Skill versus will: An investigation of a relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students

Stephanie Lee Embrey

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Walden University
2011
Abstract

Skill versus Will: An Investigation of a Relationship between Motivation to Read, Oral Reading Fluency, and Demographics for Third-grade Elementary Students

by

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M.S., Walden University, 2006
B.A., Western Maryland College, 1990

Doctoral Study Proposal in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Teacher Leadership

Walden University
April 2011
Abstract

With the demands of the No Child Left Behind legislation to utilize research-based instructional practices and teach all children to read by the end of third grade, teachers find themselves going beyond teachers’ editions and curriculum guides to the research on best reading practices. The purpose of this quantitative nonexperimental cross-sectional correlational study was to examine the strength and direction of the relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students ($N=112$). An analysis of covariance (ANCOVA) was used to quantitatively analyze archival data to assess the relationship between motivation to read, oral reading fluency, and demographics. Motivation to read, which was reported as MRP scores, includes the dimensions of self-concept as a reader and value of reading, and was measured using the Motivation to Read Profile (MRP) Reading Survey. Oral reading fluency, which was reported as Oral Reading Fluency (ORF) rates, was measured using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). Results showed a significant relationship between motivation to read, oral reading fluency, and demographics for all three dimensions of motivation. Findings from the study may contribute to social change by influencing educators’ uses of oral reading fluency data and interventions that employ improving motivation to read in an attempt to improve reading achievement for third-grade elementary students. Suggestions for further research include examining the relationship between motivation to read and oral reading fluency.
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Walden University
April 2011
Dedication

This study is dedicated to my amazing family. To my husband, and best friend, Joe, for his steadfast support of my dreams, even when the journey seemed endless. To my children, Zachary, Nicholas, and Meredith, for their understanding that Mom had a lot of schoolwork too. This journey seemed to take forever and you guys stuck with me the whole way. What more could a mom ask for? I fully intend on returning the favor when you are chasing your dreams! I couldn’t have done this without your love and support. Love you guys!!!
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How can I say thank you to the all the people who stayed with me through this wonderful, if not arduous, journey?

I know that there is no means of thanks that can repay the kindness, friendship, and dedication of my cohort in crime, Nocola. Thank you so much for sticking with me, even when I was crazy. Yey! We made it! And now I owe you lots of crafty workshops!

To the family who put up with Mom when she drug the laptop to the Great Wolf Lodge, the beach, the pool, Niagara Falls, and into the basement during the blizzard – thank you!

To my parents who encouraged me to follow my heart and who kept the little one busy so Mom could write– thank you!

To my parallel playmate, Mandy – thank you!

To the students in my classes over these past few years who have shared in my enthusiasm for learning – thank you!

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Section 1: Introduction to the Study

Introduction

The goal of many elementary school teachers is to help their students become successful readers. This study contributes to the body of knowledge intended to inform educators of issues related to third-grade elementary students. Countless teachers believe, as does the Education Commission of the States (ECS, 2010), that “Every child has the potential to succeed in school and in life. Yet there are many factors that can imperil a child’s ability to achieve his or her full potential” (para. 1). Children who are living in poverty-stricken homes, have parents with a limited education, or live in abusive homes are all at risk for poor academic achievement (ECS). Those same students are more likely to drop out of high school than their peers who are not at risk (ECS). However, those are not the only factors contributing to high school dropout rates. Students who fall behind in reading are most likely to drop out when they reach high school (ECS). Academic performance, including reading achievement, has been found to be a predictor of dropout rates beginning as early as first grade (Alexander, Entwisle, & Kabbani, 2001; Montes & Lehmann, 2004). Reading First, a government program aimed at putting proven methods of reading instruction into early reading classrooms (U. S. Department of Education, 2009), includes the suggestions that the best way to keep students in school and successful is to have them reading by the end of third grade (U.S. Department of Education, 2008). An abundance of research has been conducted in the area of improving reading achievement (Mohr et al., 2004; National Reading Panel, 2000; Schmoker, 2006; Shanker & Ekwall, 2003).
However, according to current research, students are still struggling to read (Federal Interagency Forum on Child and Family Statistics [FIFCFS], 2008). Given that choosing not to read is not an option, teachers must “craft a customized mix of teaching practices for the children they work with” (Jacob, 2001, p. 3). As Shanahan (2006a) pointed out:

No one has the right to refuse to become literate: “other people can read for me, thank you very much. I just don’t want that kind of responsibility.” The implications would be too great to allow a youngster to opt out. (p. 12)

There are numerous contributors to reading difficulty, such as poverty, gender, race, and learning disabilities (Allington, 1977), and some youngsters opt out of being successful readers. Thirteen percent of 2009 high school dropouts admit that they are struggling readers (Dalton, Glennie, & Ingels, 2009). Researchers have suggested that poor readers avoid unrewarding reading experiences and will therefore avoid reading if they have encountered unrewarding reading situations in the past (Stanovich, 1986). Unfortunately, both highly capable and less able readers can succumb to a lack of motivation to read (Decker, 1986). This multifaceted problem means that schools are now tasked with trying to increase student reading achievement and their motivation to read (Allington, 1977, 2006; Marzano, 2003).

To address literacy concerns, it is current practice to monitor students’ oral reading fluency (ORF) rate in an attempt to predict later reading proficiency (Deno, 1985; Deno, Fuchs, Marston, & Shin, 2001; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Hasbrouck & Tindal, 2006; Hudson, Pullen, Lane, & Torgesen, 2009; Shinn & Good, 1992;
University of Oregon Center on Teaching and Learning, 1999). The prevailing instrument for monitoring reading fluency in my school district is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS; District X, 2009). The oral reading fluency subtest (DORF) of the instrument assesses and monitors a student’s oral reading fluency with connected text in the form of the number of words read correctly in 1 minute (University of Oregon Center on Teaching and Learning, 2009). However, monitoring students will not solve the problem of students not being able to read (Stecker, Lambke & Foegen, 2008). A current belief in education is that students who can read are becoming better readers and those who are poor readers are not making sufficient progress to become better readers (Allington, 2006; Stanovich, 1986). Several researchers suggested that the more frequently students read, the more likely it is that they will become proficient readers (Guthrie, Schafer, & Huang, 2001; Krashen, 2004). However, frequency of text engagement is not the only factor affecting struggling readers (Adams, 1998). Regrettably, poor readers are often unmotivated to read (Chapman, 1988; Powell-Brown, 2006). Gambrell, Palmer, Codling, and Mazzoni (1996) suggested that this lack of motivation is an underlying cause of future reading difficulties. Additionally, early reading difficulties may have generalizing effects on other aspects of reading, including motivation (Butkowsky & Willows, 1980; Stanovich, 1986). Gambrell et al. (1996) proposed measuring two dimensions of motivation to read, self-concept as a reader and value of reading, with the Motivation to Read Profile (MRP) (Gambrell et al., 1996; see Appendix A). MRP scores, which include self-concept as a reader, value of reading, and total motivation to read scores (see Appendix B), are measured using the MRP Reading
Survey. Surprisingly, there is a deficit of research relating oral reading fluency and motivation to read (Quirk, Schwanenflugel, & Webb, 2009). This study contributes to the body of literacy knowledge by evaluating the relationship between motivation to read, oral reading fluency, and demographics from third graders, noting implications for reading interventions.

Section 1 of this study is designed to introduce the reader to the study. The background of the study reveals the local issues relating to struggling readers and explains how motivating students to read is a current concern in the elementary school setting. The theoretical framework then frames the study in the context of expectancy-value theory. Definitions of terms used throughout the study will be explained as well as the assumptions, scope, delimitations, and limitations. The subsection on the significance of the study further details the need for identifying a correlation between motivation to read, oral reading fluency, and demographics. The section closes with a summary of the section and a transition to the remaining sections.

**Background of the Study**

Reading achievement and efficacy are two of the goals and priorities set forth by the Board of Education in my Mid-Atlantic school district (District X, 2009). To address the demands of the No Child Left Behind legislation and data-driven decision-making, the schools in my district began using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to monitor reading progress (District X, 2009; University of Oregon Center on Teaching and Learning, 2009). Effective progress monitoring can help teachers identify students’ weaknesses and strengths, allowing teachers to plan the best
instructional program for individual students (Deno et al., 2001). Reading achievement and motivation to read have been a concern of the administration at the school since its doors opened in 1999 (K.A.A., personal communication, June 1999). In the school’s early years, teachers utilized the Elementary Reading Attitude Survey (McKenna & Kear, 1990) to examine motivation to read. The Elementary Reading Attitude Survey is a public domain reading motivation survey with published reliability and validity data (McKenna & Kear, 1990). Students were encouraged to complete the survey during class time. The principal then collected all copies of the completed measure from the homeroom teachers. Neither the students nor the teachers saw the results of the survey or used data from the results to inform instruction. New administration and increased interest in efficacy had students looking to work hard to get smarter (Howard, 1985). That was especially important as high stakes testing revealed that ABC Elementary was falling lower in the elementary school rankings when compared to other schools in the same school district. More recently, the pendulum has swung back to an interest in why some students are motivated to read while others are not (N.A. Williams, personal communication, August 2008). Evidence for that change is identifiable by the recent decline in Accelerated Reader usage since the introduction of the program to the school, as well as a decrease in book checkouts from the school library.

**Problem Statement**

There is a problem in today’s elementary schools. Students are struggling to become proficient readers. That problem will follow those children into adulthood, as young struggling readers are likely to be struggling readers in adulthood (Rapp, Van den
Broek, McMaster, Kendeou, & Espin, 2007). Sheehan-Holt and Smith (2000) pointed out that literate adults not struggling to read see literacy as an avenue to accessing better jobs, improved parenting skills, and leading more enjoyable lives. It is not acceptable to be a nation of struggling readers, nor is it beneficial to students to be struggling readers. The inherent goal of education to improve literacy (U.S. Department of Education, 2003; 2008), and appeals from the nation’s presidents, current and past, regarding the nation’s literacy have motivated this study. Leaders of this country have made it clear that “we must do more … to make sure that every child can read independently by the end of third grade” (President Clinton, 1997) and that we should “look forward to the day that no child in this country is ever left behind” (President Bush, 2003). Congress has striven for the same goals, as noted in the demands of No Child Left Behind to utilize research-based instructional practices and teach all children to read by the end of third grade (National Institute of Child Health and Human Development, 2000a). President Obama’s campaign speeches rallied for educational improvement to address the risk that “countries who out-educate us today will out-compete us tomorrow” (Obama, 2007). Billions of government spending dollars have been designated for the educational section of the American Recovery and Reinvestment Act (ARRA), (American Recovery and Reinvestment Act [ARRA], 2009) because “President Obama is committed to providing every child access to a complete and competitive education, from cradle through career” (whitehouse.gov, n.d.). However, 67% of fourth graders and 68% of eighth graders in America are still performing below the proficient level, the level that indicates solid reading performance (National Center for Education Statistics, 2009). Those figures
represent a relatively small change since the 2007 findings of 67% of fourth graders and 69% of eighth graders in America performing below the proficient level (Federal Interagency Forum on Child and Family Statistics, 2008).

It is vital that teachers understand why their students struggle to read and fail to meet the proficiency level standards. An understanding helps teachers make informed data-driven instructional decisions (Hasbrouck & Tindal, 2006). Oral reading fluency rates are a frequently used predictor of the future reading success or failure of young readers (Hasbrouck & Tindal, 2006). Motivating students to read is a challenge most teachers face when teaching (Baker & Wigfield, 1999). Motivation to read is also an underlying factor in future reading success and can be measured with the MRP (Gambrell et al., 1996). Data pertaining to both of those educational factors are available in my school district as a result of two instruments. The results of the instruments provide the numerical values for the variables of the current study. The first variable, motivation to read, provides educators with valuable information regarding students’ motivation to read as defined by their combined score on the MRP Reading Survey, a Likert-type measure that assesses student self-concept as a reader, value of reading, and overall motivation to read (Gambrell et al., 1996). Data pertaining to the second variable, oral reading fluency, are available from the DIBELS ORF subtest in the form of the number of words read correctly from connected text in 1 minute (University of Oregon Center on Teaching and Learning, 2008). Information regarding the demographics of gender and ethnicity is also provided during the DIBELS monitoring process. The current study provides insight into the relationship between motivation to read, oral reading fluency, and demographics for
third-grade elementary students. The insights gained will provide teachers with another tool in making informed data-driven decisions regarding the needs of the individual children in their classrooms.

**Nature of the Study**

This quantitative nonexperimental cross-sectional correlational study investigated the relationship between motivation to read, oral reading fluency, and demographics in third-grade elementary students. To determine the existence of a significant relationship between motivation to read, oral reading fluency, and demographics, this study examined archival data gathered from third grade results of the MRP Reading Survey and the DIBELS ORF subtest.

Because of the descriptive nature of the study, the quantitative design used was the quantitative nonexperimental cross-sectional correlational design. Descriptive research examines a situation “as it is” (Leedy & Ormrod, 2005, p. 179) and does not change or modify the situation being studied (Freeman & Mash, 2005). Correlational studies are descriptive in nature and are (a) useful in informing educators about issues relating to educating students; (b) useful in guiding experimental research efforts, which can determine causal relationships (Cook & Cook, 2008); and (c) not intended to determine a cause and effect relationship (Leedy & Ormrod, 2005). They also provide researchers with insight into the strength of association between variables, in this case, motivation to read, oral reading fluency, and demographics.

This quantitative nonexperimental cross-sectional correlational research study measured motivation to read using the Motivation to Read Profile (MRP). The MRP is a
self-report, Likert-scale instrument that evaluates the motivation dimensions of self-concept as a reader and value of reading (Gambrell et al., 1996). The MRP was administered in the form of an online survey using SurveyMonkey software (SurveyMonkey.com, 2010). MRP responses yield a total score, a self-concept as a reader score, and a value of reading score. The homeroom teacher, with my assistance, was responsible for the administration of the MRP. In accordance with the survey’s design, the teacher read the MRP to all students as they completed the measure. The teacher read all directions, questions, and answer choices to all students to eliminate factors of assessment readability on the motivation score (Gambrell et al., 1996).

This quantitative nonexperimental cross-sectional correlational research study measured oral reading fluency using the 2010 fall benchmark administration of the DIBELS ORF (DORF) subtest. That standardized assessment consisted of a benchmark test administration that involved each student reading aloud from three on-grade level connected texts. Students read individually to a trained teacher assessment administrator. Each reading was timed for 1 minute. The students were assigned an ORF rate based on the words read correctly in 1 minute. Of the three independent readings, the median score for words read correctly was recorded as the ORF rate. Reading teachers were responsible for the administration of the DIBELS benchmarks. During the benchmark window, all students were administered the MRP Reading Survey (see Appendix A), an assessment of motivation to read by Gambrell et al. (1996). DIBELS data also consisted of gender and ethnicity information.
The study was conducted through the analysis of archival data from one elementary school in my school district. ABC Elementary consented to a data use agreement for the collection of archival data according to Family Educational Rights and Privacy Act (FERPA) regulations (FERPA, 20 U.S.C. § 1232g; 34 C.F.R. pt 99, 2009). The archival data consisted of results from two instruments, DIBELS and the MRP Reading Survey. Results from DIBELS consisted of ORF rates and demographic information pertaining to gender and ethnicity. Archived DIBELS data obtained for this study were used in accordance with the use agreement of the University of Oregon and will not be used in other publications without prior consent (see Appendix C). An analysis of covariance (ANCOVA) was used to conduct quantitative analysis on archival data to assess the relationship between motivation to read, oral reading fluency, and demographics. A thorough description of the methodology, research design, and data analysis of all research questions will be provided in section 3.

**Research Questions**

The quantitative nonexperimental cross-sectional correlational study was guided by the following research questions and hypotheses:

**Motivation to Read**

_Research Question 1:_ Is there a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students?

_Null Hypothesis– H1₀:_ There is no significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.
Alternate Hypothesis - $H1_a$: There is a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

**Self-Concept as a Reader**

*Research Question 2:* Is there a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis - $H2_o$:* There is no significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis - $H2_a$:* There is a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

**Value of Reading**

*Research Question 3:* Is there a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis - $H3_o$:* There is no significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis - $H3_a$:* There is a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

The research questions and hypotheses will be discussed in more detail in section 3.

**Purpose of the Study**

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral
reading fluency, and demographics for third-grade elementary students. To that end, I sought to determine if a significant relationship exists between motivation to read, oral reading fluency, and demographics for third graders in a sampled Mid-Atlantic state elementary school. Several variables were examined. The first variable, motivation to read, was measured with the Motivation to Read Profile (MRP; Gambrell et al., 1996). Motivation to read was defined as having three levels: self-concept as a reader, value of reading, and total motivation to read. The instrument provided a motivation to read score, self-concept as a reader score, and value of reading score (see Appendix B).

Motivation to read, at all three levels, was measured using a Likert-type scale. The MRP Reading Survey Scoring Sheet (see Appendix B) provided numerical values that were used to calculate mean scores for each ethnic and gender group, as well as mean scores for the entire group. Those values were compared to the DIBELS ORF measures of the subgroup and total groups in the ANCOVA analysis. The second variable, oral reading fluency, was defined as the number of correct words read orally from a connected text in 1 minute (University of Oregon Center on Teaching and Learning, 2008). Oral reading fluency was measured with the DIBELS ORF subtest, which provided ORF rates. The third variable was ethnicity. Apart from Caucasian and African American, no ethnicity subgroup or combination of subgroups comprised at least 10% of the grade level population (SchoolMatters, 2010), so I planned to use Other to designate any student whose ethnicity was neither Caucasian nor African American. Ethnicity was originally defined as Caucasian, African American, and Other. Upon receipt and initial analysis of the archival data, it became apparent that there were few African American and Other
students as compared to the number of Caucasian students. Therefore, it was appropriate to define ethnicity as Caucasian and non-Caucasian. The fourth variable was gender. Based on the results of the data analyses, an inference was made about the significance of a relationship (Creswell, 2003; Fink 2006) between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

**Theoretical Base**

Educators are concerned with catching reading problems early in order to stop long-term reading failure (Stanovich, 1986; U.S. Department of Education, 2003; 2008). That is not easy and is not totally under the control of the teacher. In fact, “because reading is an effortful activity that children often choose to do or not to do, it also requires motivation” (Baker & Wigfield, 1999, p. 452). If a student becomes frustrated because they have low expectations of his or her ability to handle a task, they may lose their motivation to persist with a task (Brophy, 2004). It then becomes necessary for an educator to step in and provide intervention so that students do not underachieve due to a lack of motivation (Brophy). Motivation is often not something the teacher can see by looking at the student. A student’s motivation is as individual as the student herself (Stipek, 2002). Because motivation is a process and is not synonymous with achievement (Schunk, Pintrich, & Meece, 2008), this study intended to provide additional insight into the relationship between reading achievement and motivation.

The expectancy-value theory of motivation (Wigfield & Eccles, 2000) provided a framework for this study. Expectancy-value theory informed the study by exploring two dimensions of motivation to read, self-concept as a reader and value of reading. By
understanding these dimensions and their relationship to oral reading fluency, teachers can understand their student readers and make student specific, data-driven instructional decisions. Early psychologists drew upon the teachings of philosophers such as Plato (Plato, 2002) and Aristotle (Aristotle, 1984). A common school of thought in early days of philosophy was that the human mind was made up of three components: “knowing (cognition), feeling (emotion), and willing (motivation)” (Schunk et al., 2008, p. 17). Willing reflected individual wants, desires, or motives, while volition was the act of using the will (James, 2007). While those early beliefs have transformed into a number of motivation theories, such as expectancy-value theory, cognition theory, behavioral theories, arousal theories, and others, teachers are still facing an issue of skill (knowing) and will (motivation).

Expectancy-value theory has its roots in Lewin’s level of aspiration (Lewin, 1999; Lewin & Leonard, 1940) and Atkinson’s achievement motivation (Atkinson & Reitman, 1956). Lewin spoke of humans having energy sources, which he called tensions. Those tensions caused individuals to assign a valence, a positive or negative value, to their goals. Individuals strive to maintain a type of balance in their lives between the push and pull of these valences, which is described in terms of their level of aspiration (Lewin). Lewin (1999) described the level of aspiration as the goal or standard that an individual made for himself based on previous experiences and familiarity with a task. The traditional method of testing levels of aspiration was to have participants play a ring toss game whereby participants were asked to set goals as they played (Lewin & Leonard). It
became apparent to theorists that examining variables other than goal setting during a
game of ring toss was going to be necessary to explain motivation (Schunk et al., 2008).

Atkinson built upon the foundations of Lewin’s theory with his own theory of
achievement motivation. Atkinson also believed in the concept of valences and
formulated a theory based on needs, expectances, and values, the function of the
combination of all three being a motive (Atkinson & Reitman, 1956). Atkinson
suggested that motives were sets of learned behaviors based on individual differences and
expectancies. He described two basic motives: a motive to seek success and a motive to
avoid failure (Schunk et al., 2008). Atkinson’s motivation model included several
numeric formulas that were believed to explain an individual’s tendency to avoid failure
\(T_a = T_s + T_{af}\) or approach success \(T_s = M_s \times P_s \times I_s\) (Kuhl & Atkinson, 1986). If the
motive for success is high, individuals will approach or engage in a task. Conversely, if
the motive to avoid failure is high, individuals will avoid engaging in a task (Kuhl &
Atkinson)

Those early cognitive theorists laid the groundwork for future expectancy-value
theorists. They established a distinction between beliefs about being able to complete a
task and beliefs about the value and desire of doing a task. They also gave insight into
the motivation behind task completion. Future educators would come to appreciate these
ideas. The theorists explained the idea that an individual may value a task, but not feel
able to complete it, and therefore be less likely to engage in said task. In the same line of
thinking, they explained that an individual might feel capable of completing a task, but
not value it, again making engagement less likely (Schunk et al., 2008). Current
expectancy-value theorists no longer look for constructs to explain questions such as, “Should I do this task?” They now look for constructs to answer the questions like, “Am I able to do this task?” and “Do I want to do this task?” (Schunk et al.).

Interestingly, the measurement of reading motivation lags behind motivational theories (Quirk, Schwanenflugel, & Webb, 2009). One existing instrument, created by Gambrell et al. (1996) and rooted in the framework of the expectancy-value theory framework, is the MRP. The MRP consists of two measures: the Reading Survey and the Conversational Interview. The MRP Reading Survey (see Appendix A) is a self-report, self-assessment that can be administered to individuals or groups. It consists of 20 Likert-style questions that are equally representative of the dimensions (a) self-concept as a reader and (b) value of reading. The MRP Reading Survey provides educators with numerical data in the form of MRP scores for self-concept as a reader, value of reading, and total motivation to read (see Appendix B.) The second instrument, the MRP Conversational Interview, is a one-on-one interview consisting of three sections that initiate conversations about a student’s reading experiences. The MRP Reading Survey has been found both reliable and valid in assessing self-concept as a reader and value of reading (Gambrell et al.). Well-established in the expectancy-value theory framework, the MRP Reading Survey provided valuable numerical data to assist the current quantitative nonexperimental cross-sectional correlational study to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. Relevant motivation literature will be more thoroughly reviewed in section 2.
Definition of Terms

Several terms were used in the specific context of this study. For the purpose of this study, the following operational definitions of technical terms, jargon, and special word uses were applied:

*Ability beliefs:* an “individual’s perception of his or her current competence of a given activity” (Wigfield & Eccles, 2000, p. 70).

*At-risk reader:* a third grader whose beginning of the year DORF is less than 53 words correct per minute (WCPM), or a third grader whose middle of the year DORF is less than 67 WCPM (University of Oregon Center on Teaching and Learning, 1999).

*Continuous variable:* “reflects an infinite number of possible values falling along a particular continuum” (Leedy & Ormrod, 2005, p. 254).

*Connected text:* the concept of a word in context (Flanigan, 2007; Morris, 1993).


*Correlational research:* “describes existing relationships between variables” without trying to influence them (Wallen & Fraenkel, 2001, p. 349).

*Curriculum-based measurement (CBM):* a “set of methods for indexing academic competence and progress” (Deno et al., 2001, p. 508).

*DIBELS (Dynamic Indicators of Basic Early Literacy Skills):* “a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade” (University of Oregon Center on Teaching and Learning, 2008, para. 1).
**DIBELS oral reading fluency (DORF):** a “standardized, individually administered test of accuracy and fluency with connected text” (University of Oregon Center on Teaching and Learning, 1999, para. 1).

**DORF status:** one of three risk indicator ranks for reaching benchmark goals (University of Oregon Center on Teaching and Learning, 1999; see Appendix D).

**Economically disadvantaged:** students eligible for federal free and reduced priced meals (Mid-Atlantic Department of Education, 2002).

**Fan-spread:** “growing variances of the latent variables across time” (Rudinger & Rietz, 2003, para. 20).

**Fluency:** “the ability to read a text quickly, accurately, and with proper expression” (National Reading Panel, 2000, p. 3-5).

**Intrinsic motivation:** the “propensity for organisms to engage in activities that interest them and, in so doing, to learn, develop, and expand their capacities” (Ryan & Deci, 2000, p. 16). Intrinsic motivation “is based in the innate, organismic need for competence and self-determination” Deci & Ryan, 1985, p. 32).

**Learned-helplessness:** a “pattern of learned cognitions, attributions, and behaviors that leads an individual to see no contingency between the behavior and the outcomes leading to helplessness, depression, and passivity” (Schunk et al., 2008, p. 377).

**Literacy:** “using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (National Center for Education Statistics, 2005, p. 2).
**Low-risk reader:** a third grader whose beginning of the year DORF is greater than or equal to 77 WCPM, or a third grader whose middle of the year DORF is greater than or equal to 92 WCPM (University of Oregon Center on Teaching and Learning, 1999).

**Matthew effect:** “the fan-spread effect on variability with time – that over time the variability in reading and reading-related cognitive skills increases” (Stanovich, 2000, p. 153). As related to reading, “children with inadequate vocabularies- who read slowly and without enjoyment – read less, and as a result have slower development of vocabulary knowledge, which inhibits further growth in reading ability” (Stanovich, p. 184).

**Motivation to read:** “students’ self-concept as readers and the value they place on reading” (Gambrell et al., 1996, p. 519).

**Motivation to Read Profile (MRP):** a self-report, group-administered, 4-point Likert-scale instrument, designed to “assess two specific dimensions of reading motivation, self-concept as a reader and value of reading” (Gambrell, et al., 1996, p. 519; see Appendix A).

**Oral reading fluency (ORF):** the “ability to read orally, with speed, accuracy, and proper expression” (NICHHD, 2000, p.11).

**Oral reading fluency rates (ORF rates):** the number of words read from a connected text in 1 minute (University of Oregon Center on Teaching and Learning, 2008).

**Phonemes:** “the smallest unit of speech sound in a language. For example, in the word *dog*, there are three phonemes: /d/, /o/, and /g/” (Shanker & Ekwall, 2003, p. 527).
Phonemic awareness: “the understanding of and the ability to manipulate phonemes” (Shanker & Ekwall, 2003, p.527).

Phonics instruction: the process of teaching students “letter-sound correspondences and spelling patterns, and learning how to apply this knowledge to their reading” (National Reading Panel, 2000, p. 2-89).

Proficient level: According to the National Center for Education Statistics (2009), Fourth-grade students performing at the Proficient level should be able to locate relevant information, make simple inferences, and use their understanding of the text to identify details that support a given interpretation or conclusion. Students should be able to interpret the meaning of a word as it is used in the text. Students should be able to integrate and interpret texts and apply their understanding of the text to draw conclusions and make evaluations. (p. 18)

Quantitative research: According to Hall and Swee (2006), Quantitative approaches increase our knowledge by gathering data that can be manipulated mathematically. This allows us to answer questions about the meanings of psychological concepts, as well as to determine their levels and variability as well as the relationships among them. (para. 1)

Reading First School: a school that “receive[s] support to apply scientifically based reading research—and the proven instructional and assessment tools consistent with this research—to ensure that all children learn to read well by the end of third grade” (U.S. Department of Education, 2009, para. 1).
Self-concept: a combination of “individual’s perception of his or her current competence of a given activity” (Wigfield & Eccles, 2000, p. 70) and expectancies for future success (Eccles & Wigfield, 2002).

Skill: “an acquired cognitive or metacognitive competency that develops with training and/or practice” (McCombs & Pope, 1994, p. 122).

Socioeconomic status: “the measure of an individual or family’s relative economic and social ranking” (U.S. Department of Education, 2003, p. 257).

Some-risk reader: a third grader whose beginning of the year DORF is greater than or equal to 53 WCPM and less than 77 WCPM, or a third grader whose middle of the year DORF is greater than or equal to 67 WCPM and less than 92 WCPM (University of Oregon Center on Teaching and Learning, 1999).

Standardized test: “a test designed to be administered and scored in a standard, consistent manner….Such tests are supposed to be valid, reliable, and fair” (Ravitch, 2007, p. 202).

Surveys: “a type of descriptive, quantitative research used to measure the perceptions, attitudes, behaviors, or characteristics of a group” (Cook & Cook, 2008, p. 104).

Value of reading: “value students place on reading tasks and activities, particularly in terms of frequency of engagement and reading-related activities” (Gambrell et al., 1996, p. 522).
Will: “an innate or self-actualized state of motivation; an internal state of well-being in which individuals are in touch with their natural self-esteem, common sense, and intrinsic motivation to learn” (McCombs & Pope, 1994, p. 122).

Words correct per minute (WCPM): the number of words read correctly in 1 minute. Words not identified within 3 seconds, mispronunciations, and miscues are not considered correct (University of Oregon Center on Teaching and Learning, 1999).

Assumptions

A number of assumptions were made during this study. The first assumption was that motivation to read can be measured using the MRP created by Gambrell et al. (1996) and recorded as MRP scores. This assumption was supported by the research of Gambrell et al. as well as the research of Marinak and Gambrell (2010). A second assumption was that all third-grade teachers who administered the DIBELS benchmark did so according to the Dynamic Indicators of Basic Early Literacy Skills Administration and Scoring Guide (Good & Kaminski, 2002b). This assumption was based on the extensive training and annual retraining required of all teachers who administer DIBELS in District X as well as the research of Coulter, Shavin, and Gichuru (2009) indicating that reviewing assessment directions helps avoid errors in recording. A third assumption was that the DIBELS ORF rates will accurately represent the reading ability of the participants. This assumption was supported by the research of Tindal, Marston, and Deno (as cited in Good, Simmons, & Kame’enui, 2001), who investigated the reliability and validity of the DIBELS ORF subtest and found both high test-retest reliability and alternate-form reliability, as well as the research of Roehrig, Petscher, Nettles, Hudson,
and Torgesen (2008), who found DIBELS ORF to be a valid assessment of reading comprehension. The fourth assumption was that all students had responded truthfully on the MRP. That assumption was based on the existence of successful research using self-reporting (see Gambrell et al.; Morgan, 2004).

**Limitations**

The study was confined to collecting and analyzing motivation to read data as collected by the MRP. The MRP is confined to identifying two dimensions of motivation: self-concept as a reader and value of reading. The study was confined to collecting and analyzing oral reading fluency data using DIBELS (University of Oregon Center on Teaching and Learning, 1999). The study was also confined to measuring oral reading fluency as ORF rates, the number of words read correctly from a connected text in 1 minute. The study was also confined to the availability of archival data for students who took part in both the MRP and the DORF. Another limitation of the study was its correlational design. Correlational research discusses results in the form of correlations and relationships and does not report cause-and-effect relationships. Correlational research does not control for all extraneous variables, and therefore a third, unknown variable, may be involved as an underlying factor (Anderson, 1998). However, correlational research is a “useful first step toward demonstrating causation” (Price, 2000, para. 3). Although the aforementioned limitations existed, they did not reduce the significance of the research.
**Scope and Delimitations**

The scope of this quantitative nonexperimental cross-sectional correlational study was an exploration of the relationship between motivation to read, oral reading fluency, and demographics for third graders in my rural Mid-Atlantic elementary school. Motivation to read focused on self-perceptions of motivation to read as defined by the dimensions of value of reading and self-concept as a reader, as collected in a Likert-type survey. Elementary aged students have demonstrated the ability to differentiate between and identify their perceptions of task value and self-concept (Wigfield & Eccles, 2000). The instrument for collecting oral reading fluency measures involved the measurement of three 1-minute timings. Students read from three different connected texts. The oral reading fluency score was the median of the three timed readings. Findings from this study will be significant to educators in my school and school district who teach third graders readers. Generalizations to other third-grade students with similar school settings should be made with caution.

**Significance of the Study**

With the demands of No Child Left Behind legislature to have all students reading by the end of third grade (NICHHD, 2000), teachers need to make informed instructional decisions. In fact:

- decisions about reading instruction must be situational and should be based on the needs of the particular child and on the context. Teachers should be granted the professional latitude to use procedures, approaches,
and adaptations that are appropriate for a particular child in a particular context. (Flippo, 1997, p. 301)

To facilitate the execution of this legislation, a “$1.0 billion-per-year initiative to help all children read at or above grade level by the end of third grade” (Gamse, Bloom, Kemple, & Jacob, 2008, p. 1) was implemented. According to the No Child Left Behind Act of 2001, this instruction must be research-based (No Child Left Behind [NCLB], 2002). The Partnership for Reading (n.d.), a collaborative effort of the National Institute for Literacy (NIFL), the National Institute of Child Health (NICHD), the U.S. Department of Child Health and Human Development, and the U.S. Department of Education informed policy makers that, in creating policy, it is imperative that policies are strongly founded in the findings of scientifically-based research. However, there is a shortage of research on the relationship between motivation to read and oral reading fluency. Based on the limited number of studies, it is likely that there is a need for further research. The message inherent in constructivist learning theories is that learning is an active process. Teachers can invite students to learn, but they cannot force it or prevent it (Brooks & Brooks, 1999). Once invited, a student’s motivation comes into play. Expectancy-value theory addresses this motivation is terms of self-perceptions and task values. This study contributes to positive social change as it provides teachers with further research about the connection between motivation to read and reading.

The study will influence students and teachers. The significance of this study lies in its ability to help shed some light on the relationship between motivation to read, oral reading fluency, and demographics for third graders. The findings of this study provide
educators with valuable information for instructional decision making regarding motivation to read, oral reading fluency, and demographics to further guide their students be successful readers. A skill that is necessary to help students continue to gain access to a competitive education from cradle to career (ARRA, 2009). Funding for reading specialists and reading interventionist positions is no longer available in School District X. Classroom teachers will need to rely even more heavily on available research rather than the help of in-house specialists. Several researchers have investigated the predictive values of oral reading fluency on future reading achievement (Deno, 1985; Good & Kaminski, 2002b; Good, Kaminski, Simons, & Kame'enui, 2001; Riedel, 2007) and others have investigated motivation to read (Bast & Reitsma, 1998; Butkowski & Willows, 1980), but little has been said about the relationship between these two variables. The quantitative nonexperimental cross-sectional correlational design of this study helps bridge a gap in the current literature and point the way toward future research possibilities, therefore contributing to a positive social change in the community of reading teachers, researchers, and students.

Summary and Transition

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics of third-grade elementary students. Section 1 introduced the study. The need for the study was established through the background, statement of the problem, the purpose of the study, and the significance of the study.
Operational definitions were provided for key terms encountered in this and the remaining sections of the study.

Section 2 of the study provides a thorough review of the literature regarding several key concepts discussed in the study. In the literature review, I present detailed reviews of the literature regarding oral reading fluency, curriculum-based measurements, and motivation to read. Each of those factors is discussed in relation to meeting the NCLB mandates of having all students reading proficiently by the end of third grade.

Section 3 will include a discussion of the intricacies of the methodology of the study. In that section instrumentation and materials, data collection methods and analysis, my role as the researcher, and the care to protect participants’ rights, are explained.

Section 4 is structured around the research questions and the hypotheses addressed in the study. A discussion of the results, including tables for clearer understanding of the results will also be provided. The final section of the study, section 5, will include a summary of the findings of the study and provide an interpretation of those results. I will also discuss implications for social changes as well as recommendations for action and further study.
Section 2: Literature Review

Introduction

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics of third-grade elementary students.

The following literature review is organized into five topics: (a) a look at the nation of readers, (b) essential practices for reading instruction (c) oral reading fluency, (d) expectancy-value theory of motivation, and (e) motivation to read. The literature compiled for this review included scholarly journals, government publications, books, and dissertations. It was located through numerous online databases (EBSCO, ERIC, ProQuest, Academic Search Premier, PsychARTICLES, and PsychINFO) as well as careful review of the reference lists presented in the literature. Keywords and phrases used in the electronic database searches include: reading achievement, expectancy-value theory, motivation to read, oral reading fluency, reading, motivation, and elementary education. Two limits were set during the database searches: articles must have been peer-reviewed and published within the last 5 years. Any older research was used as historical perspective during the review.

A Call for Readers

information on the importance of reading (U.S. Department of Education, 2001), while others offer help with understanding statistics in the research on education (Bracey, 2003). The United States is a nation concerned about its literacy rate (Bush, 2003; Grigg, Daane, Jin, & Campbell, 2003; National Institute for Literacy, 1998; Obama, 2007; U.S. Department of Education, 2002; whitehouse.gov, n.d.). Not only are Americans concerned about the literacy rate, they are also interested in how the nation fares compared to its international neighbors (Obama, 2007). This can be seen in such reports as *The Reading Literacy of U.S. Fourth-Grade Students in an International Context: Results from the 2001 and 2006 Progress In International Reading Literacy Study* ([PIRLS]; Baer, Baldi, Ayotte, & Green, 2007). In fact, according to Margaret Kay (1996):

> No other skill taught in school and learned by school children is more important than reading. It is the gateway to all other knowledge. If children do not learn to read efficiently, the path is blocked to every subject they encounter in their school years. (para. 1)

Despite all of this attention on national literacy, many students in schools across the country are not successful readers (National Institute for Literacy, 1998; U.S. Department of Education, 2002, 2003). Researchers and educators are looking for tools to help these struggling readers (Allington, 2006; Derville, 1966; Dewey, 1938, 2001; Mohr et al., 2004; National Reading Panel, 2000; Powell-Brown, 2006; Schmoker, 2006; Shanker & Ekwall, 2003). The importance of using effective reading strategies and identifying potential reading difficulties is also addressed in many preservice teacher
courses (Barnyak & Paquette, 2010). The reason for this concern is that educators must act quickly because “once children become mired in a swamp of negative expectations, lowered motivation, and lowered levels of practice, it becomes increasingly difficult for them to get back to the road to proficient reading” (Spear-Swerling & Sternberg, 1994, p. 99). Educators should look at the best practices and choose what is best for their students (Ediger, 2001).

**Essential Components of Reading Instruction**

Learning to read is a complex skill (Adams, 1990/1998; National Reading Panel, 2000). There is no agreement on what constitutes the most effective reading strategy, primarily due to a lack of agreement on how to make sense “of a body of research as large and diverse as that associated with elementary reading instruction” (Kim, 2008, p. 374). However, the current best practices in reading instruction, as set forth by the National Reading Panel, involve five essential components: phonemic awareness, phonics, fluency, vocabulary, and comprehension (National Reading Panel, 2000). These findings have gathered much support and interest in the educational community (Shanahan, 2006b) and are often referred to as the five “pillars” of reading (Cassidy, Valadez, & Garrett, 2010). In preparation to teach reading, educators need to understand the complexities of reading as well as the relationship among the components (Moats, 1999). An explanation of these components follows.

**Phonemic Awareness**

Of the five essential instructional practices for teaching reading, phonemic awareness focuses on the most basic level of learning to read - understanding how to
manipulate the spoken word (National Reading Panel, 2000). Phonemic awareness is the ability to understand that the spoken word is broken into distinct sounds and to be able to manipulate these sounds. These distinct sounds are phonemes, the smallest units of the spoken language (Ravitch, 2007). Phonemes are not the written alphabet which, in American English, consists of 26 letters, but the individual sounds that the consonants and vowels make when spoken in words. The Institute of Educational Sciences (2009) explains that “phonemic awareness instruction teaches students how to distinguish and manipulate the sounds in words” (p. 2). Children who lack phonemic awareness are likely to experience difficulty understanding how to use the alphabet to create words and change letters to meaningful sounds (Shanker & Ekwall, 2003). These students tend to demonstrate reading difficulties as early as first grade (Stahl, 2006). These difficulties in the early stages of reading can have detrimental effects. According to Moats (1999), these difficulties can eventually “undermine vocabulary growth, knowledge of the world, mastery of language, and skill in writing” (p. 9). These early difficulties then result in more generalized problems due to their “fan-spread effects” (Tracey & Morrow, 2006, p. 156). Fan-spread effects occur as the students with reading difficulties fall further behind their more skilled peers as each group progresses through school (Stahl, 2006).

Several researchers have examined phonemic awareness because it is essential for the future success of students who are at risk of reading failure (Adams, 1990/1998; National Reading Panel, 2000). Early phonemic awareness difficulties can be correlated with reading success or lack thereof as far as 12th grade (Adams). McIntyre, Protz, and McQuarrie (2008) concluded that first graders who were at risk of reading failures
experienced an increase in phonemic awareness by participating in the Lindamood Phoneme Sequencing Program. Greater gains in phonemic awareness were observed for at-risk students than students not considered at-risk (McIntyre et al.). Another study examining phonemic awareness instruction, conducted by Lovelace (2008), concluded that explicit instruction in phonemic awareness increased the ability to produce phonemes in preschoolers. Producing phonemes is a skill that is lacking in students likely to have difficulties in reading (Shanker & Ekwall, 2003). Lovelace recommended further exploration of methods of explicit phonemic instruction in the classroom setting. One such method may be scaffolding, as described by McGee and Ukrainetz (2009). Scaffolding involves a teacher breaking down a task in a way that the students could not have accomplished on their own (Vygotsky, 1978). McGee and Ukrainetz explained that by using varying levels of scaffolding, depending on the needs of individual students, progress in phonemic awareness can be made. Some of that scaffolding may lead to phonics instruction, which is often integrated into phonemic awareness instruction (Smith, 2003).

**Phonics Instruction**

Phonics instruction refers to teaching students about the relationship that exists between letters and sounds, which then enables students to decode, or sound out, words (Ravitch, 2007). Instruction in phonics helps children understand that there are predictable patterns in the sounds that letters produce, which helps them sound out unfamiliar words (Institute of Educational Sciences, 2009). The National Reading Panel (2000) analyzed three basic phonics programs. Synthetic programs teach student to
convert letters to sounds and then blend those sounds into words. Large-unit programs teach students to blend larger subparts of words. The third program was merely a blending of the first two (National Reading Panel). Phonics instruction can be presented in a number of ways with the desired result of increased ability to decode words (National Reading Panel; Shanker & Ekwall, 2003). Some programs are scripted, an example being the SRA Reading Mastery program (Englemann & Bruner, 1995). In a scripted program, a script of exactly what should be said by the instructor, along with the expected student responses, is provided for the instructor. McIntyre, Rightmyer, and Petrosko (2008) concluded in their study comparing SRA Reading Mastery and four other regular, or non-scripted, phonics instructional models, that there was not a significant difference in phonics scores for participants. Callinan and van der Zee (2010) reported no significant difference in reading ability for students who participated in one of two scripted phonics programs. Repeated measures ANOVA tests found no effects from gender differences on reading ability, a finding consistent with several scripted programs (Callinan & van der Zee). Phonics instruction was found to be effective in whole group settings (Shapiro & Solity, 2008), small group settings (Vadasy & Sanders, 2008), and individually (Vadasy & Sanders). Regardless of the program, phonics instruction is most effective when introduced after first grade (National Reading Panel). Phonics instruction has been found to be less effective for students who are reading at or above a second-grade reading level (Shanker & Ekwall, 2003). However, in an action research study by Edwards (2008), 16 freshmen demonstrated increased reading levels after a seven week phonics intervention.
Fluency

The third component, fluency, while agreed to be critical to the instruction of reading, is often neglected in the classroom (National Reading Panel, 2000). Fluency in reading refers to the reader’s ability to read text smoothly, accurately, at a proper speed, and with appropriate expression (Shanker & Ekwall, 2003). Reading rate, or the speed at which a reader reads, is an indicator of how fluent a reader is (Allington, 2006; Good & Kaminski, 2002b). Rather than spending much need resources on decoding, fluent readers are able to free up their cognitive resources to allow more time for reading comprehension (Institute of Educational Sciences, 2009; LaBerge & Samuels, 1974; National Reading Panel).

The ultimate goal for learning to read is comprehension of text, or understanding what is read (National Reading Panel, 2000). Not only is the teaching of fluency a legitimate instruction strategy to accomplish reading comprehension (NICHD, 2000), the National Reading Panel reported that fluency is essential in the development of reading. “Children who do not develop reading fluency, no matter how bright they are, will continue to read slowly and with great effort” (National Reading Panel, p. 3-3). When students read fluently, they can concentrate more on comprehension and less on decoding (National Institute for Literacy, 2007, p. 1). Furthermore, students who fail to acquire reading fluency by third or fourth grade will likely fall behind their peers in reading achievement (Dudley & Mather, 2005).

Fluency instruction usually takes one of two approaches: oral reading practice or silent reading practice (National Reading Panel, 2000). Oral reading fluency serves as a
prerequisite to reading comprehension and future reading success (Shinn & Good, 1992). Shinn and Good considered oral reading fluency as the single most important measure of reading ability for students in the learning stages. Oral reading practice methods include: incorporating movement into fluency lessons to increase student motivation to read (Peebles, 2007), using Reader’s Theatre (Jagger, 2008; Worthy & Prater, 2002), supported reading (Kuhn, 2000), repeated reading (Rasinski, 2003; Samuels, 1997), performance reading (Rasinski), and read aloud (Trelease, 2006). There are also a number of effective silent reading practice methods, although the reliability of silent reading practice is still a problem for meta-analysis (National Reading Panel). Sustained silent reading, a time set aside in the school day for uninterrupted, independent reading (Pilgreen, 2000), is one such method. Some researchers find this method instrumental in getting students to increase their time spent engaged with text (Allington, 1977; Bryan, Fawson, & Reutzel, 2003; Campagna, 2005; Dwyer & West, 1994; Fiaspeter, 1995). Schoolwide Enrichment Reading Model (Reis et al., 2008) is another strategy that increases student fluency. This model also involves setting aside time during the school day to read independently, in addition to several scaffolded instructional components (Reis et al.). A third method of silent reading practice involves using the Accelerated Reader Program, a commercial program by Renaissance Learning intended to increase amounts of student reading with appropriate texts (National Reading Panel). Accelerated Reading has been found to improve reading achievement as a supplement to the regular reading program (Bryant, 2008). Regardless of the method employed to instruct students
in becoming fluent readers, assessing oral reading fluency is essential for monitoring and predicting future success as a reader (National Reading Panel).

**Vocabulary**

The fourth component of effective reading instruction is the teaching of vocabulary. Vocabulary refers to the reader’s understanding of the meaning of words (Shanker & Ekwall, 2003). Reading vocabulary refers to the words that students encounter while reading printed text (Institute of Educational Sciences, 2009). Little benefit will come of decoding if the student is unable to recognize the meaning of the word that has been decoded (National Reading Panel, 2000). The larger students’ vocabularies, the more adept they are at understanding what they are reading (National Reading Panel). Conversely, children who have poor vocabularies are less likely to understand what they are reading and less able to learn new vocabulary in the future (Joshi, 2005; Spencer & Guilluame, 2006). The variability in vocabulary acquisition of good and poor readers may contribute to comprehension of text (Baker, Muse, & Tannenbaum, 2007; Cunningham & Stanovich, 1997; Joshi). Biemiller (2003) stated that by the end of elementary school, typically fifth grade, the average student has acquired 9,000 root words and, by the end of twelfth grade, 13,000-15,000 root words. Therefore, increasing a student’s vocabulary from one grade to the next is critical to increasing their understanding of the text (Biemiller; Shanker & Ekwall).

While there is no established method of teaching reading vocabulary (National Reading Panel, 2000), vocabulary instruction is likely to occur in one of two ways (Biemiller, 2003). The first is through direct explanation of words and the second is in
response to questions about words (Biemiller). Direct explanation of words is more effective if the words are explained in context than in isolation (Stahl & Fairbanks, 1986). Of course, many word meanings are dependent on the academic area or context (Marzano, 2003), which is why some researchers (Allington, 2006; Marzano; Trelease, 2006) have advocated for an abundance of reading in the classroom. Bolger, Balass, Landen, and Perfetti (2008) found providing a variety of contexts more effective than single contexts in retaining meaning and application to new texts. During a read aloud, a time when a teacher is reading a text to students, these brief explanations may be one or two sentences and allow the teacher the opportunity to draw attention to words the students may not have noticed or attended to (Biemiller & Boote, 2006). Regarding responding to questions about words, Biemiller believed that students, beginning in fifth and sixth grades, can be taught to ask about words whose meanings they do not know, but the author was unsure of that same ability in students below third grade. It is known that a correlation exists between vocabulary acquisition and reading comprehension (Farr, 1969) and understanding vocabulary is an essential tool in helping students understand what they are reading (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006). Teachers should therefore be aware of and implement sound vocabulary acquisition strategies regardless of their own personal experiences (Barnyak & Paquette, 2010).

**Comprehension**

Understanding the meanings of single words is not sufficient to comprehend entire texts, which is why the final component of reading instruction is text comprehension instruction (National Reading Panel, 2000). As the name implies, text
comprehension instruction emphasizes the understanding of entire texts, or passages (Institute of Educational Sciences, 2009; National Reading Panel). Reading comprehension is the ability to understand text (Ravitch, 2007). The strategies employed in comprehending text are what guide students through understanding as they read and write (National Reading Panel, 2000). Struggling readers are typically not fluent and therefore take more effort to attend to understanding what they read, thereby limiting their reading comprehension (Allington, 2006; Shanker & Ekwall, 2003). Perfetti and Bolger (2004) found that low reading skill is associated with slow letter-string processing. Letter-string processing is the brain’s ability to process the letters seen in texts (Perfetti & Bolger, 2004). Low letter-string-processing takes the reader away from processing whole words as processing individual letters becomes time-consuming, according to Perfetti and Bolger. Making connections to text is another important subskill in reading comprehension and is a critical factor affecting comprehension, according to Shanker and Ekwall. Being able to retain those connections in long-term memory to bring them up while reading is also necessary (Willis, 2008). Prior knowledge, “the knowledge that a reader brings to the subject” (Shanker & Ekwall, p. 153), is another of these factors. Dewey believed that children need to have a personal connection to what they are learning (Dewey, 1910, 1938, 2001). He felt strongly about the responsibility of educators to create this connection as children do not come prepared to make the connection themselves:

The child comes to the traditional school with a healthy body and a more or less unwilling mind, though, in fact, he does not bring both his body
and mind with him; he has to leave his mind behind, because there is no way to use it in school. (Dewey, 2001, p. 50)

Educators make these connections in order to provide experiences, interactions, and reflections in an interactive environment. These occur to provide a continuous framework for practice (Dewey, 1910). Good readers, readers who make meaning of what they are reading, access their prior knowledge and quickly make connections when encountering text, and those who do not are likely to have reading difficulties (Perfetti & Bolger, 2004).

**Oral Reading Fluency**

Oral reading fluency (ORF) consists of three components: rate, accuracy, and prosody (NICHHD, 2000; Osborn, Lehr, & Pacific Resources for Education and Learning, 2003). Rate and accuracy are easily quantifiable and easily measured (Torgesen, Rashotte, & Alexander, 2001). Although prosody, or expression while reading, is a necessary component of fluency and important to comprehension (Allington, 2006; Miller & Schwanenflugel, 2006; National Reading Panel, 2000), it is difficult to measure and quantify (Dowhower, 1991). Schwanenflugel, Hamilton, Kuhn, Wisenbaker, and Stahl (2004) found that while students with a high rate of decoding seemed to be exhibit prosody, they found no connection between prosody and comprehension on the Wechsler Individual Achievement Test (1992) Reading Comprehension subtest. Cramer and Rosenfield (2008) warned that reading rate alone does not correlate with comprehension and supported their argument with results of their study of 83 fourth graders whose reading rate did not correlate with their comprehension
scores. Consequently, accuracy and rate are often standards by which educators and researchers measure oral reading fluency (Deno, 1985; Fuchs et al., 2001; Wang, Porfeli, & Algozzine, 2008).

Having students read aloud from connected texts for 1 minute while recording accuracy and calculating the number of words read correctly during that time, is both a reliable and valid method of assessing oral reading fluency (Deno, 1985; Deno et al., 2001; Fuchs et al., 2001; Hasbrouck & Tindal, 2006; Hudson et al., 2009; Shinn & Good, 1992). This method of assessment, called curriculum-based measurement, has become a prevailing method of ORF measurement (Deno et al.; Fuchs et al.; Graney & Shinn, 2005; Stecker, n.d.; Stecker 2006; Stecker et al., 2008).

A small study conducted by Daly, Bonfiglio, Mattson, Persampieri, and Foreman-Yates (2006) concluded that ORF is an effective criterion for experimental analysis. This small study of three elementary students used randomly selected passages from the Silver, Burdett, and Ginn basal reading series (Pearson et al., 1989) to assess growth in oral reading fluency. The researchers concluded that increasingly difficult reading passages have a positive effect on the growth of oral reading fluency (Daly et al., 2006). Deno et al. (2001) also investigated curriculum-based measurements as a tool to measure oral reading fluency. In their study, 2,675 elementary-aged students from four local education agencies across the United States were tested. For statistical analysis, Deno and colleagues combined participants across geographic area and then sorted by grade level. Oral reading fluency scores were the amount of words read aloud correctly in 1 minute in a written passage. Deno et al. ensured that all passages were kept at a constant
difficulty for each grade throughout the school year, so that changes in scores could be attributed to a change in proficiency, not a change in passage difficulty. Initial rates of growth for special and general education students changed quickly after the first year of reading instruction. For each subsequent grade, special education students fell farther behind as general education students increased more rapidly. Deno et al. concluded that because curriculum-based measurement is a bridge between psychometric behavioral methods (standardized, published tests) and teacher observation methods, curriculum-based measurement assesses relative standing among peers as well as individual growth.

Reading fluency is multifaceted (Hudson et al., 2009), yet many researchers believe that a strong relationship exists between fluency and comprehension (Hintze, Callahan, Matthews, Williams & Tobin, 2002; Klauda & Guthrie, 2008; LaBerge & Samuels, 1974; Munisteri, 2009; Riedel, 2007; Wood, 2006). Hintze et al. examined oral reading fluency and its prediction of reading comprehension in African-American and Caucasian elementary school children in an attempt to replicate and extend a study conducted by Kranzler, Miller, and Jordan (1999) on bias in curriculum-based measurements. Kranzler et al. had concluded, based on their study of 326 students, that curriculum-based measurements did not introduce bias between measurements of second- and third-grade students, but gender bias was present for fifth-grade females, and for certain ethnic groups in both fourth- and fifth-grade students. In their replication study, Hintze et al. examined the data from 136 students in second through fifth grades in a small urban town. As in the Kranzler et al. study, curriculum-based measure reading probes were used to measure oral reading fluency and grade level passages were selected
from the Silver, Burdett, and Ginn (1991) reading series. Three passages of 250 words each were used for each sitting (Hintze et al.). Unlike the Kranzler et al. study, Hintze et al. concluded that curriculum-based measurement in reading using oral reading fluency as a predictor of reading comprehension is not racially biased for African-American and Caucasian students in second through fifth grades.

Jones (2009) also found oral reading fluency to be a predictor of reading comprehension. In a study with 556 middle school student participants, Jones compared the reliability of ORF and Maze methods of testing oral reading fluency. ORF assessments consisted of the students reading orally from three 200 word reading probes. The probes were selected on an individual basis based on each student’s Lexile reading level and were administered according to general CBM guidelines. ORF rates were calculated as the average number of correctly read words in 1 minute from the three passages. Maze assessments consisted of students reading passages of about 400 words in 3 minutes with every seventh word replaced with three word choices. The format of the Maze assessment for this study was a computer based template. The student started at the beginning of the passage on the computer screen and began reading the passage to his or her self. Students were instructed that as they came upon a blank, they were to select the appropriate word from the three possible choices and continue through the passage in the same manner. Scores are based on accurate word choice (Jones). The study showed that oral reading fluency is a reliable predictor of comprehension, and has a stronger correlation with results of state testing than Maze methods (Jones). This finding is consistent with work done by Fuchs and Fuchs (1992), who concluded the same about
cloze assessments. Cloze measures require a student to silently read a 400-word passage for about 7 minutes. Every seventh word is replaced with a blank. The student is supposed to replace the blank with an appropriate word that makes sense in the passage (Fuchs & Fuchs, 1992).

A widely used curriculum-based measure for oral reading fluency is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) (Good, Kaminski, et al., 2001; Shelton, Altwerger, & Jordan, 2009; University of Oregon Center on Teaching and Learning, 2000). Some researchers have suggested that DIBELS is used too often (Goodman, 2005; Samuels, 2007). Others have suggested that DIBELS is not a predictor of a student’s ability to read authentic texts (Shelton et al., 2009). By contrast, many researchers report on the predictive value of DIBELS for early detection of future success or difficulties in reading comprehension (Munisteri, 2009; Riedel, 2007; Schilling, Carlisle, Scott, & Zeng, 2007; Suchey, 2009).

Researchers have investigated levels of bias, if any, in oral reading fluency measures for gender or ethnic subgroups (Deno, 1985, 2003; Hintze et al., 2002; Kranzler et al., 1999). In an effort to identify the accuracy of the DIBELS oral reading fluency measure for predicting third grade reading comprehension, Roehrig et al. (2008) conducted a study of 35,207 third grade participants. The researchers examined three facets of DIBELS oral reading fluency relative to its predictability to the Florida Comprehensive Assessment Test: Sunshine State Standards and the Stanford Achievement Test (Roehrig et al.). The first was the relationship between DIBELS oral reading fluency and two different reading comprehension tests. Second, the researchers
examined the appropriateness of the status levels for predicting reading comprehension outcomes. Thirdly, the researchers explored the identification of gender or ethnic bias among subgroups (Roehrig et al.). The results of statistical analysis revealed that DIBELS oral reading fluency equally predicted comprehension performance on both reading comprehension tests. The results also indicated that the status levels were predictive of reading comprehension performance on both reading tests. Finally, regarding bias of DIBELS oral reading fluency, Roehrig et al. concluded that DIBELS oral reading fluency was accurate regardless of student demographics.

In study by Munisteri (2009), DIBELS oral reading fluency was examined for its appropriateness as a predictor of future success on state comprehension exams. Munisteri also examined the data for differences in gender and ethnic groups, but did not look for bias. According to Munisteri, this study is unique in that the DIBELS oral reading fluency scores are from the previous school year, as opposed to what is typically examined, the current year’s DORF (Baker et al., 2008; Good, Kaminski, et al., 2001; Goodman, 2005; Riedel, 2007; Schilling et al., 2007; Shelton et al., 2009; Suchey, 2009). In a study of 263 participants, Munisteri discussed the predictive value of DIBELS oral reading fluency for state comprehension testing for third and fourth graders in a public elementary school. At each grade level, Munisteri examined DORF, Terra Nova (©CTB/McGraw-Hill LLC), and New York English/Language Arts Tests (New York ELA) data for gender and ethnic differences. The Terra Nova and the New York ELA are published assessments. She then examined a relationship between second-grade DIBELS oral reading fluency and Terra Nova scores with third-grade success on the New
York ELA for third graders. For fourth graders, a relationship between third-grade DORF and Terra scores with fourth-grade success on the New York ELA was examined. In both grades, the previous year’s Terra Nova was most predictive of success on the current New York ELA, followed by the previous year’s DIBELS oral reading fluency, and then socio-economic status, according to Munisteri. A drawback to the design of this investigation was the use of previous year’s DIBELS oral reading fluency data to the current year’s reading comprehensions scores, which were tested in January of that school year (Abrams, 2008). As mentioned earlier, many studies use data from a single school year in their statistical analyses (e.g., Good, Kaminski, et al., 2001; Goodman, 2005; Hintze et al., 2002; Klauda & Guthrie, 2008; LaBerge & Samuels, 1974; Riedel, 2007; Schilling et al., 2007; Shelton et al., 2009; Suchey, 2009; Wood, 2006).

In a study examining the predictive value of DIBELS oral reading fluency on the rate and accuracy of reading authentic reading materials, Shelton et al. (2009), examined the DORF scores for 14 second graders. Shelton et al. generally defined authentic reading material as “real” books (p. 140). The researchers concluded, based on close examination of DIBELS oral reading fluency scores, that the descriptive levels of performance were not accurate representations of what the students were capable of reading in authentic reading materials and suspected that students adapted their reading fluency to the text. While not examining authentic reading text, other researchers (Munisteri, 2009; Riedel, 2007; Suchey, 2009; Wood, 2006) have examined the relationship between oral reading fluency and comprehension. This appeals to educators since so many school districts implement benchmark ORF assessments to predict success
on statewide reading tests (Good, Kaminski, et al., 2001). Wood (2006) examined the DORF scores of 281 public elementary school students in northern Colorado and sought evidence of a correlation to the state assessments of those participants. Wood’s study demonstrated a strong relationship between oral reading fluency and performance on a statewide test. This relationship was strong and relatively consistent for participants in grades three, four, and five, even though small variations occurred between individual classrooms. The differences in classroom performances may have been an effect of individual teacher styles, according to Wood. Suchey was also interested in examining a relationship between oral reading fluency and comprehension.

In another study on reading fluency and reading comprehension, Suchey (2009) examined ORF scores and reading comprehension data on 1,016 third-grade participants from Reading First schools throughout the United States. Reading First is a federally funded program whereby schools seek out funds to support research-based instructional practices so that all students are reading by the end of the third grade (U.S. Department of Education, 2008). Suchey sought to assess the usefulness of ORF as an indicator of reading comprehension as well as the ability of ORF to identify specific reading components of reading comprehension. Oral reading fluency was assessed through the use of DIBELS oral reading fluency and reading comprehension was based on the comprehension battery of the Iowa Test of Basic Skills. Results from Suchey’s data analysis indicated a moderate correlation between oral reading fluency and overall reading comprehension, as identified by the Iowa Test of Basic Skills, Reading subtest, and were statistically significant. Suchey’s data also showed a stronger correlation
between oral reading fluency and literal comprehension than with inferential comprehension. Suchey explained the differences between the two types of comprehension questions by the level of interaction with the text and prior knowledge needed to address the complexities of text, and suggested further research in the area of the differences between those two types of comprehension.

Riedel (2007) examined the relationship between DIBELS subtest scores, reading comprehension, and vocabulary in urban first-grade students. Participants were 1,518 first grade students in the Memphis City School district during the 2003-2004 school year. The students in this study were predominantly African American with an almost equal number of males and females. Eighty-five percent of the students qualified for free and or reduced lunch, an indicator of poverty. Several subtests of DIBELS were also used as assessments of fluency: Letter Naming Fluency (LNF), Phoneme Segmentation Fluency (PSF), Nonsense Word Fluency (NWF), Oral Reading Fluency (ORF), and Retell Fluency (RF). Riedel concluded that if the goal of administering DIBELS was to identify students who are at risk for reading comprehension difficulties, DORF is an appropriate measurement tool, and the researcher added that there was no justification to use the other DIBELS subtests, as the other subtests of DIBELS were less accurate predictors. Riedel also concluded that vocabulary was a factor in oral reading fluency and reading comprehension. He noted that students who scored a lower oral reading fluency but scored well on the comprehension test had a higher vocabulary. Students who scored a higher oral reading fluency, but a low reading comprehension score, had a lower vocabulary score (Riedel).
A study by Schilling et al. (2007) also scrutinized fluency measures as accurate predictors of reading achievement. The participants included 2,588 first graders, 2,527 second graders, and 2,527 third graders in Reading First schools in the 2003-2004 school year in the state of Michigan. The DIBELS subtests scores of each participant were compared with their state reading test scores. The researchers reviewed hits and false alarms to determine the accuracy of the risk status of the DORF. Schilling et al. considered an accurate prediction based on DORF status as a hit, an incorrect prediction of reading difficulty as a false alarm. Based on their observations, Schilling et al. concluded the at-risk category of DORF is useful in predicting below grade level performance in reading achievement, especially in the 50th and 25th percentiles. They also concluded, however, that the Word Use Fluency (WUF) score was only weakly correlated to comprehension measures, which is consistent with the findings of Riedel (2007). Schilling et al. suggested that decisions based on DIBELS scores should use the oral reading fluency score (DORF), as it had the highest correlation at second and third grade with performance on standardized reading achievement tests.

Not all researchers are interested in the predictive value of DIBELS. In their study of second-grade American students, Wang et al. (2008) investigated the gap between at-risk and not-at-risk students. Theses researchers were interested in the development of variance in ORF rates over the course of the progress monitoring time frame. Using analysis of variance (ANOVA) with repeated measures to examine change over time, Wang et al. investigated the growth rates over time across reading status, gender, and ethnicity for a sample of 1,153 second-grade American students. The
researchers expected varying initial rates and were interested in the variance over time. Through growth-curve analysis they found consistent gaps in ORF rates between Caucasian and non-Caucasian students, higher rates for Caucasian and Asian students. They also found that females had consistently higher ORF rates than did males. The findings of Kranzler et al. (1999) suggested that there was no evidence of gender bias of ORF at the second grade level, and Deno at al. (2001) found that these gender and ethnicity gaps increased as the students get older.

**Expectancy-Value Theory of Achievement Motivation**

There are several theories that attempt to explain why people choose and show persistence in the activities they do (Schunk, Pintrich, & Meece, 2008). Self-concept and task value, the two dimensions of motivation addressed in the MRP (Gambrell et al., 1996), are also the two key dimensions of the expectancy-value theory of achievement motivation (Wigfield & Eccles, 2000). Theses two dimensions are assumed to have the most direct effect on student performance, persistence, and choice of achievement task in children and have been empirically identified in children as young as six years old (Wigfield, 2004). Even when compared to previous performance, a child’s self-concept is the strongest predictor of future success, according to Wigfield and Eccles.

Ability beliefs are the perceptions that an individual has about their current competence to complete an activity (Wigfield & Eccles, 2000). These beliefs are similar to, but separate from, feelings of future success, or expectancies. The combination of ability beliefs and expectancies is an individual’s *self-concept*. Children are capable of
identifying and distinguishing the self-concept for and between varying subject specific tasks (Wigfield et al., 1997; Wigfield & Eccles, 2000).

In addition to self concept, expectancy-value theory also addresses the value an individual places on a task. This value can be described as having four aspects: attainment value, intrinsic value, utility value, and cost value (Wigfield, 2004; Wigfield & Eccles, 2000). Attainment value refers to the value a person places on the importance of doing well on a task. Intrinsic value is the enjoyment an individual gets from performing a task (Eccles & Wigfield, 2002). In the area of reading, a child who is intrinsically motivated reads for the enjoyment of reading (Guthrie & Wigfield, 1999). This enjoyment is one of the positive effects Deci and Ryan (1985) suggested are a result of a task having a high intrinsic value. Utility value refers to how well a task fits into an individual’s future goals and how well present goals fit with these future goals. Utility goals also relate to an aspect of motivation which Deci and Ryan referred to as extrinsic reasons. For example, an extrinsic reason for performing a task may be how the individual feels that other perceive him or her for completing a task, according to Eccles and Wigfield. The final aspect of value is that of cost, which refers to how the decision to complete the task affects completing other tasks (Wigfield & Eccles, 2000), as well as the negative aspects of engaging in a task, such as fear and anxiety associated with the task (Eccles & Wigfield, 2002). As with self-concept, a child’s task values are domain-specific in students as early as first grade (Wigfield & Eccles, 2000).

Self-concept and task value change as a child gets older (Wigfield et al., 1997). These changes appear to be related to gender differences. The expectancy-value model
of achievement was originally conceived as an attempt to understand the different kinds of achievement behaviors in males and females (Wigfield, 2004) even though the performances of each population were similar (Bembenutty, 2008). In Wigfield et al.’s longitudinal study, it was found that not only were there domain differences for the dimensions of motivation, but gender differences as well. These differences occur most noticeably as students get older, in the middle school years. These findings are supported by the results of a cohort-sequential design study by Fredricks and Eccles (2002). The researchers studied 512 students beginning in grades one, two, and four, following them until they were in grades nine, ten, and twelve. The results indicated that self-concept declined as students grew older, but gender differences in self-concept remained. Both studies found that gender differences exist for task value and self-concept, and that these differences persist over time. As students in both studies grew older, their self-concept and task value also decreased.

**Motivation to Read**

Terrell Bell, former American Secretary of Education, aptly stated, “There are three things to remember about education. The first one is motivation. The second one is motivation. The third one is motivation” (Ames, 1990, p. 409). Unfortunately, the National Reading Panel (2000) did not include motivation as one of the major components of reading instruction (Williams, Hedrick, & Tuschinski, 2008). The panel did include engagement in their findings regarding fluency, but did not find sufficient research to propose engagement as a component of reading instruction (NICHHD, 2000; Shanahan, 2006b). However, many educators and researchers know that motivation is
key to good instruction (Schunk et al., 2008; Sullo, 2007; Williams et al., 2008), successful reading achievement (Gambrell et al., 1996; Hussien, 1998; Quirk et al., 2009), and improved comprehension of text (Guthrie & Wigfield, 1999).

Motivation is the “why of behavior” (Covington, 1999, p.11). Why do some students want to learn? Why do some students read until late into the night? Why do others carry around a book that they have no intention or perhaps no ability to read? Motivation also addresses what guides a student toward attaining certain goals (Sansone & Harackiewicz, 2000), makes them avoid certain situations (Derville, 1966; Onatsu-Arvilommi & Nurmi, 2000), explains how they feel about themselves (Bandura, 1977; Renninger, 2000), or why they choose to read (Butkowsky & Willows, 1980; Clifford & Chou, 1991; Gambrell et al., 1996; Hussien, 1998). White (1959) pointed out that the motivation theories of his time did not take into account the fact that humans learn to do things that they certainly did not know how to do at birth, but motivation research has evolved quite a bit since then (Covington, 1999; Schunk et al., 2008). Becoming a successful reader definitely falls under the category of tasks humans are not born to do (Rasinski, 2003). Learning to read is not a natural process (Enrichment Services, n.d.; Lyon, 2000) and it is likely that there are “multiple motivation pathways” (Taboada, Tonks, Wigfield, & Guthrie, 2009, p. 86) that guide student behavior. Other factors play a part in improving reading ability. As Baker and Wigfield (1999) observed, “because reading is an effortful activity that children often choose to do or not to do, it also requires motivation” (p. 452).
Over four decades ago, Gagné (1965) described motivation in terms of motivation to achieve. Motivation to achieve is the desire to be able to do something. Gagné predicted that “controlling and developing motivation is quite the most serious issue facing schools” (p. 207). Exacerbating the problem of developing motivation in students, said Gagné, is that sometimes the goals of learning are not readily apparent to the students, and it becomes the responsibility of the teachers and parents to help the child realize that he or she wants to learn a task. Parents often play a role in a child’s motivation to read (Baker, 2003; Baker & Scher, 2002, Morgan & Fuchs, 2007), though not always (Hussien, 1998). Nevertheless, it is often the motivation experienced as a result of interactions with school adults and one’s self motivation that influence future learning and affect a student’s motivation (Deci & Ryan, 1985; Marzano, 2003; Sweet, Guthrie, & Ng, 1998).

Stipek (1993), another proponent of achievement motivation, believed that humans behave based on a set of beliefs and values that come from previous experiences in achievement situations. These experiences are judged by the amount of failure or success that a learner perceives. Because the immediate environment influences these experiences, motivation may appear to be situational (Stipek, 1993). However, in the realm of self-efficacy, this may lead to learned helplessness as students feel that no matter what they do, they will not be successful (Linnenbrink & Pintrich, 2003). Almost a decade later, Stipek (2002) continued to promote her theories of the importance of motivation to learning: “motivation is relevant to learning because learning is an active
process requiring conscious and deliberate activity. Even the most able students will not learn if they do not pay attention and exert some effort” (p. ix).

Other theorists (Bandura, 1977; Derville, 1966) described what they believe happens when students do pay attention and observe their surroundings. Bandura (1977) described motivation in terms of what is learned in a social setting. This approach has come to be known as social learning theory (Petri, 1991). Humans are able to learn through observation and are more likely to engage in the observed behavior if they believe they are capable of completing the behavior (Bandura, 1977, 1982, 1983, 1994; Bandura & Schunk, 1981). Bandura (1977) believed that some people have a strong sense of self-efficacy, while others have a weaker one. Derville took a slightly different approach and explained what motivates students to learn in terms of difficulties and discoveries. Derville explained that one way to understand what motivates students to learn is the observation that “difficulties lead to discoveries” (p. 85). Children can either watch someone else have difficulties or experience a difficulty themselves; either way, discoveries, or learning, are going to happen, according to Derville. These discoveries are tied to human emotions. If we discover that we wanted to do something, and then find that we cannot, we become frustrated. If we find that we lack an expertise that other people have and that we feel we should have, we feel inferiority. Derville also pointed out that when learners choose to avoid such situations, they are preventing themselves from gaining the opportunity to improve, which is necessary to remove the feelings of inferiority.
Students’ negative feelings about their ability as readers may transfer to how they see themselves in other learning situations (Butkowski & Willows, 1980), which may lead to avoidance of these tasks (Derville, 1966; Linnenbrink & Pintrich, 2003). To test this hypothesis of learned helplessness, Butkowski and Willows examined the relationship between certain self-perceptions and reading ability. Seventy-two fifth-grade males from four public schools in mostly middle class communities were selected as participants for the study. For this study, participants took two “tests”. One was a reading test that required the students to try to solve five anagrams. The second test, not a reading test, involved tracing a pattern of lines without lifting the pencil. Before and after each test, participants were asked to rate their expectancy of success. The results indicated a significant relationship between expectancy and level of the reader. The researchers noted that good readers reported being more confident in their abilities than the average and poor readers, while poor readers reported significantly lower expectancies of success than the average and good readers. Poor readers also showed relatively lower expectancies for non-reading tasks as well as reading tasks, indicating a transfer of their success as a reader to their expectancy of success in ability. When they did well, poor readers did not attribute their success to ability, while average and good readers did. Another observation of the study was that poor readers reacted to failure more strongly than average and good readers did. While average and good reader expectancy scores were not significantly affected by the failure experiences, poor readers had low initial expectancy scores and then even lower post test scores based on their failure experiences.
Some learners, however, will engage in tasks in which they are not competent or avoid engaging in tasks in which they are competent. Wigfield, Guthrie, Tonks, and Perencevich (2004) noted that “even the reader with the strongest cognitive skills may not spend much time reading if he or she is not motivated to read” (p. 299). Educators are interested in why (Sullo, 2007). Completing certain tasks may provide the student with a feeling of satisfaction, which may go beyond the feelings of competence at having completed these tasks (White, 1959). Intrinsic motivation theories attempt to address such aspects of motivation, explaining that when children are intrinsically motivated, they complete activities merely because they are interested in and enjoy the task (Eccles & Wigfield, 2002). Because students who are engaged are more successful in comprehending what they read than those who not engaged (Guthrie & Wigfield, 2000), Guthrie et al. (2006) conducted a study of what they referred to as interest-based episodes and their influence on reading comprehension. Ninety-eight third graders from a Mid-Atlantic elementary school participated in the 2006 study. Since the researchers understood interest to be individual to each student, a rating scale was used to assess the interest level in accompanying reading tasks before and after collection of comprehension data. The results indicated that the more motivated a student is to complete a reading task, the better their reading comprehension. This could be due to the strong correlation between intrinsic motivation and frequency of reading (Wigfield & Guthrie, 1995; Wigfield & Guthrie, 1997).

Sometimes an external reward may affect how a child is intrinsically motivated (Deci & Ryan, 1985; Ryan & Deci, 2000; Marinak & Gambrell, 2008; Sansone &
Harackiewicz, 2000). In a post test-only control study of 75 third graders in a Mid-Atlantic suburban elementary school, Marinak and Gambrell investigated the effects of rewards on task persistence as an indicator for intrinsic motivation to read. The reward was a choice of book rewards or token rewards, token rewards being material items that were not books and had nothing to do with reading. The researchers used task persistence because if children are intrinsically motivated, and not controlled by an outside force, they will seek out the activity or continue with the activity. Interestingly, Marinak and Gambrell concluded that students who received a book reward or no reward at all demonstrated a stronger motivation to read than did students who were given a token reward.

Conversely, not all students receive the same sense of satisfaction from completing the same or similar tasks (Ajzen, 2001; Bachman & O’Malley, 1986; Eccles & Wigfield, 2002; McCombs, 1994). McCombs and Pope (1994) suggested that some differences may be due to a feeling of skill versus will. That is, even though students with the same skill set attend to an activity, they may have varying levels of will to accomplish the task. This may be due to what Renninger (2000) described as individual interests. She explained that even when two people experience the same information, they still develop their own value of that information. This could be due to multiple factors, such as prior knowledge, amount of attraction to the information, and even a sense of self (Renninger).

Hussien (1998) conducted a study regarding student motivation and reading achievement. The purpose of her descriptive study was to examine the relationship
between motivation to read and reading achievement. Hussien examined correlational data between students’ motivation to read, reading achievement, parental involvement, gender, and living location. Motivation to read was measured by a teacher survey and parental involvement was measured using a parent survey. She concluded that there was a relationship between students’ motivation to read and their reading achievement. Her study found no relationships between motivation to read and gender, parental involvement, or living location. In a study using a self-reporting tool for motivation, Gray (2008) found no evidence of a correlation between reading motivation, gender, and reading achievement. Gray attributed the lack of correlation between motivation and reading achievement partially to the self-reporting nature of her motivation assessment. However, self-reporting tools have been used to identify a significant correlation between motivation and reading achievement. Based on her findings, Hussien suggested that students who were more motivated to read tended to be better readers and therefore motivation to read could be one of the factors that influence reading achievement. This finding is echoed by a study by Taboada et al. (2009). The data analysis from the scores of 205 Mid-Atlantic fourth graders on two reading comprehension tests, as well as a motivation measure, indicated that internal motivation is a significant contributor to reading comprehension. Taboada et al. suggested that internally motivated students are more devoted to reading and therefore will better comprehend what they are reading, making a significant contribution to reading comprehension.

Taking a slightly different approach to motivation to read, Quirk et al. (2009) analyzed the data from a reading fluency assessment and a modified MRP Reading
Survey of 185 rural elementary second graders to investigate the relationship between students’ reading self-concept, goals for reading, and reading fluency. The results of their short-term longitudinal study suggested a relationship between students’ reading self-concept and their goals for reading. They also concluded that reading self-concept is related to reading fluency and goals for reading. However, goals for reading were not related to reading fluency. Broussard and Garrison (2004) also found a connection between motivation and reading achievement. In their study of 279 first and third graders from a southern city in the United States, Broussard and Garrison concluded that classroom motivation and achievement are mildly positively related, particularly for third graders.

This contribution may not always be positive (Morgan, Fuchs, Compton, Cordray, & Fuchs, 2008) or consistent (see Bast & Reitsma, 1998; Morgan, Farkas, & Hibel, 2008; Stanovich, 1986). Morgan, Fuchs, et al. (2008) examined whether early reading failure affected children’s motivation to practice reading. In a four-year longitudinal study, Morgan, Fuchs, et al., found that students identified as poor readers perceived reading as difficult and identified themselves as less competent. They also held less positive attitudes toward reading than students identified as good readers did. This difference in attitude between poor and good readers remained throughout the study. Even with successful tutoring, which increased reading skills, motivation in students who were initially reported to be less motivated toward reading remained low throughout Morgan, Fuchs, et al.’s study.
Another study that compared the reading motivation levels of students with initial and continuing reading failure with that of students having initial and continued reading success was conducted by Morgan (2004). Morgan measured reading motivation in terms of self-concept, which is considered by many researchers to be an indicator of motivation (Bandura, 1977; Boulton & Cunningham, 2003; Stanovich, 1986; Wigfield et al., 2004). To establish a causal relationship, Morgan used a pretest/posttest control group design. He compared students who received instructional intervention with those who did not. Seventy-five first graders from 30 classrooms were selected for the study from public schools in Nashville, Tennessee. Students were rated as high-skilled readers, low-skilled readers, and low-skilled readers who would receive tutoring. The rating of readers as high and low is similar to the concept of status used by DIBELS (Good & Kaminski, 2002b). The low-skilled readers receiving tutoring were monitored for five weeks using curriculum-based measurements. The curriculum-based measurement for this study was to read from a list of Dolch sight words. Students were asked to correctly read as many words as they could in 1 minute (Morgan, 2004). Morgan concluded that there were significant main effects for the groups, meaning high-skilled readers reported a high self-concept and the low-skilled readers reported a low self-concept over time. The students’ self-report of self-concept did not change over the course of the experiment. Intervention did not seem to have an effect on reading motivation. These results are similar to the findings of Morgan, Fuchs, et al. (2008). There was no significant difference between the self-reporting by the students and the observations of self-concept by the teachers. Morgan concluded that because of the lack of discrepancy,
self-reports were an accurate measure of self-concept. There were, however, significant differences in the self-reporting for self-concept across groups for the pre- and posttests, leading Morgan to conclude that there is evidence of the Matthew effect and a relationship between reading skill level and reading motivation. Matthew effect refers to the amplitude of the differences between poor readers and good readers over time (Bast & Reitsma, 1998; Morgan, Farkas, & Hibel, 2008; Stanovich, 1986).

Looking at average readers, Marinak and Gambrell (2010) were interested in the role gender plays in student self-confidence as a reader and value of reading. In their posttest-only study, the researchers investigated gender difference on the MRP. They analyzed the survey results of 288 third-grade students in terms of a total motivation score, self-concept as a reader, and value of reading. Their study yielded significant gender differences between males and females for value of reading, no significant gender differences for self-concept as a reader, and significant gender differences for the MRP total score. Marinak and Gambrell concluded that third-grade males and females were equally self-confident in the ability to read, while males were less motivated to read, specifically valuing reading less than average third grade female readers.

**Conclusion**

This section was a summary of the findings in the literature pertaining to motivation to read and oral reading fluency. There is an expectation of literacy in the nation’s students. Reading instruction plays an important role in attaining that literacy. ORF was explained in the context of the five essential components of reading instruction. The research suggests that oral reading fluency is a window into reading achievement.
This achievement is not easy to attain. Motivation plays another important role in the attainment of reading ability. Gender appears throughout the literature and was addressed in this study as well. The findings of these studies on motivation to read and oral reading fluency in the context of reading instruction and expectancy-value theory confirm the need for further research into how motivation plays a part in the self-concept as a reader and value of reading for struggling and successful readers alike. A description of the methodology and design follows in section three.
Section 3: Research Method

Introduction

The purpose of the study was to investigate evidence of a relationship between motivation to read, oral reading fluency, and demographics in third-grade elementary students. This section opens with a description of the study’s quantitative nonexperimental cross-sectional correlational design and approach. Following the clarification of design and approach is a description of the setting and sample, including a description of the population from which the sample was drawn as well as the convenience sampling method utilized during the study. The instrumentation and materials section details the MRP, which was used to measure motivation to read, as well as the DORF subtest, used to measure oral reading fluency. The data collection and analysis section outlines the procedures utilized during the data collection phase of the study as well as the procedures utilized during the administration of the MRP and DIBELS measurements. A description and justification of the data analysis procedures, which utilized an ANCOVA, is also included. Following the data collection and analysis section, I will address the protection of human participants and my role as the researcher for the study. The section concludes with a proposal for disseminating the findings of the study.

Research Design and Approach

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. Quantitative
research is a “formal, objective, systematic process in which numerical data are used to obtain information about the world” (Burns & Grove, 2005, p. 26). Inherent to quantitative research is answering questions about relationships between variables with the intent of explaining, predicting, or controlling the outcome of an experience (Leedy & Ormrod, 2005). There are two basic types of quantitative research, experimental and nonexperimental (Creswell, 2003). These have also been described as experimental and descriptive (Leedy & Ormrod, 2005). Leedy and Ormrod further delineated descriptive studies as having: (a) correlational, (b) observation, (c) developmental, or (d) survey designs. It was not my intent to test a treatment and compare it to a control group or randomly assign participants to groups; therefore I did not use an experimental model (Gravetter & Wallnau, 2005). I was interested in identifying a relationship, if one existed, between variables. Research that looks to identify the existence of relationships between variables is correlational research. The simplest way to look for such relationships between variables is to make observations of the variables as they occur naturally (Gravetter & Wallnau, 2005), which is what I did.

For this quantitative research study, I used the nonexperimental cross-sectional correlational design to examine a potential relationship between motivation to read, oral reading fluency, and demographics. Spector (2003) asserted that cross-sectional designs are efficient at determining the existence of relationships between variables. Cross-sectional designs refer to collecting data that “have been collected at one point in time” (Bourque, 2003, p. 1). Cross-sectional research may also refer to a short time frame (Spector, 2003). In the case of the current study, motivation to read and oral reading
fluency instruments were administered during the same point in time, within one week of each other. I collected motivation to read and oral reading fluency raw data, in the forms of MRP scores and ORF rates respectively, from the data archive, via a coded list from the participating school administrator. MRP responses yielded a total score, a self-concept as a reader score, and a value of reading score. Included in the measure were the self-selected responses of the MRP (see Appendix A) as well as a question requesting a student identification number to further identify the participants when matching MRP scores to ORF rates. A representative from ABC Elementary was responsible for matching the students’ identification numbers prior to giving raw data to me. The collection of said data was done only after approval from the Walden Institutional Review Board to proceed beyond the proposal phase of the study (# 11-15-10-0311114).

Cross-sectional designs also assume that the sample properly represents the population (Bourque, 2003). In the case of the current study, the sample of third graders was typical of third grade classes at ABC Elementary and is representative of the school’s population (Schoolmatters, 2010). The sampling procedures, as well as the procedures for protecting participants’ rights, will be thoroughly discussed later in this section.

The survey format allows for a quick collection of data and a rapid turnaround in the analysis (Fink, 2006). Quick data collection was important to the teachers so as not to keep students out of their classrooms and away from instructional time. Surveys also make it possible to describe motivation in numerical terms (Creswell, 2003). The results from survey samples also allow for a generalization of conclusions to the larger population (Creswell, 2003).
During the course of the study, ABC Elementary used both assessment measures, the MRP and the DORF. Throughout District X, oral reading fluency was assessed with DIBELS and motivation to read was measured in a variety of ways. However, the results of these two measures had not been examined for correlations that, if found, could prove helpful in making data-driven instructional decisions for new readers. Upon analysis of the archival data obtained from the MRP Reading Survey and the DIBELS ORF benchmark, I was able to make inferences about the school population (Fink, 2006).

The factors considered in the study, as explored in the literature review in the previous section, were motivation to read, oral reading fluency, and demographics. Motivation to read was measured with the MRP Reading Survey, which yielded MRP scores. MRP scores provided data in terms of value of reading, self-concept, and as a total score (see Appendix B). The second variable, oral reading fluency, was measured with the DORF subtest and yielded ORF rates. Data pertaining to the variables of gender and ethnicity were collected from the DIBELS data archive. Demographic information contained in the DIBELS archive was input by the school administrative assistant from enrollment information and was checked for accuracy by the homeroom teacher.

Setting and Sample

Context

This study took place in ABC Elementary. ABC Elementary was located in District X in a Mid-Atlantic state. Classroom teachers were responsible for administering the DIBELS ORF assessments. All teachers were trained in the proper DIBELS administration protocol. All materials were provided to the teachers. Third-grade
students answered an online version of the MRP in the computer lab of ABC Elementary during regular school hours. All teachers were trained in the MRP protocol. The principal of ABC Elementary provided me with raw data that did not include any personally identifiable information from preexisting school files.

**Population**

The target population was all third graders in District X. A sample of third graders was appropriate for this study for the following reasons: (a) third grade is the first year in District X that students are responsible for taking the mandatory state assessment and (b) third grade is also the target year in which all students should be reading (Bush, 2003; NICHHD, 2000).

District X was located in a Mid-Atlantic state. There were approximately 1,187 third graders in District X during the 2009-2010 school year. The third-grade population consisted of a majority of Caucasian students, but did have some ethnic and socioeconomic diversity. According to Schoolmatters (2010), the population of ABC Elementary was 76% Caucasian, 17% African American, 3% Hispanic, and 3% Asian/Hawaiian/Pacific Island. Twenty-two percent of the district’s third graders qualified for free or reduced meals. Free and reduced meal eligibility was the guideline for identifying economically disadvantaged students. District X consisted of 13 elementary schools, with a total school population of 16,585 students (Schoolmatters, 2010). All 13 elementary schools actively monitored reading progress using DIBELS (University of Oregon Center on Teaching and Learning, 2009).
The site of the study was ABC Elementary. ABC Elementary was the site of the study for several reasons. One reason was that, according to the 2009 Mid-Atlantic State Report Card (Mid-Atlantic State Department of Education, 2009), 77% of 2008-2009 third graders at ABC Elementary scored proficient or advanced on District X’s state assessment for reading achievement. Those results were some distance from the district average for that year of 91% and even further from the 2013 goal of 100% set forth by the No Child Left Behind legislature. I, the personnel in this school, and other educators with similar reading achievement results are interested in why. A second reason for the location choice was the ongoing interest on the part of staff and administration at ABC Elementary in motivation to read and the school’s implementation of the MRP. ABC Elementary was also the site at which I worked. I was familiar with the testing procedures, survey procedures, and had a working relationship with the administration that allowed me access to the archival data needed for this quantitative nonexperimental cross-sectional correlational study.

**Sampling Method**

The sampling design for this study was a convenience sampling procedure (Creswell, 2003). An advantage of using a convenience sample was that I was investigating a “naturally formed group” (Creswell, 2003, p. 164), in this case a group formed by grade level. The MRP Reading Survey and the DORF subtest were administered to all third graders in ABC Elementary. Therefore, the participants came from a naturally formed, known population, and I had access to all the archival data of students in the population. Creswell noted that one disadvantage of convenience
sampling was that it may not be representative of the population. The sample for this study was designed to overcome this disadvantage as the demographics of the sample of third graders for this study were representative of a typical third grade at ABC Elementary (Schoolmatters, 2010). Convenience sampling has been used in a number of research studies to appropriately sample populations (Benders, 2009; Clark, 2009; Creswell, 2003).

The participants were selected using the nonprobability, or convenience, sampling design (Creswell, 2003; Leedy & Ormrod, 2005). Convenience sampling was appropriate as I used a naturally formed group (Creswell, 2003). This type of sampling also provided an opportunity to study the population of interest, third-grade elementary students in District X, while in their regularly occurring instructional setting (Green, 2009). Even though all of District X’s third graders were assessed for oral reading fluency using DIBELS, a sampling frame of District X’s third graders would not have been a plausible list, since not all schools within the district utilized the same measurement tool for motivation. Therefore, the sampling frame consisted of 112 third graders at ABC Elementary.

In the course of the study the participants were grouped in several ways. Because benchmark goals and ORF rates for the DIBELS ORF subtest are based on grade level and not age, it was not necessary to compute mean age for the sample group. Fink (2006) recommended having 20 to 30 participants in a subgroup in order for the statistics to be meaningful. According to the National Statistical Service (n.d.), a sample size of 93 is sufficient for a population of 1,187. To further validate the sample size, an a priori
power analysis was also conducted using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007). *A priori* analysis provides an effective method of controlling for statistical power before conducting a study, according to Faul, et al. (2007). For the ANCOVA with medium effect size of .32, alpha of .05, power of .90, and with 6 groups, the sample size should have been at least 105. The sample size for this study (112) was greater than the suggested sample size. This means there was at least a 90% probability that 112 participants would be sufficient to find a statistical relationship (effect size of .32) between variables where alpha = .05 (Faul et al., 2009; Faul et al., 2007). As a result of the nonprobability convenience sampling design (Creswell, 2003), the sample consisted of 112 third graders of mixed gender and ethnicity, enrolled in ABC Elementary. Eligible participants included all third graders at ABC Elementary with no missing MRP or DORF scores.

**Instrumentation and Materials**

**Motivation to Read Profile (MRP)**

All participants took the teacher-read, self-report, group-administered survey, Reading Survey, of the MRP. The MRP is a public-domain instrument provided to teachers by researchers Gambrell, Palmer, Codling, and Mazzoni (1996) that evaluates self-concept as a reader and the value participants place on reading (see Appendix A). Even though the MRP is a public-domain document, my peer editor and I contacted Dr. Gambrell via e-mail to request permission to use the MRP in their respective studies (see Appendix F). This proved beneficial for the data analysis portion of this study. In the return correspondence, Dr. Gambrell reported a misprint in the article that published the
MRP (see Appendix G) and explained the misprint, enabling me to adjust the coding of data correctly in the data collection phase of this study. The survey is a self-report, group-administered instrument designed to have the questions and answer choices read to the participants. This avoids a problem inherent in much motivational research, in which students who are poor readers are misidentified as unmotivated, and good readers are labeled as more motivated (Gambrell et al., 1996). During the administration of the survey, the students answered two types of questions with Likert-type responses. Half of the questions measured student self-concept as a reader, with questions such as, *I worry about what other kids think about my reading* (see Appendix A). The other half of the questions measured value of reading with questions such as, *When someone gives me a book as a present, I feel ___* (see Appendix A). During the coding phase of the study, I recoded the responses to the survey according to the MRP Reading Survey scoring sheet (see Appendix B). The recoded information was entered into the SPSS software for data analysis.

The MRP has been established as reliable and valid for measuring student attitude toward reading (Gambrell et al., 1996). The internal consistency was calculated for the MRP and revealed a moderately high reliability, $r = 0.75$ (Gambrell et al., 1996). Several studies have used the MRP to study motivation to read (Chirchick, 2009; Gray, 2008; Wiggins, 2009). The participating school used the MRP in their efforts to address self-efficacy with their third and fourth grade students (D. M., personal communication, September 6, 2008).
**Administering the Motivation to Read Profile**

The MRP Reading Survey was administered within one week of the administration of the DIBELS ORF assessment. As an online survey tool, the survey took place in any of several small computer lab sites in the school. The participants were seated at computers with the survey already loaded onto the screen. The Reading Survey is designed to be read to the students. One of the problems of many motivational studies is that the readability of the instrument yields results that make better readers seem more motivated, while lower ability readers are identified as less motivated (Gambrell et al., 1996). Therefore, the teacher explained the purpose of the survey, read the directions, and read all survey questions and answer choices as the participants progressed through the survey, to ensure that an inability to read the questions did not affect the scores of the survey. Students were told “the results of the survey will provide information that the teacher can used to make reading more interesting for them and that the information will be helpful only if they provide their most honest responses” (Gambrell et al., p. 527).

While access to the survey could have been granted to participants at home, the teachers would not have been able to monitor such surveys and could not have verified who had actually taken the survey or how it had been completed. Therefore, all MRP surveys were completed at school.

Student responses to the MRP collection tool took place during regular school hours. This eliminated any influences due to access to internet at home or lack of transportation for the participants involved in the study. The principal of the school
requested that students take the survey during school hours in either whole group visits to the large computer lab or small group visits to one of the smaller computer labs.

The MRP data were collected and stored at the survey tool website, SurveyMonkey (SurveyMonkey.com, 2007). SurveyMonkey has been a successful online survey collection tool in previous research (e.g., Carlyle, 2009; Frederick, 2009). Data were collected concurrently upon completion of the survey. It was the teacher’s responsibility to make sure that all students clicked the final “submit” button at the end of the survey in order for the survey data to be sent to SurveyMonkey.

The school technology coordinator used the survey tool website SurveyMonkey to collect the data via the internet. SurveyMonkey maintained the data in a database that is accessible via the internet with a password. Individual responses could be accessed by survey or question.

Since the survey was conducted at school during school hours, there was no need for follow-up requests to complete the survey. There might have been instances, however, when a student was absent from school during the survey sessions. Teachers maintained records of which students, if any, were absent from the survey session and made follow-up sessions with any absent participants within one week of the initial survey. I collected MRP data from the archival data file provided to me by the school official as per the data use agreement that included the removal of all personally identifiable information (FERPA, 20 U.S.C. § 1232g; 34 C.F.R. pt 99, 2009). I recoded the coded results, which were provided by the school official. The recoded data were
entered into SPSS Career Starter Program 15.0 for Windows (SPSS Inc., 2006) for analysis.

SurveyMonkey

SurveyMonkey maintained the data from the MRP in a database that was accessible via the internet with a personal password. This information could be accessed by individual survey response or by question by the school official, who downloaded the MRP results. Coded data collected via SurveyMonkey are available by requesting said data from me, in accordance with FERPA regulations (FERPA, 2009).

Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

Participants’ oral reading fluency (ORF) rates, the number of words read correctly in 1 minute from connected text, were tested using DIBELS (University of Oregon Center on Teaching and Learning, 1999). DIBELS is a recommended assessment of reading fluency (NICHHD, 2000) and was a required progress assessment tool in District X (District X, 2009).

Administering DIBELS

Participants were given the beginning of the year benchmark, which occurs in September of each year. Each student’s reading teacher administered these assessments individually to their own reading students. Prior to the fall benchmark administration of DIBELS, reading teachers reviewed the Directions for Scoring-Part 1: Oral Reading Fluency in the DIBELS Administration and Scoring Guide for Oral Reading Fluency (Good & Kaminski, 2002b). Reviewing the assessment’s directions helps avoid
assessing errors that could result in a misclassification of reader’s skills given a
curriculum-based measure such as DIBELS (Coulter, Shavin, & Gichuru, 2009).

Several studies have researched the reliability and validity of DIBELS ORF for third grade (Good, Simmons, et al., 2001). Tindal et al. (as cited in Good, Simmons et al.) found the test-retest reliability for the DIBELS ORF progress monitoring and benchmark passages ranges between .92 and .97, and the alternate-form reliability for different passages ranges from .89 to .94. Additionally, the predictive reliability for key foundational reading skills ranges from .34 to .82 (Good, Simmons et al.).

During the benchmark measurement, participants were asked to read three on-grade level passages. There were 29 passages in the third grade DIBELS assessment. The Spache readability for the 29 passages ranges from 2.9 – 3.1 (Good & Kaminski, 2002a). Spache readability score accounted for a 30% variance (r = .55) in children’s reading skills (Good & Kaminski, 2002a). Individually, the students were timed for 1 minute while reading each of the three passages, with the cue to “do your best reading” (Good, Kaminski, & Dill, 2001, p. 32). The ORF rate was based on the number of correctly read words in each of the 1-minute timings. Incorrectly read words, skipped words, substitutions, and pausing for more than 3 seconds were all marked as miscues, and did not count toward the ORF rate (Good, Kaminski, & Dill).

ORF rate was recorded as the median number of correct words read per minute from the three readings. This score was written on the passage directly and again on the front cover of the testing document. Reading teachers were responsible for the administration of the DIBELS benchmark, which included the timing of the passages,
recording of errors, and calculating the median score. Trained paraprofessionals were responsible for data entry into the DIBELS data system. I collected ORF rates from the archival data file provided to me by the school official as per the data use agreement (see Appendix H) that included the removal of all personally identifiable information (FERPA, 20 U.S.C. § 1232g; 34 C.F.R. pt 99, 2009). The information received from the downloaded DIBELS report was solely for use in this study and will not be used in any other distribution without consent from the University of Oregon as per the use agreement between the University of Oregon and me (see Appendix C).

Data Collection and Analysis

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

The study was guided by the following research questions and hypotheses:

Motivation to Read

Research Question 1: Is there a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students?

Null Hypothesis—H10: There is no significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

Alternate Hypothesis—H1a: There is a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.
Self-Concept as a Reader

*Research Question 2:* Is there a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis* - $H_{2o}$: There is no significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis* - $H_{2a}$: There is a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

Value of Reading

*Research Question 3:* Is there a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis* - $H_{3o}$: There is no significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis* - $H_{3a}$: There is a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

In order to assess the significance of the relationships referred to in the research questions, inferential data analysis using ANCOVA was utilized to determine if there were any mean differences in oral reading fluency associated with motivation to read after adjusting for differences in age and ethnicity in terms of:

*Dependent variable:* oral reading fluency

*Fixed factor:* motivation to read (motivation to read, self-concept as a reader, value of reading)
Covariates: gender (male/female) and ethnicity (Caucasian/ non-Caucasian)

Measures: motivation to read total score, self-concept as a reader score, and value of reading score as measured by the MRP Reading Survey, ORF rate (median number of correct words per minute read in three trials) as measured by DIBELS

Statistics: ANCOVA

Sample size: 112

Population: Third-grade elementary students in District X

Data Collection

Permission to conduct this study at ABC Elementary and use archival data was granted by the key stakeholder, the principal of ABC Elementary (see Appendices H and I). Prior to conducting research, I successfully completed the National Institutes of Health (NIH) Office of Extramural Research Web-based training course “Protecting Human Research Participants” (see Appendix E). I applied the skills and knowledge gained from that course into the ethical consideration of all participants. I submitted the Walden Institutional Review Board (IRB) application and obtained permission from IRB prior to conducting any research for this study (# 11-15-10-031114).

All student data were archival and stored in school records. No testing was conducted by me outside of the scope of my normally occurring duties as a fifth grade teacher. Data were collected from each student during the administration of each measure as explained in the previously section. Once DIBELS data were retrieved from the DIBELS database by school personnel, the names of all students were removed, leaving the data file with an identification number. Students did not supply a name while
completing the MRP. Each student used a student identification number to protect the students from unforeseen complications with the online collection tool and therefore anonymity was secure for all students. The identification number for both measures was the same for individual students. The identification number was used to match data points from the MRP scores with the DORF rates. I did not have access to data that contained this identification information. The school official who created the data file for me used the student identification numbers to match student data. I did not have access to data that contained district assigned identification numbers. Prior to providing me with data, the school official created a new code, unrelated to any identifiable information, and removed all personally identifiable information. New identification numbers were created using a random numbers table, such as ones created using Research Randomizer (Urbaniak & Plous, 1997). This ensured that the students were not in any identifiable order. I was provided with coded data only.

Data Analyses

An inferential analysis of the archival data occurred for each research question. Motivation to read, reported as MRP scores, and oral reading fluency, reported as ORF rates, were continuous scales. The full survey score was the participant’s coded score out of a possible 80 points. The self-concept as a reader and the value of reading scores were the participant’s coded score out of a possible 40 points each (see Appendix B). Oral reading fluency, as expressed as ORF rates, was measured on a continuous scale based on the number of correct words read orally from a connected text in 1 minute (University of Oregon Center on Teaching and Learning, 2008). DIBELS categorizes ORF rate into
three levels of risk (see Appendix D), however, I maintained the ORF rate data as a continuous scale. Trichotomizing the data in such a way could have discarded score validity, distorted variable distributions, or distorted the relationship between variables (Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005).

The parametric analytical tool used to conduct the quantitative analysis of the relationship between motivation to read, oral reading fluency, and demographics was analysis of covariance (ANCOVA). The ANCOVA was chosen over the analysis of variance (ANOVA) for its ability to measure the relationship between two variables while taking into account additional covariates instead of random variation (Leedy & Ormrod, 2005). Using the ANCOVA also increased the power and reduced bias (Huitema, 2006). ANCOVA is considered to be a general linear procedure (Wendorf, 2004). Linear correlations are recommended for studies that take two different measures, in this case, oral reading fluency rates and motivation to read scores, from each participant and the researcher wishes to quantify how well they are associated (Motulsky, 1995). Another feature of linear correlation statistical tests is that the calculations are symmetrical with regard to the two variables, which means that regardless of which is identified as X or Y, the correlation coefficient will be the same (Motulsky, 1995). This was appropriate as I was seeking to identify a possible correlational relationship between variables, such as motivation to read and oral reading fluency, and not a causal relationship.

The ANCOVA analysis was computed using the SPSS Career Starter Program 15.0 for Windows Package (SPSS Inc., 2006). The dependent variable for the ANCOVA
was oral reading fluency as measured by the DIBELS ORF subtest. The fixed factor for the ANCOVA was motivation to read as measured by the MRP Reading Survey. Motivation to read was delineated as the full survey score, the self-concept as a reader score, or the value of reading score as measured by the MRP Reading Survey and was measured as a continuous scale and then converted to categories (low, medium, high) based on the response distributions for each motivation scale. The full survey score was the student’s coded score out of a possible 80 points. The self-concept as a reader and the value of reading scores were the student’s coded score out of a possible 40 points each (see Appendix B). The covariates were gender and ethnicity. Gender was measured on a categorical scale and delineated as either male or female, and ethnicity was measured on a categorical scale and delineated as Caucasian or non-Caucasian.

**Protection of Human Participants**

All aspects of this study were conducted ethically and professionally according to the guidelines and requirements of Walden University’s Institutional Review Board. The research proposal was formally reviewed and approved by the Walden University Institutional Review Board prior to conducting the research study (# 11-15-10-0311114). I followed the guidelines and requirements of the Institutional Review Board to ensure the protection of the participants’ rights. Some of the requirements included the principal signing a consent to conduct research study letter (see Appendix I) and a data use agreement form (see Appendix H) allowing me access to archival data from the participating elementary school. Upon IRB approval archival data were retrieved from ABC Elementary School. MRP and DORF rate data were collected from SurveyMonkey
and the DIBELS data archive, respectively, by a designee of the school. All data analyzed in this study came from pre-existing school data files. I did not have access to or use student names or identifiers in the preparation of this doctoral study. In accordance with FERPA (2009) regulations, prior to giving raw data to me the principal ensured that all written materials were edited to remove any personally identifiable information that, alone or in combination, is linked or linkable to a specific student that would allow a reasonable person in the school community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty (20 U.S.C. § 1232g; 34 C.F.R. pt 99).

No identifiable names were used when referring to the participating school or school district. The pseudonym ‘ABC Elementary’ was used in place of the school name for the study. The pseudonym ‘District X’ was used in place of the school district. The state in which ABC Elementary was located was referred to only by its location as a Mid-Atlantic state. During the data collection phase of this research, all data were stored on my portable storage device, which was password protected. I was the only person with knowledge of the password. The storage device was kept on a lanyard, which I wore around my neck at the time of the data exchange. The data exchange occurred at ABC Elementary when I received the file containing the raw data from which school personnel removed all personally identifiable information as previously explained. The data came from one of the secure computers in the principal’s office. When the storage device was not being used, I kept it in a lockbox in my home. All statistical analysis occurred on my
password protected home computer. My computer was linked to a secure home network. At the conclusion of the research study, all electronic information was stored on an offline secure storage device. The storage device will be stored in a lockbox for at least 5 years, in accordance with the IRB guidelines of Walden University, which are based on 45 CFR 46, §46.115 (2009). Any temporary files that were created were deleted from my storage device and computer at the conclusion of the study.

**Role of the Researcher**

At the time of the study, I was a fifth-grade teacher in an elementary school located in a Mid-Atlantic state. Throughout the course of my teaching career, I had taught reading to students in grades three through eight. I had been a fifth-grade teacher at the participating school for one year. One of the teaching assignments held by me while at ABC Elementary was to serve as the intermediate grade level interventionist. In that capacity, I used research-based interventions to work with at-risk students in grades three through five. Prior to teaching fifth grade, I served as a third-grade teacher for four years, and as a fourth-grade teacher for five years at the participating school. Prior to working in the participating school, I taught sixth, seventh, and eighth grades in a southern United States middle school.

For this study, I requested permission to conduct the study from the key stakeholder, the principal of ABC Elementary (see Appendix I). Permission to use deidentified (per current government regulations [FERPA, 2009]) archival data was requested and obtained from ABC Elementary (see Appendix H). No change in instruction or practice was incorporated into this study. In the analysis of data and in the
writing of the study no personal identifying information was utilized. All data analyzed for this study came from pre-existing school data files. During the data collection phase of this research, all coded data were stored on a password-protected portable storage device and analyzed using SPSS software on my secure home computer.

**Dissemination of Findings**

The results of the study will be presented to the community stakeholders, including the administration and teachers at the participating school. I will schedule a meeting with the principal, vice-principal, and dean of the participating school to share results from the study. During the meeting, the findings of the study as well as any recommendations based on the study will be shared. It is also my intention to share the findings with the teachers at ABC Elementary via a presentation at a staff meeting. If the results of the study show a significant relationship between motivation to read, oral reading fluency, and demographics, it was planned that the results of the study would be shared with the other schools in the participating school district. In this case, a staff development opportunity with the department of instruction in District X would be arranged. It was anticipated that if a significant relationship were identified between motivation to read, oral reading fluency, and demographics, that knowledge could be used in planning appropriate instruction and intervention for struggling readers.
Section 4: Results

Introduction

The purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. The context of the study was ABC Elementary, located in District X in a Mid-Atlantic state. Participants were selected using the nonprobability, or convenience, sampling design (Creswell, 2003; Leedy & Ormrod, 2005). Collection and analysis of archival data occurred after Walden Institutional Review Board approval (# 11-15-10-0311114). This section presents an analysis of the archival data collected for the study. The tools used in this study are also reviewed. Each research question is addressed in terms of the data analysis conducted for each question from the MRP Reading Survey and the DIBELS ORF subtest for third graders. A discussion of the implications of the results for educators and third graders as well as recommendations for further action will be presented in the fifth and final section of the study.

Research Tools

Data were collected from archival records for 112 third-grade students at ABC Elementary. There were 54 females and 58 males in the sample. Two instruments were used to collect the data contained in the archival records. The instruments were the MRP Reading Survey, which was used to measure motivation to read, and the DORF subtest, used to measure oral reading fluency. The MRP Reading Survey yielded a total motivation to read score, a self-concept as a reader score, and a value of reading score. In
order to complete the ANCOVA for data analysis, motivation to read, self-concept as a reader, and value of reading were then divided into three groups: low, medium, and high levels. The three groups based on the total motivation to read score were: low (1-55), medium (56-65), and high (66-80). The three groups based on the self-concept as a reader scores were: low (1-27), medium (28-33), and high (34-40). The three groups based on the value of reading scores were: low (1-27), medium (28-34), and high (35-40). The DORF subtest, used to measure oral reading fluency, yielded an oral reading fluency rate which was computed as the number of words read correctly in 1 minute from connected text. Only archival data from students who completed both assessments were used in the data analysis for the current study.

**Data Analysis**

Archival data were collected and analyzed to address the following research questions: (a) Is there a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students? (b) Is there a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students? and (c) Is there a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students? ANCOVA was used to analyze the data. The ANCOVA was chosen over ANOVA for its ability to measure the relationship between two variables while taking into account additional covariates instead of random variation (Leedy & Ormrod, 2005). This also increased the power and reduced bias (Huitema, 2006).
Data are summarized in Table 1 for ethnicity and in Table 2 for gender. Table 1 shows that a majority of students were Caucasian (80%), followed by African American (15%) and then Other (5%). Because there were so few students categorized as African American or Other as compared to the number of Caucasian students, ethnicity was categorized as two groups for the ANCOVA analysis, Caucasian and non-Caucasian. Table 2 shows that there was about the same proportion of females (48%) and males (52%).

Table 1

*Crosstabs for Ethnicity by Oral Reading Status*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>At Risk</th>
<th>Some Risk</th>
<th>Low Risk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>17</td>
<td>24</td>
<td>49</td>
<td>90</td>
</tr>
<tr>
<td>%</td>
<td>81.0</td>
<td>82.8</td>
<td>79.0</td>
<td>80.4</td>
</tr>
<tr>
<td>African Am.</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>%</td>
<td>19.0</td>
<td>17.2</td>
<td>12.9</td>
<td>15.2</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>0.0</td>
<td>0.0</td>
<td>8.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>29</td>
<td>62</td>
<td>112</td>
</tr>
</tbody>
</table>

*Percent represents percent of respective ethnicity for respective Oral Reading Status*
Table 2

*Crosstabs for Gender by Oral Reading Status*

<table>
<thead>
<tr>
<th>Oral Reading Status</th>
<th>At Risk</th>
<th>Some Risk</th>
<th>Low Risk</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>n 11</td>
<td>16</td>
<td>278</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>% 52.4</td>
<td>55.2</td>
<td>43.5</td>
<td>48.2</td>
</tr>
<tr>
<td>Male</td>
<td>n 10</td>
<td>13</td>
<td>35</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>% 47.6</td>
<td>44.8</td>
<td>56.5</td>
<td>51.8</td>
</tr>
<tr>
<td>Total</td>
<td>n 21</td>
<td>29</td>
<td>62</td>
<td>112</td>
</tr>
</tbody>
</table>

*Percents represent percent of respective gender for respective Oral Reading Status

**Motivation to Read**

Research Question 1: Is there a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students?

Null Hypothesis—$H_{10}$: There is no significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

Alternate Hypothesis—$H_{1a}$: There is a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students.

To address research question 1, an ANCOVA analysis was utilized to determine if there were any mean differences in oral reading fluency associated with motivation to read after adjusting for differences in gender and ethnicity. The dependent variable was oral reading fluency as measured by the DIBELS ORF subtest. The fixed factor for this
analysis was total motivation to read. To compute the analysis, the students were divided into three groups based on their total motivation to read score: low (1-55), medium (56-65), and high (66-80). The covariates for the analysis were gender (coded 0 = male and 1 = female), and ethnicity (coded 0 = non-Caucasian, 1 = Caucasian). The results indicated that gender, $F(1, 107) = .19, p > .05$, and ethnicity, $F(1, 107) = .35, p > .05$, were not significant, indicating that neither gender nor ethnicity are related to oral reading fluency (Table 3). Results also indicated that motivation to read, $F(2, 107) = 24.56, p < .05$ was significant, indicating that there is a significant difference in oral reading fluency among the three levels of motivation (Table 4).

Table 3

**ANCOVA Results for Oral Reading Fluency by Total Motivation to Read**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>$F$</th>
<th>$p$</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>0.35</td>
<td>0.554</td>
<td>0.054</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.19</td>
<td>0.664</td>
<td>0.044</td>
</tr>
<tr>
<td>Motivation</td>
<td>2</td>
<td>24.56**</td>
<td>0.000</td>
<td>0.561</td>
</tr>
<tr>
<td>Error</td>
<td>107</td>
<td>(1122.97)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Italicized variables are the covariates. Value enclosed in parentheses represents mean square error.*

* $p < .05$  ** $p < .01$
Table 4

*Oral Reading Frequency Descriptives by Level of Motivation to Read*

<table>
<thead>
<tr>
<th>Motivation to Read</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (1)</td>
<td>64.5</td>
<td>31.4</td>
<td>37</td>
</tr>
<tr>
<td>Medium (2)</td>
<td>78.4</td>
<td>34.0</td>
<td>35</td>
</tr>
<tr>
<td>High (3)</td>
<td>118.3</td>
<td>34.3</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>88.0</td>
<td>40.4</td>
<td>112</td>
</tr>
</tbody>
</table>

**Self-Concept as a Reader**

*Research Question 2:* Is there a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis- $H_{20}$:* There is no significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis- $H_{2a}$:* There is a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students.

To address research question 2, an analysis of covariance (ANCOVA) was utilized to determine if there were any mean differences in oral reading fluency associated with self-concept as a reader after adjusting for differences in gender and ethnicity. The dependent variable was oral reading fluency as measured by the DIBELS ORF subtest. The fixed factor for this analysis was self-concept as a reader. To compute the analysis the students were divided into three groups based on their self-concept as a
reader score: low (1-27), medium (28-33), and high (34-40). The covariates for the analysis were gender (coded 0 = male and 1 = female) and ethnicity (coded 0 = non-Caucasian, 1 = Caucasian). The results indicated that gender, $F(1, 107) = .06, p > .05$, and ethnicity, $F(1, 107) = .50, p > .05$, were not significant, indicating that neither gender nor ethnicity are related to oral reading fluency (Table 5). Results also indicated that self-concept as a reader, $F(2, 107) = 31.35, p < .05$ was significant, indicating that there is a significant difference in oral reading fluency among the three levels of self-concept as a reader (Table 6).

Table 5

<table>
<thead>
<tr>
<th>Source</th>
<th>Df</th>
<th>$F$</th>
<th>$p$</th>
<th>$H$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>0.50</td>
<td>0.481</td>
<td>0.071</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.06</td>
<td>0.808</td>
<td>0.032</td>
</tr>
<tr>
<td>Self-concept as a reader</td>
<td>2</td>
<td>31.35**</td>
<td>0.000</td>
<td>0.741</td>
</tr>
<tr>
<td>Error</td>
<td>107</td>
<td>(1033.10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Italicized variables are the covariates. Value enclosed in parentheses represents mean square error.

* $p < .05$  
** $p < .01$
Table 6

Oral Reading Frequency Descriptives by Level of Self-Concept as a Reader

<table>
<thead>
<tr>
<th>Self-Concept as a Reader</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (1)</td>
<td>59.3</td>
<td>26.3</td>
<td>35</td>
</tr>
<tr>
<td>Medium (2)</td>
<td>82.4</td>
<td>33.5</td>
<td>39</td>
</tr>
<tr>
<td>High (3)</td>
<td>120.4</td>
<td>34.8</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>88.0</td>
<td>40.4</td>
<td>112</td>
</tr>
</tbody>
</table>

**Value of Reading**

*Research Question 3:* Is there a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students?

*Null Hypothesis- H₃ₒ:* There is no significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

*Alternate Hypothesis- H₃ₐ:* There is a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students.

To address research question 3, an analysis of covariance (ANCOVA) was utilized to determine if there were any mean differences in oral reading fluency associated with value of reading after adjusting for differences in gender and ethnicity. The dependent variable was oral reading fluency as measured by the DIBELS ORF subtest. The fixed factor for this analysis was value of reading. To compute the analysis,
the students were divided into three groups based on their value of reading score: low (1-27), medium (28-34), and high (35-40). The covariates for the analysis were gender (coded 0 = male and 1 = female) and ethnicity (coded 0 = non-Caucasian, 1 = Caucasian). The results indicated that gender, $F(1, 107) = .18$, $p > .05$, and ethnicity, $F(1, 107) = .02$, $p > .05$, were not significant, indicating that neither gender nor ethnicity are related to oral reading fluency (Table 7). Results also indicated that value of reading, $F(2, 107) = 7.14$, $p < .05$ was significant, indicating there is a significant difference in oral reading fluency among the three levels of value of reading (Table 8).

Table 7

ANCOVA Results for Oral Reading Fluency by Value of Reading

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>$F$</th>
<th>$p$</th>
<th>$H$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>0.02</td>
<td>0.894</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.18</td>
<td>0.672</td>
<td>0.044</td>
</tr>
<tr>
<td>Value of reading</td>
<td>2</td>
<td>7.14**</td>
<td>0.001</td>
<td>0.344</td>
</tr>
<tr>
<td>Error</td>
<td>107</td>
<td>(1445.70)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Italicized variables are the covariates. Value enclosed in parentheses represents mean square error.*

* $p < .05$  ** $p < .01$
Table 8

Oral Reading Frequency Descriptives by Level of Value of Reading

<table>
<thead>
<tr>
<th>Value of Reading</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (1)</td>
<td>68.3</td>
<td>33.9</td>
<td>36</td>
</tr>
<tr>
<td>Medium (2)</td>
<td>87.7</td>
<td>41.6</td>
<td>33</td>
</tr>
<tr>
<td>High (3)</td>
<td>104.8</td>
<td>37.6</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>88.0</td>
<td>40.4</td>
<td>112</td>
</tr>
</tbody>
</table>

Summary

Inferential statistics were used in this quantitative nonexperimental cross-sectional correlational study to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. The archival data collected for this study were analyzed using the SPSS Career Starter Program 15.0 for Windows (SPSS Inc., 2006). Demographic information for the sample is provided in Tables 1 and 2. Hypotheses were tested using ANCOVA, the results of which were presented in Tables 3-8. Several conclusions can be made from the results of the data analysis. There is a significant relationship between motivation to read and oral reading fluency for third-grade elementary students. Students in the high scoring group for total motivation to read had higher oral reading fluency rates. There was no significant relationship between the demographics (gender and ethnicity) to oral reading fluency. There is also a significant relationship between self-concept as a reader and oral reading fluency for third-grade students. Students in the high scoring group for self-concept as a
reader had higher oral reading fluency rates than the medium group and the low group. There was no significant relationship between the demographics (gender and ethnicity) to oral reading fluency. Finally, there is a significant relationship between value of reading and oral reading fluency for third-grade students. Students in the high scoring group for value of reading had higher oral reading fluency rates. There was no significant relationship between the demographics (gender and ethnicity) to oral reading fluency.

Further discussion of the findings will be discussed in section 5. Interpretation of findings, implications for social change, recommendations for action and further studies will also be discussed in section 5.
Section 5: Summary, Conclusions, and Recommendations

Introduction

Using the expectancy-value theory (Wigfield & Eccles, 2000) as its conceptual framework, the purpose of this quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. Archival data gathered from the results of the MRP Reading Survey and the DIBELS ORF subtest for 112 third graders at a public elementary school in a Mid-Atlantic state were analyzed to determine the existence of a significant relationship between motivation to read, oral reading fluency, and demographics. A power estimate for the sample size was conducted using the G*Power program and revealed a 90% probability that 112 participants would be sufficient to find a statistical relationship between variables where alpha = .05 (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007). Archival data were obtained in accordance to the data use agreement with the University of Oregon (see Appendix C) and the data use agreement with ABC Elementary (see Appendix H). Motivation to read, an underlying factor in future reading success (Gambrell et al., 1996), was assessed with the MRP Reading Survey and delineated as self-concept as a reader, value of reading, and a combined overall score, motivation to read. Oral reading fluency, the number of words read correctly from connected text in 1 minute, was assessed using the DIBELS ORF subtest. Data were gathered only from students who completed both assessments. The data were analyzed to answer the following research questions:
Research Question 1: Is there a significant relationship between motivation to read, oral reading fluency, and demographics for third-grade elementary students?

Research Question 2: Is there a significant relationship between self-concept as a reader, oral reading fluency, and demographics for third-grade elementary students?

Research Question 3: Is there a significant relationship between value of reading, oral reading fluency, and demographics for third-grade elementary students?

To measure the relationship between the variables and take into account additional covariates (Leedy & Ormrod, 2005), data were analyzed using ANCOVA. The covariates for this study were two demographics: gender (male or female) and ethnicity (Caucasian or non-Caucasian). Results from ANCOVA analysis indicated that neither gender nor ethnicities were significant, indicating that neither was related to oral reading fluency for motivation to read at any level, motivation to read, self-concept as a reader, or value of reading. According to ANCOVA analysis, there was a significant difference in oral reading fluency among the three dimensions of motivation: motivation to read, self-concept as a reader, and value of reading. Specific outcomes were discussed in section 4.

Interpretation of Findings

As mentioned earlier, understanding why students are struggling to read and meet proficiency level reading standards is vital to a teacher’s ability to make informed data-driven instructional decisions (Hasbrouck & Tindal, 2006). The results of the current study provide insight that could contribute to that understanding. The current study attempted to identify a possible correlational, rather than a causal relationship.
Correlational research of this type can be a first step toward identifying causal relationships. The purpose of the quantitative nonexperimental cross-sectional correlational study was to determine whether a relationship exists between motivation to read, oral reading fluency, and demographics for third-grade elementary students. The results indicate that a relationship does exist. Interpretations and conclusions about the results are presented here, referencing the outcomes from section 4.

The null hypothesis for research question 1 stated there would be no significant relationship between motivation to read, oral reading fluency, and demographics. ANCOVA analysis indicated the covariates, gender and ethnicity, were not related to oral reading fluency. Controlling for demographics, results from an ANCOVA analysis also indicated a significant difference in oral reading fluency among the three levels of motivation. Therefore, I rejected the null hypothesis, concluding that there is a significant relationship between motivation to read, oral reading fluency, and demographics.

The null hypothesis for research question 2 stated there would be no significant relationship between self-concept as a reader, oral reading fluency, and demographics. ANCOVA analysis indicated the covariates, gender and ethnicity, were not related to oral reading fluency. Controlling for demographics, results from the ANCOVA analysis also indicated a significant difference in oral reading fluency among the three levels of self-concept as a reader. Therefore, I rejected the null hypothesis, concluding that there is a significant relationship between self-concept as a reader, oral reading fluency, and demographics.
The null hypothesis for research question 3 stated there would be no significant relationship between value of reading, oral reading fluency, and demographics. ANCOVA analysis indicated the covariates, gender and ethnicity, were not related to oral reading fluency. Controlling for demographics, results from the ANCOVA analysis also indicated a significant difference in oral reading fluency among the three levels of value of reading. Therefore, I rejected the null hypothesis, concluding that there is a significant relationship between value of reading, oral reading fluency, and demographics.

There is still a debate in the literature as to the predictive value of oral reading fluency on future reading achievement (Good, Kaminski, et al., 2001; Hintze et al., 2002; Schwanenflugel et al., 2004; Wood, 2006; Gray, 2008; Suchey, 2009). Regardless of the reader’s position on oral reading fluency and future reading success, the current study provides insight into the relationship between oral reading fluency and motivation to read. If further research supports the predictive value of oral reading fluency on reading achievement, this study may provide an avenue to study the predictive value of motivation to read in reading achievement. These findings support the work of Guthrie et al. (2006), who reported that the more motivated a student is to complete a task, the better his or her reading comprehension, as well as the work of Hussien (1998), who reported a relationship between motivation to read and reading achievement. The findings also support the work of Morgan, Fuchs et al. (2008), who found that students who had difficulty reading also identified themselves as less competent in reading. They also found that better readers had a better attitude toward reading than poor readers. The findings of this study suggest a similar relationship, as noted earlier. The findings do not,
conversely, support the work of Gray (2008), who reported no evidence of a correlation between reading, motivation, gender, and reading achievement. However, in light of the current study and the work of Fredericks and Eccles (2002) and Wigfield et al. (1997), whose studies suggest evidence of a decrease in self-concept and task value over time, most noticeably in older students (Wigfield, 2004; Bembenutty, 2008), I wonder about the future motivation of the students with low oral reading fluency.

**Implications for Social Change**

By investigating the relationship between motivation, oral reading fluency, and demographics in third-grade elementary students, this research study contributes to positive social change in the practice of reading instruction for third graders and the community of reading teachers, researchers, and students. Motivation to read and oral reading fluency are two factors that may contribute to future reading success in young readers. The results of this research study indicate that there is a significant relationship between motivation to read and oral reading fluency, thereby adding justification to educators and researchers further investigating the use of motivational strategies in the classroom and using them to make data-driven instructional decisions.

Motivation is a powerful factor in learning. Research conducted by Archembault, Eccles, and Vida (2010) suggested that students who report low self-concept and task value in grade three go on to report the same or lower beliefs by the end of elementary school. According to the results of the current study and several studies that investigate motivation and learning (Allington, 1977, 2006; Marzano, 2003), students with low motivation to read are also less than proficient readers. In the case of the current study
this lack of proficiency in reading manifests as low oral reading fluency. What remains
to be investigated is the directionality of the relationship, if such a causal relationship
exists. Not being a strong reader tends to follow students throughout their school careers
and then into their adult lives (Rapp, Van den Broek, McMaster, Kendeou, & Espin,
2007). As educators who are responsible for the future reading success of students, we
need to find methods and means of interrupting the downward cycle of motivation and
reading before these youngsters slide too far down the illiteracy slope, thereby promoting
a positive change in these students.

**Recommendations for Action**

Professional development that trains teachers to recognize indicators of low
motivation and improve motivation to read may prove useful to educators who are faced
with students with a low motivation to read. There are numerous instructional
interventions to help educators improve oral reading fluency with their students (e.g.,
Chard, Vaughn, & Tyler, 2002). Examples include repeated readings (Chard et al.),
Reader’s Theater (Clark, Morrison, & Wilcox, 2009), the usage of Fry Phrases, Fluency
Formula, and Corrective Reading Decoding. While there has been increased interest in
understanding motivation in reading (Archambault et al., 2010, Guthrie, McRae, &
Klauda, 2007), in my school district, no formal instructional interventions are available
that are directed at improving motivation to read. This could be due to the limited
number of such interventions. Alternatively, as Mudd (2010) suggested, there could be
inconsistent evidence for the effects of motivational interventions. In Jim Wright’s The
Savvy Teacher: Reading Interventions that Work, no interventions addressed motivation
to read. That does not mean there are no interventions examining motivation and reading, as evidenced by the work of Guthrie, McRae, and Klauda (2007) on Concept-Oriented Reading Instruction and its impact on motivational processes and reading comprehension. The research of Yin-kum (2008) also provides findings on motivation and reading with a look at the role of cooperative learning on second grade readers. Perhaps as more research continues to surface, more programs will be created that are directed at improving motivation.

Because there is a current lack of formal programs and a motivational package is not likely to reveal itself in the near future, educators are going to have to be more creative in their professional growth strategies to improve students’ motivation to read. Educators will need to actively search for opportunities to work on the motivational aspects of increasing student reading skills. Looking for government programs may be a starting point for locating strategies. Programs such as Reading is Fundamental (RIF), whose goal is to prepare and motivate students to read (Reading is Fundamental, 2010), may provide teachers with instructional practices. RIF also supports programs for students of the age range of the current study, such as RIF Reading Planet (Reading is Fundamental, n.d.). Clark, Morrison, and Wilcox (2009) suggested that Reader’s Theater provides opportunities for feelings of success that may lead to motivating students to read more, thereby increasing their reading abilities. They also suggested that, as students begin to feel more confident in their reading, they may engage in an increased amount of reading. Tapping into student interests and tying them into reading activities may also work to increase motivation to read; examples include such activities as using song lyrics,
having open mike days, and reading to younger children (Sample, 2005). Feedback, as investigated by Meyer et al. (2010), in the form of Web-based reading tutors offers interesting findings regarding motivation and improving comprehension. Regardless of the program or activities, educators are going to have to search for tools to motivate their students and then monitor their students for increased motivation to read and, hopefully, increased reading proficiency. Further research is needed, however, to determine if a causal relationship exists between these two factors.

Based on the results of this study, I encourage other schools to explore the levels of motivation to read among their readers. This study provides data to support such an exploration in the form of further studies and instructional decision making practices. Findings in this study provide educators with research based evidence that could help them motivate their student readers.

**Recommendations for Further Study**

This study provides additional literature to further the understanding of the relationship between motivation to read, oral reading fluency, and demographics in third-grade elementary students. In light of the findings, the following suggestions for future research are appropriate:

1. A similar study with a larger, more diverse sample could be conducted. The present study’s small sample size could restrict is generalizability.

2. A long term study could be conducted to analyze results from fall and spring assessments. Questions regarding the effect of fall scores on spring scores
could be investigated, or perhaps any relationships between motivation to read between the fall and spring.

3. A long term study could be conducted to analyze the relationship of motivation to read and oral reading fluency over the course of several school years.

4. A study could be conducted that investigates whether motivation to read changes as a result of instructional strategies directed at increasing motivation.

5. A study could be conducted that investigates whether interventions directed at increasing oral reading fluency have an effect on motivation to read at a later point in the school year.

Closing

“Magic happens when you give children a book: Eyes sparkle, smiles emerge, and imagination comes alive” (Reading Is Fundamental, 2010, para. 6). One of the many goals of schools, such as the one mentioned in this study, is to increase reading achievement. It is believed by educators and researchers alike that increasing oral reading fluency to a proficient level is crucial achieving that goal. While the current study did not attempt to establish a causal relationship between motivation to read and oral reading fluency, the results of the correlational study do suggest the existence of a relationship between motivation to read, oral reading fluency, and demographics. This relationship should be addressed by those tasked with teaching children to read. Future research in the relationship of motivation to read and oral reading fluency may have an impact on future reading strategies and data-driven decisions made by reading teachers,
and, more importantly, an impact on the students who will become proficient readers. When the eyes of all students sparkle at the sight of a new book and the students are able to read that book, the gateway to knowledge will be unlocked and students will hold the key to future success.
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Appendix A: Motivation to Read Profile

Figure 2
Motivation to Read Profile

Reading survey

Name________________________________________ Date__________________

Sample 1: I am in ________.
☐ Second grade  ☐ Fifth grade
☐ Third grade  ☐ Sixth grade
☐ Fourth grade

Sample 2: I am a ________.
☐ boy
☐ girl

1. My friends think I am ____________.
   ☐ a very good reader
   ☐ a good reader
   ☐ an OK reader
   ☐ a poor reader

2. Reading a book is something I like to do.
   ☐ Never
   ☐ Not very often
   ☐ Sometimes
   ☐ Often

3. I read ____________.
   ☐ not as well as my friends
   ☐ about the same as my friends
   ☐ a little better than my friends
   ☐ a lot better than my friends

4. My best friends think reading is ____________.
   ☐ really fun
   ☐ fun
   ☐ OK to do
   ☐ no fun at all

5. When I come to a word I don’t know, I can ________.
   ☐ almost always figure it out
   ☐ sometimes figure it out
   ☐ almost never figure it out
   ☐ never figure it out

6. I tell my friends about good books I read.
   ☐ I never do this.
   ☐ I almost never do this.
   ☐ I do this some of the time.
   ☐ I do this a lot.

(continued)
Figure 2
Motivation to Read Profile (cont’d.)

7. When I am reading by myself, I understand ____________
   - almost everything I read
   - some of what I read
   - almost none of what I read
   - none of what I read

8. People who read a lot are ____________
   - very interesting
   - interesting
   - not very interesting
   - boring

9. I am ____________
   - a poor reader
   - an OK reader
   - a good reader
   - a very good reader

10. I think libraries are ____________
    - a great place to spend time
    - an interesting place to spend time
    - an OK place to spend time
    - a boring place to spend time

11. I worry about what other kids think about my reading ______
    - every day
    - almost every day
    - once in a while
    - never

12. Knowing how to read well is ____________
    - not very important
    - sort of important
    - important
    - very important

13. When my teacher asks me a question about what I have read, I ______
    - can never think of an answer
    - have trouble thinking of an answer
    - sometimes think of an answer
    - always think of an answer

14. I think reading is ____________
    - a boring way to spend time
    - an OK way to spend time
    - an interesting way to spend time
    - a great way to spend time

(continued)
Figure 2
Motivation to Read Profile (cont'd.)

15. Reading is ________.
   ☐ very easy for me
   ☐ kind of easy for me
   ☐ kind of hard for me
   ☐ very hard for me

16. When I grow up I will spend ________.
   ☐ none of my time reading
   ☐ very little of my time reading
   ☐ some of my time reading
   ☐ a lot of my time reading

17. When I am in a group talking about stories, I ________.
   ☐ almost never talk about my ideas
   ☐ sometimes talk about my ideas
   ☐ almost always talk about my ideas
   ☐ always talk about my ideas

18. I would like for my teacher to read books out loud to the class ________.
   ☐ every day
   ☐ almost every day
   ☐ once in a while
   ☐ never

19. When I read out loud I am a ________.
   ☐ poor reader
   ☐ OK reader
   ☐ good reader
   ☐ very good reader

20. When someone gives me a book for a present, I feel ________.
   ☐ very happy
   ☐ sort of happy
   ☐ sort of unhappy
   ☐ unhappy
Appendix B: MRP Reading Survey Scoring Sheet

Note. As per the email received from Dr. Gambrell (see Appendix G), question 11 will not be recoded because there was a misprint in the original publication.
Dear Stephanie,

This e-mail confirms the approval from the University of Oregon for you to include "DIBELS Benchmark Goals" at https://dibels.uoregon.edu/benchmark.php#3grade3 in your thesis as long as you include the copyright notice "Copyright(c) 2007 University of Oregon, Center on Teaching & Learning, College of Education. All Rights Reserved" with the work. You'll also need to include a statement that the downloaded report is solely for use in your thesis and no rights are granted for further distribution. If these terms are acceptable to you then you are all set to go.

Please let me know if you have any questions. Thanks.

Linda Hansen, Ph.D.
Sr. Technology Development Assoc.
Office of Technology Transfer
University of Oregon
Eugene, OR  97403-1238
Phone: 541-346-2662
Fax: 541-346-5215
Email: lphansen@uoregon.edu

From: Stephanie Embrey [mailto:stephanie.embrey@waldenu.edu]
Sent: Tuesday, June 01, 2010 5:10 PM
To: Hansen, Linda
Subject: Re: request for reprinting permission

Hello Linda,

David sent me your name as the contact for my request for permission to reprint information regarding DIBELS benchmarks. I have no intention of reprinting any of the testing materials. However, I would like to include information about the benchmark scores for third graders. I would like to use the ORF information from the table found at https://dibels.uoregon.edu/benchmark.php#3grade3. I would like to reproduce this information in table format, with your permission.

Thank you so much for your time,
Stephanie Embrey
## Appendix D: DIBELS Benchmark Goals and Indicators of Risk

### Table 9

**Third Grade: Three Assessment Periods Per Year**

<table>
<thead>
<tr>
<th>DIBELS Measure</th>
<th>Beginning of Year Months 1 - 3</th>
<th>Middle of Year Months 4 - 6</th>
<th>End of Year Months 7 - 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORF</strong></td>
<td>0 - 52</td>
<td>0 - 66</td>
<td>0 - 79</td>
</tr>
<tr>
<td></td>
<td>53 - 76</td>
<td>67 - 91</td>
<td>80 - 109</td>
</tr>
<tr>
<td></td>
<td>77 and above</td>
<td>92 and above</td>
<td>110 and above</td>
</tr>
<tr>
<td></td>
<td>At Risk</td>
<td>At Risk</td>
<td>At Risk</td>
</tr>
<tr>
<td></td>
<td>Some Risk</td>
<td>Some Risk</td>
<td>Some Risk</td>
</tr>
<tr>
<td></td>
<td>Low Risk</td>
<td>Low Risk</td>
<td>Low Risk</td>
</tr>
</tbody>
</table>

**RTF**

**BENCHMARK GOALS FOR THIS MEASURE HAVE NOT YET BEEN ESTABLISHED.**

Preliminary evidence indicates that for students to be on track with comprehension they should meet both of the following criteria: 1) meet the Oral Reading Fluency benchmark goal and 2) have a retell score of at least 25% of their Oral Reading Fluency score.

**WUF**

**BENCHMARK GOALS FOR THIS MEASURE HAVE NOT BEEN ESTABLISHED.**

Tentatively, students in the lowest 20 percent of a school district using local norms should be considered at risk for poor language and reading outcomes, and those between the 20th percentile and 40th percentile should be considered at some risk.

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*Note.* Copyright(c) 2007 University of Oregon, Center on Teaching & Learning, College of Education. All Rights Reserved Third Grade DIBELS benchmark goals and risk status.
Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Stephanie Embrey successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 06/26/2009

Certification Number: 249899
Appendix F: MRP Request for Consent

Dear Dr. Gambrell,

We are doctoral students at Walden University and are in the process of working on our doctoral studies. While conducting independent literature reviewed on the topics of reading motivation, we came across your MRP tool. We have examined several other profiles as well and find that your survey best meets the needs of our respective studies. Nocola Williams’ study is investigating the effects of Sustained Silent Reading inclusive of teacher modeling on reading motivation in fourth graders at our elementary school. Stephanie Embrey is exploring the relationship, if any, between oral reading fluency and motivation to read in third graders at our elementary school. We are aware of the public domain classification that you so graciously allow as referenced in one of your earlier studies (Gambrell, Palmer, Codling, & Mazzoni, 1996). In preparation of our studies, we would like to take all necessary precautions by procuring your permission to use the MRP as a measurement tool in each of our studies.

Thank you for your time,

Stephanie Embrey & Nocola Williams
Appendix G: Consent to Use MRP

Hi, Thanks for your note. Yes, you have permission to use the MRP in your research. I would appreciate receiving a copy of your final research report. ALSO, PLEASE NOTE THAT IN THE ORIGINAL PUBLICATION IN READING TEACHER THERE IS A CODING ERROR. ITEM #11 SHOULD NOT BE RECODED. This error has been corrected in subsequent publications. Best, Linda

On 2/19/10 8:37 PM, "Stephanie Embrey" <stephanie.embrey@waldenu.edu> wrote:

Dear Dr. Gambrell,

We are doctoral students at Walden University and are in the process of working on our doctoral studies. While conducting independent literature reviewed on the topics of reading motivation, we came across your MRP tool. We have examined several other profiles as well and find that your survey best meets the needs of our respective studies. Nocola Williams' study is investigating the effects of Sustained Silent Reading inclusive of teacher modeling on reading motivation in fourth graders at our elementary school. Stephanie Embrey is exploring the relationship, if any, between oral reading fluency rates and motivation to read in third graders at our elementary school. We are aware of the public domain classification that you so graciously allow as referenced in one of your earlier studies (Gambrell, Palmer, Codling, & Mazzoni, 1996). In preparation of our studies, we would like to take all necessary precautions by procuring your permission to use the MRP as a measurement tool in each of our studies.

Thank you for your time,

Stephanie Embrey & Nocola Williams

Linda B. Gambrell
Distinguished Professor of Education

Phone (cell): [redacted]
Email: [redacted]
Appendix H: Data Use Agreement

DATA USE AGREEMENT

This Data Use Agreement (“Agreement”), effective as of July 18, 2010 (“Effective Date”), is entered into by and between Stephanie Embrey (“Data Recipient”) and Dowell Elementary (“Data Provider”). The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set (“LDS”) for use in research in accord with the HIPAA and FERPA Regulations.

1. Definitions. Unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the “HIPAA Regulations” codified at Title 45 parts 160 through 164 of the United States Code of Federal Regulations, as amended from time to time.


3. Data Fields in the LDS. No direct identifiers such as names may be included in the Limited Data Set (LDS). In preparing the LDS, Dowell Elementary shall include the data fields specified as follows, which are the minimum necessary to accomplish the research: (ID RECODE, ETHNICITY, GENDER, GRADE, CLASS, ORF-fall rate, ORF-fall status, ORF-winter rate, ORF-winter status, ORF–spring rate, ORF-spring status, MRP- fall Q1, MRP–fall Q2, MRP–fall Q3, MRP–fall Q4, MRP–fall Q5, MRP–fall Q6, MRP–fall Q7, MRP–fall Q8, MRP–fall Q9, MRP–fall Q10, MRP–fall Q11, MRP–fall Q12, MRP–fall Q13, MRP–fall Q14, MRP–fall Q15, MRP–fall Q16, MRP–fall Q17, MRP–fall Q18, MRP–fall Q19, MRP–fall Q20).

4. Responsibilities of Data Recipient. Data Recipient agrees to:
   a. Use or disclose the LDS only as permitted by this Agreement or as required by law;
   b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;
   c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;
   d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or


5. **Permitted Uses and Disclosures of the LDS.** Data Recipient may use and/or disclose the LDS for its doctoral study examining the relationship between oral reading fluency and motivation to read.

6. **Term and Termination.**
   a. **Term.** The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.
   b. **Termination by Data Recipient.** Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.
   c. **Termination by Data Provider.** Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.
   d. **For Breach.** Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.
   e. **Effect of Termination.** Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. **Miscellaneous.**
   a. **Change in Law.** The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties’ obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.
b. **Construction of Terms.** The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the FERPA Regulations.

c. **No Third Party Beneficiaries.** Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. **Headings.** The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

<table>
<thead>
<tr>
<th>DATA PROVIDER</th>
<th>DATA RECIPENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signed:</td>
<td>Signed:</td>
</tr>
<tr>
<td>Print Name:</td>
<td>Print Name:</td>
</tr>
<tr>
<td>Principal,</td>
<td>Stephanie Embrey</td>
</tr>
<tr>
<td>Elementary</td>
<td>Teacher/Researcher</td>
</tr>
</tbody>
</table>
Appendix I: Principal’s Letter of Cooperation

Date: 07/18/2010

Dear [Name],

As a doctoral student at Walden University, I have been increasingly interested in motivation to read. One area of specific interest to me is the possibility of a relationship between motivation to read and oral reading fluency among third graders.

Upon approval from Walden University I will be conducting a research study that will examine the relationships that may exist between motivation to read and oral reading fluency among third graders. The purpose of this study will be to gain greater insight into the factors influencing the relationship between motivation to read and oral reading fluency and to explore any similarities between these factors.

I would like very much to involve ABC Elementary (pseudonym). I will not need access to your students; however, the study would involve several considerations on your part. First, it would be necessary for me to acquire some demographic information for ABC Elementary, results of the Motivation to Read survey that the students completed in the fall, and fall DIBELS ORF benchmark scores for the third graders at ABC Elementary. Secondly, in order to obtain this information, I will ask for you to provide existing archival data that includes the requested data. I also request that the data not contain any personally identifiable information.

At the end of the study I will share results of the study that may impact your instructional decision making at the school.

I will make you aware of any significant changes to the study if they arise.

I am available to discuss this study with you at any time you wish. Please feel free to contact me at [phone number]. I look forward to your reply and thank you for your consideration. The research contact for this study is Dr. Barbara Calabro [phone number]. “Principal’s Consent for Research” is attached.

Respectfully submitted,

Stephanie L. Embrey

Enclosure (1)
Dear Dr. Calabro,

The researcher, Stephanie Embrey, and I have discussed her research proposal titled: Skill versus Will: An Investigation of a Relationship between Motivation to Read and Oral Reading Fluency in Third-grade elementary Students. Please be informed that Mrs. Stephanie Embrey has my permission to conduct her doctoral study at ABC Elementary (pseudonym). She will have access to the archival student data that is necessary for the study, including demographic information, Motivation to Read survey results, and DIBELS oral reading fluency rates for the third-grade students. She will not have access to personally identifiable information for the students. I hereby give my permission for the research to be conducted as proposed in my school.

Sincerely,

Principal
Curriculum Vitae

Stephanie L. Embrey

1014 Secret Court
Lusby, MD 20657
Phone: 410.394.0814
Email: sembrey@yahoo.com

EDUCATION

Doctorate of Education, Teacher Leadership, April, 2011
Walden University, Minneapolis, Minnesota

Dissertation: Skill versus Will: An Investigation of the Relationship between Motivation to Read and Oral Reading Fluency, and Demographics for Third-grade Elementary Students

Advisor: Dr. Barbara Calabro

Master of Science, Education, 2006
Walden University, Minneapolis, Minnesota

Bachelor of Arts, Psychology, 1990
Western Maryland College, Westminster, Maryland

CERTIFICATION

Maryland Educator Certificate
Advanced Professional Certificate
Certification Areas
- Elementary Education 1-6
- Middle School

WORK EXPERIENCE

Educator
ABC Elementary, 1999 to present
  - Fifth-grade Teacher (2010 – present)
Interventionist (2006-2008)
Fourth-grade Teacher (1999-2006)

Robert Smalls Middle School, 1992 - 1999
Computer Technology Teacher (1997-1999)
Sixth-grade Teacher (1992-1993)

SKILLS AND QUALIFICATIONS

- Microsoft Office and Internet
- Trained in Diagnostic Reading Assessments (DIBELS, TOWRE, QRI, Houghton Mifflin Leveled Reading Passages Assessment)
- Front Page Web Authoring
- Trained in Reading Interventions (Just Words, SpellRead, Corrective Reading, LIPS, Wilson)