total	28.1029	6.22978	68
Female	Grade1	31.3077	4.23054	13
	Grade 2	31.6400	6.46065	25
	Grade 3	31.3333	4.15862	18
	Grade 4	27.6667	5.63001	12
	Grade 5	28.3636	5.92069	11
	Grade 6	23.8421	4.89062	19
	Total	29.1735	6.01549	98
Total	Grade1	31.4615	5.17092	26
	Grade 2	30.5000	6.44394	42
	Grade 3	29.2632	5.66012	38
	Grade 4	26.0556	5.84579	18
	Grade 5	28.0625	5.57935	16
	Grade 6	24.6538	5.09072	26
	Total	28.7349	6.10828	166

The descriptive table shows the descriptive statistics including the mean, standard deviation for the dependent variable (Academic reading) for each student for each separate group, by gender and by grade level as well as for the total respondents when all groups are combined (Total). The mean range in academic reading was 22.83–31.62 for males and 23.84–31.64 for females. The mean total range was from 24.65 – 31.46. Males maintained a higher academic reading attitude in grades one and six while females held a higher attitude in grades two through five.

Table 10

Levene's Test of Equality of Error Variances<sup>a</sup> for Dependent Variable: Academic

F	df1	df2	Sig.
.791	11	154	.649

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Levene's test of equality of variances was conducted within ANOVA. Using an alpha level of .05, the Levene's test indicated the assumption of homogeneity of variances was met, F(11, 154) = .791, p = .649.

<sup>&</sup>lt;sup>a</sup> Design: Intercept + Gender + Grade + Gender \* Grade

Table 11

Tests of Between-Subjects Effects for Dependent Variable: Academic

	Type III Sum		Mean			Partial Eta	Noncent.	Observed
Source	of Squares	df	Square	F	Sig.	Squared	Parameter	Power <sup>b</sup>
Corrected Model	1274.832 <sup>a</sup>	11	115.894	3.656	.000	.207	40.218	.996
Intercept	105038.133	1	105038.133	3313.706	.000	.956	3313.706	1.000
Gender	77.728	1	77.728	2.452	.119	.016	2.452	.343
Grade	735.671	5	147.134	4.642	.001	.131	23.209	.972
Gender * Grade	240.201	5	48.040	1.516	.188	.047	7.578	.521
Error	4881.506	154	31.698					
Total	143222.000	166						
Corrected Total	6156.337	165						

<sup>&</sup>lt;sup>a</sup> R Squared = .207 (Adjusted R Squared = .150)

Main effect result revealed that the student academic reading score was significantly different among students in different grades, F (5,154) = 4.642, p = .001, partial  $\eta 2 = .131$ . Calculated effect size for grade level indicates a medium proportion of variance in academic score is accounted for by differences in grade levels. Bonferroni's post-hoc was conducted to determine which grade student groups were significantly different in academic reading scores. Results revealed academic reading scores of sixth grade students to be significantly different from all other grades except for fourth grade and fifth grade. Sixth grade student academic reading scores are significantly lower (24.65  $\pm$  5.09, p < 0.01) than that of students in first grade (31.46  $\pm$  5.17), second grade (30.50  $\pm$  6.44) and third grade (29.26  $\pm$  5.66). In addition, results also reveal that the academic reading scores of fourth grade students (26.05  $\pm$  5.84, p < 0.01) are significantly lower from the academic reading scores of students in first grade (31.46  $\pm$  5.17).

<sup>&</sup>lt;sup>b</sup> Computed using alpha = .05

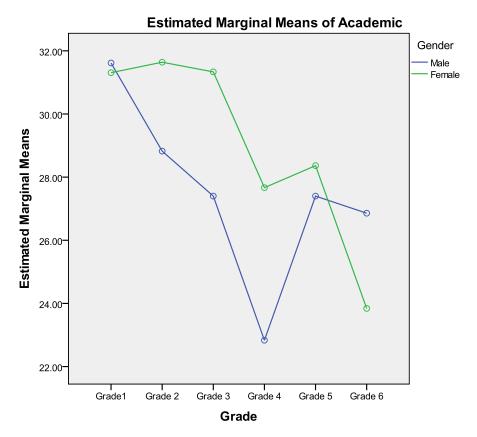


Figure 1. Academic Marginal Means by Grade and Gender

# **ANOVA for Total Reading**

A two way ANOVA was conducted to determine if total reading scores differ among male and female students and among students in different grades.

Table 12

Descriptive Statistics for Dependent Variable: Total

Gender	Grade	Mean	Standard Deviation	N
Male	Grade1	62.0000	11.75443	13
	Grade 2	58.1176	10.93093	17
	Grade 3	54.3500	12.02749	20
	Grade 4	48.6667	11.60460	6
	Grade 5	55.0000	6.96419	5
	Grade 6	53.5714	10.84523	7
	Total	56.2206	11.49672	68
Female	Grade1	61.2308	7.77982	13
	Grade 2	62.2400	11.22972	25
	Grade 3	62.8333	7.61770	18
	Grade 4	58.3333	10.65435	12
	Grade 5	57.0000	9.39149	11
	Grade 6	48.8421	8.90233	19
	Total	58.5510	10.58994	98
Total	Grade1	61.6154	9.77375	26
	Grade 2	60.5714	11.16428	42
	Grade 3	58.3684	10.92585	38
	Grade 4	55.1111	11.62092	18
	Grade 5	56.3750	8.52350	16
	Grade 6	50.1154	9.47978	26
	Total _	57.5964	10.99641	166

The descriptive table shows the descriptive statistics including the mean, standard deviation for the dependent variable (Total reading) for each student for each separate group, by

gender and by grade level as well as for the total respondents when all groups are combined (Total). The mean range in total reading attitude was 48.67–62.00 for males and 48.84–62.83 for females. The mean total range was from 50.12–61.62. Males maintained a higher total reading attitude in grades one and six while females held a higher attitude in grades two through five. The total reading attitude of both sexes decreased from 1<sup>st</sup> grade to 6<sup>th</sup> grade with little fluctuation.

Table 13

Levene's Test of Equality of Error Variances<sup>a</sup> for Dependent Variable: Total

F	df1	df2	Sig.
.916	11	154	.527

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Levene's test of equality of variances was conducted within ANOVA . Using an alpha level of .05, the Levene's test indicated the assumption of homogeneity of variances was met, F (11, 154) = .916, p = .527.

<sup>&</sup>lt;sup>a</sup>Design: Intercept + Gender + Grade + Gender \* Grade

Table 14

Tests of Between-Subjects Effects for Dependent Variable: Total

	Type III Sum					Partial Eta	Noncent.	Observed
Source	of Squares	df	Mean Square	F	Sig.	Squared	Parameter	Power <sup>b</sup>
Corrected Model	3764.035 <sup>a</sup>	11	342.185	3.255	.001	.189	35.808	.991
Intercept	425147.963	1	425147.963	4044.545	.000	.963	4044.545	1.000
Gender	321.988	1	321.988	3.063	.082	.020	3.063	.413
Grade	1861.094	5	372.219	3.541	.005	.103	17.705	.912
Gender * Grade	863.664	5	172.733	1.643	.152	.051	8.216	.560
Error	16187.923	154	105.116					
Total	570631.000	166						
Corrected Total	19951.958	165	101)					

<sup>&</sup>lt;sup>a</sup> R Squared = .189 (Adjusted R Squared = .131)

Main effect result revealed that students total reading score was significantly different among students in different grades, F(5,154)=3.541, p=.005, partial  $\eta 2=.103$ . Calculated effect size for grade level indicates a medium proportion of variance in total reading score is accounted for by differences in grade levels. Bonferroni's post-hoc was conducted to determine which grade student groups were significantly different in academic reading scores. Results revealed academic reading scores of sixth grade students are  $(50.11\pm9.47,\,p<0.01)$  significantly different from that of the students in first grade, second grade, and third grade. Sixth grade students have lower total reading scores  $(50.11\pm9.47,\,p<0.01)$  than that of students in first grade  $(61.61\pm9.77)$ , second grade  $(60.57\pm11.16)$  and third grade  $(58.36\pm10.92)$ .

<sup>&</sup>lt;sup>b</sup> Computed using alpha = .05

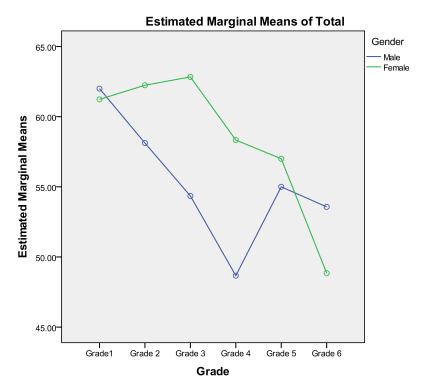


Figure 2. Total Marginal Means by Grade and Gender

### **Discussion**

The results were reflective of academic, recreational, and total reading attitudes using the dependent variables of gender and grade. The resulting analysis indicated that there was no statistical significance in recreational reading attitude for gender (p = .105), grade (p = .101), or both (p = .251). Academic reading attitude provided no statistical significance with gender (p = .119) or both gender and grade (p = .188). However, the analysis did provide statistical significance in academic reading attitude for grade (p = .001). The total reading attitude also maintained no statistical significance for gender (p = .082) or for both gender and grade (p = .152), and statistical significance with grade (p = .005).

Based on the provided analysis, gender does not appear to be a factor in reading attitude.

The analysis also does not support both gender and grade being a factor in reading attitude.

Although further research may be warranted, this analysis does not provide support for the idea that reading attitudes are shaped by gender. The analysis does, however, provide significance between overall reading attitude and grade level. This revelation in the research would be an area for further research.

### CHAPTER V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to discuss the results and implications of the data gathered throughout this study. The discussion will include a restating of the purpose and the procedures used in the study. An analysis of each research question using the data collected will be provided. A summary of participation percentages by gender and grade, along with limitations to the data will be given. Future research implications will be provided as well. Finally, conclusions will be given with recommendations for practices to address gender reading gaps.

### Introduction

The purpose of this study was to examine the current reading attitudes between elementary-level male and female students and to examine the correlation between reading attitude and academic performance. The reading achievement gap between genders has persisted over the years. Awareness and focus on learning styles has helped to narrow the gaps between students in many areas, but the gap between males and females in reading has not decreased. This study set out to discover current gender gaps in reading and the correlation to academic success.

Gender gaps in education have been reported and studied for decades (Meece, Glienke, & Askew, 2009). Much of the research into gender gaps has focused on gender gaps in math and science. A movement for females to close the achievement gap in these areas has provided the bulk of the research. The awareness of achievement gaps between genders has helped educators to focus the curricula to address inequalities, especially for females. "Among secondary school

students, large gender gaps in mathematics and science performance have decreased, and for basic skills, have been eliminated" (Meece, Glienke, & Askew, 2009, p. 411). For male students however, there has been little or no movement to close the gaps. In the areas of reading and writing, there has been little movement in the past 30 years to move males closer to the reading levels of their female counterparts (Meece, Glienke, & Askew, 2009).

One reason that the gender gaps persists in reading and writing is that females have a higher self-efficacy in the areas of literature and language arts. Males, however, have a higher self-efficacy in the areas of mathematics, science, and athletics (Meece, Glienke, & Askew, 2009). This belief has been shown to be developed as the result of various factors as the child develops. Males come into school less equipped to read and write than the females. The gaps in reading proficiency and reading attitude are amplified as the children progress through school (Gower, 2010). An early positive start in reading is vitally important for later success in reading comprehension. Positive early connections with reading predict the literacy experience for the lifetime of the child, regardless of the eventual level of comprehension the child attains (Cunningham & Stanovich, 1997).

Students who enter and quickly become strong readers in elementary school gain a stronger sense of competency. As the students become better readers, they begin to read more. The students who do not form a positive reading attitude and who do not desire to enter into reading activities become less apt to become proficient readers, otherwise known as the Matthew Effect (Gower, 2010). If students do not become proficient readers, this will impact other subject areas throughout their educational years. The lack of reading proficiency might also increase the likelihood of the student dropping out of school. Research from England, Australia, and the United States has shown that boys are less likely to become engaged readers on an

academic or leisurely level as they progress into their teenage years (Love & Hamston, 2003). This makes males more susceptible to academic disengagement and dropping out of school.

Based on this information, the purpose of this study was to examine the reading attitudes of males and females in grades 1 through 6 and in an effort to determine whether these attitudes differ significantly. In addition to investigating a difference in reading attitude, this study attempted to also identify the reading attitude gap between genders and determine whether it increases from first to sixth grade. Finally, the data was compared to available testing and academic data to determine whether there is a correlation between low academic reading attitude scores and low academic reports and test scores.

# **Study Procedures**

In order to accurately engage students in grades 1–6 about reading opinions, a survey was determined to be the best method in which to conduct this study. A kindergarten through sixth grade school was identified. The superintendent of the school system was emailed about the study and solicited for the system's participation. Once permission was granted by the superintendent, the principal of the school was contacted via email and solicited to participate. Once the principal of the selected school provided permission, several conferences were held by email, phone, and in person in order to organize and schedule faculty meetings and survey administration. The researcher provided an orientation to the faculty about the purpose of the study, parental permission forms, survey procedures, and future use of the data on May 1, 2012.

Prior to the parental permission forms being released to students or the survey being administered, the researcher submitted the Research Protocol Review Form to the Office of Human Subjects Research at Auburn University. Permission to utilize human subjects in the

study was granted by the Institutional Review Board (IRB). The survey instrument and parental consent forms were approved to distribute with the IRB permission as well.

Parental consent forms were provided to each teacher in grades 1–6. The teachers distributed the forms to each student in their respective classes with instructions about taking the consent form home to their parents. The consent form provided information about the study and its purpose. It also informed the parents that the names would remain confidential and further data collection would remain anonymous. After collecting the forms over a one-week time period, the teachers turned the forms into the front office where the researcher retrieved them. Copies were made of the consent forms and sent back home with the respective students.

The approved Elementary Reading Attitude Survey was administered to every student in grades 1-6 (n=166) that provided a parental consent form. Each survey was administered during the students' normal class times and by their respective classroom teacher on May 3, 2012. A total of 166 surveys were collected from the elementary school on May 4, 2012. All of the data from the collected surveys was entered into SPSS and descriptive data were generated. A two way analysis of variance (ANOVA) was conducted to determine if recreational, academic, and total reading scores differ among male and female students and among students in different grades. Levene's test of equality of variances was conducted within each ANOVA using an alpha level of .05. In addition, Bonferroni's post-hoc was conducted to determine which grade student groups were significantly different in academic reading scores.

## **Interpretations and Conclusions**

The descriptive statistics gathered from the data in the study provided the following results. There were 68 male students (41%) and 98 female students (59%) that participated in the study. Out of the 166 total students, 26 were in first grade (15.67%), 42 were in second

grade (25.3%), 38 were in third grade (22.89%), 18 were in fourth grade (10.84%), 16 were in fifth grade (9.64%), and 26 were in sixth grade (15.66%). A further breakdown of each participant by grade and gender provides the following descriptive data sets. First grader participants were 13 female (50%) and 13 male (50%); second grade participants were 25 (59.52%) female and 17 male (40.48%); third grade participants were 18 female (47.37%) and 20 male (52.63%); fourth grade participants were 12 female (66.67%) and 6 male (33.33%); fifth grade participants were 11 female (68.75%) and 5 male (31.25%); and sixth grade participants were 19 female (73.08%) and 7 male (26.92%).

Following a review of the literature regarding male factors related to reading attitude, this study was developed to determine the change in the reading attitude of the male students enrolled in grades one through six. The purpose of the quantitative part of this study is to examine reading attitudes of male readers in comparison with female reading attitudes. The research questions guiding the survey are as follows:

RQ1: Are boys less likely than girls to have a positive reading attitude?

 $H1_0$ : Boys have a more positive reading attitude than girls.

 $H1_1$ : Boys have a more negative reading attitude than girls.

RQ2: Are boys less likely to enjoy academic reading than girls?

H2<sub>0</sub>: Boys enjoy academic reading more than girls.

H2<sub>1</sub>: Boys enjoy academic reading less than girls.

RQ3: Does the difference in reading attitude between males and females increase from grades 1 to 6?

H<sub>30</sub>: The reading attitude gap between genders decreases from grades 1 to 6.

H3<sub>1</sub>: The reading attitude gap between genders increases from grades 1 to 6.

The results were reflective of academic, recreational, and total reading attitudes using the dependent variables of gender and grade. The resulting analysis indicated that there was no statistical significance in recreational reading attitude for gender (p = .105), grade (p = .101), or both (p = .251). Academic reading attitude provided no statistical significance with gender (p = .119) or both gender and grade (p = .188). However, the analysis did provide statistical significance in academic reading attitude for grade (p = .001). The total reading attitude also maintained no statistical significance for gender (p = .082) or for both gender and grade (p = .152), and statistical significance with grade (p = .005).

The remainder of the research questions were analyzed through an analysis of student records. The scores from the ERAS were grouped by grade. The data from the students scoring in the lowest 10% of reading attitudes for males in each grade was analyzed. These students had their records from testing and academic progress compared. This data was used to calculate correlations between reading attitudes and academic performance.

- RQ4: Will the male students who have low reading attitudes also have low academic performance?
- H4<sub>0</sub>: Male students who have negative reading attitudes will have positive academic performance.
- H4<sub>1</sub>: Male students who have negative reading attitudes will have negative academic performance.

An analysis of the student records provided little support for a correlation between low reading attitude and poor academic performance. Grades on the student report cards were analyzed. Each student report card displayed a high level of academic success in all subjects.

Therefore, there was little to no variability associated with the student academic performance and reading attitude.

#### Discussion

No statistically significant relationship was discovered between academic, recreational, or total reading attitude and gender. This suggests that gender plays no role in reading attitude for students in grades 1–6. In addition, no statistically significant relationship was found between recreational reading and grade. However, the analysis did provide statistical significance in academic reading attitude for grade (p = .001). The total reading attitude also provided statistical significance with grade (p = .005). This data suggests further research may be needed in grade level and academic and total reading attitude.

### **Future Research**

Based on a review of the literature, the researcher found that there are many facets to reading attitude. In combination, many of these factors could compound to create strong reading attitudes. Gender alone does not appear to play a role, but multiple other factors such as the perception of reading by peers, parents, or role models could impact a child's attitude. A series of one-way multivariate analysis of variance may be able to provide more insight into the impact of multiple factors. Factors to analyze could consist of parent, peer, and teacher perceptions of reading, availability of reading resources, academic curriculum, level and amount of reading in the environment, and availability of reading interests.

This study could be replicated to incorporate a larger sample size. A replication of this study could also use multiple academic settings, such as urban and suburban, or high poverty and affluent schools. With multiple factors influencing reading attitude, a replication using multiple variables would produce more beneficial results.

### Conclusion

Reading attitudes among children is a complex and instrumental part of education.

School systems and principals are tasked every year to bring about higher reading achievement scores in their schools. Instructional leaders are left to analyze the current curriculum and find ways to increase reading levels. The argument here is that there are multiple factors both at home and at school that influence reading development. Analyzing curriculum to produce results is like fighting a forest fire with a spray bottle. This is a battle that has to be fought on multiple fronts in order to make improvements.

Educational leaders need to foster a climate of reading acceptance at school. Some ways to accomplish this is to provide a learning environment filled with reading role models. Posters depicting popular students, parents, community members reading books should be placed in schools. Communications with the student body should contain references to reading. Schools should include opportunities for students to participate in clubs or activities that provide a positive reading climate. Schools should maintain large quantities of reading materials that include all student reading levels and interests. Teachers should be given professional development and instructed on how to provide interesting and relevant reading opportunities for their students. Texts that were traditionally explored in English classes could be reevaluated for relevance and interest. This should be done on both the local and the State levels.

Parents need to be educated on the benefits of reading as well. Parents are able to educate their children about reading well before they enter school, whether it be from modeling or reading aloud to their children. Parents need to understand the importance of reading in all academic areas. Schools should attempt to build more community conscience about reading. Schools should also take the opportunity to educate the community on the benefits of reading.

These reading initiatives can be obtained with school outreach. School libraries can open doors to parents who need reading or technology resources but cannot afford them. School leaders can coordinate opportunities for community leaders and school personnel to appear in low socioeconomic areas to promote reading.

## REFERENCES

- Ahmed, W., Minaert, A., van der Werf, G., & Kuyper, H. (2010). Perceived social support and early adolescents' achievement: The meditational roles of motivational beliefs and emotions. *Journal of Youth Adolescence*, 39, 36–46. doi: 10.1007/s10964-008-9367-7.
- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34, 452–477.
- 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, 489–507.
- Chiu, M., & McBride-Chang, C. (2006). Gender, context, and reading: A comparison of students in 43 countries, *Scientific Studies of Reading*, 10(4), 331-362. doi: 10.1207/s1532799xssr1004\_1.
- Clark, C., & Akerman, R. (2006). Social inclusion and reading: An exploration. *National Literacy Trust*, June, 1–11.
- Clark, C., Torsi, S., & Strong, J. (2005). Young people and reading. *National Literacy Trust*.

  August, 2005.
- Coe, W., Dailey, J, Davis, C., Hardy, J., Hatcher, S., Powell, B., Richert, K., Seagraves, D., & Trafford, Y. (2010). The bridge: Alabama's high school dropout rate. Accessed April 2011

- http://www.ati.aum.edu/uploadedfile/file/Alabama%20Drop%20Out%20Rate%20Final%20Draft.pdf
- Cox, E. (1995). Boys and girls and the costs of gendered behavior. A keynote speech in printed in Gender equity: A framework for Australian schools. Keynote given at the Promoting Gender Equity Conference, Canberra, February 22–24, 1995.
- Cunningham, D. (2008). Literacy environment quality in preschool and children's attitudes toward reading and writing. *Literacy Teaching and Learning*, 12, 19–36.
- Cunningham, A., & Stanovich, K. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934–945.
- Dearing, E., McCartney, K., Weiss, H. B., Kreider, H., & Simpkins, S. (2004). The promotive effects of family educational involvement for low-income children's literacy. *Journal of School Psychology*, 42, 445–460.
- Dee, T. (2007). Teachers and the gender gaps in student achievement. *The Journal of Human Resources*, 3, 528–554.
- Feitelson, D., & Goldstein, Z. (1986). Patterns of book ownership and reading to young children.

  \*Reading Teacher\*, 39, 924–930.
- Gower, S. (2010). *Boys' reading habits as children and their college grades*. Thesis submitted to the Graduate College of Bowling Green, May 2010.
- Guthrie, J., & Coddington, C. (2009). Reading motivation. In K. Wentzel & A. Wigfield (Eds.), Handbook of motivation at school (pp. 503–525). New York: Routledge.
- Guthrie, J., Schafer, W., von Secker, C., & Alban, T. (2000). Contributions of instructional practices to reading achievement in a statewide improvement program. *Journal of Educational Research*, 93, 211–225.

- Hamston, J., & Love, K. (2005). Voicing resistance: adolescent boys and the cultural practice of leisure reading. *Discourse: Studies in the Cultural Politics of Education*, 26, 183–202.doi: 10.1080/01596300500143161.
- House of Representatives Standing Committee on Education and Training. (2002). Boys: Getting it right. Retrieved April, 2011 from <a href="http://www.childtrendsdatabank.org/pdf/1\_PDF.pdf">http://www.infoplease.com/ipa/A0779196.html</a> and <a href="http://www.wordreference.com/definition/drop\_out">http://www.wordreference.com/definition/drop\_out</a>,
- Jacobs, J. E., & Eccles, J. S. (1992). The impact of mothers' gender-role stereotypic beliefs on mothers' and children's ability perceptions. *Journal of Personality and Social Psychology*, 63(6), 932–944.
- Katz, H., & Sokal, L. (2003). Masculine literacy: One size does not fit all. Reading Manitoba, 24(1), 4–8.
- Kerachsky, S. (2010). Program for international student assessment (PISA) 2009 results.

  Retrieved March 4, 2001 from <a href="http://nces.ed.gov/surveys/pisa/pisa2009highlights.asp">http://nces.ed.gov/surveys/pisa/pisa2009highlights.asp</a>
- Kush, J., & Watkins, M. (1996). Long-term stability of children's attitudes toward reading. *Journal of Educational Research*, 89, 315–319.
- Ladd, G. W., Herald-Brown, S. L., & Kochel, K. P. (2009). Gender and motivation. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 323–348). New York: Routledge.
- Lever-Chain, J. (2008). Turning boys off? Listening to what five-year-olds say about reading. *Literacy*, 42, 83–91.

- Love, K., & Hamston, J. (2003). Teenage boys' leisure reading dispositions: juggling male youth culture and family cultural capital. *Educational Review*, *55*, 161–177. doi: 10.1080/0013191032000072209.
- McClelland, M., Morrison, F., & Holmes, D. (2000). Children at risk for early academic problems: the role of learning-related social skills. *Early Childhood Research Quarterly*, 15, 307–329.
- McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, May, 626–639.
- Meece, J. L., Glienke, B. B., & Askew, K. (2009). Gender and motivation. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 411–431). New York: Routledge.
- National Center for Education Statistics. *Trends in high school dropout and completion rates in the United States: 1972–2008.* Retrieved April, 2011 from <a href="http://nces.ed.gov/pubs2011/dropout08/findings6.asp">http://nces.ed.gov/pubs2011/dropout08/findings6.asp</a>
- Neuman, S., & Gallagher, P. (1994). Joining together in literacy learning: teenage mothers and children. *Reading Research Quarterly*, 29, 382–401.
- Oreopoulos, P. (2007). Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling. *Journal of Public Economics*, *91*, 2213–2229.
- Pajares, F., & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology*, 26, 366–381.
- Rumberger, R. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, *32*, 583–625.

- Rumberger, R. (2001, January 13). Why students drop out of school and what can be done. Paper for Conference, "Dropouts in America: How Severe is the Problem? What Do We Know about Intervention and Prevention?" Harvard University.
- Rusillo, M., & Arias, P. (2004). Gender differences in academic motivation of secondary school students. *Electronic Journal of Research in Educational Psychology*, 2, 97–112.
- Simner, M., & Barnes, M. (1991). Relationship between first-grade marks and the high school dropout problem. *Journal of School Psychology*, 29, 331–335.
- Smith, M., & Wilhelm, J. (2004). "I just like being good at it": The importance of competence in the literate lives of young men. *Journal of Adolescent & Adult Literacy*, 47, 454–461.
- Sokal, L., Katz, H., Sych-Yereniuk, A., Chochinov-Harder, L., Adkins, M., Grills, T., Stewart,C., & Priddle, G., (2004). Male reading teachers: Effects on inner-city boys. Final Report to the Winnipeg Inner-city Research Alliance, University of Winnipeg.
- Sokal, L., & Katz, H. (2008). Effects of technology and male teachers on boys' reading. *Australian Journal of Education*, 52, 81–94.
- Sokal, L., Thiem, C., Crampton, A., & Katz, H. (2009). Differential effects of male and female reading tutors based on boys' gendered views of reading. *Canadian Journal of Education*, 32, 245–270.
- Southern Education Foundation. (2008). High school dropouts: Alabama's number one education and economic problem. Accessed April 2011.

  http://www.southerneducation.org/content/pdf/HS\_Dropouts\_Alabamas\_Number\_One\_E ducation\_Economic\_Problem.pdf
- Stott, D., Green, L., & Francis, J. (1983). Learning style and school attainment. *Human Learning*, 2, 61–75.

- Suh, S., & Suh, J. (2007). Risk factors and levels of risk for high school dropouts. *Professional School Counseling*, 10, 297–306.
- Swanson, C. (2002). Who graduates? Who doesn't? A statistical portrait of public high school graduation: Class of 2001. Washington DC: The Urban Institute.
- Tyler, J., & Magnus, L. (2009). Finishing high school: alternative pathways and dropout recovery. *The Future of Children*, 19, 77–103.
- Weaver-Hightower, M. (2003). The "boy turn" in research on gender and education. *Review of Educational Research*, 73, 471–498.
- Wigfield, A., & Eccles, J. (Eds.). (2002). *Development of achievement motivation*. San Diego: Academic Press.
- Wigfield, A., & Guthrie, J. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology*, 89, 420–432.
- Younger, M., & Warrington, M. (2005). Raising boys' achievement. Research Report RR636.

  Queen's Printer and Controller of HMSO2005.

# Appendix A

## Parental Permission Form

# **Auburn University**

Auburn University, Alabama 36849-5221

Department of Educational Foundations, Leadership and Technology 4036 Haley Center

PARENTAL PERMISSION/CONSENT

for a Research Study entitled

"Academic Reading Attitudes and Performance as a

Function of Gender"

Telephone: (334) 844-3066

FAX: (334) 844-3072

Your child is invited to participate in a research study to determine the gender gaps in reading attitudes and how it correlates to academic performance. The study is being conducted by Brad Cook, Doctoral Student at Auburn University under the direction of Dr. Salisbury-Glennon, Associate Professor in the Auburn University Department of Educational Foundations. Your child was selected as a possible participant because he or she is in grades one through six and attending East Smiths Station Elementary School. Since your child is age 18 or younger we must have your permission to include him/her in the study.

What will be involved if your child participates? If you decide to allow your child to participate in this research study, your child will be asked to take a survey. Your child's total time commitment will be approximately 30 minutes. Your child may be chosen for further research based on the survey results. The additional research will include examining academic records, to include report cards and transcripts, and National and State administered testing results, to include the ARMT, DIBELS, and the STAR tests if available. Your signature on this form provides the researcher permission to examine these records. If you or your child does not want to participate in the study, he/she will be given an alternate activity to complete during the survey time that is similar in nature to the survey.

Are there any risks or discomforts? The risks associated with participating in this study are limited, but may include breach of confidentiality. To minimize these risks, we will attach no names or a false name when reporting the data.

Parent.	/Guardian Initials	Page 1 of 2
I GI CIIC	Guaraian midais	1 450 1 01 2

Are there any costs? If you decide to allow your child to participate, you will incur no costs. This survey is free to take.

If you (or your child) change your mind about your child's participation, your child can be withdrawn from the study at any time. Your child's participation is completely voluntary. If you choose to withdraw your child, your child's data can be withdrawn as long as it is identifiable.

Your decision about whether or not to allow your child to participate or to stop participating will not jeopardize you or your child's future relations with Auburn University, the Department of Educational Foundations or East Smiths Station Elementary School.

Benefits from participating in the survey will be to the school and the system. The data collected from these surveys will be offered to the school and the district. This data could be used to evaluate the current reading focus of the children of Smiths Station and Lee County. This could potentially provide benefits to the students of Lee County by changing practices to meet the reading needs of the students.

Your child's privacy will be protected. Any information obtained in connection with this study will remain confidential. The data collected will be protected by Brad Cook.

Your child's identity will either not be used in the report or will be used with a false name. Information obtained through your child's participation may be used to fulfill an educational requirement and published in a journal.

If you (or your child) have questions about this study, please ask them now or contact Brad Cook at (334)618-7165 or Dr. Salisbury-Glennon at (334)844-3064. A copy of this document will be given to you to keep.

If you have questions about your child's rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH FOR YOUR CHILD TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO ALLOW YOUR CHILD TO PARTICIPATE.

Parent/Guardian Signature	Investigator obtaining consent	Date
	Robert B. Cook Printed Name	 Date
, , , , , , , , , , , , , , , , , , , ,		
Printed Child's name/Grade		Page 2 of 2

# Appendix 2

Elementary Reading Attitude Survey

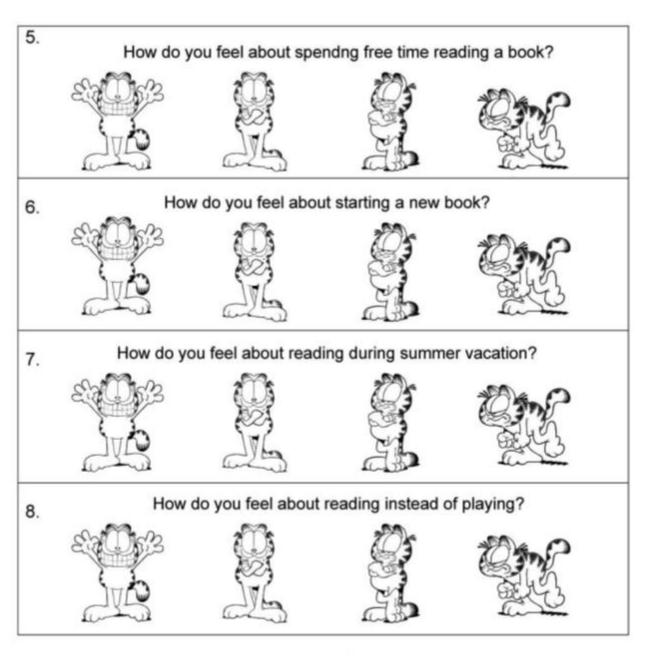
# **Elementary Reading Attitude Survey**

Grade Name

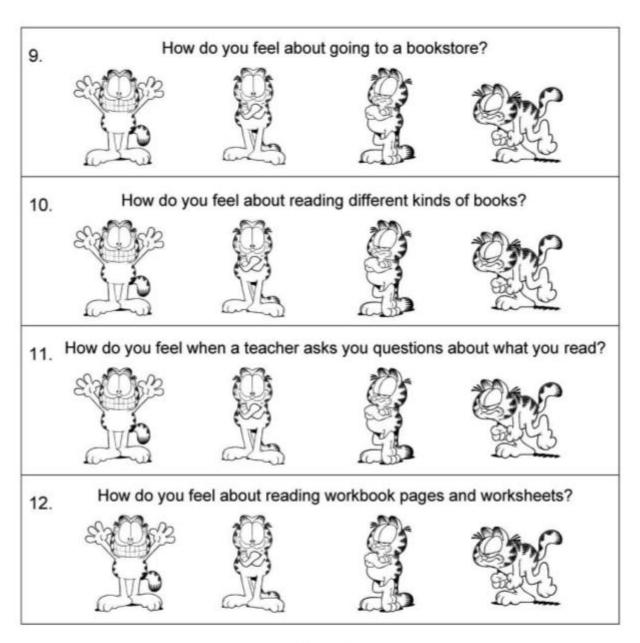
School

Plea	ase circle the pict	ure that describe	s how you feel	when you read a book.
1.	How do you feel when you read a book on a rainy Saturday?			
2.	How do you feel when you read a book in school during free time?			
3.	How do you feel about reading for fun at home?			
4.	How do you feel about getting a book for a present?			

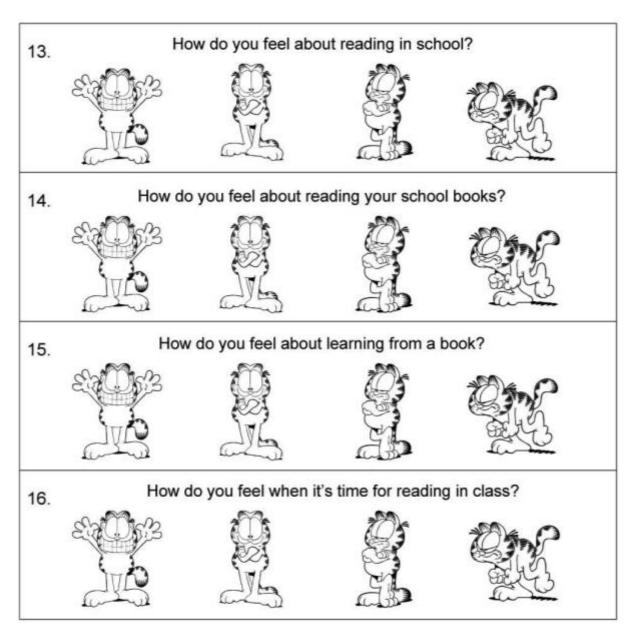
Page 1



Page 2



Page 3



Page 4



Page 5

# **Elementary Reading Attitude Survey Scoring Sheet**

Student Name			
Teacher			
Grade	Administration Date		
	Scoring Guide 4 points Happiest Garfield 3 points Slightly smiling Garfield 2 points Mildly upset Garfield 1 point Very upset Garfield		
Recreational reading	Academic reading		
1			
2			
3	3		
4	4		
5	5		
6	6		
7	7		
8.	8.		
9	9		
10.	10		
Raw Score:	Raw Score:		
Full scale raw sec	ore (Recreational + Academic):		
Percentile ranks:	Recreational		
	Academic		
	Full scale		