

The Impact of Intrinsic Motivation on Reading Achievement and Reading Attitudes

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Table of Contents

List of Tables	i
Abstract	ii
I. Introduction	1
Statement of Problem	2
Statement of Research Hypothesis	2
Operational Definitions	2
II. Review of the Literature	4
Motivation	4
Reading Achievement and Motivation	5
Impact of Low Reading Motivation	7
Increasing Reading Motivation	8
Reading Motivation: Next Steps	9
III. Methods	11
Design	11
Participants	11
Instrument	12
Procedure	13
IV. Results	16
V. Discussion	18
Implication of Results	18
Theoretical Implications	20
Threats to Validity	21
Connections to Existing Literature	24

Implications for Future Research	25
Conclusion	26
References	28

List of Tables

1. Means, Standard Deviations, and t-statistic for Elementary Reading Attitude Survey Scores by Group Membership	16
2. Frequencies of Increasing Reading Level by Group Membership	17

Abstract

The purpose of this study was to investigate the impact of intrinsic motivation on the reading achievement and reading attitudes of first grade students. The measurement tool used to measure reading attitudes was the Elementary Reading Attitude Survey, and the measurement tool used to measure reading achievement was the Pioneer Valley Running Record Assessment. This study involved the use of a pretest/posttest design to compare data from the beginning to the end of the four week intervention period. The results of this study indicated there was no significant difference between the reading attitudes of students who received the intrinsic motivation strategy and students who did not receive the intrinsic motivation strategy. Students in the control group were significantly more likely to move up a reading level on the Pioneer Valley Running Records assessment. Although the students in the intrinsic motivation group were less likely to move up a reading level on the Pioneer Valley Running Records Assessment, all of the students in the intrinsic motivation group showed improvement in their reading accuracy, self-correction rate, fluency, and/or comprehension scores when compared to their pre-assessment. Research in the area of intrinsic reading motivation and reading attitudes should continue in order to help educators implement more effective motivation strategies and gain a more expanded and balanced view of student reading attitudes and reading achievement.

CHAPTER I

INTRODUCTION

Reading achievement has been an important goal for most schools. Many teachers collect data gathered from running records or other miscue analysis in order to determine the strengths and weaknesses of a student's reading ability. While a student's skill in decoding a word or comprehending story events influences a student's reading ability, other factors should also be considered. Research has shown that motivation can also impact reading achievement, and low reading motivation can be particularly prevalent among struggling readers (Cartwright et al., 2016; Wigfield et al., 2016).

Title I schools, where many of the students come from a lower socioeconomic status, may face significant challenges in regard to reading motivation and reading achievement. Students from lower socioeconomic backgrounds may lack access to literacy resources or home support due to parent work schedules, transient home life, or other underlying reasons. Targeted reading interventions, flexible grouping during guided reading lessons, and other school and community based programs are often used by teachers and schools to support struggling readers and increase reading achievement. However, low reading motivation and negative attitudes towards reading can hinder this progress as students may refuse to complete reading tasks or struggle to remain engaged during reading instruction. Teachers often strive to instill a passion for reading in their students, and developing intrinsic motivation in students can help them internalize the value of learning and display reading autonomy.

This study will investigate the influence of intrinsic motivation on reading achievement and reading attitudes in first grade students in a Title I school in response to school concerns regarding student reading achievement and low motivation of struggling readers. The shift from in-person to virtual learning in response to the pandemic has also raised further concerns among

staff members about student engagement and achievement due to increased screen time, stress, and other environmental distractions. As a teacher, this researcher has observed that the struggling readers in her first grade class often make statements indicating poor reading attitudes or display difficulties remaining engaged or motivated during reading instruction. It is the goal of this researcher to study student reading attitudes and understand how to support intrinsic reading motivation for young students. This researcher will evaluate the effectiveness of incorporating intrinsic motivation on reading achievement and reading attitudes in order to further research on reading motivation and support struggling readers.

Statement of Problem

The purpose of the study is to investigate the impact of intrinsic motivation on the reading achievement and reading attitudes of first grade students.

Statement of Research Hypothesis

The first null hypothesis was that membership in the intrinsic motivation or control group is independent of whether or not the children made a gain in a level or more on the Pioneer Valley Running Records. The second null hypothesis was that the reading attitude of first grade students who received an intrinsic motivation strategy is not significantly different than the reading attitudes of students who did not receive the intrinsic motivation strategy.

Operational Definitions

Reading achievement is defined as progressing one reading level from the previous Pioneer Valley Running Record assessment.

Reading attitude is defined as the full scale raw on the Elementary Reading Attitude Survey that reflects the student's attitudes towards recreational and academic reading.

Intrinsic motivation is when a student's motivation to complete a task is driven by internal interests and values (Wigfield et al., 2016).

Intrinsic motivation strategy is when the teacher gives positive verbal praise related to the student's use of reading skills, attempted strategies, or display of self-efficacy while reading in order to promote intrinsic motivation.

CHAPTER II

REVIEW OF THE LITERATURE

Increasing reading achievement for students has long been a goal of educators. Reading ability has been shown to be critical to student success in later grades, with students who struggle with reading typically continuing to have academic problems later in life (Lee & Jonson-Reid, 2016). With reading ability a primary goal in many schools, it is necessary to have effective reading interventions and instructional strategies that support the goals of reading achievement. This literature review explores the effects of motivation on reading achievement. Section one focuses on defining motivation. Section two makes connections between reading achievement and motivation. Section three analyzes the problems associated with low reading motivation, and section four discusses ways to increase reading motivation. The final section suggests next steps in reading motivation research.

Motivation

Motivation has often been defined in terms of how an individual's values and interests drive their willingness to complete a task (De Naeghel et al., 2016; Wigfield et al., 2016). Self-determination theorists have further explored this concept in terms of the influence of social context on motivation (Marshik et al., 2017). Researchers cite three key psychological needs that influence motivation: autonomy, relatedness, and competence (Deci & Ryan, 2000; Marshik et al., 2017). Autonomy is an individual's need for choice or feeling of control, while relatedness is the need to feel supported by others and to establish a connection (Marshik et al., 2017). The need for competence focuses on an individual's belief in his/her own effectiveness and capabilities (Deci & Ryan, 2000; Marshik et al., 2017). Researchers have suggested that students who have these needs supported in the classroom have increased motivation (Deci & Ryan, 2000).

The concept of motivation can be further divided into intrinsic and extrinsic types. Intrinsic motivation is driven by internal interests and values (Wigfield et al., 2016). Extrinsic motivation relates to external influences on an individual's motivation to complete a task, such as physical rewards or grades. Intrinsic motivation of motivation is often linked to longer lasting engagement as the students strive to complete the task due to internal values, rather than the promise of an extrinsic reward (Cartwright et al., 2016; Wigfield et al., 2016). Motivation is a broad term in relation to academics for students, but reading motivation can be defined as the specific values and goals that encourage a student to read (Vaknin-Nusbaum et al., 2018).

Reading Achievement and Motivation

Educators have continued to study the role motivation plays in academic achievement, particularly for reading achievement (Cartwright et al., 2016; Ho & Guthrie, 2013; Marshik et al., 2017). Ways to increase reading motivation have been heavily sought after by educators due to concerns of declining motivation to read as students grow older (Cartwright et al., 2016; Wigfield et al., 2016). Reading motivation has been shown to have a “significant variance” in student reading comprehension and reading growth (Cartwright et al., 2016 p. 20). The researchers found that when controlling for verbal ability, classroom teacher, and student age, student motivation “accounted for 11% of the variance in reading comprehension” among elementary school age students (p.14). The findings from this two year study also indicated that reading motivation contributes to reading comprehension development over time, suggesting that analyzing and fostering student reading motivation early on could support reading comprehension development in elementary school. A study by Ho & Guthrie (2013) found that middle school age students with lower confidence in reading informational texts scored low on a battery of reading achievement assessments targeting reading fluency and comprehension. Reading achievement has commonly been analyzed in terms of a cognitive perspective with a

focus on comprehension, fluency, and accuracy. However, Cartwright et al. (2016) argue that a more complex view is needed to highlight the influence of motivation on reading comprehension. Decoding and linguistic comprehension are common predictors of reading comprehension, but Cartwright et al. emphasize the role of executive skills, such as working memory and cognitive flexibility, in student ability to complete reading tasks. For example, the researchers suggest that students may be able to demonstrate that they can process the sounds and meaning of words when assessed independently on decoding and linguistics tasks, but these skills may not translate to reading comprehension if the students do not have the cognitive flexibility needed to shift seamlessly between these skills in order to support their reading comprehension. Their research also indicated that solely looking at decoding and linguistics predictors for reading comprehension could not account for the role of reading motivation in reading comprehension and growth. Cartwright et al. suggest that using a more complex view of reading comprehension can help expand understanding of what constitutes strong reading comprehension and how to better support the development of these skills in students.

Further studies have focused on student reading performance, particularly on higher-stakes reading assessments and standardized tests (Marchand & Furrer, 2014). In one study, students were assessed on their level of engagement and reading competence, which was used to predict their performance on summative reading assessments. While engagement did not have a significant influence on reading competence for higher level readers, Marchand & Furrer suggest that students with low engagement or motivation may have decreased performance on reading assessments over time.

Motivation has also been found to have positive effects across different student groups. Students with reading disabilities often face particular challenges with reading achievement. In a study by Zentall & Lee (2012), researchers found that motivational intervention with both

intrinsic and extrinsic motivational cues was effective for students with reading disabilities, leading to an increased reading fluency and comprehension performance. Other research has shown that interventions that focus on reading motivation have had a positive impact on reading autonomy, particularly for boys (De Naeghel et al., 2016). Across different ethnic groups, reading motivation has had varying effects, with some studies indicating a strong, positive relationship between intrinsic motivation and text comprehension for specific ethnicities, and other studies showing less noticeable effects (Lee & Jonson-Reid, 2016; Wigfield et al., 2016).

Impact of Low Reading Motivation

While reading motivation has been shown to have a positive impact on student reading achievement, low reading motivation can lead to significant consequences for student performance. Studies have shown that reading motivation decreases as students reach older grade levels (Cartwright et al., 2016; Vaknin-Nusbaum et al., 2018; Wigfield et al., 2016). Low reading motivation is also particularly prevalent amongst struggling readers and students with ADHD (Lee & Jonson-Reid, 2016; Vaknin-Nusbaum et al., 2018; Wigfield et al., 2016; Zentall & Lee, 2012). This low motivation often leads to task avoidance and decreased engagement during reading lessons (Vaknin-Nusbaum et al., 2018).

Several factors can impact reading motivation, including instructional practices, text choice, and school focus on standardized testing. Vaknin-Nusbaum et al. (2018) note that the classroom environment changes as students transition from elementary to middle school, which could relate to the declining motivation for reading. Other studies have indicated that instructional practices that do not encourage student interest or include boring texts can also lead to decreased intrinsic motivation (Wigfield et al., 2016). Increased emphasis on testing and certain formal academic evaluation practices have also been found to lead to decreased reading motivation in students. Instruction that focuses too heavily on peer-comparisons, such as through

class ranking systems or academic competitions could lead to students comparing themselves to others and reducing their feelings of competence. This research highlights the importance of reading motivation and indicates a need for intervention to support reading motivation in students.

Increasing Reading Motivation

Given the importance of reading achievement and the potential consequences of low reading motivation, many researchers have attempted to develop effective interventions to increase reading motivation. Some researchers have emphasized the role teachers play on supporting student reading autonomy in terms of instructional choices and student-teacher interactions (De Naeghel et al., 2016; Marshik et al., 2017; Ho & Guthrie, 2013). Professional development for teachers that focused on building student autonomy for reading was found to significantly increase student autonomy for recreational reading (De Naeghel et al., 2016). This teacher workshop followed key principles from the self-determination theory, by encouraging teachers to support student interests in reading topics and text choice. Other similar instructional practices can be used to increase student feelings of autonomy, such as by giving students choice in reading follow up activities or text choice.

Research has shown that student self-efficacy can also positively influence reading achievement (Lee & Jonson-Reid, 2016; Ho & Guthrie, 2013). Teachers that focus on identifying students who display low self-efficacy can then use this data to provide supportive motivational practices that increase student feelings of competence towards reading. In addition to teaching practices, teacher feelings of autonomy, relatedness, and competence can also influence student motivation (Marshik et al., 2017). Marshik et al. note that teachers who do not have these three basic psychological needs met, such as not feeling autonomy in choice of curriculum or school policy, are less likely to support student need for autonomy. Conversely, teachers who expressed

feelings of autonomy in their workplace were more likely to support their students' autonomy, and this support was positively related to student reading achievement.

Specific reading interventions that also incorporate student motivational strategies have had positive effects on reading achievement (Bradshaw & Vaughn, 2016; Wigfield et al., 2016). Research that utilized a modified "Retrospective Miscue Analysis" program, where students were given a chance to self-evaluate their reading performance before meeting with their teacher, led to increased self-perception of reading abilities (Bradshaw & Vaughn, 2016). This action of having students monitor their own reading by listening to recordings of themselves and including students in the discussion of their miscue analysis allowed the students to become better at self-regulating and increased their meta-cognition. Student growth in self-corrections while reading and their increased self-perceptions links to previous research that has also emphasized the importance of relatedness and competence (De Naeghel et al., 2016; Lee & Jonson-Reid, 2016; Ho & Guthrie, 2013). Helping students see the relevance of reading through such engaging activities can build student reading motivation.

Reading Motivation: Next Steps

With the significant decline in reading motivation as students move from elementary to middle school, along with the lasting impact that low reading achievement can have on student performance, it is imperative for educators to implement effective instructional practices that support student reading motivation (Vaknin-Nusbaum et al., 2018; Wigfield et al., 2016). While copious research has been conducted on the relationship between reading motivation and reading achievement, further research is needed to gain a deeper understanding on how motivation influences reading achievement across different student groups. Several studies have focused on students in upper elementary or middle school, but more research is needed on the impact of reading motivation on students in primary grades (Lee & Jonson-Reid, 2016; Ho & Guthrie,

2013; Wigfield et al., 2016). While some research has studied the influence of motivation across different ethnicities, students with reading difficulties, and English Language Learners, further studies that focus on these student groups could broaden this scope (Lee & Jonson-Reid, 2016; Marchand & Furrer, 2014; Zentall & Lee, 2012). Continuing research in this field can help educators more effectively support students with low reading motivation and increase reading achievement for all students.

CHAPTER III

METHODS

The purpose of this study was to determine the effect of intrinsic motivation on reading achievement and reading attitudes in first grade students.

Design

This study is a quasi-experimental design with a non-equivalent control group. The study used convenience sampling of first grade students from the researcher's classroom, who had been assigned to four guided reading groups based on their reading levels as determined by the Pioneer Valley Running Record. The four reading groups were combined into two groups for research purposes in terms of level of intervention, with the intent of creating overall equal ability groups (i.e., highest group with lowest group; two middle groups together). These two groups were then randomly assigned to either the control or experimental level of intervention.

The Elementary Reading Attitude Survey was administered to assess student reading attitudes in a pre-test and post-test format. Reading achievement was measured by the Pioneer Valley Running Record assessment in a pre-test and post-test format. The independent variable was the presence of intrinsic motivation strategies, which is defined as when the teacher provides positive verbal praise related to the student's use of reading strategies. The dependent variables were reading achievement and reading attitudes. Reading achievement was defined as growing one reading level from the pre-test to the post-test on the Pioneer Valley Running Record. Reading attitude was the student's full scale raw score on the Elementary Reading Attitude Survey that reflects the student's attitudes towards recreational and academic reading.

Participants

The participants were a sample of 22 first grade students from a Title I school in a mid-sized urban neighborhood in the mid-Atlantic region. The school consists of students from

diverse ethnic backgrounds. The sample included 8 Black students, 4 Asian/Pacific Islander students, 7 White students, 2 Hispanic students, and 1 Multi-Racial student. 10 of the students were girls and 12 were boys. 16 of the 22 students were English Language Learners. One student received special education services for speech and language. Among the 15 students in the experimental group, 11 were English Language Learners, 2 were Hispanic students, 4 were Black students, 3 were Asian/Pacific Islander students, and 5 were White students. Among the 7 students in the control group, 5 were English Language learners, 4 were Black students, 1 was a White student, 1 was a Multi-Racial student, and 1 was an Asian/Pacific Islander student.

Instrument

The instrument used to measure reading attitudes was the Elementary Reading Attitudes Survey designed by McKenna & Kear (1990), which measures student reading attitudes in terms of recreational and academic reading. The survey consists of 20 questions and uses a four point scale. Pictures of Garfield, a cartoon cat, are used to represent the answer choices for each item, ranging from very happy (four points) to very upset (one point). This survey measures a student's raw total score, as well as percentile ranks at each grade level for recreational reading, academic reading, and the student's full scale score. For the purposes of this study, the raw total score was used. Higher scores reflect a more positive attitude towards reading. Multiple studies have researched the reliability and stability of the Elementary Reading Attitudes survey across grade levels, gender, and racial groups (Diamond & Onwuegbuzie, 2001; Kazelskis et al., 2004). These researchers found moderate to high reliability across all subgroups, though some researchers have indicated a need for further study into the stability of the instrument over different intervals of time. The survey was adapted to an online format using the Seesaw learning app. Each item contained an audio recording of the question by the researcher so that students

could listen to each question and then select their response independently. There is no reliability or validity data for the transformation to an online format.

The instrument used to measure reading achievement was the Pioneer Valley Running Records Assessment from the Literacy Footprints Guided Reading program. This assessment and reading program were developed by Jan Richardson and Michele Dufresne, and it has a digital format to allow for virtual administration. The assessment consists of leveled books ranging from Level A through Z. Levels H through J are considered on grade level for first grade students at the time of year the post assessment was administered. Each book includes a running record sheet to track student miscues and reading behaviors. The accuracy rate is determined as a percentage score by the total number of miscues out of total words in the text. The scores are grouped by independent, instructional, and hard levels. Beginning at level D, the running record sheets also include a Fluency Rate with a four point scale and comprehension questions categorized by “Attend and Remember” and “Connect, Infer, Analyze, and Evaluate.” Each category is scored on a three point scale for a total of 6 points, ranging from very proficient to not proficient. The assessment includes a guide for levels F and above to support teachers in determining where to begin guided reading instruction, based on a combination of the student’s accuracy score and comprehension proficiency score. For the purposes of this study, the focus was on obtained reading level.

Procedure

The Pioneer Valley Running Records Assessment pre-test was administered approximately two weeks prior to the start of the study. The pre-test was administered one-on-one to each student using a Zoom breakout room. The researcher shared her computer screen with the student so that they could read aloud from the selected text while the researcher

privately scored the student on the corresponding running records sheet. The Elementary Reading Attitudes Survey pre-test was administered at the beginning of the study.

Students were assigned to guided reading groups based on the results of the Pioneer Valley Running Records Assessment. Students were placed in four guided reading groups based on book bands. Group 1 consisted of students from levels A/B/C and Group 2 consisted of students from levels D/E. Group 3 consisted of students from levels I/J, and Group 4 consisted of students from levels L/M/N/O/P. Group 1 and 4 and Groups 2 and 3 were combined together for research purposes with the intent of creating groups of similar overall average abilities for receiving the different levels of the intervention. However, the reading instruction was differentiated by ability group level (e.g., Group 1 students were taught with other Group 1 students with the appropriate difficulty level of text.) The two research groups were randomly assigned to either the control condition or experimental condition. Groups 1 and 4 were assigned to the experimental condition and consisted of 15 students. Groups 2 and 3 were assigned to the control condition and consisted of 7 students.

During the four week intervention, students in the experimental group received positive verbal praise designed to promote intrinsic motivation. The verbal praise focused on student demonstration of reading skills or strategies, as well as effort and self-efficacy. This intrinsic motivation strategy was utilized during the guided reading group rotations, where the researcher read with one reading group at a time while the other students were engaged in independent learning activities in Zoom break out rooms. Each guided reading lesson consisted of a book introduction, word work activities, and shared or independent reading, where the researcher would confer with an individual student as they read the text aloud. The researcher incorporated intrinsic motivational verbal praise for students in the experimental group throughout each small group reading lesson. This praise included comments on the reading strategies shown, the effort

they made to try decoding an unfamiliar word, and their responses or attempts to respond to comprehension questions about the text. Specific praise also emphasized how they have grown as readers through the skills they have learned and the effort they have demonstrated in order to promote positive associations with reading. Students in all four groups received daily small group guided reading instruction.

A Pioneer Valley Running Records Assessment post-test and the Elementary Reading Attitude Survey post-test were administered at the end of the four week intervention. For the first hypothesis, students were classified as to whether or not they had gained one level during the intervention. A chi-square test of independence was used to determine whether the instructional condition (receiving verbal praise to promote motivation) was independent of whether students gained a level. For the second hypothesis, an independent samples t-test was used to determine if the groups differed in reading attitudes prior to the intervention. An independent samples t-test was used to determine if the groups differed in reading attitudes after the intervention. There was no significant difference in pre-intervention mean Early Reading Attitude Survey scores between the experimental group (Mean = 63.33, SD = 9.42) and the control group (Mean = 61.00, SD = 9.04) [$t(20) = .55$, $p = .59$]. Consequently, it was not necessary to control for pre-existing differences.

CHAPTER IV

RESULTS

The purpose of the study is to investigate the impact of intrinsic motivation on the reading achievement and reading attitudes of first grade students. Students in the intrinsic motivation group received positive praise related to the students' use of reading strategies or display of self-efficacy while reading in order to promote intrinsic motivation.

An independent samples t-test was conducted with the independent variable being the presence of intrinsic motivation strategies and the dependent variable being the student's full scale raw score on the Elementary Reading Attitude Survey that reflects the student's attitudes towards recreational and academic reading. The mean post-test score on the Elementary Reading Attitude Survey of the Intrinsic Motivation group (Mean = 60.27, SD = 14.40) did not differ significantly from that of the Control group (Mean = 65.29, SD = 9.05) [$t(20) = .84, p = .41$]. Please see Table 1. Consequently, the null hypothesis that the reading attitude of first grade students who received an intrinsic motivation strategy is not significantly different than the reading attitudes of students who did not receive the intrinsic motivation strategy was retained. Interestingly, although not subjected to statistical analysis since it was not part of the original hypothesis, the mean Early Reading Attitude Score for the Intrinsic Motivation group went down after the intervention (Mean = 63.80 as compared to Mean = 60.27) while the score increased for the Control group.

Table 1

Means, Standard Deviations, and t-statistic for Elementary Reading Attitude Survey Scores by Group Membership

Group	N	Mean	Standard Deviation	t-statistic
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Intrinsic Motivation	15	60.27	14.40	.84 (NS)
Control Group	7	65.29	9.05	

NS = non-significant at $p \leq .05$

A chi-square test of independence was conducted with the variables of group membership (intrinsic motivation or control) and whether they increased a level on the Pioneer Valley Running Records. Group membership was found to be non-independent, with children in the Intrinsic Motivation group being significantly less likely to move up a reading level $\chi^2 = 4.03$, $p = .045$. Please see Table 2 for observed frequencies. Consequently, the null hypothesis that membership in the intrinsic motivation or control group is independent of whether or not the children made a gain in a level or more on the Pioneer Valley Running Records was rejected.

Table 2

Frequencies of Increasing Reading Level by Group Membership

Outcome	Intrinsic Motivation Group	Control Group
Increased at least 1 level	6	6
Did not increase at least 1 level	9	1

CHAPTER V

DISCUSSION

The purpose of the study was to investigate the impact of intrinsic motivation on the reading achievement and reading attitudes of first grade students. The null hypothesis that membership in the intrinsic motivation or control group is independent of whether or not the children made a gain in a level or more on the Pioneer Valley Running Records was rejected. The null hypothesis that the reading attitude of first grade students who received an intrinsic motivation strategy is not significantly different than the reading attitudes of students who did not receive the intrinsic motivation strategy was retained.

Implication of Results

The results of this study indicated that students in the control group were significantly more likely to move up a reading level on the Pioneer Valley Running Records assessment. Although the students in the intrinsic motivation group were less likely to move up a reading level on the Pioneer Valley Running Records assessment, all of the students in the intrinsic motivation group showed improvement in their reading accuracy, self-correction rate, fluency, and/or comprehension scores when compared to their pre-assessment. While some of these students within the intrinsic motivation group did not progress one reading level, this finding suggests that the intrinsic motivation strategy may have influenced the slight growth of reading accuracy, self-correction rate, fluency, and/or comprehension scores. This finding suggests practical implications for teacher evaluation of student reading growth, as well as implications for future studies. Teachers should consider multiple reading factors, including a miscue analysis of a students' running records, along with student performance on other reading assessments, when evaluating student reading growth.

Prior researchers have used a multitude of reading instruments to evaluate reading achievement in students, including standardized tests, running records, decoding and linguistics tasks, or reading comprehension tasks (Cartwright et al., 2016; Ho & Guthrie, 2013; Marchand & Furrer, 2014). Research by Cartwright et al. (2016) emphasized the importance of having a more complex and expanded view of reading comprehension, as they indicated that only focusing on decoding and linguistics predictors for reading comprehension did not account for the role of reading motivation in reading comprehension and growth. A more balanced and expanded view of reading achievement across reading accuracy, fluency, and comprehension could help teachers better evaluate student reading growth and the influence of reading motivation on reading achievement. Longer term studies with larger sample sizes may also better reflect the influence of intrinsic reading motivation on student reading achievement in terms of reading level growth, as the typical progression rate of reading levels used by the Pioneer Valley Running Records assessment vary between levels (Fountas & Pinnell, 2017).

The results of this study indicated there was no significant difference between the reading attitudes of students who received the intrinsic motivation strategy and students who did not receive the intrinsic motivation strategy. Observations made by the researcher during the Elementary Reading Attitude Survey post assessment indicated student attitudes and behaviors towards re-taking the same assessment may have somewhat influenced the assessment results. Some of the students seemed reluctant to take the post-assessment survey, particularly those who had been recently pulled multiple times to take school mandated reading and language assessments. Student responses on the reading attitude survey did not always reflect their observed behaviors and attitudes during small group reading lessons. For example, certain students marked a negative response towards reading books recreationally, but during small group lessons they would be eager to share books they were reading at home or ask if they could

read their favorite book aloud to the class. These results have practical implications in terms of teacher evaluation of student reading attitudes and use of reading attitude assessments. Teachers would benefit from using multiple data sources to assess students reading attitudes, such as through surveys, anecdotal observations, and even student interviews. Observations made by the researcher during this study would also suggest that certain students were more responsive to the intrinsic observation than others. Some students responded very positively to the intrinsic motivation strategy, and displayed higher levels of effort to decode unfamiliar words during their small guided reading group and increased attentiveness towards whole and small group reading lessons. Other students within the intrinsic motivation group seemed more ambivalent towards the positive praise, and some even expressed a desire to earn “Dojo Points,” an extrinsic motivation strategy utilized by the researcher and the school. This indicates that some students may respond more positively to extrinsic motivation strategies, such as through the use of points, as compared to solely utilizing intrinsic motivation strategies.

Theoretical Implications

The results of the study also have theoretical implications. Researchers have found that student self-efficacy can positively influence reading achievement (Lee & Jonson-Reid, 2016; Ho & Guthrie, 2013). Many of the students who grew one or more reading levels on the post-assessment of the current study displayed higher self-efficacy and were more likely to utilize reading strategies and make self-corrections when observed by the researcher during lessons and the post assessment. This supports the theory that self-efficacy and feelings of competence can have a positive impact on reading achievement (De Naeghel et al., 2016; Lee & Jonson-Reid, 2016; Ho & Guthrie, 2013). The researcher’s observations of student behavior and results of the Elementary Reading Attitude Survey supports research indicating that reading attitudes may be impacted by multiple factors rather than just intrinsic motivation. Research has shown that

instructional practices that do not promote student interest, classroom environment changes, and increased emphasis on testing can decrease student motivation and reading attitudes (Wigfield et al., 2016; Vaknin-Nusbaum et al., 2018). Teachers should consider the various factors that can influence student motivation in order to better support more positive reading attitudes.

It is also possible that other intrinsic motivational strategies or a combination of extrinsic and intrinsic motivational strategies could have a deeper impact on student attitudes and reading achievement than just the use of positive verbal praise. This coincides with previous research that emphasizes the importance of utilizing various instructional practices to increase reading motivation, such as by encouraging student choice and promoting student interest (De Naeghel et al., 2016). A long term study may more accurately portray student growth across all reading levels and its relationship to reading attitudes and reading achievement.

Threats to Validity

Multiple factors threatened validity of the study. One threat to external validity was the selection-treatment interaction. A convenience sample of the researcher's first grade classroom was used for this study, which contains a high population of English Language Learners and diverse students from a Title I school. While the reading groups within the sample were randomly selected to receive either the treatment or control, the sample is not representative of the overall population of first grade students. Another external validity threat was the impact of online learning on student behavior and reading growth, along with the transition of some students to hybrid, in-person learning towards the end of the study. The move to online learning for the current school year has led to many changes in teaching methods and styles, along with increased questions about how the online learning environment may be impacting students, particularly students in primary grades and struggling learners. Towards the final few weeks of the study, certain students were selected to come back to the school for hybrid learning based on

multiple factors including parent choice, English Learner status and level, and special education status. Students in the hybrid program would return to the classroom for two days per week, but would still participate in the class activities and lessons on Zoom using their tablets. While instruction remained in the online format using Zoom for all students, many students whose parents had not opted for them to come back into the physical classroom or who could not yet return due to the classroom capacity requirements expressed disappointment and frustration that they could not return to the classroom. These factors may have influenced student responses and behaviors during the assessments and lessons completed during the study.

A related threat to the internal validity is the assessment administration of the Elementary Reading Attitude Survey due to the constraints of the online learning environment. The assessment is intended to be given in a paper format, where each question would be read to the students as they mark their response. The survey was modified to an online format using the Seesaw learning app, containing audio recordings of each question so that the students could listen to each question and select their responses independently. There is no reliability or validity data for the transformation of this survey to the online format. The online format also presented challenges, as the teacher could not directly monitor student behavior while they were taking the online assessment. The researcher observed that a few students submitted their assessment results very rapidly on the pre-test, which may indicate that they did not fully listen to each audio recording of the questions or spend the same time and consideration on their answer selection that they may have if they were in a traditional classroom setting. Other students have their parents present in the room with them during online learning, which may have influenced them to select the responses they felt may please their parents. The administration of the post-assessment of the Elementary Reading Attitude Survey also differed for certain students due to the transition into hybrid learning. The online format remained the same for all students in the

study, but the students who had returned to in person learning may have altered their test taking behaviors or possibly their responses due to being in the presence of their teacher rather than their parents. The classroom environment has less distractions compared to the home environment, where multiple siblings and family members may be participating in online learning or work in the same room. These factors could impact the internal validity of the study.

Frequent student absences and disruptions to the small group guided reading lessons also impacted the internal validity of the study. Poor internet connectivity, distractions from the home environment, and school wide testing procedures led to frequent absences for certain students during the lessons. Certain students were pulled for mandatory testing during the small group lessons, impacting their participation within the study and exposure to the intrinsic motivation strategy. Other students within the intrinsic motivation group who had frequent disruptions at home or issues with internet connectivity also struggled to participate during the lessons. This lack of consistency in participation may have influenced student reading growth and attitudes towards reading. For the purposes of this study, the researcher focused on the obtained reading level from the Pioneer Valley Running Records assessment, but the progression of reading levels is not consistent between every level. For example, students who obtain an instructional level between A-C and between levels I-Z typically take two to three months to progress to the subsequent reading level (Fountas & Pinnell, 2017). Conversely, students who are instructional at levels D-H are expected to progress approximately 1 level each month. The intrinsic motivation group only consisted of students reading at levels A/B/C and L/M/N/O/P, while the control group consisted of students reading at levels D/E and I/J. While these groupings were combined in this manner for research purposes with the intent of creating groups of similar overall average abilities for receiving the different levels of the intervention, the varying progression rates may have impacted the results of this study, as the students within the intrinsic

motivation group were less likely to move up a reading level compared to the students in the control group. This threatened the internal validity of the study. The short time period of the study (approximately 1 month) also threatened the internal validity of the study in terms of the Elementary Reading Attitude Survey. Various studies on reliability and stability of the Elementary Reading Attitudes survey across grade levels, gender, and racial groups have found moderate to high reliability across all subgroups (Diamond & Onwuegbuzie, 2001; Kazelskis et al., 2004). However, the study by Kazelskis et al. (2004) also found low stability of the Elementary Reading Attitude Survey scores over short intervals of time, particularly for students below sixth grade. The researchers discussed that the changes in reading attitudes could be influenced by student reactions to a recent reading performance or other influences from the classroom and home environments. Assessments given at periodic intervals could help avoid these potential issues with reading attitude fluctuations.

Connections to Existing Literature

Multiple studies have emphasized the importance of developing effective strategies to support reading motivation and promote reading growth (Marchand & Furrer, 2014; Lee & Jonson-Reid, 2016; Ho & Guthrie, 2013). Ho & Guthrie (2013) studied the relationships between various aspects of motivation and reading achievement. Similarly to this current study, Ho & Guthrie studied the impact of intrinsic motivation on reading achievement. However, these researchers took a more expanded view of motivation by studying the impact of multiple affirming and undermining motivational variables, including intrinsic motivation, perceived difficulty, efficacy, peer value, and avoidance. Their findings indicate that multiple motivational variables can influence student reading achievement and that students with high levels of perceived difficulty and low confidence in reading informational texts scored lower on the reading achievement assessments. High levels of self-efficacy can also positively influence

reading achievement. Unlike this current study, the study by Ho & Guthrie used predominantly European-American adolescents.

Other studies have focused on the implications for a more diverse population. Research by Lee & Jonson-Reid (2016) focused on the relationship between self-efficacy, reading achievement, and motivation across various ethnicities. Similar to this current study, Lee & Jonson-Reid's research included a diverse student sample of students specifically from a low-income neighborhood. However, their research solely focused on ethnic minorities who were struggling readers and at risk for reading failure. The findings indicated a significant impact of self-efficacy on reading achievement based on standardized reading scores. A study by Marchand & Furrer (2014) also focused on the impact of reading motivation and reading competence in relation to predicting performance on standardized reading assessments. The results of this study indicated that students with low reading motivation were more likely to demonstrate decreased performance on reading assessments over time. Unlike this current study, Marchand & Furrer focused on upper level elementary students rather than primary level students. While different studies have utilized various assessment instruments and focused on different aspects of reading motivation, it is clear that developing effective reading motivational strategies to better support reading achievement continues to be a priority for researchers and educators.

Implications for Future Research

Further research is needed to examine the impact of motivational strategies on reading achievement for primary age students. Extending the current study over a longer period of time with a larger sample size of first grade students could provide researchers with more insight on the impact of intrinsic reading motivation on reading achievement. A longer study would help counteract the validity concerns raised from the current study regarding the assessments. More

students may showcase reading level growth when the study is extended over multiple months rather than a single month. Administering the Elementary Reading Attitude Survey at periodic intervals during the study could provide more consistent data and avoid short-term fluctuations in reading attitudes. A larger sample size of students would also help the data be more generalizable to first grade students overall.

Researchers should also consider the influence of online instruction on reading motivation and achievement, particularly for young and vulnerable learners. Students and teachers have had to rapidly adjust to an online learning environment, and there is little research on how this new learning environment due to the COVID-19 pandemic has impacted student social, emotional, and academic development. Studying the impact of different motivational strategies, including both extrinsic and intrinsic strategies, would also be beneficial, specifically in relation to primary grades, students of various ethnicities, and other sub groups. For example, some of the students in the current study did not respond as positively to the intrinsic motivation as others, indicating other motivational strategies may be more effective for certain students. Studies comparing the influence of an extrinsic strategy, such as earning Class Dojo points versus the intrinsic strategy of positive praise or analyzing the impact of multiple intrinsic motivational strategies, would help broaden understanding of the role various motivational aspects play in supporting reading achievement for these subgroups and provide more effective strategies for teachers to use with their students.

Conclusion

This study focused on the impact of intrinsic motivation on reading attitudes and reading achievement in first grade students. While the results of this study did not find a significant difference between reading attitudes of students who received the intrinsic motivation strategy and students who did not receive the intrinsic motivation strategy, the findings and researcher

observations do highlight the role reading attitude can play in reading achievement. Low reading attitudes can lead to lower levels of reading growth in some students. Researcher observations from this study also indicate that while the students in the intrinsic motivation group were less likely to move up a reading level compared to the control group, many of the students demonstrated smaller levels of reading growth when focusing on accuracy, fluency, and comprehension scores.

Practical implications include the need to evaluate student reading achievement across multiple indicators and use a longer interval between assessments when evaluating reading level growth and reading attitudes. The results of reading attitude surveys should also be carefully considered in relation to teacher observations and student interviews. This will allow for a more balanced and expanded view of student reading attitudes and reading achievement. Future research could extend this study using larger sample sizes and a longer intervention period to better generalize the results. Further research should also focus on the impact of different intrinsic and extrinsic motivational strategies in order to compare the influence of different motivational techniques. Studies have emphasized the importance of reading motivation on reading achievement, and educators and researchers should continue to strive to better understand how to implement effective motivational strategies.

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