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Impacts of Intrinsic and Extrinsic Motivation on Reading Achievement of First-Grade Students

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Kristin Houghton

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Walden University
2015

Abstract

Impacts of Intrinsic and Extrinsic Motivation on
Reading Achievement of First-Grade Students

by

Kristin L. Houghton

MA, Walden University, 2006

BS, West Chester University, 2002

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

December 2015

Abstract

Teachers struggle to address motivation and its impact on reading achievement and the continued desire to read, even with first-grade students. The theoretical framework for this study was based on Bandura's social cognitive theory of self-efficacy, which pertains to how individuals feel and think about themselves and the way they self-motivate; it was also based on Skinner's operant theory, which maintains that a student can be motivated by positive reinforcement. A quasi-experimental design was used to examine the impact of 3 motivation conditions (intrinsic, extrinsic, or a combination of both) on the reading achievement and oral reading fluency of 66 first-grade students. The students in 3 intact classrooms were assigned as 3 different treatment groups, each representing a separate motivation condition. The dependent variables were reading achievement and oral reading fluency. Data were pretest and posttest scores on reading achievement and oral reading fluency measures. Students in 2 of the 3 groups graphed their oral reading fluency (words read correctly per minute), which supported the intrinsic motivation condition of goal setting. Similarly, students in 2 of the 3 groups received rewards, which defined the extrinsic motivation condition. After 8 weeks of treatment conditions, posttest scores were compared with pretest scores as a covariate. An analysis of covariance showed no statistically significant differences in reading achievement between the 3 motivation conditions. Further analysis revealed a statistically significant difference in oral reading fluency favoring the intrinsic motivation intervention group. The findings suggest that 8 weeks may not be sufficient for students to benefit directly from any specific motivation condition, but suggest that engaging students in goal setting may improve reading achievement and eventual literacy.

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Dedication

To my mother and father, for always encouraging me to “reach for the stars.” My father’s absence after his passing on January 25, 2011 is particularly felt at a time of such accomplishment. I know that he, as a loving father, would have been pleased.

Acknowledgments

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Section 1: Introduction to the Study

Overview

The motivation to learn is something that is inherent in all people. Guthrie, Wigfield, Metsala, and Cox (1999) defined motivation “in terms of characteristics of individuals, such as their goals, competence-related beliefs, and needs that influence their achievement and activities” (p. 233). Taboada, Tonks, Wigfield, and Guthrie (2009) maintained that there are specific “components of reading motivation: interest, preference for challenge, involvement, self-efficacy, competition, recognition, grades, social interaction, and work avoidance” (p. 5). The motivation to read has become one of the main contributors to whether or not a student succeeds in elementary school (Applegate & Applegate, 2010). Gambrell, Palmer, Codling, and Mazzoni (1996) maintained that students want to read because they are motivated and have a desire to read. Consequently, motivation is instrumental in the reading process (Ülper, 2011).

Reading is an activity generally requiring both effort and interest; therefore, the reading skill of children has been correlated with their reading motivation (McGeown, Goodwin, Henderson, & Wright, 2012). Highly motivated students choose to read, which in turn, will develop into a lifelong reading habit (Gambrell, 2011). However, research has demonstrated that motivation decreases as students proceed through each grade level (Applegate & Applegate, 2010; Capen, 2010; Froiland, Oros, Smith, & Hirschert, 2012). Edmunds and Bauserman (2006) maintained that this decline in reading motivation seems to happen beginning in first grade and continues to progressively decline through the fourth grade. Results from administration of the Children’s Attitudes to Reading survey

demonstrated that the reading pleasure of students has declined considerably since the early 2000s (Clark & Fumbold, 2006; Sainsbury, 2004). It appears that reading decreases with age as learning becomes associated with work rather than enjoyment.

If reading is not enjoyed at a young age, this mindset is unlikely to change in later years (Clark & Fumbold, 2006). Guthrie, McRae, and Klauda (2007) posited that this loss of motivation occurs due to students' understanding of their own reading performance. At an early age, students are aware of their reading ability compared to other students (Edmunds & Bauserman, 2006). In many classrooms, students read passages aloud and hence can easily draw a comparison between their own ability and that of peers. If students view themselves as capable readers, they will be motivated to read. However, students will not be motivated to read if they do not perceive themselves as reading as proficiently as others (Guthrie et al., 2007). Without motivation, students become less engaged in classroom activities and minimize their learning (Metsala, Wigfield, & McCann, 1996).

In this current study, student motivation relates to the desire to participate in the learning process (Lumsden, 1994). Lumsden (1999) viewed motivation as the most important aspect of education. Guay et al. (2010) maintained that motivation is fundamental for academic achievement. Students typically enter school with the highest levels of motivation. It is the role of educators to preserve this motivation and encourage lifelong learning (Jenkins, 2005; Worley & Dyrud, 2003). Such enthusiasm is an asset to be developed and encouraged. Capen (2010) cautioned that even if students have the skills and ability to read, they might not choose to read unless they are motivated.

Ultimately, the level of motivation students come to school with will be affected by what occurs within the classroom (Becker, McElvany, & Kortenbruck, 2010).

As noted earlier, researchers have reported a decline in reading motivation, especially with struggling readers, which seems to be considerable from first grade through fourth grade (Capen, 2010; Wigfield et al., 1997). Reading motivation must be addressed in the primary grades in order to promote a positive attitude toward reading, which will foster a love for reading throughout life. Mullis, Martin, Gonzalez, and Kennedy (2003) maintained that “positive perceptions of their reading ability may influence [students’] perseverance with a task, or may encourage their engagement” (p. 259). Conversely, students with negative attitudes of their reading ability will likely demonstrate decreased motivation to read. These conclusions are consistent with the findings from a reading-attitude survey which reported that the U.S. ranked 33rd out of 35 countries for percentage of 4th grade respondents in the “high” category, “high” meaning students who agreed with most of the positive statements about reading and their competence on the reading-attitude survey (Mullis, et al., 2003). Teachers therefore need to begin placing greater importance on fostering an intrinsic motivation to read in their students (Froiland et al., 2012). Motivation to read is pivotal to the academic success, reading comprehension, and self-esteem of students (Becker et al., 2010). It frequently makes the difference between temporary, limited learning with a lack of deep understanding and permanent, meaningful learning that occurs naturally (Edmunds & Bauserman, 2006; Oldfather, 1993).

Background

The desire to read is as critical a lesson as reading instruction. Colker (2007) defined *highly motivated readers* “as those who generate their own literacy learning opportunities, and in so doing, ... begin to determine their own destiny as literacy learners” (p. 130). Students enter the classroom with different experiences and backgrounds, as well as varying levels and types of motivation (Ryan & Deci, 2000a). Active involvement, engagement, and a feeling of ownership of the reading process increase motivation (Fulk & Montgomery-Grymes, 1994). The more individuals are motivated to read, the more they will want to read and, in turn, the greater their academic success. This cycle not only increases reading ability, but also builds self-esteem, along with successful, motivated readers.

Swanson and Ros-Voseles (2009) defined a *disposition* as “a tendency to exhibit frequently, consciously, and voluntarily a pattern of behavior that is directed to a broad goal” (p. 30). Self-motivation, independence, problem solving, and flexibility are all dispositions that encourage early reading. According to Swanson and Ros-Voseles, “it makes sense to teach children to read while strengthening their nature to become readers” (p. 31). Thus, to develop lifelong readers, a feeling of wanting to read must be instilled in students as reading skills are taught. Students who become readers read for enjoyment, view reading as valuable, and pursue additional opportunities to read.

Reading was defined as “an effortful activity that children often can choose to do or not to do” by Wigfield, Wilde, Baker, Fernandez-Fein, and Scher (1996), who further noted that “it requires motivation for children to engage in literacy activities” (p. 1). The

majority of children attending elementary school can read; however, possessing the skill to read does not necessarily equate to choosing to read (Swanson & Ros-Voseles, 2009). Motivation is vital to reading engagement because it can be a challenging activity in comparison to other available options (Wigfield, Guthrie, Tonks, & Perencevich, 2004). Students who lack a motivation to read reduce their chances of becoming successful readers (Wigfield et al., 1996).

Primary students are at the beginning of their academic careers. If educators fail to foster a love for reading at this early stage, students may never develop the desire to read. An increase in reading motivation concurrently improves reading comprehension as well as academic achievement (De Naeghel, Van Keer, Vansteenkiste, & Rosseel, 2012; Wigfield et al., 2004). Motivated students devote more time to reading; as students read more, both their reading skills and their reading comprehension also improve (Capen, 2010). Motivation is the key to becoming a lifelong reader.

Reading motivation involves self-efficacy, reading goals, social motivation, and intrinsic and extrinsic influences (Aarnoutse & Schellings, 2003). These influences stimulate and help guide reading behavior. Reading strategies further influence reading motivation through the exchange of ideas with peers who are intrinsically motivated to read (i.e., engaged readers; Guthrie et al., 2007). Not all students are motivated in the same way (Gambrell, 2011). Learning to read is the most important skill students will acquire during their academic careers. Those who read frequently become skillful readers (Morgan & Fuchs, 2007). The frequent use of reading aids increases sight word recognition, vocabulary, fluency, and comprehension. The frequency with which children

read is typically governed by the reading skill they have acquired and their motivation. For students who do not obtain the skills to read early on, reading may develop into an arduous task, causing them to fall further behind as they avoid opportunities for practice.

Reading is a pivotal skill by which students acquire knowledge. Motivating students to read results in more than improved reading performance and fluency (Guthrie et al., 2006). Teachers who instill a desire to read in their students are also promoting the growth of positive self-esteem, as their students become successful readers and lifelong learners. First-grade students, at the beginning stages of reading, need a foundation of motivation to become successful readers. Motivation is, in turn, imperative to instilling a strong reading foundation allowing students to become productive members of society.

Intrinsic motivation “refers to the process of doing an activity for its own sake, or doing an activity for the reward that is inherent in the activity itself” (Deci, 1995, p. 21). Such motivation relates to the perceived value, worth, or enjoyment of the activity. Intrinsically motivated students actively participate in a specific activity just out of curiosity, interest, and pleasure, which is essential for lifelong, voluntary reading (Metsala, Sweet, & Guthrie, 1996). Learning is more meaningful when driven by intrinsic rather than extrinsic motivation (Deci, 1995). The development of intrinsic motivation is important early in the academic careers of students because it builds the foundation and behaviors necessary for successful learning throughout life (Broussard & Garrison, 2004, p. 106). Students might not become lifelong learners in tasks requiring reading without intrinsic motivation to read (Marinak, 2006).

Extrinsically motivated students will engage in a specific activity to achieve a reward or to escape being reprimanded. Extrinsic motivation is best used sparingly and only when the reward is clearly deserved and closely related to the task accomplished (Brewster & Fager, 2000). When the reward is unrelated to the action, the activity typically becomes a means to an end (Covington, 2000). Boggiano, Main, and Katz (1991) suggested that extrinsic motivation is also associated with low achievement scores. Researchers have also determined that rewards, deadlines, and pressured evaluations weaken intrinsic motivation because they lead students into perceiving the success as the outward, external reward (Marinak, 2006; Ryan & Deci, 2000b). Akin-Little and Little (2004) maintained that if extrinsic motivators such as grades and rewards are removed, students will develop into lifelong learners. As early as first grade, the progression of poor readers becoming poorer readers begins (Morgan, Fuchs, Compton, Cordray, & Fuchs, 2008). Therefore, it is crucial that teachers work with students to facilitate their acquisition of the necessary skills to achieve success throughout their academic careers and beyond.

Problem Statement and Nature of the Study

A lack of reading motivation affects the amount of reading students engage in, leading to a decline in reading for pleasure, which in turn affects the reading achievement of students (Rogers, 2012). The current decline in reading for pleasure within the United States may result in raising a society that is less informed and less able to make important decisions due to this decline (Rogers, 2012). Reading achievement is necessary within all academic subjects. In order to read textbooks to obtain knowledge and guidance, it is

imperative that students obtain the skill to read (Guthrie et al., 1999). Unfortunately, not all students possess the motivation to read. Those who do will invest additional time in reading. The amount of time spent reading correlates with text comprehension and increased fluency, which lead to becoming successful readers (Allington & Gabriel, 2012). The most significant objective of reading instruction is to motivate students in order to foster the love for reading (Gambrell, 1996).

Clark and Fumbold (2006) cautioned that even if students have the skill to read, this does not necessarily mean that they will elect to read. Highly motivated students will choose to read and continue to perform the activity from a personal desire (Rasinski, 2011). Students increasingly lose the intrinsic motivation to read from year to year, resulting in teachers struggling to motivate their students (Froiland et al., 2012). In order for students to become lifelong readers, teachers need to create and cultivate the love of reading (Clark & Fumbold, 2006; Moley, Bandré, & George, 2011). In order for reading to become a lifetime practice, students must see reading as an important, valuable, and satisfying experience (Clark & Fumbold, 2006). Students will not be successful if they are not motivated to read (Brewster & Fager, 2000). In order for students to become successful lifelong learners as well as efficient readers, they need to have the ability as well as the motivation to read (Brewster & Fager, 2000; Wigfield et al., 1996).

The local reading problem is occurring at an elementary school in Maryland, as first grade reading achievement has not been at an acceptable level. All first graders in this school are assessed three times a year using The Dynamic Indicators of Basic Early Literacy Skills (DIBELS), specific 1-minute assessments for measuring the attainment of

early literacy skills, to monitor the growth of their reading achievement. According to the data, in 2006, 41% of first-grade students were reading at benchmark by the end of the year; in 2007, 34% of first-grade students were reading at benchmark by the end of the year; and in 2008, 30% of first-grade students were reading at benchmark. After looking at this decline in scores over 3 years, I felt that this problem must be addressed and corrected in order for the students to become successful readers and learners.

This research was conducted within a suburban Title I public school within the state of Maryland that serves students attending preschool through the fifth grade. The student body is composed of 411 students. The sample in this study consisted of 66 first-grade students. The first grade was chosen because students at this academic level are at the beginning stages of reading. They are applying their knowledge of letter sounds to learn to read, as well as learning the necessary strategies to become successful readers. If students are not motivated, they will not choose to read. A lack or decrease of motivation and interest results in a lack or decrease of reading. Motivation is essential for successful learning, and reading is the foundation of learning (Butterworth & Weinstein, 1996).

For this quantitative study, data were gathered using an instrument known as the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003). The study was initiated to examine the effects of three motivation interventions on reading achievement. All participating first-grade students completed the Houghton Mifflin Leveled Reading Passages. These reading passages were completed as a pretest at the beginning of the study and again as a posttest at the end of the study, and the two sets of scores were then compared. The study instrument facilitated the evaluation of the

students' current reading level (Houghton Mifflin Company, 2003). The data collected provided valuable information regarding the reading ability and level of each participating student. The pretest and posttest enabled determination of reading growth among the sample across the 8-week period of the study.

Purpose Statement, Research Questions, and Hypotheses

The purpose of this study was to determine which type of motivation intervention—intrinsic, extrinsic, or a combination of the two—has the greater impact on increasing the reading achievement of first-grade students. Reading achievement was based upon the pretest and posttest scores on the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003). The findings show how to promote social change by providing primary-school teachers with successful ways to motivate their students to become active members of society through increased reading achievement. Students also read a weekly passage in order to monitor progress.

The following research questions and hypotheses guided the study:

Research Question 1: What are the differences in reading achievement posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in the achievement on the pretest?

Null Hypothesis 1: There are no differences in reading achievement posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation,

or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in the achievement on the pretest.

Alternative Hypothesis 1: There are differences in reading achievement posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in the achievement on the pretest.

Research Question 2: What are the differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in fluency on the pretest?

Null Hypothesis 2: There are no differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in fluency on the pretest.

Alternative Hypothesis 2: There are differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in fluency on the pretest.

Theoretical Framework

The theoretical framework for this study was based upon the Skinner operant theory (as cited in Ryan & Deci, 2000a), which espouses all behavior as motivated by subsequent effects. Operant conditioning uses positive reinforcement to modify an identified behavior. The student then makes an association between that behavior and the positive reinforcement. Intrinsically motivated activities are viewed as those reinforced by the activity itself. Bandura (1977) conducted groundbreaking studies focused on the social origins of self-motivation and self-regulation in children. Self-belief in personal efficacy plays a major role in motivation. Bandura first defined the term *self-efficacy* as beliefs surrounding the personal ability to produce specific levels of performance (Bandura, 1977).

Self-efficacy is a concept that explains how individuals feel and think about themselves, as well as the manner in which they self-motivate (Bandura, 1977). Self-efficacy levels can enrich or inhibit motivation. According to Taboada et al. (2009), “reading self-efficacy refers to individuals’ judgments or self-evaluations about their ability to do well on reading activities such as reading a book, or reading a passage” (p. 89). In order for students to maintain the determination to be successful, they must be confident of their abilities (Pajares, 2002). To view themselves as thriving, competent readers, students must be successful readers so that, when they are presented with more challenging texts, they will persevere in confidence (Gambrell, 2011). Bandura (1977) found that children who observed peers relinquishing instant reward in favor of larger long-term reward increased their preference for delayed reward. Unlike self-esteem,

which reflects personal worth or value, self-efficacy reflects the amount of confidence surrounding the performance of specific tasks. Students who are confident with their abilities and see themselves as skillful readers are more likely to choose to take on more challenging undertakings, as well as set and achieve higher goals, than students with low self-efficacy.

Definition of Terms

The following terms are used throughout the current study and are defined for purposes of the research:

Extrinsic motivation: A construct resulting in behavior that is encouraged by external rewards and occurs outside the student (Ryan & Deci, 2000a). This type of motivation occurs outside the student.

Goal: A specific level of proficiency on a task within a specified amount of time (Conte & Hintze, 2000).

Intrinsic motivation: A construct resulting in behavior that is driven by internal rewards and occurs from within the student (Ryan & Deci, 2000a).

Modeling: Demonstrating a way of performing that enables the behavior to be imitated (Schunk, 2003).

Oral reading fluency: The oral reading accuracy of a passage (the correct words read per minute). In this study, students read a passage for 1 minute and the errors were subtracted from the total number of words read to obtain the oral reading fluency (Hasbrouck & Tindal, 2006).

Praise: The verbal expression of approval or admiration for an object or individual (Henderlong & Lepper, 2002). In this study, praise was used after students read a passage.

Reading achievement: The ability to read text fluently and accurately while comprehending the reading in order to determine the grade level equivalent (Houghton Mifflin Company, 2003).

Reinforcer: An event or object that increases the frequency of a behavior (Akin-Little & Little, 2004).

Reward: An object given in recognition of effort, behavior, or achievement (Akin-Little & Little, 2004).

Self-efficacy: Self-belief surrounding personal abilities to learn or complete tasks or behaviors at desired levels (Bandura, 1977).

Self-evaluation: A self-assessment of personal capabilities and progress (Schunk, 2003).

Assumptions, Limitations, Scope, and Delimitations

The current study was conducted with the assumption that the participants represented the general population of first-grade students. As stated earlier, the study consisted of 66 first-grade students attending heterogeneous classes within a Title I school located in a suburban area. The student body reflected the student populations of most public schools, and the students were from a variety of socioeconomic backgrounds with varying forms of parental support. It was also assumed that the teachers were

following the guidelines presented on how to motivate the students while they were reading.

Several limitations should be mentioned in order to identify potential weaknesses in the study (Creswell, 2013). One limitation was my role of researcher and teacher of Group A; as this type of study includes personal involvement, the need to reduce bias was increased. Creswell (2013) advanced that a researcher's understanding of the study material as well as knowledge of the students in the setting can strengthen the active involvement of participants. Another limitation of this study, as a result of the assumptions, was the small student population and sample size, as well as the fact that this was a convenience sample. The official test scores of the students prior to entering the first grade were used to assign the students to three classrooms prior to the beginning of this study; therefore, the groups were already in place. It was noted that mean prior reading achievement and oral reading fluency varied across the different groups. The fact that the teacher of Groups B and C administered the weekly reading passages could have been a limitation. Additionally, the large pretest differences between the three groups could have been a limitation. Students who started at a lower pretest score would have had a hard time making up the difference in scores. The students in Group A began with higher pretest scores. Therefore, it can be construed that their performance may have been partially due to initial self-efficacy and motivation, not just due to the intervention. Also, the oral reading fluency assessment only measures oral reading fluency and not comprehension. Hasbrouck and Tindal (2006) stated, "fluency is only one of the essential skills involved in reading" (p. 642). Another limitation was the length of the study.

Research was only conducted for an 8-week period. This might not have been enough time for students to fully demonstrate their improvement in reading achievement and oral reading fluency. Finally, the research was conducted in only one Title I suburban elementary school, which may limit generalizability.

The scope of the study was determined by the aim of investigating whether differences exist between the reading achievement of first-grade students who are motivated by conditions designed to support intrinsic motivation and that of students who are motivated by conditions designed to support extrinsic motivation, or by conditions designed to support a combination of both intrinsic and extrinsic motivation. This study had a small sample that consisted of 66 first-grade students in one elementary school. Using a larger sample size might produce a more expansive range of scores to determine whether differences exist between reading achievement and a specific type of motivation conditions.

Protection of Participants' Rights

All necessary actions were taken in order to protect participants' rights. Prior to conducting this study, I obtained permission from the Walden University IRB (Approval 09-24-09-0302318) and the local school administrator. Parental consent and student consent were not required because taking the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003) is standard procedure in Grades 1-5 in this school district. Also, the Houghton Mifflin Reading Student Anthology passages (Houghton Mifflin Harcourt, 2001) are part of the school's language arts curriculum. All data were collected for educational purposes and shared with me for this research study.

All data were locked in a secure location and have been kept confidential.

Significance of the Study and Implications for Social Change

The enthusiasm to learn is considered a fundamental skill in all students when they have a positive view of themselves and a motivating learning environment (Berliner, 2003). It is important for teachers to create classrooms that are organized, friendly, and accepting of many viewpoints, as well as to communicate to students their value and potential. Educators must approach their teaching in a committed, creative, and passionate manner to encourage students to choose to become lifelong learners who value learning simply for the sake of learning (Lumsden, 1994). Motivating students for lifelong learning is a primary task of educators (Worley & Dyrud, 2003).

If teachers are motivated and having fun, their students are likely to exhibit the same characteristics. Therefore, teachers need to be motivated to teach if they want their students to be motivated to learn. Building a school atmosphere where open communication and camaraderie are encouraged and supported fosters motivation in both students and teachers. This research could be used to foster such motivation, increasing academic achievement for primary-school students. As noted earlier, students arrive in the classroom with varying attitudes toward education. Motivating students who enter the classroom with little to no motivation and changing their negative beliefs surrounding self-worth are difficult undertakings for teachers. The reward is seeing student potential come to fruition as learning and achievement manifest inside as well as outside the classroom (Berliner, 2003).

The primary role of a teacher leader is to inspire and encourage students to reach beyond their comfort zones (Bowman, 2007). In order to foster self-esteem so that students can become successful in school, it is imperative that teachers support their students in all aspects of their learning. Effective educators accept leadership to bring professional beliefs to fruition (Laureate Education, Inc., 2005).

As noted earlier, the findings of this study may enable primary-school teachers to promote social change by helping students become active members of society through reading achievement. Teachers are strategically positioned to tap the potential of highly motivated students. Educators have significant impact on student motivation. Students enter school excited to succeed and become productive American citizens; however, learning must be ongoing.

In contemporary society, reading proficiency is an indispensable ability (De Naeghel et al., 2012). It is the job of educators to teach students how to read while also cultivating the motivation to read (Rasinski, 2011). When students begin their academic careers, they arrive at school curious about learning and with high expectations for success. They are motivated and enjoy learning, are exposed to a completely new world of learning, and are continually learning new things in a variety of ways (Gottfried, 1990; Mata, 2011; Mulford, 2006). The joy and wonderment of learning must be sustained throughout their educational careers. By focusing on the motivation of first graders, a strong foundation can be built toward lifelong learning and a love for reading.

Mulford (2006) stated, "Society's most important investment is increasingly seen to be in the education of its people" (p. 48). Three major characteristics are needed to

increase student achievement. The first characteristic is the way in which students are treated. Students who are treated with respect and feel that they are valued and trusted will be more successful. The second characteristic is a learning community in which diversity and differences are valued. The third characteristic relates to the presence of a learning community that encourages taking risks so that members can change and grow.

Summary

The importance of reading motivation and achievement in elementary-school students cannot be overstated. For students to become successful as well as efficient readers, it is essential that they have the ability as well as the motivation to read. The local reading problem addressed at an elementary school in Maryland was first-grade reading achievement that has not been at an acceptable level. To become lifelong learners, students must be motivated to read (Brewster & Fager, 2000; Wigfield et al., 1996). The purpose of this study was to determine which type of motivation intervention— intrinsic, extrinsic, or a combination of the two types—has the greatest influence on increasing the reading achievement of first-grade students.

Section 2 contains a review of current literature with an emphasis on specific theories of motivation, types of motivation, motivation versus attitude, and specific reading improvement strategies. In Section 3, I describe the methodology used for the study. The population, sample, data collection and data analysis and procedures are explained. Quantitative analysis and hypotheses tests are discussed. In Section 4, the results of the study are discussed; research procedures are reviewed; the results of the analysis are described and connected to the research question and hypotheses; and

statistical test results are described and summarized. In Section 5, a review of the study in relation to the theoretical framework and an interpretation of the research findings in relation to the research question and hypotheses are provided. The recommendations for action, recommendations for further study, and implications for social change are discussed.

Section 2: Literature Review

Overview

Various studies have focused on motivation and reading since the early 1990s; however, few researchers have addressed the motivation to read in relationship to reading achievement among samples of primary-school students (Applegate & Applegate, 2010; Froiland et al., 2012; Guay et al., 2010). The current study addresses this gap in existing literature. This literature review was conducted with a focus on the following themes: (a) theories of motivation, (b) types of motivation, (c) methods of measuring motivation, and (d) strategies for reading motivation.

The primary and secondary sources reviewed are books, journals, websites, and seminar presentations collected through Walden University and other electronic databases. The review began with researching the importance of intrinsic and extrinsic motivation in relation to reading achievement. The following keywords were used in the online search for relevant sources: *reading motivation, intrinsic motivation, extrinsic motivation, reading achievement, elementary students, praise, rewards, and primary students*.

A comprehensive investigation was conducted for studies regarding theories of motivation, intrinsic and extrinsic motivation, rewards, praise, and the measurement of motivation. Studies on each type of motivation addressed in this current research were located with a simple search on the topic and subsequently expanded with a search for existing studies on the ideas proposed within the literature drawn from the initial search. As supportive studies emerged through this literature review, the importance of

promoting reading motivation within the classroom began to develop. This search continued until the references began to cover the same content and reference each other. The literature reviewed focused on how intrinsic and extrinsic motivators can be used as specific reading strategies to increase reading achievement. The following research studies are representative of the methodologies used in research on types of motivation.

The Applegate and Applegate (2010) study was a mixed methods study and focused on literacy in relation to reading motivation. The sample consisted of 443 students from Grades 2-6. Students were given the Motivation to Read Profile (Gambrell, Palmer, Codling, & Mazzoni, 1996), which measured reading self-efficacy and the value of reading. Students were also asked to read narrative passages and respond to open-ended comprehension questions to determine reading achievement. Ultimately, the study indicated that if a student is unmotivated to read, there is not much that a teacher can do.

The Guay et al. (2010) study was a quantitative study that focused on student motivation across school subjects. The study included 425 students in Grades 1-3. The results of this study identified the influence of using extrinsic or intrinsic motivation depending on each of the specific school subjects in the primary elementary grades. The findings of this study reported that intrinsic motivation had the greater impact on reading interest.

This current study, which is quantitative in nature, was conducted with a focus on the types of motivation (intrinsic, extrinsic, or a combination) as they relate to improving reading achievement. First graders were chosen because first grade is when students begin their academic reading careers.

Theories of Motivation

Theorists within the field of motivation have presented explanations for how students become motivated to perform tasks such as reading. Psychological theories of motivation have provided clarification related to the manner in which students begin to value learning. Four noticeable theories of motivation are “self-efficacy theory, attribution theory, self-worth theory, and achievement goal theory” (Seifert, 2004, p. 237).

Self-Efficacy Theory

Bandura (1986) defined *self-efficacy* as “people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391). Furrer and Skinner (2003) postulated that how students view their academic ability and their self-efficacy are predictors of motivation, achievement in school, and student engagement. *Engagement* refers to the “quality of behavioral involvement (e.g., students’ attention and effort) and emotional involvement (e.g., positive emotion) during learning activities” (De Naeghel et al., 2012, p. 1008). Simply put, self-efficacy is self-belief in the personal willingness and ability to succeed (Guthrie et al., 2007; Lin, Wong, & McBride-Chang, 2012). *Reading self-efficacy* refers to the degree of students’ expectation surrounding their own achievement of a reading task (Schiefele, Schaffner, Möller, & Wigfield, 2012).

Self-efficacy beliefs are foundational for motivation and many forms of accomplishment (Lin et al., 2012; Pajares, 2002; Schiefele et al., 2012). Horner and Shwery (2002) reported that students’ “level of self-regulation depends not only on their

reading and self-regulation skills, but also on their beliefs about their efficacy to read, the value they place on the reading task, and their motivation to read and learn” (p. 102). Engaged readers are intrinsically motivated, enjoy learning, desire to understand what they are reading, believe in their reading abilities, and possess a sense of self-efficacy (Guthrie, 2001; Reynolds, Wheldall, & Madelaine, 2011). Students with low self-efficacy, as it relates to reading, do not value reading. Ambe (2007) affirmed that students who have difficulty with reading and have been unsuccessful in the past are unmotivated to read because their previous experiences with reading were not positive. Therefore, unmotivated students are less prone to become active readers (Corkett, Hatt, & Benevides, 2011; Worthy, 2002).

The level of self-efficacy students possess can improve or inhibit motivation. Students with low levels of self-efficacy view themselves as incapable and may avoid tasks they perceive as challenging or difficult. Low self-efficacy causes motivational problems and impedes learning (Margolis & McCabe, 2006). Students with high self-efficacy are typically active readers who will usually choose activities that are more challenging and who set and achieve higher goals than students with low self-efficacy (Guthrie, 2001; Guthrie & Humenick, 2004; Schiefele et al., 2012; Seifert, 2004). Corkett, Hatt, and Benevides (2011) maintained that teachers play an integral part in the growth of student self-efficacy and achievement. If teachers recognize what will motivate and empower students to read, students will learn self-efficacy that can endure a lifetime (Smithson, 2013). Educators need to encourage students to become responsible for their classwork, grades, and overall academic performance, which should lead to becoming

successful students. Unless students believe that they can be successful and achieve academically, they will not persevere when faced with other challenges.

According to Bandura (1994), self-efficacy views are attained from the following: being successful in challenging experiences, observing the success of peers, and verbal confirmation that one possesses necessary skills. Performing a task successfully increases self-efficacy. A teacher can choose a particular text for a student to successfully decode to increase the self-efficacy of the student (Guthrie et al., 2007). However, if past performance was easily achieved and results are not achieved quickly on the next level of performance, students may become easily discouraged. Social modeling is another important source of self-efficacy. When students observe their peers successfully reading, they believe that they can also read. Bandura emphasized that students can be convinced that they have the necessary skills to be successful. Conversely, students with low self-efficacy will seek easier or less challenging tasks and avoid more difficult tasks (Corkett, et al., 2011; Solheim, 2011).

Verbal encouragement boosts self-efficacy as self-doubt is overcome and success is ultimately achieved (Bandura, 1994). Psychological reactions such as moods, physical responses, emotions, and stress levels can all affect how students view their abilities; therefore, they impact self-efficacy. For example, self-efficacy can be increased by learning how to decrease stress and by receiving immediate feedback on progress and specific content goals (Guthrie & Humenick, 2004; Guthrie et al., 2007). According to Guthrie and Humenick (2004), feedback on progress fosters student motivation, as well as self-efficacy, and will increase self-confidence relating to reading, which in turn will

further increase motivation. Teachers can also increase student self-efficacy by assisting with setting short-term and long-term goals. When student self-efficacy increases, an increase in the application of reading strategies and reading comprehension follows (Guthrie et al., 2007). Thus, an increase in self-efficacy will increase the intrinsic motivation of students toward reading.

Self-efficacy is a part of a greater “theoretical framework known as social cognitive theory, which postulates that human achievement depends on interactions between one’s behaviors, personal factors (e.g., thoughts, beliefs), and environmental conditions” (Schunk & Pajares, 2001, p. 2). As Bandura (1986) stated, "What people think, believe, and feel affects how they behave" (p. 25). Social cognitive theory contends that rewards earned for the accomplishment of difficult tasks can bring about increased interest in the respective activity (Pierce, Cameron, Banko, & So, 2003). The reward increases self-efficacy in students because they believe they can succeed at an activity, which leads to an increase in intrinsic motivation. Motivation requires the fulfillment of essential psychological needs such as ability, independence, and connectedness (Deci & Ryan, 2000). Humans strive to master challenges within the environment, implementing past experience to ultimately develop a self-concept (Ryan & Deci, 2000a). Social and environmental factors will increase motivation toward this end.

Ryan and Deci (2000b) applied cognitive evaluation theory, which is a subtheory within self-efficacy theory, to conclude that praise and feedback during an activity will increase feelings of capability, which will consequently enhance intrinsic motivation for that activity. Even when students are experiencing competence and mastery of an

activity, they will not be intrinsically motivated toward its performance unless they are free to choose the activity (Raffini, 1993; Ryan & Deci, 2000a). When rewards are perceived as information, intrinsic motivation will increase. In contrast, rewards that are observed as extrinsic or controlling will lead to reduced views of self-worth, which will lead to lower intrinsic motivation (Cameron, Pierce, Banko, & Gear, 2005).

Attribution and Self-Worth Theory

Attribution theory relates to how students interpret actions in relation to their thought process and behavior (Seifert, 2004). An *attribution* is defined as the cause of an event. In terms of students, it is their rationalization for why specific events occur, usually because of talent, determination, complexity of a task, or luck. According to attribution theory, students who are high achievers will approach tasks they expect to successfully perform because they confidently believe their success is due to their effort. If students fail, they attribute this outcome to bad luck or a poor teacher; they do not view the causal factor as their own deficiency. Therefore, failure does not affect the self-esteem of students, and success can build confidence. Attribution theory incorporates both cognitive theory and self-efficacy theory. For the purposes of this study, the construct addresses the self-perceptions of students and the manner in which they can influence how they interpret success or failure. The future tendency of the students to exhibit current behavior is also influenced by self-perception.

Self-worth theory maintains that the worth of individuals is connected to their ability to perform an activity well. The construct suggests that people are equipped with a sense of self-worth, which is a vital aspect of performance. Students who are viewed as

good readers are considered more worthy than those who are struggling readers. Students with a sense of self-worth, believe what really matters is the ability to read really well, know they are respected, valued, and are loved by others as people. A critical affect mechanism in self-worth theory is that increased effort, which can result in failure, suggests low ability, leading to feelings of embarrassment and humiliation (Morgan et al., 2008; Seifert, 2004). Failure avoiding strategies include behaviors such as not trying, stalling, setting goals that are either too low or too high, or asking for help (Seifert, 2004). Unfortunately, given the option between feeling guilty by not completing their work and feeling embarrassed by working hard and not succeeding, students choose guilt over failure. Consequently, students too often avoid engaging in an activity altogether in an effort to escape failure.

Achievement Goal Theory

A primary feature of achievement goal theory is the function of goals. Achievement goals are the reason many students engage in a task (Spinath & Steinmayr, 2012; Was, 2006). The foundation of achievement goal theory is that behavior is tied to the need to complete specific tasks. Task-mastery goals depict student eagerness to improve ability and understand instructional material (Schiefele et al., 2012). Students focus on learning the material by securing new skills, attempting to comprehend their work, strengthening their confidence, and mastering or achieving the task at hand (Ames, 1992; Was, 2006). Students believe that effort leads to success or mastery.

Students with a goal of task mastery invest time in learning tasks via a variety of strategies and prefer challenging work (Fitch, 2013). They are viewed as self-regulating

and self-determining, which in turn, foster cognitive development (Seifert, 2004). Mata (2011) maintained that a significant decline is evident in task mastery and performance goals amongst grade levels. However, students with a focus on task mastery are worried about exhibiting their capability and level of performance compared to others in addition to how they are viewed by others (Fitch, 2013; Was, 2006). These students also attribute success or failure to uncontrollable factors. They view ability, rather than effort, as the causal factor (Lumsden, 1999; Schiefele et al., 2012; Was, 2006). If failure is perceived as possible, students often withhold effort rather than trying harder and risking failure. Thus, without effort, failure cannot be attributed to a lack of ability. Students can be classified with either mastery or performance goals, or with intrinsic or extrinsic motivation.

Types of Motivation

Guthrie and Humenick (2004) posited that students are not either motivated or unmotivated in the realm of reading, but rather, they display different types of motivation. There is a debate over which type of motivation (i.e., intrinsic or extrinsic) holds the greatest potential impact on reading achievement for students. Whether extrinsic rewards undermine intrinsic motivation has also been a central issue with teachers. Ryan and Deci (2000a) maintained that to be motivated means to be inspired toward a particular action. Consequently, for students to become better readers, they need to be motivated to read.

Intrinsic Motivation

Guay et al. (2010) affirmed that superior student motivation is centered primarily on intrinsic motivation. This form of motivation is essential to the promotion of lifelong, voluntary reading (Melekoglu, 2011; Metsala et al., 1996; Pulfrey, Darnon, & Butera, 2013). Lepper, Corpus, and Iyengar (2005) defined intrinsic motivation “as a desire to engage in behaviors for their own inherent rewards” (p. 192). Intrinsic motivation is necessary for learning, and is also an identified goal of education in general (Pulfrey et al., 2013; Spinath & Steinmayr, 2008; Spinath & Steinmayr, 2012). An intrinsically motivated student will be enthusiastic toward reading, read more, and therefore demonstrate a tremendous level of comprehension (Schiefele, et al., 2012; Taboada et al., 2009). Sources of intrinsic motivation include positive reading experiences, books regarded as pleasurable, realizing the personal importance of reading, and interest in the topic read (Becker et al., 2010). Students who are intrinsically motivated become engaged readers (Vieira & Grantham 2011). They view reading as valuable, and hence tend to set goals related to reading well and often, which allows a self-perception of reading capability (Froiland et al., 2012; Gerbig, 2009; Gillet, Vallerand, & Lafrenière, 2012; Guthrie, 2001; Guthrie & Humenick, 2004).

When students view reading as interesting, or believe that becoming a good reader is important to becoming a successful member of society, they will presumably engage and persevere in reading simply for its intrinsic value (Malloy, Marinak, Gambrell, & Mazzoni, 2013). Therefore, when faced with difficult texts, an intrinsically motivated reader will persist and exert more effort than readers not intrinsically

motivated to resolve conflicts and make connections with prior knowledge (Becker et al., 2010; Gerbig, 2009; Guthrie, 2001). These students are determined and, involved in gaining knowledge, self-confidence, and generally receive high grades (Guay et al., 2010). Intrinsically motivated students enjoy learning for their own purposes and pursue learning about topics that interest them (Froiland et al., 2012).

Two studies have reported indisputable correlations between intrinsic motivation and reading achievement (Gottfried, 1990; Lepper et al., 2005). The Gottfried (1990) study was a longitudinal study that included 107 participants beginning at age 1; however the study of academic intrinsic motivation took place from age 7 through age 9. The students completed a Children's Academic Intrinsic Motivation Inventory (CAMI), which asked questions and measured academic intrinsic motivation. The CAIMI consisted of a “5-point Likert scale ranging from *Strongly Agree* to *Strongly Disagree*” (p. 527). The findings of this study revealed that academic intrinsic motivation was substantially linked with reading achievement.

The Lepper et al. (2005) study was a quantitative study that included 797 students in Grades 3-8. The students completed a questionnaire, which included separate indicators of intrinsic and extrinsic motivational orientation about their academic behaviors. The questionnaire consisted of a “5-point Likert-type scale, ranging from *not at all true for me* to *very true for me*” (p. 187). The findings of this study revealed that intrinsic motivation was correlated with reading achievement.

Froiland et al. (2012) maintained that students who recognize the value of reading, perform well and enjoy many facets of literacy. Intrinsic motivation “is

positively associated with reading more regularly, fluently, and with greater comprehension” (pg. 93). Intrinsically motivated students showed an increase in reading achievement.

Intrinsic motivation is critical to successful reading (Wang & Guthrie, 2004). Students who are engaged and intrinsically motivated to read are reported to have high satisfaction with their reading experiences and therefore engage in reading more often, which leads to improved learning, increased reading skill, and higher academic achievement (Becker et al., 2010; Froiland et al., 2012; Lepper et al., 2005; Mol & Bus, 2011; Senn, 2012). The extent and amount of their reading far exceeds students who are not intrinsically motivated (Putman & Walker, 2010; Wang & Guthrie, 2004). Those who perceive themselves as competent become increasingly more intrinsically motivated (Guay et al., 2010). Therefore, it is believed that the promotion of this form of motivation is associated with an increase in reading comprehension (Becker et al., 2010; Miller, 2012; Putman & Walker, 2010).

When students are faced with challenges in reading, intrinsically motivated students are likely to embrace the challenges and seek various methods toward the resolution of any related problems (Wang & Guthrie, 2004). They are persistent and skillful in their reading skills due to their effective application of reading strategies (Froiland et al., 2012). As a result, engagement with a variety of reading material increases and reading skills continue to develop (Becker et al., 2010; Shroff, Vogel, & Coombes, 2008). The Gillet et al. (2012) study was a quantitative study that investigated intrinsic and extrinsic motivation within the school setting. The sample consisted of a

total of 1,606 students ranging in ages from 9 through 17 years old from different schools in Quebec City, Canada. Students completed questionnaires that addressed their motivation regarding three specific school activities (going to school, completing work, and listening to the teacher). Responses were based on a 5-point Likert scale ranging from “*Strongly disagree*” (1) to “*Strongly agree*” (5). The findings revealed a “decrease in intrinsic motivation and self-determined extrinsic motivation from age 9 to 12 years” (p. 77). Therefore, students who are intrinsically motivated at a young age are more successful in reading tasks as they age (Gottfried, 1990; Lepper et al., 2005; Wang & Guthrie, 2004).

Clark and Fumbold (2006) encouraged teachers to establish a classroom within which all students are inspired to be successful readers. Increasing the intrinsic motivation of students is likely to encourage reading activities and improve reading skills (McGeown et al., 2012). As noted earlier, motivating students to read will not only assist them in reaching academic success, but also foster a lifelong love for reading. Clark and Fumbold (2006) defined *reading* as “an important gateway to personal development, and to social, economic and civic life” (p. 5). Froiland et al. (2012) maintained “intrinsic motivation is associated with high levels of determination” (p. 92), which is a necessary characteristic for becoming successful in a global workforce and educated society. The success of American society is reliant upon the level of literacy among its population (Becker et al., 2010). Students must therefore be literate to perform as successful members of society throughout their adult lives.

Student learning is greater when the intrinsic motivation to read has been developed because it is the joy of reading, rather than the receipt of a reward for reading, that reaps the true benefits of the reading activity (Deci, 1995). The need to pursue and overcome challenges is the foundation of intrinsic motivation (Raffini, 1993). Raffini (1996) opined that students must be able to

control their own decisions (autonomy); to do things that help them feel successful (competence); to feel part of something larger than themselves (belonging and relatedness); to feel good about who they are (self-esteem); and to find pleasure in what they do (involvement and stimulation). (p. 3)

Raffini identified three essential sources of intrinsic motivation: control, challenge, and curiosity. Tasks must be moderately difficult for students so they face challenges in their accomplishment. Tasks overly easy or overly hard decrease intrinsic motivation (Baker, Dreher, & Guthrie, 2000; Raffini, 1996). Providing books at a variety of levels will allow students to choose reading material that is challenging and thus increase their intrinsic motivation to read; these students complete tasks just for the challenge. They tend to exhibit increasing interest, confidence, and excitement in reading (Hon-keung, Man-shan, & Lai-fong; 2012).

A second source of intrinsic motivation is curiosity (Raffini, 1993). Students have a natural curiosity surrounding activities and situations that are new or different from their existing or prior experiences or expectations. Such curiosity motivates student interests. Intrinsic reading motivation involving curiosity in learning for the pleasure gained from being engaged and the challenge of reading difficult text is an important

factor in students becoming competent readers (Lin et al., 2012; Swanson & Ros-Voseles, 2009).

A third source of intrinsic motivation is an educational environment that gives students the freedom to take ownership over their learning by offering them choices (Baker et al., 2000; Gambrell, 2011; Horner & Shwery, 2002; Ülper, 2011; Wigfield et al., 2004). By offering students choices, they understand they are in control of their learning. It is essential students recognize they are also in control of their choices, perceiving themselves as owners of their own learning. This will lead to students who view themselves as competent readers (Mahiri & Maniates, 2013). Vieira and Grantham (2011) maintained that an environment that encourages choices increases reading engagement. When students are provided the choice and freedom to select what they would like to read, they will read more, comprehend more, and will want to read. Offering choices to students renders it more likely that they will be paired to a text written at their respective level of reading competency (Allington & Gabriel, 2012; Allyn, 2011). Consequently, it is important to understand that, by offering too many choices, students might choose not to choose, essentially withdrawing from the activity of reading (Fitch, 2013).

Clark and Fumbold (2006) postulated that intrinsic, rather than extrinsic motivation predicts reading for pleasure. Self-determination and autonomy are likely to encourage intrinsic motivation because students will have a source of control over their behavior and environment. Motivating students to be successful lifelong learners requires teachers who empower their students (Horner & Shwery, 2002; Wigfield et al., 2004).

Students are empowered when they take ownership of their learning, are allowed a “voice” in selected classroom activities, and are able to decide which type of book to read and projects on which they work (Eisenberg, 2003; Horner & Shwery, 2002; Oldfather, 1993; Wigfield et al., 2004).

Intrinsic motivation is strengthened by the students’ active involvement in learning as well as students taking ownership of their learning (De Naeghel et al., 2012; Fulk & Montgomery-Grymes, 1994). Offering choices within the reading curriculum is a valuable way to encourage intrinsic motivation to read while providing a sense of ownership over the reading that is accomplished (Baker et al., 2000; Gambrell, 2011). Providing choice, acknowledging feelings, and providing opportunities for self-directed learning enhances intrinsic motivation from a stronger sense of autonomy (Gambrell, 2011; Moley et al., 2011; Ryan & Deci, 2000b). Students must be encouraged whenever possible to choose books they will enjoy so they will view reading as an integrated facet of daily life (Clark & Poulton, 2011; Crow & Small, 2011).

Students who choose their own books will grow into adults who read and take control of their learning. Those encouraged to choose and read books at their own pace and for pure enjoyment, rather than simply read as many books as they can, will tend to choose to read for the sake of reading (Hobbs, Oleynik, & Sacco, 2009). The importance of providing students with choice (i.e., control) over what they read cannot be overstated because it will encourage them to read more, as well as increase their intrinsic motivation (Cremin, Mottram, Collins, Powell, & Safford, 2009). Intrinsic motivation is more likely to promote long-term interest and learning than extrinsic motivation (Guthrie, 2001).

Extrinsic Motivation

Extrinsically motivated students have a tendency to concentrate on the reward and recognition in reading instead of learning from texts (Guthrie & Humenick, 2004; Lepper et al., 2005; Wang & Guthrie, 2004). Extrinsically motivated students participate in an activity for its potential to help them earn a good grade, please a teacher, or obtain the respect of peers (Froiland, 2011). The focus is on superficial learning outcomes; therefore, these students will not actively participate in classroom learning (Crow & Small, 2011; Law, 2008). Student attention is diverted from the text, greatly reducing text comprehension (Wang & Guthrie, 2004).

A sole focus on extrinsic motivation can considerably diminish intrinsic interest as well as the gratification for learning alone (Crow & Small, 2011; Lepper et al., 2005). Such motivation has a significantly negative effect on the intrinsic motivation to perform tasks that would otherwise be viewed as interesting (Crow & Small, 2011).

Guthrie and Humenick (2004) maintained that students who depend upon teachers, peers, or methods other than themselves to provide the benefits of reading are considered to be extrinsically motivated because these sources are all considered to be external in nature. Becker et al. (2010) reported that

early reading failure leads to higher extrinsic motivation, with children reading only when they have to, which in turn leads to poorer reading skills....children who read for extrinsic reasons have poorer reading skills than do children with lower extrinsic motivation. (p. 781).

The purpose of the Becker et al. (2010) quantitative study was to analyze the correlation of intrinsic and extrinsic motivation in connection with the development of reading literacy and the amount of reading completed. Twenty-two elementary schools participated in a longitudinal assessment beginning from Grades 3-6 consisting of a total of 740 students from 54 classes. The findings of the study collectively represented a significant contribution to emerging literature on reading motivation. Because of its longitudinal nature the Becker et al. (2010) study revealed how reading amount and reading mastery are connected with intrinsic and extrinsic reading motivation.

Becker et al. (2010) measured intrinsic reading motivation using three factors, each with one to four indicators. Three of the four items were positively phrased (e.g., “I like reading,” “Reading is fun,” and “I read because I like reading stories”). One item was negatively phrased by stating, “I think reading is boring.” The instrument assessed the intrinsic value attached to the activity of reading using a 4-point Likert-type response scale (*1-disagree completely, 2-disagree, 3-agree, 4-agree completely*). The extrinsic reading motivation was also measured using three factors. The extrinsic motivation provided by parents was assessed with the following three statements: “I read because my parents find it important that I read a lot”; “I read because my parents want me to”; “I read because I want my parents to be proud of me”. The same 4-point Likert-type response was provided. The amount of reading was calculated through reports from the students and questionnaires that the parents completed.

All statistical analyses by Becker et al. (2010) were conducted with statistical computer software. The findings signified that intrinsic reading motivation was positively

correlated to reading mastery. Students will read more and set higher-level reading goals if they view reading as a valuable activity. Extrinsic reading motivation was negatively correlated with reading literacy, suggesting that students who read for extrinsic reasons possess lower level reading skills. Extrinsically motivated children read for reasons such as a desire to please their parents. The bidirectional relationship found by Becker et al. might suggest that reading failure in the early grades leads to insufficient skills in reading caused by an increase in extrinsic motivation as well as students reading only when they are told to read. Therefore, the findings indicated that implementing extrinsic motivation can negatively affect student motivation leading to decreased reading achievement.

Deci, Koester, and Ryan (1999) conducted a meta-analysis of the consequences of extrinsic motivators on the levels of intrinsic motivation of students from preschool to college. The results indicated that focusing mainly on extrinsic rewards weakens intrinsic motivation. Conversely, in some situations praise increased intrinsic motivation. A notable negative effect of the use of rewards is that they inhibit students' ability to make their own decisions about an activity (i.e., students do not take responsibility for self-motivation or regulation). Extrinsic motivators introduce the most harm when presented by teachers to encourage students to perform a desired activity. Students who are extrinsically motivated tend to seek out less complex learning strategies, and, in turn, score lower on assessments than students who are intrinsically motivated to learn (Akin-Little & Little, 2004). Such students are concerned only with the reward from academic performance.

The use of extrinsic motivation can be used to initially motivate students to read, which will eventually develop into intrinsic motivation to read (Colker, 2007; Guthrie et al., 2007). Extrinsic motivation may assist in motivating students to learn in areas where students lack interest (Lau, 2009). It can encourage unenthusiastic readers to engage in reading to promote an ongoing interest in the activity (Fletcher, Grimely, Greenwood, & Parkhill, 2011). Under specific conditions, the internalization of the importance of reading rewards and incentives, at first, can encourage students to engage in reading (Colker, 2007). Consequently, providing extrinsic motivation related to a task at hand will increase motivation.

Rewards. Akin-Little and Little (2004) defined a *reward* as an object given in recognition of effort, behavior, or achievement. Use of extrinsic reward will control behavior temporarily (Metsala et al., 1996); however, once the reward is no longer offered, students will no longer participate in the activity (Covington, 2000; Small, 2009). Edmunds and Bauserman (2006) maintained that eventually extrinsic rewards will no longer be effective and will lose their influence (Lepper et al., 2005).

As noted earlier, Colker (2007) and Guthrie et al. (2007) found that extrinsic motivation could be used to spur intrinsic motivation. However, some researchers have found that extrinsic rewards undermined intrinsic interest in a task (Akin-Little & Little, 2004; Covington, 2000; Small, 2009). It is also possible that offering rewards to students for conducting an activity in which they already have an interest would discourage them from continuing, which is a phenomenon referred to as the *overjustification effect* (Covington, 2000; Rosenfield, Folger, & Adelman, 1980). If a student is already engaged

in a task without receiving extrinsic rewards, the introduction of such rewards would lead the student to find the activity of less interest than when the rewards were not a component (Akin-Little & Little, 2004; Small, 2009). This outcome results because the behavior is now overjustified, developing a reduction in the effect of the intrinsic reward. Thus, introducing rewards undermines intrinsic motivation when students are already interested and engrossed in the respective activity (Clark & Fumbold, 2006; Pierce et al., 2003).

Deci (1995) advanced that behavior related to extrinsic motivation would last only as long as the rewards were in place. Once the reward is withdrawn, students may withdraw from the activity (Akin-Little, Eckert, Lovett, & Little, 2004). Deci (1995) also conceded that once students were accustomed to rewards, they began to take the shortest or quickest path to the reward. Specific schools have partnered with a pizza franchise to offer students points for reading books that they can subsequently redeem for free pizza. The more books a student reads, the more free pizza they earn. Consequently, students selected short, simple books to earn more points for less reading. Deci (1995) noted that the message of this type of program is that students are more interested in the pizza than books. Hilden and Jones (2011) suggested that teachers use rewards with the intention of motivating students to read; however, students participated in the desired activity until they got their prize or reward. Giving students rewards or prizes for reading has been linked to students performing the desired task for a short term, but long term rewards “undermine the development of intrinsic motivation” (Gambrell, 2011, p. 10). Rather

than giving students pizza or some other type of reward for reading books, Raffini (1996) suggested offering books for reading books.

Rewards may lead students to perceive the associated activity as something that they must do because it will help them achieve something else (i.e., rewards are viewed as the reason for engaging in the activity) (Akin-Little & Little, 2004; Small, 2009). When teachers offer rewards to students for reading, they are assuming the students could not or would not choose to read on their own. The problem is that teachers are using rewards to motivate students to perform an activity that could otherwise be exciting and motivating in its own right. According to Akin-Little and Little (2004), rewards do not change the attitudes that motivate student behavior, nor do they lead to profound, lasting change because they are aimed at affecting current actions. Research has found that rewards are only effective for brief periods of time (Akin-Little et al., 2004, Akin-Little & Little, 2004; Small, 2009). A behavior will therefore only manifest as long as the reward is offered. Once the reward is phased out, relinquishment of the behavior will follow. The use of rewards also produces an extrinsic orientation, which is related to reduced problem-solving skills, views of lower capability, decreased effort toward mastery, and reduced intrinsic motivation (Boggiano et al., 1991). An extrinsic motivation orientation is also associated with low academic achievement. Extrinsically motivated students view others or unspecified circumstances as responsible for their low achievement outcomes, while intrinsically motivated students view internal influences as responsible.

Performance-contingent rewards are awarded explicitly for completing an activity well or exceeding an identified benchmark, which typically leads to decreased motivation (Pierce et al., 2003). The negative effects of performance-contingent rewards manifest when the rewards are associated with a performance level. Rewards closely tied to performance can be viewed as controlling and result in reduced effort, also contributing to a weakened self-determination. Conversely, intrinsic motivation can be increased when rewards are offered for achieving or exceeding over and above the level of peer performance. The more rewards are used in the classroom, the more students seem to need those rewards (Akin-Little et al., 2004, Akin-Little & Little, 2004; Small, 2009). Rewards should be used only if they lead to lasting change long after the point of the incentive of a reward. They can have an unfavorable effect on performance quality. Students offered rewards typically do not perform the associated task well and will choose easier tasks. Additionally, rewards do not change the attitudes that motivate behavior. Thus, they do not typically lead to lasting change because they are aimed at affecting only performance rather than the underlying mind-set.

Rewards may be effectively used on a short-term basis (Akin-Little et al., 2004); nevertheless, it is important to avoid a heavy reliance on physical rewards as a method of enriching the academic effort of students (Froiland et al., 2012). Under specific conditions, rewards can enhance student motivation and performance (Pierce et al., 2003). Rewards can also increase motivation on low interest activities. With high-interest activities, the positive effects of rewards are acquired when students receive verbal praise for the activity, when rewards indicate ability at the end of the activity, or when the

rewards are given for accomplishing a specific goal (Cameron et al., 2005). When administered closely following a behavior, rewards will increase the probability of behavior repetition (Brewster & Fager, 2000; Deci et al., 1999). Akin-Little et al. (2004) espoused rewarding with a party or other group incentive as long as the reward is not contingent upon student behavior or achievement.

The effective implementation of rewards involves incentives as similar as possible to the associated task (Cameron et al., 2005). For example, after a student has read a book, a reward of another book is ideal. If the reward is unrelated to the activity it may undermine the motivation to read (Clark & Fumbold, 2006). Another effective use of rewards is to have students take ownership in the process of deciding the nature of the reward, as well as how the incentive can be obtained. Thus, students take ownership in evaluating the quality of their activity (Cameron et al., 2005). Rewards in and of themselves neither weaken nor sustain intrinsic motivation. What matters is how the rewards are implemented (Cameron et al., 2005; Raffini, 1993). If an activity, such as reading a book, provides feelings of independence and capability, students will undertake reading for the intrinsic satisfaction, which will strengthen the intrinsic motivation to read. When students perceive they are successful with an activity, they will desire to repeat the task.

Praise. One of the most powerful rewards a teacher can use is praise (Pressley et al., 2003). Kanouse, Gumpert, and Canavan-Gumpert (1981) defined “praise as positive evaluations made by a person of another’s products, performances, or attributes, where the evaluator presumes the validity of the standards on which the evaluation is based” (p.

98). Praise can be highly effective within the classroom because it stimulates a positive and encouraging learning environment and allows students to gain self-confidence. It can increase the desire to engage in the praised activity and hence increase motivation (Gambrell, 2011; Zentall & Lee, 2012).

Effective teachers provide praise in the form of informative compliments that provide students with a sense of achievement and confidence in their work (Guthrie, 2001, Wilson & Trainin, 2007). Teacher praise includes verbal scaffolding, encouragement, and specific direction, which leads to increased student motivation to learn (Gambrell, 2011). Effective praise is specific, sincere, and sufficient, as well as properly delivered for specific outcomes (Guthrie, 2001; Wilson & Trainin, 2007). However, when students continue to work on the praised activity simply to gain the attention and approval of the teacher, the motivation is then considered extrinsic in nature (Akin-Little et al., 2004). Once students no longer receive the praise for completing the respective activities, they will discontinue the activities and lose their motivation. Thus, praise encourages some students to become dependent upon teacher evaluations.

Gambrell (2011) emphasized that praise is not always effective. If students believe praise to be undeserved or insincere, it can be interpreted as controlling. If students view teacher praise as undeserved or insincere, motivation may decrease because they may feel that they are being manipulated (Gambrell, 2011). Generic praise decreases motivation because it communicates a characteristic that cannot be changed (Wilson & Trainin, 2007; Zentall & Lee, 2012). When teachers tell students how good they are, the students feel the pressure associated with needing to live up to the

compliment; therefore, the teachers are in charge and controlling student behavior. Such praise is viewed as a judgment. Praise may impede performance when it implies low ability by reducing interest in the associated assignment, leaving students feeling pressured and seeking a low-risk approach to avoid failure (Gambrell, 2011; Henderlong and Lepper, 2002). Students will subsequently only complete tasks with the hope of being complimented.

When praise consists of positive feedback and is contingent, specific, and sincere, it can function as positive reinforcement (Gambrell, 2011; Henderlong & Lepper, 2002). This type of feedback can have an enriching effect on intrinsic motivation because verbal rewards are typically unexpected. Such reward provides a confirmation of ability that can increase intrinsic motivation (Deci et al., 1999). Students who receive explicit feedback understand their capabilities. Henderlong and Lepper (2002) postulated that sincere praise is an important variable, which must be honest and sincere as well as precise and specific, reducing the likelihood of a gap between what the student hears and his or her self-perception. Praise must be genuine and used in moderation; otherwise, it may be received as generalized and meaningless (Henderlong & Lepper, 2002). Consequently, students will accept praise when it is consistent and matches with how they view themselves.

Students who view themselves as playing an important role in their own learning process will want to achieve. An effective teacher designs incentives for students that will motivate their desire to perform assigned tasks. It is important to avoid a public display of praise because it creates competition rather than collaboration. Offering students a private

comment to promote independence will also cause them to realize their work is valued (Bowman, 2007). Immediate teacher feedback is important.

Goals. Setting goals is a positive motivator (Szabo, 2011). When students set their own goals and reflect on the goals they set, they have a deeper involvement in their learning. Setting goals can lead to increased intrinsic motivation by allowing students to set their own goals and decide what they need to do to obtain those goals (Peterson & Davis, 2008). Goal setting helps the student to visualize what he or she wants to achieve in a specified time (Szabo, 2011). When students set their own goals, it should be with the help of the teacher in order to make sure that the goals are realistic, relevant, and attainable. Goals should be specific to the student so that once met, the student will want to set a new goal (Smithson, 2013; Swain, 2005).

Teachers should meet with students once a week to discuss the progress toward their goals as well as to provide feedback to see if the goals need to be readjusted (Swain, 2005). Goals without feedback, as well as feedback without goals, do not have an effect on student motivation. In order for students to set and adjust the goals that they set, they need both oral and written feedback. The feedback should encourage improvement in areas where they need growth as well as acknowledge their success and reinforce positive behavior in order to achieve repeated success (Bowman, 2007; Smithson, 2013).

Motivation Versus Attitude

Students motivated to read will invest more time in reading, which correlates to their skill level in text comprehension and overall reading achievement (De Naeghel, et al., 2012; Guthrie et al., 1999). Metsala et al. (1996) also reported that the level of

motivation to read among a sample of elementary school children correlated with the amount they read. While reading motivation relates to the motives for wanting to read, reading attitude relates to the feelings about reading (Schiefele, et al., 2012). Attitude toward reading is equally important, because it can cause students to either pursue or avoid reading (McKenna & Kear, 1990). Unfortunately, students who avoid reading or do not read regularly are unmotivated to read resulting in a decrease in opportunities to become successful readers. Furthermore, avoiding reading can result in negative feelings about reading where the struggling readers continue to struggle (Clark & DeZoysa, 2011). Moreover, attitude regarding reading is essential because it affects reading ability through its effect on reading performance and fluency (Clark, Woodley, & Lewis, 2011; McKenna, Conradi, Lawrence, Jang, & Meyer, 2012). As students age, and as an increasing number of recreational options are presented, positive attitudes toward reading generally decrease. When learning to read, a motivating climate is important. Reading motivation manifests with intrinsic and extrinsic motivation, social motivation, self-efficacy, and the establishment of reading goals (Aarnoutse & Schellings, 2003).

Becker et al. (2010) reported that the connection among previous achievements and subsequent motivation indicates that students revel in activities in which they are proficient at and therefore motivated to repeat. Frequent reading supports the development of self-efficacy. Students who read more frequently develop greater reading comprehension.

Students who can read, but do so rarely, are referred to as *reluctant readers* (Johns & Lenski, 2001). Such readers are generally categorized in one of two groups. The

first is comprised of students who can read at a below grade level, but choose not to read. The second group consists of students maintaining reading skill at or above grade level, but do not read because it is too hard. Extrinsic motivation may be needed to encourage reluctant readers. As reading becomes a more enjoyable and rewarding experience, extrinsic motivation can be replaced with an intrinsic motivation to read.

Students with negative attitudes toward reading are not necessarily unmotivated to read (Clark, Woodley, & Lewis, 2011; Johns & Lenski, 2001); motivation differs from attitude. Students with negative attitudes toward reading might have difficulty reading or might not have had a sufficient number of positive experiences with reading to appreciate the activity. A positive attitude with regard to reading can affect reading motivation and reading achievement (Clark & DeZoysa, 2011; McKenna & Kear, 1990). In the primary grades with students who are just beginning to experience reading, positive reading experiences are imperative. Motivating students to read is therefore important so they can develop positive attitudes toward the activity, building a strong foundation for future reading success.

Improvement Strategies

Motivating students to want to read can be a struggle for all teachers. A plethora of activities compete with reading such as video games, movies, television, and sports. A pivotal aspect of the teaching role is to make reading fun and worthwhile for students. The long-standing debate over which type of motivation is optimal (i.e., extrinsic vs. intrinsic) is addressed in the current study, as well as whether rewards help or hinder motivation.

Attention, Relevance, Confidence, and Satisfaction Model

An effective motivation approach is through the attention, relevance, confidence, and satisfaction (ARCS) model created by Keller (1987). This model is a problem-solving approach for creating a learning environment to stimulate and sustain student motivation toward the application of specific strategies. Attention strategies, which arouse and sustain curiosity and interest, are used to capture, maintain, and stimulate student interest. Hodges (2004) suggested using humor and presenting instruction in different ways to help sustain attention. Relevance strategies, which connect to student interests, needs, and motives, are used to provide students with appropriate choices, responsibilities, and influences while incorporating their personal experiences. Furthermore, explaining how reading relates to students now as well as how reading will help them in their future will validate the relevance of reading. Confidence strategies, which help students establish a positive outlook on achievement, also help students recognize that their success is because of their abilities and efforts. Assisting students with setting realistic, obtainable goals will also aid in students becoming confident readers. Satisfaction strategies, which provide intrinsic and extrinsic support for effort, allow teachers to reinforce student success either intrinsically or extrinsically (Astleitner & Lintner, 2004; Hodges, 2004; Small, 1997).

The attention, relevance, confidence, and satisfaction model includes four specific steps: define, design, develop, and evaluate. The first step is to define the problem, evaluate the students, and identify motivational goals. Next, plan the motivational strategies that will work with the students. The next step is to develop a plan and all

necessary materials that will be needed. When all of these steps are in place, the final step is to evaluate the plan to see what worked and what did not in order to attain the result desired (Hodges, 2004). Thus, the attention, relevance, confidence, and satisfaction model ensures that the attention of activity-stimulated students is directed in a relevant manner, at their level of confidence, and ultimately satisfying for every student.

Another strategy fostering reading motivation is encouraging students to set relevant and realistic goals. Such goals can also lead to academic success and promote self-efficacy. Goals that specify the requirements for success increase cognitive and emotional reactions. Teachers need to assist students in setting small goals that can be accomplished quickly as they progress toward a larger goal (Smithson, 2013). Good readers “have clear goals and constantly monitor the relation between the goals they have set and the text they are reading” (McLaughlin, 2012, p. 433). When students are taught to work toward their goals, their progress in the development of learning skills is faster and their academic success is also enhanced. Thus, all students can experience success (Schunk, 2003).

Teachers need to encourage students to take academic risks in order to overcome their negative beliefs surrounding personal capabilities (Berliner, 2003; Jenkins & Terjeson; 2011). Setting an individual learning goal focuses students on personal mastery and improvement rather than on outperforming peers. When students take part in setting their own goals, they become accountable and assume ownership for achieving those goals (Smithson, 2013). With competitive activities, the focus is on winning rather than performing well; hence, behavior is extrinsically motivated (Deci, Betley, Kahle, Abrams

& Porac, 1981). Allowing students to set their own learning goals fosters intrinsic motivation (Baker et al., 2000; Bowman, 2007).

When students enjoy the topic of the reading material, they will select a more difficult text and set higher goals (Jenkins & Terjeson, 2011; Law, 2008). Goals provide a clear standard against which students can measure their progress. Feedback from teachers is necessary to convey student progress and offer useful strategies toward goal achievement. Students are more likely to complete reading material when an intrinsically based goal is established versus one extrinsically grounded (Froiland et al., 2012). It is imperative for students to realize that they can shape their own learning and have choices with regard to how they attain their goals.

Research has shown that both intrinsic and extrinsic motivation can be used in specific situations in the classroom. Lepper et al. (2005) advanced that increasing intrinsic motivation and using extrinsic motivation, in order to have students initially engage in an activity, may set them on the path of reading for the pure enjoyment of reading, which will increase their overall motivation. Wang and Guthrie (2004) also suggested another way to increase achievement is by using both intrinsic and extrinsic motivation. At first, students may begin reading for extrinsic reasons; however over time they will eventually internalize the importance of reading on their own, which will lead to intrinsic motivation. Initially, students can be inspired to learn using extrinsic rewards. When rewards are associated to a specific sought after behavior and encourage student engagement, students can then become self-motivated, which encourages high-quality learning (Gambrell & Marinak, 1997). Therefore, if students are working on skill

building, or it is necessary to control behavior, extrinsic motivation is useful. However, intrinsic motivation is necessary for higher order literacy and self-directed learning (Metsala et al., 1996).

Another significant aspect in cultivating lifelong learning through reading is being able to choose (Jenkins & Terjeson, 2011; Law, 2008). Students who choose what they read tend to be more motivated (Jenkins & Terjeson, 2011; Law, 2008). Choice can include which book to read, where to read, and whether to read alone or with a partner (Guthrie, 2001; Ülper, 2011). Choice equates to motivation because it provides students with authority and control over their learning (Guthrie, 2001). Control is a primary need in the development of self-determination and motivation (Guthrie & Humenick, 2004). Providing choices of reading material and reading activities increases student interest and their time invested in reading (Guthrie, 2001). Increased choice also increases intrinsic motivation (Guthrie et al., 2007).

When students have some level of control over their learning and reading, they often choose to increase their reading (Guthrie et al., 2007). Students who make their own decisions (i.e., autonomy); participate in activities that cause them to feel successful (i.e., competence); feel like they belong and are a part of something (i.e., acceptance and understanding); view themselves in a positive manner (i.e., self-esteem); set realistic goals; develop a plan to accomplish those goals; and evaluate their progress (Guthrie et al., 2007; Horner & Shwery, 2002).

According to Schunk (2003), goals are essential facets of motivation and learning. Specific short-term goals are attained rapidly, which results in increased motivation and

self-efficacy. Long-term goals are more appropriately broken down into shorter, easily attainable milestones that are neither too easy nor too difficult to reach. Students will not attempt what they believe to be impossible. However, a goal must present a sufficient amount of difficulty for students to work harder toward its attainment. Modestly difficult goals increase motivation and imply a sense of growth, which also increases self-efficacy. Specific goals are probable to increase learning and stimulate self-evaluation. Goals can be achieved by modeling. Students are more inclined to follow models when they expect the modeled behavior will facilitate goal achievement.

Goals motivate students to complete a task and work hard to obtain the strategies that will have an impact their learning (Horner & Shwery, 2002). Therefore, goals must also be set for reading. When students set their own goals, they place increased value on reading and thereby increase their intrinsic motivation (Smithson, 2013; Szabo, 2011). It is important to select specific and challenging goals, ensuring feedback for ongoing evaluation that facilitates goal achievement (Conte & Hintze, 2000). Reading instruction that allows students to set specific, obtainable short-term reading goals such as the number of pages they will read each day enhances success (Guthrie et al., 2007). Student efficacy related to reading, and self-confidence in their future success, are continually improved and enhanced by the provision of specific goals with steps toward achievement (Guthrie & Humenick, 2004).

Students who set goals and reflect upon those goals take greater ownership of their learning. However, for goal setting to be effective, students must continually assess their progress and set new goals based on the progress (Horner & Shwery, 2002). Self-

evaluation increases motivation and self-efficacy because students believe they are capable of learning and raising their level of achievement (Schunk, 2003). When students self-evaluate, they are assessing their progress toward a goal while making suitable changes along the way in order to attain their goal. If students have attained their goals, they set new goals. If students are advancing toward their goal, they may start to see what they still need to do in order to achieve their goal and will begin to set their own goals (Horner & Shwery, 2002). When students are not making sufficient progress, they must determine and resolve the needed adjustments. The goal may need to involve a shorter duration to planned achievement or greater specificity. More time and effort may be necessary, the application of different strategies may be needed, or perhaps the goal must be changed. Modeling reflection and exploration is needed for students to develop the necessary self-evaluation skills.

According to Schunk (2003), *self-evaluation* includes “(a) self-judgments of present performance through comparisons with one’s goal and (b) self-reactions to those judgments by deeming performance noteworthy, unacceptable, and so forth” (p. 160). As students self-evaluate and track their progress toward their goals, they realize they are capable learners, which reinforces self-efficacy for continued learning; leading to intrinsically motivated students with a longing to continue. At the start of a task, students feel confident because they have identified specific goals. This self-efficacy supports motivation and fosters their learning. When students begin to self-evaluate their progress, their self-efficacy is increased and, in turn, their motivation is increased or maintained. It is important for young students to confer with adults to assist with goal setting so goals

can be broken down into manageable steps and the students can receive feedback on their progress. Schunk found that students, who met with adults on a weekly basis to receive such feedback, as well as to identify and set new goals, demonstrated the highest reading achievement.

Summary

This review of current literature focused on specific theories of motivation, as well as types of motivation, exemplified the extensive existing research on extrinsic and intrinsic motivation. Related studies have shown that teachers want their students to become strategic, independent readers who can read and understand a text, analytically consider its subject matter, and effectively talk over their related thoughts and ideas with others (Moley et al., 2011). For students to improve their reading skills, teachers need to focus student attitudes on reading and the motivation to read for pleasure (Fletcher et al., 2011). Aligning motivational support with instructional practice allows teachers to build lifelong literacy engagement in their students (Metsala et al., 1996). Prior to this study, no specific research had been conducted on the motivation of first-grade students and whether it affects reading achievement. This study examines types of motivation in relation to first grade reading achievement. Extrinsic motivation was compared to intrinsic motivation to obtain data on how each affects reading achievement. The nature of the research represents a significant addition to the existing literature on reading motivation because it explicitly compares both methods in search of a specific method of motivation that will increase reading achievement among first-grade students. It is important to describe the research design of the present study.

Section 3 contains an explanation of the research design used in the present study. Information on the population, sample, data collection and data analysis and procedures are explained. In Section 4, the results of the study are discussed; research procedures are reviewed; the results of the analysis are described and connected to the research questions and hypotheses; and statistical test results are described and analyzed in detail. In Section 5, a review of the study in relation to the theoretical framework and an interpretation of the research findings in relation to the research questions and hypotheses are provided. The recommendations for action, recommendations for further study, and implications for social change are discussed.

Section 3: Research Method

Introduction

This section includes descriptions of the research design, setting, population and sample, treatment, variable and instrumentation, and methods used for collecting and analyzing data. The purpose of this study was to determine which type of motivation intervention— intrinsic, extrinsic, or a combination of both intrinsic and extrinsic—had the greater impact on increasing reading achievement of first-grade students as measured by pretest and posttest scores on the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin, 2003). Additionally, the Houghton Mifflin Student Reading Anthology passages (Houghton Mifflin, 2001) were used to determine oral reading fluency.

Research Design

A quasi-experimental three-group pretest posttest research design was chosen for this study (Belli, 2008). This quantitative design was selected because it allowed me to examine the reading achievement and oral reading fluency of three comparable groups of first-grade students who received three different forms of motivation interventions (i.e., either extrinsic or intrinsic motivation or both).

Population and Sample

The site for the current research study was a suburban Title I public school within the state of Maryland that enrolled students in preschool through the fifth grade. The school served a population of 411 students. Within this Title I public school, 58% of the student population received free or reduced-price lunch. All grade levels were composed

of three classrooms with approximately 20 students in each class, excluding preschool and prekindergarten. Approximately 90% of the students were listed as Caucasians.

It is essential to describe the manner in which the first-grade students were assigned to the various intervention conditions in this current study. Although random assignment is the optimal method in experimental conditions, such assignment is impossible in certain settings (Gersten et al., 2005). The participating class of first-grade students ($N = 66$; 36 boys and 30 girls) was heterogeneous in nature with regard to aspects such as disability that may have powerful effects on reading achievement. All students participated in this study. The official test scores of the students prior to entering the first grade were used by the study school to assign the students to three classrooms prior to the beginning of this study; therefore, the groups were already in place. The school assigned the motivation intervention conditions to the three classrooms for the treatment period.

Treatment

The treatment corresponding to the quasi-experimental research design contained three different motivation intervention conditions, as sponsored by the school and implemented by school staff as follows. All three groups were given the same assigned text to read weekly from the anthology readings, which increased in difficulty each week. Some students used this information to track the number of words read correctly in 1 minute in order to set achievable goals. Additionally, students had opportunities to read throughout the day. All three groups were also presented with new reading opportunities throughout the day.

It was important for me as the teacher of Group A in this study to provide opportunities and strategies to foster intrinsic motivation that enabled students to value themselves or develop a sense of self-esteem as a result of reading. The three sources of *intrinsic motivation* identified by Raffini (1996) were control, curiosity, and challenge. All students read the same weekly reading passage, which allowed for control over the text students were reading when receiving the motivation intervention. All students were provided time to read any text of their choice during the school day. This was guided by the understanding that curiosity is a key source of motivation (Lin, Wong, & McBride-Chang, 2012). Students in Group A read a first-grade-level passage weekly for 1 minute from the Houghton Mifflin Reading Student Anthology (Houghton Mifflin Harcourt, 2001) to obtain their results for the words read correctly to identify their oral reading fluency. Each student graphed his or her data to provide a visual representation of his or her progress in order to set realistic goals. The goals and the steps necessary toward their attainment were stated in writing, and a self-report scale rating their progress was completed. The students would look at the words that they read correctly and decide if they met their goal or not. If they did, they would write “achieved,” and if they did not, they would write “progressing.” The unit of measurement was the number of words read correctly over the span of 1 minute from the first grade student anthology book. The ratings were discussed with the students, and specific feedback was provided to allow them to adjust their plans to ensure goal achievement. The students set a specific reading goal each week and recorded their progress. Providing students ownership in making decisions can be a very powerful tool (Smithson, 2013; Szabo, 2011; Wigfield, Metsala,

& Cox, 1999). The idea was to ensure that the students encountered manageable challenges as they accomplished each goal. In their attempt to meet their goal by using control, curiosity, and challenge, intrinsic motivation was gained (Raffini, 1996). The goal setting served to increase students' interest and hence the intrinsic motivation to engage in additional reading activities (Guthrie, McRae, & Klauda, 2007; Smithson, 2013; Szabo, 2011).

The teacher of Group B relied heavily upon rewards and praise as a way of motivating the participating students. These students were exposed to conditions that enhanced extrinsic motivation, met weekly to read the same grade-level passage as Group A, were provided time to read any text of their choice during the school day, and were given a reward and verbal praise after their reading. Rewards for the 8 weeks included a bookmark, a piece of hard candy, a pencil, a piece of chocolate, an eraser, a mint, a highlighter, and a lollipop. The words read correctly for students in Group B were just noted on the passage. Students were also given opportunities throughout the week to read. The students in Group B were not involved in setting goals or recording progress. In the present study, the rewards used were expected to influence behavior in terms of desired performance.

The teacher of Group C engaged in a combination of alternating intrinsic and extrinsic motivation conditions every other week. The students who were exposed to conditions that enhanced intrinsic and extrinsic motivation also met weekly to read the same grade-level passage as Group A and Group B. Again, all students were provided time to read any text of their choice during the school day. On the alternating weeks that

students were exposed to conditions that enhanced intrinsic motivation, each student graphed the data to provide a visual representation of his or her progress. The ratings were discussed with the students, and specific feedback was provided to allow them to adjust their plans over the next 2 weeks to ensure goal achievement. On the alternating weeks when students were exposed to conditions that enhanced extrinsic motivation (i.e., rewards and praise), the students did not set goals or record progress during this time. The students looked at their growth and discussed their goals during the intrinsic motivation intervention week. All students in Group C received praise and the same rewards as Group B for the extrinsic motivation intervention week consisting of items such as a bookmark, a piece of hard candy, a pencil, and a piece of chocolate.

Variables and Instrumentation

A quantitative study involves variables that are viewed as the attributes or characteristics of people or objects that hold the potential for varying values (Belli, 2008). Quantitative research is conducted to measure such attributes or characteristics to obtain numerical values that can be, in turn, used in statistical analyses to determine the cause-and-effect relationships between the variables. The current study included one independent variable, type of motivation intervention, which was composed of intrinsic motivation, extrinsic motivation, and alternating intrinsic and extrinsic motivation to determine the impact on the reading achievement and oral reading fluency of first-grade students. The types of motivation were the result of teacher manipulation. Further, the study also involved two dependent variables, reading achievement and oral reading

fluency. Additionally, the pretest of reading achievement and oral reading fluency scores were used as covariates.

The dependent variables and the covariates were measured as follows.

Reading achievement was measured by using the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003). This tool provides an accurate measure of a student's reading level by measuring the rate at which the student reads the passage; the oral reading accuracy, or percentage of words the student reads correctly; fluency of the passage based on grouping of words and phrasing, as well as flow and expression; and finally comprehension based on questions about the passage that the student reads (Houghton Mifflin Company, 2003).

The instrument consists of 22 little books spanning guided reading levels A through Z. A teacher's manual is also included that consists of student vocabulary lists and comprehension questions. Students first read vocabulary lists to determine an approximate reading level. Next, they read a book at the level determined from the vocabulary list. Based on the comprehension questions, a grade level reading level is obtained to determine their overall reading achievement.

Validity of the Houghton Mifflin Leveled Reading Passages has been established (Houghton Mifflin Company, 2003). *Validity* refers to the degree to which a given instrument measures what it claims to measure (Golafshani, 2003). Scores on the instrument are relevant to students' reading capabilities and skills, based upon their grade level (Houghton Mifflin Company, 2003). The content validity of the instrument (i.e., the

degree to which it assesses the construct of concern) is also assured because the tool is designed to measure and identify students' grade level reading ability.

The reliability of this tool has been established as well. *Reliability* refers to the degree to which the instrument provides consistent results over time and the results can be reproduced under similar situations (Golafshani, 2003). The Houghton Mifflin Leveled Reading Passages is hence widely used at the study site for determining students' current reading level in order to measure achievement throughout a specific period of time.

The instrument used to measure oral reading fluency in this study was the Houghton Mifflin Reading Student Anthology passages (Houghton Mifflin Harcourt, 2001). This instrument determines oral reading fluency based on words read correctly before and after the motivation intervention is implemented. The following were not considered as errors: repetitions of a correct word, self-corrections, added words, and pronunciations due to accent, speech impediment, or dialect, as well as added words. Errors consisted of words read incorrectly, but if the student repeated the same error, it was only counted once. To determine the words read correctly per minute, the number of errors was subtracted from the total number of words the student read, divided by the number of words read and then multiplied by 100. This percentage was the student's oral reading fluency.

Students had one-on-one, private meetings with the teacher of each group and read the same story from the anthology for 1 minute. Teachers used the weekly reading

passages with all students in their group, and then they were scored to obtain the total words read correctly.

Validity of the Houghton Mifflin Reading Student Anthology passages has also been established (Houghton Mifflin Harcourt, 2001). As previously stated, validity refers to the degree to which a given instrument measures what it claims to measure (Golafshani, 2003). As stated above, passages are scored for oral reading fluency. Scores on the instrument are relevant to student oral reading fluency, based upon their grade level (Houghton Mifflin Harcourt, 2001). The content validity of the instrument (i.e., the degree to which it assesses the construct of concern) is also assured because the tool is designed to measure and identify the students' oral reading fluency at grade level.

The reliability of the Houghton Mifflin Reading Student Anthology passages (Houghton Mifflin Harcourt, 2001) is established because the assessment provides consistent results of words read correctly per minute. Therefore it is commonly used at the study site to determine students' oral reading fluency (words read correctly per minute). It is also aligned with the first grade curriculum and expected reading level of first graders.

Data Collection Procedure

Upon approval from Walden Institutional Review Board (Approval 09-24-09-0302318) data collection began, and was collected between September and November 2009.

Teachers were already assigned to classrooms prior to the beginning of the study; therefore, the groups were already in place. The three classrooms were then assigned the

various motivation intervention conditions (Group A, Group B and Group C). The implementation of this study was sponsored by the school, and implemented by school staff; therefore, the school was responsible for designing and implementing the teacher training related to the conditions that enhanced the motivation intervention among the participants in all three study groups. The training included how to complete the 1 minute weekly reading passages and how to provide constructive feedback, such as stating the students' growth, the specific strategies used to sound out words, and how to work with the students to set attainable goals. Training also addressed how to review and reflect on the goals students set at the beginning of the following week in order for students to reflect on their progress to see if any adjustments need to be made in order to achieve their goal. Training with the Group B teacher again consisted of how to oversee the 1 minute weekly reading passage and how to administer the rewards and praise. Praise consisted of phrases such as, "good job", "wow", "way to go", and "you're doing great." Next, training with the Group C teacher of the combination group consisted of how to oversee the 1 minute weekly reading passage as well as how to utilize weekly alternating intrinsic motivation with goal setting and extrinsic motivation such as rewards and praise. Finally, the following materials were gathered and distributed to all teachers: printed weekly reading passages, timer, goal setting sheets for the Group A and Group C teachers, and rewards for the Group B and Group C teachers.

To ensure uniformity in the conditions that enhanced the three types of motivations in this study, briefs were distributed to all teachers. The teachers exhibited desirable attitudes toward the use of the conditions that enhance the specific motivation

interventions in their classes. Therefore, the school believed that the selected educators would be dedicated in their provision of the motivation conditions.

Data were collected using the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003), which the school sponsored, at the onset of the study as a pretest and again after 8 weeks as a posttest to determine the reading achievement of each student. Passages were grouped by 11 levels, with some containing 3 sublevels consisting of beginning, early, or late totaling in 33 specific levels. Specific grade levels were noted using letters AB (Kindergarten), CD (early Grade 1), EFG (mid Grade 1), HI (late Grade 1), J (early Grade 2), KL (late Grade 2), MN (early Grade 3), OP (late Grade 3), QRS (Grade 4), TUV (Grade 5), WXYZ (Grade 6) and each level also consists of scores below benchmark, within benchmark, and above benchmark. Since the scores were non-numerical, I assigned each level with a numerical value of 1 assigned the lowest level and 33 as the highest possible level so each outcome was recoded to a numerical value with a score (see Appendix A).

Additionally, data were collected by the teacher of each group using the first-grade-level passages in the Houghton Mifflin Reading Student Anthology (Houghton Mifflin Harcourt, 2001) at the onset of the study and again after 8 weeks to determine the oral reading fluency based on number of words read correctly in 1 minute for each student. These reading passages were also used in order to implement the specific motivation interventions used within the three study groups.

Data Analysis

After data were collected, I converted the pretest and posttest results from the Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003) from the letterform from A through Z to a numerical value of 1 through 33 to identify the pretest and posttest numerical scores for reading achievement. Books were grouped by letters and consisted of three different levels consisting of below benchmark, within benchmark, and above benchmark (see Appendix A). Next, I entered the data from the pretest and posttest into an Excel spreadsheet. Further data were gathered from the pretest and posttest scores from the Houghton Mifflin Student Reading Anthology passages (Houghton Mifflin, 2001) to determine oral reading fluency. Again, I entered the data from the pretest and posttest into an Excel spreadsheet. Then, I opened the Excel documents with IBM SPSS Statistics, version 22 and thus converted the data from Excel to SPSS format in order to run the data analysis.

To analyze the data, two Analysis of Covariance (ANCOVA) procedures were utilized to determine any differences in reading achievement and oral reading fluency within the treatment period between the three motivation intervention groups. In addressing Research Question 1, an ANCOVA procedure was performed to determine if there were significant differences in reading achievement posttest scores (dependent variable) among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation (independent variable), when adjusting for preexisting differences in the

achievement on the pretest (covariate). In addressing Research Question 2, an ANCOVA procedure was again performed to determine if there were significant differences in oral reading fluency posttest scores (dependent variable) among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation (independent variable), when adjusting for preexisting differences in fluency on the pretest (covariate). Testing for statistical significance was supplemented by post hoc tests in order to determine which motivation intervention was most effective in terms of improving reading achievement and oral reading fluency. Hypothesis testing was done using $\alpha = .05$ as the criterion for rejecting the null hypotheses.

Possible Threats

Several threats existed to the validity or quality of the study findings. External threats included students discussing or overhearing the reading passages used in the pretest and posttest, as well as their own existing bias surrounding the importance of reading. Some students might love to read, while other students might not like to read at all. An internal threat was the reading maturity of the students during the study. As the year progressed, their reading improved. An internal and construct issue was random and systematic error. One random error may have been the mood of the students, which can either positively or negatively affect their performance. One systematic error may have been loud traffic just outside the classroom because such noise can adversely affect reading scores. The teachers of Groups A, B, and C met with the students in the back of

the room to administer the weekly reading passage. All passages were graded by myself; therefore, there was no inter-rater discrepancy.

The reading maturity of the first-grade students over the course of this study may have altered the measured effects of the leveled reading passages (i.e., oral reading fluency). As the students adjusted to the reading routine, they may have become more comfortable and performed better on the leveled reading passages. The students were separated into equal sized heterogeneous groups of 66 students based upon their test scores prior to entering the first grade. This ensured equal representation of ability within all of the study groups. Group A received an intrinsic motivation intervention for 8 weeks, Group B received an extrinsic motivation intervention for 8 weeks, and Group C received a combination of the two approaches. The findings of this study are most valuable to the study-site school; however, the results may be generalized to other populations or geographic areas comparable in nature including first-grade students with similar academic and social attributes.

Summary

A pretest-posttest design with pretest as covariate was used in this quasi-experimental quantitative research. This design represented the best method for a study performed within a school setting. Student assignment to the treatment groups was done using a convenience method rather than randomization, thus rendering the design quasi-experimental in nature. Experienced teachers administered the intervention. The study sample of 66 first-grade students was divided into three groups (i.e., Group A, Group B, and Group C). Interventions of both intrinsic and extrinsic motivation, as well as a

combination of these forms of motivation, were administered, respectively. The Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003) was used to measure the reading achievement of the student sample prior to the experimental treatment and following the treatment for comparison purposes to establish the effects of motivation on student reading achievement. An ANCOVA was utilized in order to determine if significant differences existed in the change in reading achievement and oral reading fluency within the treatment period between the three motivation intervention groups while controlling for prior reading achievement and oral reading fluency ability of the participants.

The present section consisted of an explanation of the research design and methods of the study. In the present study, I examined which type of motivation intervention—intrinsic, extrinsic, or a combination of the two types—has the greater impact on increasing the reading achievement of first-grade students as measured by words read correctly in one minute as well as the scores on the Houghton Mifflin Leveled Reading Passages. In the next section of the study, I present the results of data analysis. In section 5, a review of the study in relation to the theoretical framework and an interpretation of the research findings in relation to the research question and hypotheses are provided. The recommendations for action, recommendations for future research, and implications for social change are discussed.

Section 4: Results

Overview

In this section, I describe the data collected and focus on the analysis of the data using inferential statistics as well as hypothesis testing in order to determine statistical conclusions for each research question. The data collected included reading achievement pre- and post-treatment scores as measured by the Houghton Mifflin Leveled Reading Passages and oral reading fluency pre- and post-treatment readings as measured by the Houghton Mifflin Reading Student Anthology passages. All participating students were in first grade, and the teachers who participated in this study taught first grade. Analysis of the data revealed the importance of motivation and reading achievement; information that can be used by teachers to increase reading achievement and oral reading fluency in their classrooms.

Descriptive Analysis

A preliminary descriptive analysis was done in order to come up with initial insights on the data gathered. Table 1 presents the descriptive statistics for the pretest and posttest scores on reading achievement among motivation types. Group A, the group receiving the intrinsic motivation intervention, showed an increase in reading achievement scores from pretest ($M = 8.91$, $SD = 6.63$) to posttest ($M = 13.91$, $SD = 7.93$). Group B, the group receiving the extrinsic motivation intervention, also demonstrated an increase in pretest ($M = 6.23$, $SD = 5.02$) to posttest ($M = 9.86$, $SD = 6.30$) reading achievement scores throughout the treatment period. Group C, the group receiving both intrinsic and extrinsic motivation intervention, exhibited the same, having

an increase in reading achievement from pretest ($M = 3.05$, $SD = 3.03$) to posttest ($M = 7.41$, $SD = 3.66$).

Table 1

Descriptive Statistics of Pretest and Posttest Reading Achievement

Group		Minimum	Maximum	M	SD
A-Intrinsic	Pretest_RA	1.00	26.00	8.91	6.63
	Posttest_RA	2.00	32.00	13.91	7.93
B-Extrinsic	Pretest_RA	1.00	20.00	6.23	5.02
	Posttest_RA	1.00	26.00	9.86	6.30
C-Combination	Pretest_RA	1.00	13.00	3.05	3.03
	Posttest_RA	1.00	14.00	7.41	3.66

As presented in Figure 1, the pretest and posttest reading achievement scores were compared among the different motivation interventions used. Again, as exhibited in the graphical representation of reading achievement pretest and posttest scores, there were increases in reading achievement scores across the different groups. However, there were differences in pretest and posttest reading achievement scores between the different groups, with Group A, intrinsic motivation intervention, having high mean pretest and posttest scores whereas Group C, combination of intrinsic and extrinsic motivation intervention, having low mean pretest and posttest scores.

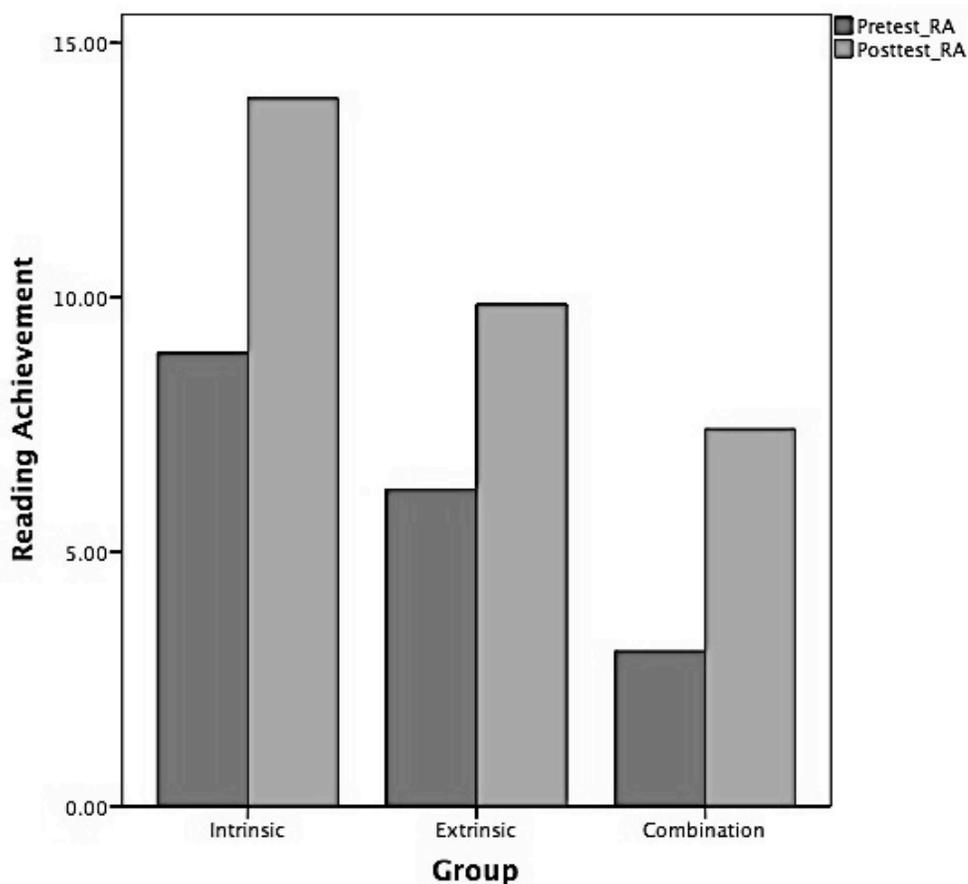


Figure 1. Pretest and posttest mean scores for reading achievement.

Table 2 showed that Group A had an increase in oral reading fluency (words read correctly per minute) from pretest ($M = 62.55$, $SD = 28.89$) to posttest ($M = 134.91$, $SD = 45.82$). Group B demonstrated the same, having an increase from pretest ($M = 38.59$, $SD = 31.69$) to posttest ($M = 77.64$, $SD = 24.23$) in oral reading fluency (words read correctly per minute). Group C exhibited the same, with an increase in oral reading fluency (words read correctly per minute) from pretest ($M = 31.23$, $SD = 23.42$) to posttest ($M = 64.50$, $SD = 22.59$).

Table 2

Descriptive Statistics of Pretest and Posttest Oral Reading Fluency (Words Read Correctly per Minute)

Group		Minimum	Maximum	<i>M</i>	<i>SD</i>
A-Intrinsic	Pretest_PR	12.00	107.00	62.55	28.89
	Posttest_PR	42.00	230.00	134.91	45.82
B-Extrinsic	Pretest_PR	8.00	128.00	38.59	31.69
	Posttest_PR	39.00	139.00	77.64	24.23
C-Combination	Pretest_PR	4.00	94.00	31.23	23.42
	Posttest_PR	24.00	109.00	64.50	22.59

As presented in Figure 2, pretest and posttest oral reading fluency (words read correctly per minute) was compared among the different motivation interventions used. Again, as exhibited in the graphical representation of oral reading fluency pretest and posttest scores, there were increases in oral reading fluency scores across the different groups. However, it was seen that there were differences in pretest and posttest performance reading between the different groups, with Group A, the intrinsic motivation intervention group, having high mean pretest and posttest scores while Group C, the combination motivation intervention group, had the lowest mean pretest and posttest scores. The trend seems to follow that of reading achievement scores obtained.

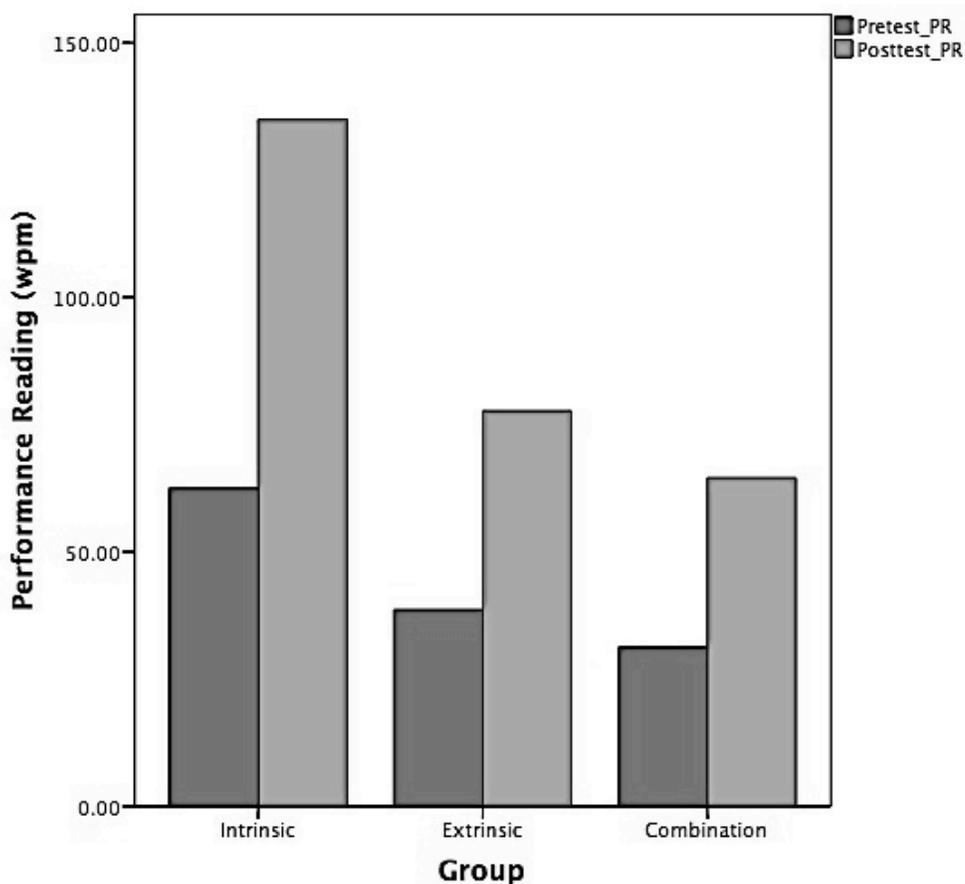


Figure 2. Pretest and posttest mean scores for oral reading fluency (number of words read correctly per minute).

Inferential Statistics

An ANCOVA procedure is performed to determine whether there are differences in posttest scores when adjusting for preexisting differences in pretest scores (covariate). Hence, in this study, prior reading achievement and oral reading fluency scores were deemed covariates, or confounding variables, and were controlled using the ANCOVA procedure.

Research Question 1

In addressing Research Question 1, an ANCOVA was performed to determine differences in reading achievement posttest scores (dependent variable) among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation (independent variable), when adjusting for preexisting differences in achievement on the pretest (covariate). The ANCOVA was performed with the posttest reading achievement scores as the dependent variable, the motivation type grouping variable as the independent variable, and pretest reading achievement scores as the covariate. Revisiting the descriptive statistics of posttest reading achievement scores as presented in Table 3, it was seen that Group A had the highest mean reading achievement score.

Table 3

Posttest Reading Achievement Descriptive Statistics

Group	<i>M</i>	<i>SD</i>
A-Intrinsic	13.91	7.93
B-Extrinsic	9.86	6.30
C-Combination	7.41	3.66
Total	10.40	6.69

The ANCOVA test statistic reveals that there is no statistically significant difference in reading achievement improvement between motivation types ($F = 1.091, p = 0.34$). This is contrary to what the descriptive analysis suggests.

Table 4 presents the marginal estimates for reading achievement scores, which are adjusted controlling for prior reading achievement level. As the results of the ANCOVA suggest, there were minimal differences in adjusted mean reading achievement scores between motivation types.

Table 4

Marginal Estimates for Reading Achievement

Group	<i>M</i>	<i>SD</i>
A-Intrinsic	10.80	.62
B-Extrinsic	9.68	.59
C-Combination	10.70	.63

Table 5 presents the post hoc test, pairwise comparison of reading achievement between motivation groups. As with the results of the ANCOVA, the post hoc test suggests that there is no statistically significant pairwise difference between the different motivation groups.

Table 5

Pairwise Comparisons for Reading Achievement

(I) group	(J) group	Mean difference (I-J)	SE	<i>p</i>
Intrinsic	Extrinsic	1.12	.86	.587
	Combination	.11	.93	1.000
Extrinsic	Intrinsic	-1.12	.858	.587
	Combination	-1.02	.87	.738
Combination	Intrinsic	-.11	.93	1.000
	Extrinsic	1.01	.87	.738

Research Question 2

In addressing Research Question 2, an ANCOVA was performed to determine, the differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in oral reading fluency on the pretest. An ANCOVA procedure was performed with posttest oral reading fluency as the dependent variable, motivation type grouping variable as the independent variable, and pretest oral reading fluency as the covariate. Revisiting the posttest oral reading fluency descriptive statistics, as seen in Table 6, it was seen that Group A, the intrinsic motivation intervention group, had the highest mean posttest oral reading fluency score.

Table 6

Posttest Oral Reading Fluency Descriptive Statistics (Number of Words Read Correctly per Minute)

Group	<i>M</i>	<i>SD</i>
A-Intrinsic	134.91	45.82
B-Extrinsic	77.64	24.23
C-Combination	64.50	22.59
Total	92.35	44.52

The ANCOVA test statistic for between-subjects effects for oral reading fluency is presented in Table 7. The ANCOVA reveals that there is a statistically significant difference between the posttest mean scores between groups for oral reading fluency between different motivation groups while controlling for prior oral reading fluency ($F = 23.388, p < 0.001$). This result is consistent with the initial insight of the descriptive analysis.

Table 7

Tests of Between-Subjects Effects for Oral Reading Fluency (Number of Words Read Correctly per Minute)

Source	<i>df</i>	Mean square	<i>F</i>	<i>P</i>
Corrected model	3	35209.79	94.186	.000
Pretest_PR	1	43954.79	117.579	.000
Group	2	8743.19	23.388	.000
Total	66			

Table 8 presents the marginal estimates for oral reading fluency adjusted, controlling for prior oral reading fluency level. The adjusted mean oral reading fluency scores for Group A were seen as having the greatest increase between the posttest and pretest scores, Group B follows, and Group C had the least increase between the posttest and pretest scores.

Table 8

Marginal Estimates for Oral Reading Fluency (Number of Words Read Correctly per Minute)

<u>Group</u>	<u><i>M</i></u>	<u><i>SD</i></u>
A-Intrinsic	117.66	4.42
B-Extrinsic	82.82	4.15
C-Combination	76.57	4.27

Table 9 presents the post hoc test, pairwise comparison of oral reading fluency between the different motivation intervention types. The post hoc test suggests that there is a statistically significant mean difference in the posttest and the pretest scores in oral reading fluency between Group A and Group B and Group A and Group C. The test suggests that Group A, the intrinsic motivation intervention group, had higher improved mean oral reading fluency by 34.84 compared with Group B, the extrinsic motivation intervention group, and 41.08 compared with Group C, the combination intervention motivation group, at a 95% confidence interval. The test; however, suggests that there is no statistically significant difference between Group B and Group C.

Table 9

Pairwise Comparisons for Oral Reading Fluency (Number of Words Read Correctly per Minute)

(I) group	(J) group	Mean difference (I-J)	SE	<i>p</i>
Intrinsic	Extrinsic	34.84	6.19	.000
	Combination	41.08	6.43	.000
Extrinsic	Intrinsic	-34.84	6.19	.000
	Combination	6.24	5.86	.874
Combination	Intrinsic	-41.08	6.45	.000
	Extrinsic	-6.24	5.86	.874

Summary

Two analyses of covariance (ANCOVA) were performed to determine whether there were statistically significant differences in reading achievement and oral reading fluency with respect to the motivation intervention type utilized while controlling for prior reading achievement and oral reading fluency (words read correctly per minute).

The ANCOVA revealed that there were no statistically significant differences in reading achievement between the three motivation groups, which was contrary to the suggestion of the descriptive analysis. The mean reading achievement scores among the motivation intervention types were similar to each other when adjusted for prior reading achievement level. The second ANCOVA revealed that there were statistically significant differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions

designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in oral reading fluency on the pretest. Group A, the intrinsic motivation intervention group showed greater oral reading fluency posttest scores when adjusting for preexisting differences in oral reading fluency on the pretest than both Group B, the extrinsic motivation intervention group, and Group C, the combination of intrinsic and extrinsic motivation intervention group. Group B and Group C were seen to have similar oral reading fluency posttest scores when adjusting for preexisting differences in oral reading fluency on the pretest.

These results suggest that there were no statistically significant differences in reading achievement between the three motivation intervention types. However, the results revealed that there is a statistically significant difference in oral reading fluency between the three motivation intervention types.

In Section 5 a review of the study in relation to the theoretical framework and an interpretation of the research findings in relation to the research questions and hypotheses are provided. The recommendations for social change and implications for further study are discussed.

Section 5: Discussion

Overview

The motivation to read is one of the major factors that determine student success or failure in elementary school (Applegate & Applegate, 2010). Therefore, it is essential to identify ways to motivate all students to read. Reading is a task requiring interest and effort; as such, the reading skill of students has been associated with reading motivation (McGeown, Goodwin, Henderson, & Wright, 2012). As stated earlier, students who are extremely motivated to read choose to find the time to read, which in turn will develop into a lifelong reading habit (Gambrell, 2011). Hence, motivation plays a crucial role in the reading process in order to foster reading.

The specific research questions addressed in this study were as follows:

Research Question 1: What are the differences in reading achievement posttest scores (dependent variable) among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation (independent variable), when adjusting for preexisting differences in the achievement on the pretest (covariate)?

Research Question 2: What are the differences in oral reading fluency posttest scores (dependent variable) among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic

and extrinsic motivation (independent variable), when adjusting for preexisting differences in fluency on the pretest (covariate)?

The Houghton Mifflin Leveled Reading Passages (Houghton Mifflin Company, 2003) were administered to all 66 first-grade students as a pretest at the beginning of the study to determine reading achievement. Additionally, all participants read a first-grade-level reading passage from the Houghton Mifflin Student Reading anthology (Houghton Mifflin Harcourt, 2001) at the beginning of the study as a pretest to determine oral reading fluency (the number of words correctly read per minute). The students who received conditions designed to facilitate intrinsic motivation (i.e., Group A) set and tracked specific reading goals for 8 weeks. The students received assistance with setting and tracking their reading goals throughout this period. As the teacher of Group A, I met with the students on a weekly basis to read a grade-level passage from the first-grade reading anthology, graphed the results, and subsequently evaluated the students' steps toward goal attainment. The students who received conditions designed to facilitate extrinsic motivation (i.e., Group B) also met weekly to read the same grade-level passage as Group A and were given a reward (i.e., candy or a bookmark) after each reading. The combined group (i.e., Group C) likewise met weekly to read the same grade-level passage and received alternating conditions designed to facilitate intrinsic and extrinsic motivation following each reading.

At the end of the 8 weeks of this study, the Houghton Mifflin Leveled Reading Passages was again administered to obtain the reading achievement scores of each student and to compute the mean scores for each group in order to determine differences

in reading achievement. As noted earlier, the instrument evaluated the students' current reading levels. Additionally, all participants read a first-grade-level reading passage from the Houghton Mifflin Student Reading anthology to obtain the oral reading fluency scores of each student and to compute the mean scores for each group in order to determine differences in oral reading fluency

Discussion of Findings

The findings of this study revealed that there was a statistically significant difference between the oral reading fluency posttest scores of Group A and those of Groups B and C when adjusted for differences on the pretest. These findings were supported by literature on the topic of types of self-efficacy and motivation presented in Section 2. The authors of several studies discussed in the literature review acknowledged that motivation is essential to instill a desire to read. Self-efficacy beliefs are the foundation for student motivation and personal achievement (Lin et al., 2012; Pajares, 2002; Schiefele et al., 2012). Self-efficacy levels can either strengthen or hamper motivation.

Pertaining to Research Question 1, the posttest scores for reading achievement were compared among the different motivation interventions with pretest scores as covariates. The ANCOVA test statistic revealed that there was no statistically significant difference in reading achievement improvement between motivation types.

Addressing Research Question 2, the posttest scores for oral reading fluency (words read correctly per minute) were compared among the different motivation interventions used. The ANCOVA test revealed that there was a statistically significant

difference in oral reading fluency between motivation types. Group A, the students who received conditions designed to facilitate intrinsic motivation, had the highest posttest oral reading fluency score when adjusting for preexisting differences in oral reading fluency on the pretest. These results suggest that the intrinsic motivation intervention had more impact on oral reading fluency than extrinsic motivation or a combination of both intrinsic and extrinsic motivation.

Researchers have highlighted the importance of motivation and even presented evidence pertaining to the most effective type of motivation in learning among children. This current research provided support for those studies claiming that intrinsic motivation has a greater impact on oral reading fluency (Applegate & Applegate, 2010; Becker et al., 2010; Gambrell, 2011). Researchers have also maintained that extrinsic motivation might not be the optimal motivation for learning among youth (Akin-Little & Little, 2004, 1999; Ames & Archer, 1988; Deci et al., 1999; Hilden & Jones, 2011; Lumsden, 1994; Ryan & Deci, 2000a). This claim was less apparent in the results of the Houghton Mifflin Leveled Reading Passages showing no statistically significant differences in reading achievement among the three motivation types.

The oral reading fluency of the students in Group C, who received the combination intervention, was not significantly different from that of the students in Group B, who received solely extrinsic motivation. This outcome may suggest that for the students in Group C, the intrinsic motivation intervention was not used consistently during the 8 weeks, or that a period of 4 weeks of intrinsic motivation conditions was simply too brief.

In this study, the Group C students, who received the alternating extrinsic-intrinsic motivation intervention, continued to perform in a manner consistent with the extrinsic study group, even when the motivation focus shifted to intrinsic motivation every other week. It should be noted that while the intrinsic motivation intervention was in place, students in Group C were given constructive, positive feedback and graphed, reviewed, and set new goals every other week.

Social Impact

Students are the leaders of the future; therefore, it is imperative that they be prepared to take on all of the challenges that they will face in their academic careers. In order to accomplish this, they must become successful readers as well as readers who choose to read. Increased self-efficacy leads to increased motivation and the belief that one has control over one's own learning, which is linked to a higher level of performance (McTigue & Liew, 2011; Schunk, 2003). This suggests, in turn, that the current education system for primary-school students must focus not only on teaching students how to read, but also on instilling an intrinsic motivation to read. It is in the formative years that this must be addressed to enable students to cultivate a love for reading that will be ongoing during the course of their lives.

According to Ciampa (2012), reading motivation begins to decline in primary school, which renders it imperative for primary-school teachers to motivate students to read both in school as well as outside the classroom setting. This decline in motivation is especially true in this contemporary world of rapidly changing technology, offering children a wide range of entertainment that captures far more attention than reading

(Gallagher, 2010). Gambrell (2011) opined, “if we want our students to value reading and academics, we have to be clever enough to create classrooms where the message is clear that reading and learning are the best reward” (p. 11). If students are more motivated to learn to read at an early stage, they will not succumb to the pull of video games and television. In order for students to become active readers, they need to be motivated to read (Gambrell, 2011). The intrinsic motivation to read that is necessary among primary students would create a generation of students who choose to read to become successful, fluent readers. Reading is vital to all academic subjects and essential for the future success of students (Gambrell, 2011; Gottfried, 1990). Students who are intrinsically motivated to learn in turn learn more, demonstrate more positive behavior, and are happier than students who are not intrinsically motivated (Froiland et al., 2012). They typically desire to make a societal contribution (Froiland et al., 2012).

Conclusions and Recommendations

Results of this study revealed no statistically significant difference in reading achievement between motivation types. The data supported Null Hypothesis 1, which indicated that there are no differences in reading achievement posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in the achievement on the pretest.

Additionally, differences in oral reading fluency were evident between the study group receiving intrinsic motivation conditions, the study group receiving extrinsic

motivation conditions, and the study group receiving both intrinsic and extrinsic motivation conditions. The data supported Alternative Hypothesis 2 of this study, which indicated that there are differences in oral reading fluency posttest scores among first-grade students who were motivated (a) by conditions designed to support intrinsic motivation, (b) by conditions designed to support extrinsic motivation, or (c) by conditions designed to support a combination of intrinsic and extrinsic motivation, when adjusting for preexisting differences in fluency on the pretest. Motivation holds many implications for other facets of childhood learning such as self-confidence, self-esteem, and self-worth (McTigue & Liew, 2011; Seifert, 2004).

The students within all three study groups demonstrated reading improvement, suggesting that motivation, whether extrinsic or intrinsic, has a positive effect on the reading skill or perhaps just a maturation of reading skill of primary-school students. The study did not begin at the beginning of the school year; therefore, there is a strong likelihood that previous teaching methods and patterns of reading already in place in the three groups of first graders could have been highly influential. The 8-week program may be an insufficient amount of time for students receiving any type of motivation intervention to internalize the responsibility of reading and associate their progress to learning how to read. Students may require a very specific motivator for specific reading tasks. Due to the short span of time, the learning observed in this study might be temporary and yet to be internalized by the participating students (Oldfather, 1993). Consequently, they might still adopt the intrinsic or extrinsic orientation of the other study groups. Moreover, the students' initial motivation and experiences that they

received in kindergarten might also have affected their reading preferences, which could have affected their attitudes and their preferred method of motivation. Furthermore, the use of three different teachers for the three treatments presented another threat. Some teachers might have been more effective with the motivational approach that was used, even though I checked in with each teacher weekly. Likewise, some teachers might have been more effective at teaching reading skills. The conditions themselves may not have been distinctive enough to avoid any overlap; for example, choice of reading material, normally associated with intrinsic motivation, was used in all three groups. Additionally, the group with the lowest pretest level could have had less motivation because struggling with reading is demotivating; conversely, the group with the highest initial level may have been more motivated to begin with. Success is motivating, and motivation to read may have made students better readers initially.

It is recommended that future research increase the time of the motivation interventions to determine the duration necessary for students to begin internalizing the motivation to read. Focusing on using praise versus tangible rewards needs further research. Additionally, future research could include more time to practice reading skills. Research interventions could allow students to choose the type of reward they want as well as allow students to control how often they would like to be rewarded. Future studies could also focus on intermediate or middle school students.

Additionally, it is recommended that the starting self-efficacy of the participants be considered for it may have an impact on the improvement by reading motivation type. The findings of this research may lead future researchers to examine if the improvement

in reading achievement is solely dependent on the reading motivation type or is also dependent on other confounding variables inherent within the participants.

My recommendation for future action is that primary-school teachers foster an atmosphere of intrinsic motivation within the classroom. Allowing first grade students to set and monitor their own goals will instill a sense of ownership in reading. This is important in primary grades because students are at the beginning stages of reading. Additionally, providing students choice and control over what they read will foster their curiosity as well as increase their motivation to read. The value of reading, as well as the joys of reading for fun, needs to be emphasized to students during this vulnerable phase to encourage them to adopt this mind-set as a lifetime pattern (Becker et al., 2010). For children to become future leaders they first need to become literate members of society. Motivated readers will continue to grow as readers, and succeed as citizens.

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Appendix A: Conversion of Reading Levels to Numerical Scores

Level	Below benchmark	Within benchmark	Above benchmark
AB (Kindergarten)	1	2	3
CD (Early Grade 1)	4	5	6
EFG (Mid Grade 1)	7	8	9
HI (Late Grade 1)	10	11	12
J (Early Grade 2)	13	14	15
KL (Late Grade 2)	16	17	18
MN (Early Grade 3)	19	20	21
OP (Late Grade 3)	22	23	24
QRS (Grade 4)	25	26	27
TUV (Grade 5)	26	29	30
WXYZ (Grade 6)	31	32	33