Reading Motivation and Achievement in 5th Grade Students

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Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

May 2013

Graduate Programs in Education

Goucher College

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Abstract

The purpose of this study was to examine the impact of reading incentive programs in a 5th grade classroom on reading and reading achievement. It was hypothesized that students in a 5th grade Language Arts class who were given an opportunity to participate in a reading incentive program would not show improvement in reading comprehension and reading motivation when compared to a control group that received no reading incentive program. The study used a quasiexperimental design and took place over a three-month time period. A pretest/posttest model was used to determine the effectiveness of the reading incentive/motivation program. The findings from this study indicated no statistically significant results, and therefore the null hypothesis that there would be no difference in AR points or STARS instructional placement level was retained.

CHAPTER I

INTRODUCTION

Overview

Educators across the world know the importance of reading. Knowing how to effectively read and comprehend is an important skill that students will utilize for a lifetime. Almost everything that a person does involves some kind of reading and comprehension. To master the skill of reading, one must practice reading. It has been proven that a lot of students who struggle with reading and comprehension do not read. They do not read for enjoyment, and, in most cases, have not experienced an early foundation in reading. Most students who achieve academically all have one thing in common: they like to read. Successful students also have an intrinsic motivation and self efficacy that drives them to succeed. Many educators and researchers have examined the correlation between reading and academic achievement. Researchers have shown that, especially for students in Grades 3 through 5, motivation for reading predicts reading achievement on standardized tests and school grades (Guthrie, Wigfield, Humenick, Perencevich, Taboada, & Barbosa, 2006b).

Statement of Problem

The purpose of this study is to examine the impact of reading incentive programs on reading and reading achievement. It has been observed that some students know how to read, but they are not reading. With the emergence of the new Common Core curriculum, students are being held to a higher academic standard. Teachers will also be held accountable for students' achievement or lack thereof. The Common Core curriculum charges educators with the task of making sure that their students become "college and career ready" by the time they finish high school. The reading portion of the Common Core curriculum places higher demands on

comprehension and text-based evidence support. Students will not only have to answer basic comprehension questions, but they will have to provide evidence that supports their answers. This kind of complex thinking only comes about from higher-level thinking. Higher-level thinking develops from reading and understanding complex texts by using basic reading strategies. Simply, if the child is not reading, he/she will not have had the time to practice those strategies for higher-order thinking.

Hypothesis

Students in a 5th grade Language Arts class who are given an opportunity to participate in a reading incentive program will not show improvement in reading comprehension and reading motivation when compared to a control group that will receive no reading incentive program.

Operational Definitions

Achievement

Reading comprehension tests designed by STARS (software based assessment tool) were administered to both the treatment and the control group students as they finished a specified quarter. The STARS assessment tool when correctly utilized measures a student's instructional reading level.

Motivation

Motivation can be defined as desire, or interest and drive. For this study, motivation was measured through the Accelerated Reader (AR) Program, which records the number of books read through brief comprehension quizzes.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review will evaluate and discuss several studies that center on the effectiveness of school-based reading incentive programs and answer the question of whether programs really work. This topic is worth examining because it allows educators, parents, and other stakeholders to see the effects of the reading programs in schools. It also gives the educational community a picture of what does work. A reviewing of existing studies allows a glimpse into the best practices of the different interventions and programs discussed.

Section one of the review will focus on the importance of reading. Section two will discuss extrinsic and intrinsic motivation for reading. Section three will focus on characteristics of a successful motivating reading program.

The Importance of Reading

In a web series by the organization We Give Books, Author Tomie dePaola (2010) stressed that, "Reading is important because if you can read you can learn anything about everything and everything about anything" (http://www.youtube.com/watch?v=7epT0qUaaX4). Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information (Anderson, Heibert, Scott, & Wilkinson, 1985). To a child reading may seem boring and tedious. He/she is not aware of the true benefits that reading can bring him/her. Good readers reap numerous benefits that will sustain them for a lifetime, whereas poor readers will struggle in everyday normal tasks and making important decisions. Good readers inevitably earn better grades than nonreaders. Through reading, a student can gain a vast amount of knowledge and experience.

With the emergence of the new Common Core curriculum across the nation and in

Maryland, teachers will be tasked with preparing today's students to be career- and college-ready by the end of their school years. The Common Core curriculum also calls for an increase in text complexity, meaning that the texts that students will read will be more advanced than before. Students will no longer be asked simple recall questions, but will instead be asked to reflect and pull evidence from the text that supports their responses. If a student is unable to read complex texts or answer the questions without support, he/she will ultimately fail the Common Core assessment. The implications of any child's failure to pass the assessments span across several dimensions. If a child does not do well on these assessments, he/she may develop a feeling of low self worth. In addition, he/she will not be career or college ready, and he/she will struggle with other academic subject areas and life tasks.

To become better readers and to be college- and career-ready, students need to acquire a love for reading. They must be motivated to read independently. For example, children will set higher goals for themselves and select more difficult books to read if they enjoy the subject of the books. Also, according to Law (2003), when readers are motivated to read, the amount of time they spend on reading is increased, and consequently their reading comprehension improves.

Intrinsic and Extrinsic Motivation for Reading

To accomplish a task requires motivation. There are two main types of motivation, intrinsic and extrinsic. Intrinsic motivation is driven by interest or enjoyment of the task itself. People who are intrinsically motivated enjoy doing the task and generally have a fond interest in it. Extrinsic motivation is defined as doing a task merely to obtain something. People who are extrinsically motivated often perform a task with the promise of something gained such as a reward. It is generally acknowledged that motivation plays a critical role in learning. It often

makes the difference between learning that is superficial and shallow and learning that is deep and internalized (Gambrell, 1996).

Educational researchers have struggled with the problem of how to motivate young students to read. They have evaluated countless reading programs and initiatives that promised an increase of reading motivation. Most of these programs focus merely on extrinsic motivation. They promise the student various rewards and incentives for reading. Some programs focus on blending intrinsic motivation and extrinsic motivation. Research has found that students with highly developed intrinsic motivation for reading report high levels of curiosity to read, involvement in a range of reading activities, preference for challenging materials, and extended amounts of time in reading activities (Guthrie, Hoa, Wigfield, Tonks, & Perencevich, 2006a).

Another study has also found that children demonstrating intrinsically or extrinsically motivated literacy behavior may appear very similar on the surface. For example, both are anxious to participate in class, or perhaps they are willing and anxious to read. The difference between an extrinsically or intrinsically motivated reader is not in the outward manifestation of the behavior, but rather lies within the source of the behavior and in the long-term interest of the child in reading (Fawson & Morre, 1999). Several studies have argued that incentive programs that focus primarily on extrinsic motivation undermine a student's intrinsic motivation to read. However, Unrau and Schlackman (2006) demonstrated that student academic reading is probably driven by a combination of intrinsic and extrinsic motivation.

Characteristics of a Successful Motivational Reading Incentive Program

There are numerous reading incentive programs that are being implemented worldwide. Several of these programs use incentives to motivate students to read, and others use incentives and engaging activities to increase reading motivation. To get a feel for what incentives to offer,

the teacher must know his/her students. Teachers should assess students to know what motivates each one. A variety of extrinsic and intrinsic factors, ranging from stickers to self-satisfaction, may contribute to motivation. If the classroom incentive program is to motivate poor readers, providing the right incentive is crucial (Ford & Ohlhausen, 1988).

Some researchers argue that a good reading motivation program does not simply reward but instead endeavors to shape and develop lifelong readers and learners. To do this, some suggest that schools examine their existing curriculum. To spark the interest of a child, the curriculum must be integrated with other academic subjects. The approach of schools to the curriculum could affect the degree to which children's motivation is domain-specific. Schools in which each subject is taught separately could quickly lead children to have very domain-specific motivations for each subject area. When curricula are integrated across content areas, it is possible that children's motivation also may be more integrated across domains (Wigfield, Guthrie, Tonks, & Perencevich, 2004).

Another way to increase reading motivation is to simply allow the students to choose their own books to read. This gives a student a sense of ownership and he/she will most likely choose a book that interests him/her. Teacher support for student autonomy is important for engagement. Teachers who enable students to find books related to their interests and support students' processes of choosing authors or topics are able to increase cognitive engagement in reading (Guthrie, 2001). The teacher should also set aside time each day for students to read in class. Researchers suggests that when the students participate in reading activities which provide strong content goals and contain rich topical content, students become more motivated to engage in and to gain knowledge from these activities. Thus, future research should examine the reciprocal ways in which cognitive and motivational processes interact (Taboada, Tonks,

Wigfield, & Guthrie, 2006).

Summary

Assisting students in developing a sense of self efficacy and a healthy habit of reading will undoubtedly improve their academic. Teachers and parents need to be aware of the academic consequences of a student being a nonreader. Reading motivation is a topic that has been explored worldwide. In order to achieve academically, it is paramount that students read and understand what they are reading. Consequently, educators are interested in investigating the various factors that promote early reading proficiency, and various studies have shown that children's reading motivation directly and indirectly influences their reading comprehension (Law, 2003). Much remains to be determined about the best way to increase motivation to read. Educators must not be driven by promises of short-term gains, however. Forced by public opinion, principals, administrators, and teachers strive to achieve immediate results regardless of long-term consequences (Pavonetti, Brimmer, & Cipielewski, 2002). Future research on this topic should include societal and peer influences in reading.

In conclusion, a successful reading incentive program should include content integration, self-autonomy, and a blended program that focuses on intrinsic and extrinsic motivation. According to the various studies discussed, these characteristics will best serve and motivate young and struggling readers.

CHAPTER III

METHODS

This study was initiated to determine whether school-based reading incentive and motivation programs are truly effective in increasing reading and reading comprehension in 5th grade students. Research results will be utilized to identify which program is the most effective.

Design

The study used a quasiexperimental design. This design allowed for the use of a control and a treatment group to examine reading comprehension scores and number of books read after the implementation of the reading incentive/motivation program. The independent variable for this study was the reading incentive/motivation program, and the dependent variable was reading comprehension and number of books read.

The study took place over a three-month time period, and the use of a pretest/posttest model was used to determine the effectiveness of the reading incentive/motivation program.

Participants

The participants used for this research study included 100 5th grade students from an elementary school in Baltimore County, Maryland. The study school opened its doors in 1992 and serves a number of communities within a five-mile radius. This area has approximately 18,000 households and a population of 45,000. The school's population is predominately White and upper middle class. The school also has a special subpopulation of Title I transfer students. The school's total student population is 594. The 5th grade student population is 120 with 49% female and 48% male. The 5th grade class is also made up of 2% FARMS (Free and Reduced Meals Students), 5.9% students with 504 plans, and 10.6% special education students. According

to the Maryland State Department of Education, the school's index is a Strand 1, which is categorized as meeting and exceeding the academic standards for all students.

The treatment groups included two classes that were taught by the researcher. One class was comprised of a group of 28 students, and the other class had a group of 20. The control group also included two classes taught by another 5th grade reading teacher with one of her classes having 26 students and another having 26 students. According to the most recent MSA data, 100% of all of the 5th graders scored proficient in reading.

Instruments

There were two instruments used in this study. The first instrument used was the STARS Reading Assessment, a software-based test. Each student completes the assessment on a computer. The assessment is used school-wide and is often utilized for screening, benchmarking, progress monitoring, and placing students at their ideal reading level. The reading test assesses the following reading skills: word knowledge, comprehension strategies, analyzing literary text, and analyzing arguments and evaluating text. The STARS assessment scores are not based on percent but rather on IRL (Instructional Reading Level).

The second instrument used was the Accelerated Reader Program (AR). Accelerated Reader is a software assessment tool used in many primary and secondary schools. If used correctly, the program can be used to assess a student's reading level, suggest titles of books at that level, and then assess whether a student has completed reading the book by asking a series of quiz questions. The program also provides additional information to students, teachers, and parents regarding reading rates, amount of reading, and other variables related to reading. The AR program for this study will be used to determine the student's reading comprehension level and record the number of books read by each student.

Procedure

The study began for the experimental and control groups on October 10, 2012. Both groups met for a double block of 60 minutes which means a total class time of 120 minutes. The students completed the STARS pretest on October 10th. Two students took the pretest on October 15th because they were absent due to illness.

On December 10th, the students were introduced to the reading incentive program "The 90% AR Club," an incentive program that records the number of books read and measures students' reading comprehension of those books within one academic quarter. On January 29th, the students were once again assessed using the STARS Reading Assessment. The students participating in this incentive program must read at least four books a quarter with at least one of them being nonfiction. The students must take an AR comprehension quiz on those books and score at least 90% on all of them. The students who met all of those guidelines were rewarded with a "Shout Out" during morning announcements and a special treat.

CHAPTER IV

RESULTS

This study examined the impact of school-based reading incentive and motivation programs on reading comprehension in 5th grade students. The quasiexperimental design used in this study involved a pre- and posttest using instructional levels as assessed through the STARS reading assessment. Additionally, the amount of reading completed by students was measured through Accelerated Reader Program (AR). The Accelerated Reader program categorizes novels by grade levels and points. AR points are based on grade levels and how many words the book has. The number of books read was determined by the reader themselves. To determine the number of books the student has read, data was collected from the students' AR online testing records. Each time a student takes an AR quiz on a particular novel, the AR program records the student's test score, points, and the book information itself. This record and reporting tool allows the researcher to monitor and record books read and reading comprehension progress and achievement.

Data were analyzed using the independent *t*-test between the control and experimental groups. A *t*-test was used because this test essentially assesses whether the means of two groups are statistically different from each other. A growth score was computed by subtracting the STARS instructional reading level of the pretest from that of the posttest. Table 1 below displays the measures of central tendency for the variables. Table 2 displays the results of the independent *t*-test. The *p* value was less than .05, so therefore no statistically significant differences were obtained.

Table 1

Measures of Central Tendency

	ExpOrControl	N	Mean	Std. Deviation
AR Points	Experimental	47	77.040	102.9593
	Control	52	79.333	56.5543
Growth	Experimental	47	.6723	1.22292
	Control	52	.5885	1.21084

Table 2

Independent t *test Results*

		t	df	Sig. (2-tailed)	Mean Difference
AR Points	Equal variances assumed	-.139	97	.890	-2.2923
Growth	Equal variances assumed	.343	97	.733	.08388

CHAPTER V

DISCUSSION

This study examined the impact of school-based reading incentive and motivation programs on the reading and reading comprehension in 5th grade students. Data analyses completed in Chapter IV indicated no statistically significant findings, and therefore the null hypothesis that there would be no difference in AR points or STARS instructional placement level was retained. Moreover, there was no significant difference between the experimental group and the control group for reading achievement when reading incentive programs was used. Finally, there was no statistically significant change in motivation of the experimental group from the pretest results to the posttest results.

Implications of Results

In this research study, the reading incentive program produced no significant effect on reading achievement and motivation to read for the 5th grade students. The results show that there was no significant difference between the experimental group and the control group. The null hypothesis was retained.

The results showed the incentive program produced no significant change in reading motivation and reading achievement. However, there were in particular five students who benefitted greatly from the incentive program, and their reading achievement and motivation increased. The children as a whole also enjoyed the incentive. Perhaps the results would have had a more favorable outcome had the incentive program lasted longer.

Threats to Validity

All experimental and quasiexperimental studies have threats to validity. In particular, there are threats to external validity that are determined by the type of sampling and threats to internal validity that are determined by the design if the study.

This experiment had several threats to internal validity that may have affected the outcome of the results. The first threat to internal validity is history. History is a threat to external validity because during the treatment period the students went on winter break. Winter break lasted for two weeks. This is a threat to validity because the students may not have been reading during the winter break. The students were instructed to continue reading during the break, but the researcher had no control over whether the students read or not.

The next threat to internal validity involved maturation. Maturation occurs when the subjects grow older or get bored or anxious with the topic. The experiment did not take place over a long period of time, but the subjects have struggled in the past with getting themselves motivated to read. So, in a sense, the subjects may have gotten bored with the topic.

The last threat to internal validity concerned diffusion or imitation of treatment. Diffusion or imitation of treatment occurs when the treatment subjects are acquainted with the subjects of the control group. This circumstance can be a hindrance to validity. The students could have shared with the other students the details from the incentive program and questions from the AR and STARS assessments. This would compromise and minimize the difference between both the treatment group and the control group.

In addition to threats to internal validity there were several threats to external validity as well that may have affected the outcome of the results. The first threat to external validity was population validity. Population validity refers to how well the sample group compares to the

population as a whole. Population validity was a threat to external validity because the sample used in this study was chosen for convenience. The convenience sample was used because it was the researcher's classroom; therefore, it was available and convenient. This is a threat to validity because the sample may not be a complete representation of the population. The results of the study could have been affected because of the threat of population validity.

The second threat to external validity that may have affected the outcome of the results is the novelty and disruption effect. Novelty and disruption effect refers to the fact that anything that is different will make a difference. By introducing the incentive program to the students, they may have responded favorably because the program was something different than what they were used to. This is a threat to external validity because to students may not have had enough time to adjust to the program.

Connections to Previous Research

Portions of this research study are very similar to a study performed in 2006 by Guthrie, Humenick, Perencevich, Taboada, Barbosa, and Wigfield. Their study also looked at the topic of reading motivation and comprehension. Instead of using a simple rewards program to motivate their subjects to read, however, they used what they called "Stimulation Tasks" to increase situational interest. By providing the subjects with hands-on science activities and books that contained stimulated topics to increase "situational interest," they proposed that engagement in reading involves interactions with text that are motivated and strategic. They reviewed evidence showing that when students are engaged in reading, they comprehend better and have stronger reading outcomes than when they are not engaged (Guthrie et al., 2006b). Their findings found that introducing the students to stimulating activities related to reading increased their comprehension and reading motivation, thus proving their hypotheses correct. The researchers

proved that it is not effective to reward students with extrinsic rewards to increase motivation, but that one must instead look to changing a child's intrinsic motivation whereby they become self-motivated to read.

Implications for Future Research

Results from this study showed no significant evidence to support the notion that incentive reward programs are effective in increasing a student's comprehension and motivation to read. Most research on the topic of reading motivation and comprehension is very broad, and the findings are mostly inconclusive. The research studies that yielded positive results were very pointed, meaning they were very specific in what incentives were used and how those incentives would increase motivation.

It would be interesting to perform a research study on intrinsic motivation. Generally speaking, studies that examined extrinsic motivation as a factor in increasing reading motivation and comprehension have not produced significant results. Future research should be dedicated to looking at how a student's motivation to read can be altered internally, meaning that the student must develop an intrinsic drive/motivation.

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