The Effects of Intrinsic Motivation and How It Relates to

Academic Achievement in Second-Grade Students

By Maria Talerico

Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

July 2018

Graduate Programs in Education

Goucher College

Table of Contents

List of Tables

Abstract

The purpose of this study was to determine whether there is a relationship between second-grade students' level of intrinsic motivation and their academic achievement. Intrinsic motivation was measured by the students' time on task. The students' academic achievement was measured by the Fountas & Pinnell Benchmark Assessment System. The treatment used in the study consisted of one week of a conscious effort by the teacher to praise the students and give positive, meaningful feedback for effort and achievement. Several analyses were conducted to test the null hypotheses that there would be no relationship in the population mean from pre- to posttest for time on task and Fountas & Pinnell Benchmark Assessment System, using the customary $p=.05$ level of statistical significance. There was a statistically significant gain from pre- to post-time on task. There was also a statistically significant shift in reading levels from pretest to posttest. Although there was an increase in time on task and academic achievement, the null hypothesis cannot be rejected at $p<.05$. Further research in this area should be continued to determine under what conditions a stronger correlation between intrinsic motivation and academic achievement might exist.

CHAPTER I

INTRODUCTION

Overview

In a classroom full of students, no two students are the same. Some students naturally have that drive to do well. They are excited to learn and will do anything to please the teacher. On the other hand, in the same room, there are those students who just don't seem to care. They act out, and do not follow directions. They seem to lack the drive to do anything independently. These students seem to have no intrinsic motivation. This could be because of many different reasons. The student may have a rough home life. He or she may not have a role model who instilled these values in him or her. Students may have had an experience that turned them off from education altogether. Whatever the reason, the lack of intrinsic motivation is a problem in the classroom. This lack causes students not to try, not to follow directions, and not complete their work. Consequently, it is more difficult for them to be successful in the classroom. On the other hand, the presence of intrinsic motivation can lead to academic success in students (Froiland, Oros, Smith, & Hirchert, 2012).

A lack of intrinsic motivation within students is increasing and is a very pervasive problem. Because of the lack of intrinsic motivation, teachers need to teach not only content, they also need to find a way to persuade unmotivated students to participate in the activities of the classroom.

The researcher is a second-grade teacher who notices this lack of intrinsic motivation in her own students. Throughout the five years the researcher has spent in the classroom, she has noticed that students are entering the classroom with less intrinsic motivation every year. The students who possess intrinsic motivation are very engaged in activities and tend to have higher

achievement on assignments. There are many ways to raise a student's intrinsic motivation. Some students' motivation is easier to raise than others'. The researcher strives to encourage her students to reach their highest potential. That includes raising their intrinsic motivation, which is the focus of this study.

Statement of Problem

The point of this study is to identify whether there is a relationship between the level of intrinsic motivation and academic achievement of second-grade students.

Hypothesis

There is no relationship between the intrinsic motivation and academic achievement of second-grade students.

Operational Definitions

Intrinsic Motivation

Intrinsic motivation is the drive a person has to do well. In this study the focus is on education. This means that the student values education. He or she has a desire to learn. A student who has intrinsic motivation actively participates in learning activities. This study will measure intrinsic motivation by measuring the class' time on task. The researcher will give students praise and feedback to determine whether that may increase the amount of time the students are engaged in an activity. The praise and feedback approach is the independent variable in this study. Engagement will mean that the students are actively working and not participating in outside conversations.

Academic Achievement

Academic achievement is defined as when students are performing well academically. They are participating in the activities of the classroom. Students who are achieving

academically understand and gain knowledge of the content being taught. They are making progress on assessments that are given throughout the school year. Academic achievement will be based on the Fountas & Pinnell Benchmark Assessment System. The students will be expected to reach a higher guided reading level on this assessment. This assessment is the dependent variable in this study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Intrinsic motivation is inside of everyone. However, what each person values varies. It is becoming clear that in the classroom most students' intrinsic motivation towards education seems to be lacking. When students have intrinsic motivation regarding academics they are more likely to complete assignments, engage in lessons, and work hard on independent work to improve their learning. Therefore, students who lack intrinsic motivation for academic success, tend not to complete their work, or put to effort into participation during a lesson. From the teachers' point of view, this is problematic. The following review of literature will describe intrinsic motivation and will aid in supporting the belief that it is an important part of academic achievement.

Section one will define intrinsic motivation. Section two will discuss the reasons why intrinsic motivation is critical in the classroom. Section three will discuss what can help increase intrinsic motivation in the classroom. Section four describes the role of intrinsic motivation regarding reading.

What is Intrinsic Motivation?

Intrinsic motivation differs for each person. This type of motivation is based on how the person feels internally. People with intrinsic motivation participate in a subject simply because they are curious or they would like to know more about a certain thing. Intrinsic motivation results in a person having a desire to participate in an activity. A person who is intrinsically motivated will be eager to complete and contribute to an activity (Dev, 1997). Intrinsic motivation stems from a person's habits and what he or she values as important and interesting

4

(Knollmann & Wild, 2007). It is up to the person to determine how much intrinsic motivation he or she has towards a specific thing.

Aside from intrinsic motivation, there is academic intrinsic motivation, which relates more to the classroom setting. This relates to the student being persistent when completing an academic assignment. It can also determine how long a person will stay on task when working on academic activities. Students with high levels of academic intrinsic motivation will be curious to learn new things. They will be eager to select an academic activity to further their learning. If a task is challenging for a student with academic intrinsic motivation, they will not need a celebration to encourage them to persevere through this difficult assignment (Dev, 1997). Dev (1997) states, "The intrinsically motivated student is also more likely to retain the concepts learned and to feel confident about tackling unfamiliar learning situations" (p.13). Students with high academic intrinsic motivation tend to have a more negative response to direct support when completing tasks (Knollmann & Wild, 2007). Overall, academic intrinsic motivation makes students more eager to learn and perform.

Why is Intrinsic Motivation Important in the Classroom?

Intrinsic motivation helps students increase their time on task because they value academic achievement. Intrinsic motivation correlates with self-determination. Students tend to have a decrease in intrinsic motivation as they go through their school years. However, intrinsic motivation is beneficial for students' engagement and involvement in learning tasks. Intrinsically motivated students look for learning opportunities and ways to learn more about subjects they are exposed to and interested in. Intrinsic motivation comes with putting your best effort into an activity as well as wanting to be challenged (Froiland et al., 2012). This is very desirable when students are expected to be involved in rigorous instruction that will prepare them for college and

careers. Students who have high levels of intrinsic motivation are more likely to grasp concepts and have greater academic achievement. It is known that praise from educators helps promote intrinsic motivation (Froiland et al., 2012). The goal is for students to be highly educated and to want to learn and do well in school.

Poor student performance can stem from poor self-concept or self-esteem. People perform based on how they see themselves. Self-concept is how someone feels about a certain subject. Self-esteem is how they feel about their self-concept. How people view themselves is how they identify. A student can identify with academics. This is how students see themselves regarding education (Osborne & Jones, 2011). For example, are they a good student? Do they consider themselves smart? Students can develop this identification through experiences and feedback. Students' self-esteem influences how they perform. If students identify with academics, then their intrinsic motivation will be higher- and vice versa (Osborne & Jones, 2011). It is important for the students to have high self-esteem and a positive self-concept in the classroom, so they will be intrinsically motivated to perform.

What Can Help Increase Intrinsic Motivation in the Classroom?

There are many ways to help increase a student's intrinsic motivation. Teachers can work with the student on increasing their self-esteem. Giving positive feedback will increase a student's self-esteem (Osborne & Jones, 2011). This positive outcome will also motivate the student to perform in the future. The feedback is important; however, it is critical that the student recognizes this feedback as positive. This will increase this student's self-concept (Osborne & Jones, 2011). For example, if a student thinks that he or she is doing poorly in phonics, he or she is not going to be intrinsically motivated to participate in phonics activities. However, the more the student participates, the more a teacher can give positive oral feedback, explaining how that

student did a really nice job decode all the sounds in a word. The teacher can also give the student written positive feedback on a phonics dictation practice, explaining how the student did well spelling words with a specific sound. This student may now consider him/herself as doing well in phonics. This student may now be more eager to participate in phonics activities. Osborne and Jones (2011) used the following diagram to explain how feedback leads to an increase in self-esteem:
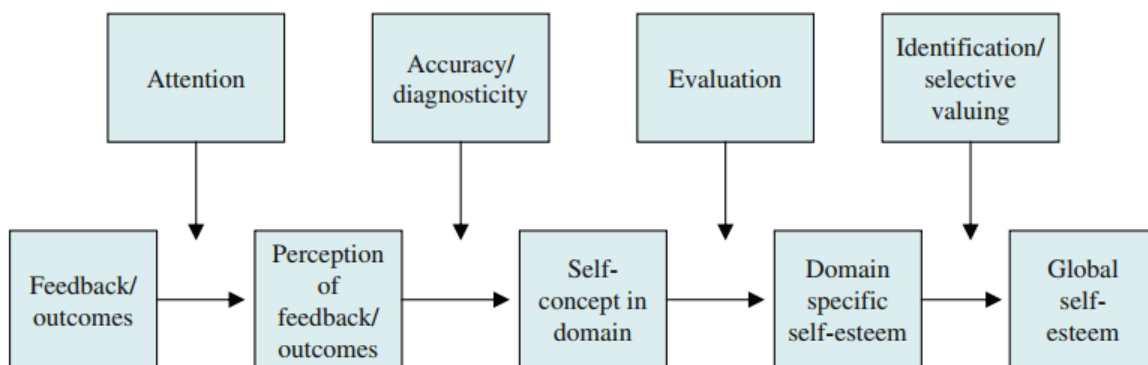
(p. 133)

The teacher should consider giving meaningful and positive feedback to increase students' self-esteem and intrinsic motivation.

When students are intrinsically motivated, they choose to engage in learning tasks. A way to build academic motivation is for the teacher to plan engaging activities for students (Williams & Stockdale, 2004). If the teacher plans engaging activities, the students will enjoy learning. This will improve their engagement and motivation to participate in other activities as well. If the teacher models behaviors and values, the students will adapt to mimic these behaviors and develop academic values (Williams & Stockdale, 2004). For example, if a teacher discusses the importance of the Read to Self rotation of Daily Five and models this rotation for students as they are doing it, the students will display these same actions. Teachers should talk about how

7

important activities, such as Read to Self, are and why we do them. The students will eventually think they are important and will want to do their best.

It is also proven that students' intrinsic motivation increase when the students see their teacher as a positive motivator. They are also more likely to have an increase in their academics if their teacher is a positive influence on them. A teacher's motivation behaviors stem from three major domains. The first contribution is the relationship between the teacher and students (You, Dang, & Lim, 2015). The better the relationship between the teacher and student, the more likely the student is going to want to perform. The information the teacher is providing in order to meet standards, also contributes to the teacher's motivational behaviors (You et al., 2015). If the teacher is lecturing straight from a textbook, the students are not going to be eager to participate. However, if the teacher interacts with the students and makes the information relate to them at levels they can understand, the students will more likely be motivated to learn. Finally, the amount of freedom the teacher gives the student also impacts their motivational behavior (You et al., 2015). If the teacher is trusting of their students, the students are aware of this and will want to do well. The level of support that teachers give and how much they care correlate with the students' level of intrinsic motivation (Bieg, Backes, & Mittag, 2011). The positivity from the teacher will impact the students' motivation to do well.

What Role Does Intrinsic Motivation Play in Reading?

If children have intrinsic motivation for reading, they will read more and attend to what they are reading. If children find reading important, they are more likely to comprehend what they are reading. When students are intrinsically motivated, they want to do well (Cartwright, Marshall, & Wray, 2016). If students are intrinsically motivated to read, they are going to read closely so they understand what they are reading. Students who are motivated to read will choose

8

to read more often. They will also identify with themselves as readers. Because they expose themselves to texts so often, their reading skills become stronger.

Students who create reading goals for themselves and are motivated to meet them will increase their reading skills (Cartwright et al., 2016). If a student is supposed to read at a level K by the end of November, letting him or her know this and giving him or her something to work toward will get that student to this goal. If the students are motivated to read, they will increase their reading skills. Reading motivation is an important part of reading development. Good readers use reading to reach goals and complete tasks (Lau, 2009). These readers who are intrinsically motivated are also more likely to use reading strategies to help problem solve (Law, 2009). Being intrinsically motivated helps the students build confidence when reading, which gives them the motive to read more and persevere.

Summary

The level of intrinsic motivation ultimately depends on the student. Students' thoughts and values must come from within. Being intrinsically motivated will help students in the classroom when persevering and engaging in academic tasks. Teachers can help students build intrinsic motivation by keeping a positive attitude and modeling the virtues and behaviors that are important to be a good student. Teachers can also set a purpose for learning that will give meaning behind the work the student is asked to do. It is proven that being intrinsically motivated leads to academic achievement.

CHAPTER III

METHODS

Design

This study used a correlational design. The focus is whether there is a relationship between two variables, intrinsic motivation and academic achievement. The pre-assessment indicates the students' guided reading levels based on the Fountas & Pinnell Benchmark Assessment System. The Fountas & Pinnell Benchmark Assessment System was tested and proved to be reliable and valid. The texts become more complex as the levels grow (Heinemann & Houghton Mifflin Harcourt, 2018). The researcher gave the students praise and feedback to increase their intrinsic motivation. To determine whether the level of intrinsic motivation increased, the researcher measured the students' time on task. Once an increase in intrinsic motivation occurred, the students participated in the Fountas & Pinnell Benchmark Assessment System to determine their current reading level.

Participants

The participants in this study were 26 second-grade students at a public elementary school. The researcher was the teacher of this class. The class includes female and male students who are Caucasian, African American, and Hispanic. The students range in age from seven to eight years old. Two of the students have 504 Plans and receives services through a Student Support Plan. Two other students are English Language Learners who speak Spanish. They receive ESOL services.

Instrument

The researcher used the Fountas & Pinnell Benchmark Assessment System to determine the academic level of the students. To determine the amount of intrinsic motivation the students

had, the researcher measured the students' time on task using a stopwatch. The Fountas &
Pinnell Benchmark Assessment System is given to all second-grade students to determine their
guided reading level. This is a school requirement. The students are required to read a text and
answer comprehension questions based on the text. The researcher must conduct a running
record while the student is reading to determine the student's accuracy. A running record allows
the researcher to follow along with students as they read. The researcher marks the students'
errors and some tendencies that the students display. For example, repeated words or self-
correction of errors are recorded.

Procedure

The students were tested in a one-on-one setting, given the Fountas & Pinnell Benchmark
Assessment System. The child was told the title of the story and a summary of what the text was
about. As the student read, the researcher conducted a running record. When the text was
finished, the researcher asked the student comprehension questions based on the text. The
researcher determined the students' independent reading levels based on their accuracy and
comprehension of the text. During an hour of class time, the researcher tracked the students' time
on task using no praise or feedback.

Throughout the next week, the researcher made a conscious effort to give praise and
feedback during instruction. This was to build the students' intrinsic motivation. The researcher
again tracked the students' time on task during the same time of the day. This would determine
whether the level of intrinsic motivation was increasing. Once the students showed signs that
their intrinsic motivation was increasing, the researcher administered the Fountas & Pinnell
Benchmark Assessment System again to determine whether they showed signs of academic
achievement.

The Pearson Correlation Index was calculated between time on task and the F&P (benchmark) at the pre-assessment and post-assessment. The pre- and post-correlations were tested for statistically significant changes. Also, paired t-tests measured the actual pre- to post-changes in time on task and F&P mean scores.

CHAPTER IV

RESULTS

The purpose of this action research study was to determine whether a relationship exists between the students' level of intrinsic motivation, measured by the students' time-on-task and academic achievement, as measured by Fountas & Pinnell Benchmark Assessment System. The participants in the study were 26 second-grade students at a public elementary school. The researcher was the teacher of the class.

The treatment used in the study consisted of one week of a conscious effort by the teacher to praise the students and give positive, meaningful feedback for effort and achievement. Prior to the treatment, students were assessed with the Fountas & Pinnell Benchmark Assessment System and time-on-task was measured during one hour of class. The Fountas & Pinnell Benchmark Assessment System was administered individually. After the treatment, students were tested again with the Fountas & Pinnell Benchmark Assessment System, and time on task was measured.

Several analyses were conducted to test the null hypotheses that there would be no relationship in the population mean from pre- to posttest for time on task and Fountas & Pinnell Benchmark Assessment System, using the customary p=.05 level of statistical significance. In addition, the time-on-task and Fountas & Pinnell Benchmark Assessment System scores were correlated to determine whether time on task and reading levels were correlated in the population. For this action research study, the theoretical population is all second-grade classrooms similar in demography, ability, and achievement to the current study classroom.

Since time on task was measured in minutes, the paired t-test was used for pre- versus post-time on task. Since Fountas & Pinnell Benchmark Assessment System is a categorical

variable, Pearson's Chi-Square was used for pre- versus post-reading levels. Moreover, the

original Fountas & Pinnell Benchmark Assessment System levels produce too many categories

with too few students per category to conduct a useful analysis. Therefore, the original Fountas

& Pinnell Benchmark Assessment System levels were recoded into grade level categories using

the publisher's Fountas & Pinnell Benchmark Assessment System Text Level Gradient

(Heiemann & Houghton Mifflin Harcourt, 2018). Tables 1 and 2 show the results of the recoding

of the Fountas & Pinnell Benchmark Assessment System for this study.

Table 1

Recode of Fountas & Pinnell Benchmark Assessment System Levels into Grade Levels, Pretest

| Fppre | RECODE of nfppre (Fppre) | | | | Total |
	K	1st	2nd	3rd	
B	1	0	0	0	1
C	4	0	0	0	4
D	1	0	0	0	1
E	0	2	0	0	2
F	0	1	0	0	1
G	0	2	0	0	2
H	0	1	0	0	1
I	0	4	0	0	4
J	0	2	0	0	2
K	0	0	4	0	4
L	0	0	2	0	2
M	0	0	1	0	1
N	0	0	0	1	1
Total	6	12	7	1	26

Table 2

Recode of Fountas & Pinnell Benchmark Assessment System Levels into Grade Levels, Posttest

```
                    RECODE of nfppost (Fppost)
    Fppost          K        1st       2nd       3rd       Total

          D         1         0         0         0         1
          E         0         3         0         0         3
          F         0         3         0         0         3
          H         0         1         0         0         1
          I         0         2         0         0         2
          J         0         3         0         0         3
          K         0         0         4         0         4
          L         0         0         5         0         5
          N         0         0         0         2         2
          O         0         0         0         2         2

    Total           1         12        9         4         26
```

The null hypothesis states there is no relationship between intrinsic motivation, measured by time on task, and academic achievement, measured by Fountas & Pinnell Benchmark Assessment System. Tables 3-5 show the results of the null hypothesis regarding the data.

Table 3

Null Hypothesis 1: There will be no change in the population pre- to post-time on task.

Variable	N	Mean	S.D.	t-test	p-level	Statistically Significant	Cohen's Effect Size
TOT pre	26	33.8	10.2				
TOT post	26	40.9	12.1	3.97	.0005	Yes	.78, medium

Null Hypothesis 1 is rejected (p<.05). There was a statistically significant gain from pre- to posttest in time on task, with medium treatment effect size.

Table 4

Null Hypothesis 2: There will be no shift upwards in the population Fountas & Pinnell

Benchmark Assessment System pre- and post-reading level categories

```
RECODE of
  nfppre     |      RECODE of nfppost (Fppost)
  (Fppre)    |    K        1st       2nd       3rd  |    Total
-------------+------------------------------------------+----------
          K  |    1         5         0         0  |        6
        1st  |    0         7         5         0  |       12
        2nd  |    0         0         4         3  |        7
        3rd  |    0         0         0         1  |        1
-------------+------------------------------------------+----------
      Total  |    1        12         9         4  |       26

        Pearson chi2(9) =   23.6872    Pr = 0.005
```

Null hypothesis 2 is rejected (p<.05). There was a statistically significant shift in reading

levels from pre- to -post. For example, five out of six students who tested at the kindergarten

level on the pre-test were at the first-grade level on the post-test. Overall, half of the students

moved up one grade level in reading between the pre- and post-assessment, while no students

tested at a lower grade level on the post-assessment.

Table 5

Null Hypothesis 3: There is no population relationship between time on task and Fountas &

Pinnell Benchmark Assessment System Reading Levels

```
+-------------+
|   Key       |
|-------------|
|   rho       |
| Sig. level  |
+-------------+
```

```
             |  TOTpre   TOTpost   Nfppre   Nfppost
-------------+----------------------------------------
      TOTpre |  1.0000

     TOTpost |  0.6370*   1.0000
             |  0.0005

      Nfppre | -0.1429    0.0140   1.0000
             |  0.4861    0.9461

     Nfppost | -0.2696   -0.0559   0.8033*   1.0000
             |  0.1830    0.7864   0.0000
```

Null Hypothesis 3 cannot be rejected at p<.05 for a statistically significant relationship between time- on- task and Fountas & Pinnell Benchmark Assessment System reading grade levels. Because Fountas & Pinnell Benchmark Assessment System uses categories of reading levels, the non-parametric Spearman's Rho correlation was used in place of the Pearson correlation.

For all the tests of the null hypotheses, the population is theoretical and refers to all classrooms that would be similar to the class used in the current study. The similarities include grade, demography, ability, pre-treatment reading achievement, behavior, pre-treatment time- on- task, and relevant teacher characteristics.

In summary, from the pre- to post-treatment, students had statistically significant time on task improvement with an average gain of seven minutes out of an hour of classroom instruction. The seven-minute game translated to a medium effect size using Cohen's Delta statistic. Also, half of the students moved to a higher reading grade level, and no students declined from the pre- to post-treatment. The shift was statistically significant. With, there were no statistically significant correlations between time on task and reading grade levels post treatment.

CHAPTER V

DISCUSSION

The study tested whether there is a relationship between the level of intrinsic motivation and academic achievement. The null hypothesis states that there is no relationship between the level of intrinsic motivation and academic achievement. Intrinsic motivation was measured by the students' time on task from pre- to post-treatment. There was a significant gain in the students' time on task with the treatment. Academic achievement was tested using the Fountas & Pinnell Benchmark Assessment System. There was also a statistically significant gain in the students' reading levels from pre- to post-treatment. However, there was no statistically significant relationship between time on task and reading achievement. Therefore, the main null hypothesis cannot be rejected at the customary 5% level of statistical significance.

Implications of Results

The implications of the results show there is no significant correlation between intrinsic motivation, as measured by time- on- task, and academic achievement, as measured by Fountas & Pinnell Benchmark Assessment System. The students' time on task improved by an average of seven minutes from pre- to post-treatment. When looking at the Fountas & Pinnell Benchmark Assessment System data, the students either moved to a higher reading grade level or stayed the same from pre- to post-treatment. However, there were no statistically significant correlations between time on task and reading grade levels after the treatment occurred.

Theoretical Consequences

The treatment required the researcher to give positive and meaningful feedback to the students. With the treatment in place, the time on task improved. Time on task is a characteristic of intrinsic motivation. With the treatment in place, and the improvement of time on task, half of

the population gained a reading grade level, and half stayed the same. With, the gains were not associated with a statistically significant relationship between the level of intrinsic motivation and academic achievement.

Threats to Validity

One threat to validity in this study was selection bias. The population used was not chosen randomly. The students were selected conveniently. The population consisted of students in the researcher's second-grade class. Another threat comes from this convenient sample being a smaller size. This sample was all the same age and in the same class with the same teacher.

Aside from the chosen sample being bias, another threat to validity was the time the students were given the Fountas & Pinnell Benchmark Assessment System. The teacher performed the treatment; however, other instruction did occur in between the pre- and post-Fountas & Pinnell Benchmark Assessment System. This could have also been the cause of the gain in reading grade levels.

Connections to Previous Studies/Existing Literature

Intrinsic motivation is lacking in more and more students in the classroom. Many teachers are considering how to raise this intrinsic motivation and how it can help in the students' academics. A previous study shows that intrinsic motivation in children can assist them in academic achievement (Dev, 1997). This article suggests motivational tactics that educators can be aware of to assist the students in gaining intrinsic motivation. Another study showed that intrinsically motivated students would perform better when the adult in the situation had learning autonomy (Knollmann & Wild, 2007). Froiland et al. (2012) state that intrinsic motivation is similar to the Self Determination Theory. In other words, improvements in academics can take place. Students who are intrinsically motivated want to learn more about topics that they find

interesting. This relates to academic achievement. The students who acquire intrinsic motivation have a high sense of conceptual learning, memory, and higher achievement overall.

Another study suggests ways to increase intrinsic motivation that led students to academic achievement (Osborne & Jones, 2011). When the students receive feedback specific to academics, their self-concept and intrinsic motivation increase. Teachers can encourage success and intrinsic motivation by providing feedback that is constructive about their goals. Teachers should also use language that provides support for the students.

One other study says that intrinsic motivation for academic engagement is preferred over extrinsic motivation (Williams & Stockdale, 2004). Students who are intrinsically motivated are more likely to perform academically. The teacher's praise and feedback encourages students' achievement to continue. The presence of intrinsic motivation causes students to achieve without outside motivation. This article also states that praise from a teacher increases intrinsic motivation (Williams & Stockdale, 2004).

Implications for Future Research

There are other studies that can be conducted to further this study. The researcher should compare two or more different classes. One class would have a teacher actively performing a treatment to increase students' intrinsic motivation. The teacher of the other class would not actively try to increase the intrinsic motivation of the students. The researcher would then compare the Fountas & Pinnell Benchmark Assessment System data of the two different classes.

The researcher could also provide a questionnaire to help measure intrinsic motivation and academic achievement. The questionnaire could ask questions such as, "Is reading important?" This would obtain student input and give the researcher more insight on the level of intrinsic motivation.

Conclusion

The purpose of this study was to determine whether there is a relationship between intrinsic motivation and academic achievement. The data determined there was growth in the students' time on task. The data also showed that the students' Fountas & Pinnell Benchmark Assessment System grade levels increased or stayed the same. However, there was no significant correlation between intrinsic motivation and academic achievement. During the treatment, the students responded well to the feedback. It seemed to cause them to believe in themselves. If intrinsic motivation is decreasing as the years go on, it is important for teachers to have a strategy that supports the growth of intrinsic motivation within their students.

References

Bieg, S., Backes, S., & Mittag, W. (2011). The role of intrinsic motivation for teaching, teachers'
care and autonomy support in students' self-determined motivation1/zur rolle von
intrinsicher lehrmotivation, lehrerfürsorglichkeit und autonomieunterstützung für die
selbstbestimmte lernmotivation von schülerinnen und schülern. *Journal for Educational
Research Online*, *3*(1), 122-140. Retrieved from http://goucher.idm.oclc.org

Cartwright, K. B., Marshall, T. R., & Wray, E. (2016). A longitudinal study of the role of reading
motivation in primary students reading comprehension: Implications for a less simple view of
reading. *Reading Psychology*, *37*(1), 55-91. https://doi.org//10.1080/02702711.2014.991481

Dev, P. C. (1997). Intrinsic motivation and academic achievement. *Remedial & Special
Education, 18*(1), 1-12. Retrieved November 1, 2017, from
https://goucher.idm.oclc.org/login?url=http://search.ebscohost.com.goucher.idm.oclc.org/
login.aspx?direct=true&db=a9h&AN=9702174749&site=ehost-live&scope=site

Froiland, J. M., Oros, E., Smith, L., & Hirchert, T. (2012). Intrinsic motivation to learn: The
nexus between psychological health and academic success. *Contemporary School
Psychology*, *16*, 91-100. Retrieved from http://goucher.idm.oclc.org

Heinemann, & Houghton Mifflin Harcourt (Eds.). (n.d.). *Research*. Retrieved April 4,
2018, from http://www.fountasandpinnell.com/research/default#bas

Knollmann, M., & Wild, E. (2007). Quality of parental support and students' emotions during
homework: Moderating effects of students' motivational orientations. *European Journal
of Psychology of Education - EJPE (Instituto Superior De Psicologia Aplicada)*, *22*(1),
63-76.

Lau, K.L. (2009). Grade differences in reading motivation among Hong Kong primary and

secondary students. *British Journal of Educational Psychology*, *79*(4), 713-733.

Retrieved from http://goucher.idm.oclc.org

Law, Y.K. (2009). The role of attribution beliefs, motivation and strategy use in Chinese

fifth-graders' reading comprehension. *Educational Research*, *51*(1), 77-95. https://doi.org/

10.1080/00131880802704764

Osborne, J. W., & Jones, B. D. (2011). Identification with academics and motivation to achieve

in school: How the structure of the self influences academic outcomes. *Educational*

Psychology Review, *23*(1), 131-158. https://doi.org/10.1007/s10648-011-9151-1

Sawilowsky, S. (2009). New effect size rules of thumb. *Journal of Modern Applied*

Statistical Methods, *8*(2), 467-474.

Williams, R. L., & Stockdale, S. L. (2004). Classroom motivation strategies for prospective

teachers. *The Teacher Educator*, *39*(3), 212-230. Retrieved from http://goucher.idm.oclc.org

You, S., Dang, M., & Lim, S. (2015). Effects of student perceptions of teachers' motivational

behavior on reading, English, and mathematics achievement: The mediating role of domain

specific self-efficacy and intrinsic motivation. *Child & Youth Care Forum*, *45*(2), 221-240.

https://doi.org/10.1007/s10566-015-9326-x