THE IMPACT OF READING ACHIEVEMENT ON STANDARDIZED TESTING

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Submitted To

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Submitted in Fulfillment for the Requirements for
61-683 Research Paper

Fall 2011

July 10, 2012
Abstract

One of the most important skills needed to thrive in today’s society is becoming an effective and proficient reader. Reading is a fundamental skill for becoming a strong student, accurate test taker, and achieving professional success. In this study, 151 fourth through eighth grade students from a private school were studied to examine if their reading habits, test scores, and motivation could predict their overall performance on a standardized test. There were 75 females and 76 males that participated in this study. The students responded to a reading motivation scaled question late in the school year before completing the standardized test. Individual students’ reading data was tracked throughout the school year with the computer-based programs, Accelerated Reader and STAR Reading Assessment. This study shows that students with high motivation to read and with high ITBS Reading Total scores, STAR scores, and Accelerated Reader can be predicted to score equally as high on the ITBS Composite.
Introduction

*Background, Issues and Concerns*

According to the NAEP, around 40% of students are being classified as non-readers. The education system must do something to move more students to becoming proficient readers. No Child Left Behind (NCLB) was created in 2001 to focus on some of the major problems in our education system today. NCLB includes new responsibilities and requirements for states, school districts, and schools. It will encourage national reading progress if educators can bring together proven methods to make sure that each and every child becomes a successful reader. NCLB requires that students’ progress is monitored and tracked throughout the year to indentify problem areas and trends. There are many instruments that are used to assess reading ability in elementary classrooms today. Two popular instruments are the STAR Reading Enterprise and the Accelerated Reader Enterprise. These two programs are online tests that are created by Renaissance Learning. As the education system works toward using online assessments, it is getting easier to track data and locate trends. By tracking 151 4th-8th grade students’ reading scores, it was determined if these two programs and individual students’ motivation can determine a student’s result on the ITBS.

*Practice under Investigation*

It was determined if the ITBS Reading Total score, STAR Reading Assessment results, and the amount of Accelerated Reader points earned can predict an intermediate student’s score on the ITBS Composite. Personal reading habits were investigated as well to determine if there is a relationship between minutes of daily engaged reading and motivation to read with the ITBS Composite score.
School Policy to be Informed by Study

After analyzing the results of the study, the effectiveness of the STAR Reading Assessment and Accelerated Reader program was revealed. It was determined if these two programs can be used to identify which students need additional instruction prior to taking the ITBS to advance them to becoming proficient test takers. It was also determined if individual reading habits are related to high-stakes test scores. Programs that prove to be successful predictors and strong reading habits make it possible to help raise school wide standardized test scores.

Conceptual Underpinning

Research shows that children who read well in the early grades are far more successful in later years. It is essential that children develop into skilled readers after finishing their third grade year of school. Competent readers often take advantage of the opportunities that they are presented with and are confident students. When students are successful readers, they easily transition their success to the other content areas. When students do not become proficient readers, they can be faced with many obstacles. Non-readers are more likely to drop out of school and more likely to not experience success in their career. Reading is also an essential skill for elementary students because of the popularity of high stakes testing in the modern education system. Testing provides quick and reliable information on a student’s academic performance. When students are not strong readers, they often fail to perform proficiently on all content areas of standardized tests. While some professionals think that too much focus is put toward high-stakes testing, it is a necessary component of our educational system. In order for students to experience academic success, they must become skillful
Readers. Reading is a central skill that can ensure success. Teachers can use each individual student’s reading data to help predict their standardized test scores and even the amount of success throughout their academic career. They can use this data to help students improve specific areas of reading. From the additional amount of early support given to students when they are learning to become skillful readers, it is helping them improve as high-stake test takers for the rest of their academic career. From the information found in this study, it essential for teachers to use reading data to predict their students’ test scores so that they are able to create the equal opportunity of success for all students.

Statement of the Problem

Teachers need an accurate picture of their students’ reading strengths and weaknesses when considering performance on standardized tests. To do this, teachers need an instrument to predict the amount of students that will perform in the proficient level when taking a standardized test.

Purpose of the Study

The purpose of the stepwise regression analysis was to determine the relationship between independent variables (ITBS Reading Total, STAR Reading Assessment, and Accelerated Reader points) with the dependent variable (ITBS Composite) from 151 4th-8th grade students. These independent variables, which have been acquired throughout the school year, were studied to determine if specific reading instruments influence the students’ performance and predict their results on the ITBS Composite. Two correlation matrixes were conducted to determine if students’ individual reading habits can influence their ITBS Composite score. The purpose of the correlation matrixes was to determine if a relationship
exists between the independent variables (motivation to read and minutes spent reading) with
the dependent variable (ITBS Composite.)

Research Questions

1. Can independent variables (ITBS Reading Total, STAR Reading Assessment, and
   Accelerated Reader points earned) predict a dependent variable (ITBS Composite
   score)?

2. What can best predict the score of the ITBS Composite: ITBS Reading Total, STAR
   Reading Assessment, or number of Accelerated Reader points earned?

3. Is there a relationship between the amount of time students spend individually reading
   and their motivation to read with their ITBS Composite score?

Null Hypotheses

1. The ITBS Composite score cannot be predicted from the ITBS Reading Total score, STAR
   Reading Assessment score, and amount of Accelerated Reader points earned.

2. There is not a relationship between the ITBS Composite score and the amount of time
   each student spends engaged in independent reading.

3. There is not a relationship between the ITBS Composite score and a student’s
   motivation to reading.

Anticipated Benefits of the Study

By examining the results of the correlation matrixes and the multiple regression study
on the best predictor of the ITBS Composite score, teachers will be able to predict the amount
of students that will perform in the proficient level when taking the standardized test. Teachers
will be able to identify which students will need additional help prior to taking the ITBS to advance them toward becoming proficient test takers and successful readers.

Definition of Terms

Accelerated Reader Enterprise-- A cost-effective and successful reading software that provides frequent progress monitoring and produces reading improvement.

Accelerated Reader Points-- The amount of points that students receive from reading books with a set point level and taking a comprehension test.

Engaged Minutes Reading-- The average amount of minutes that students spend reading based on Accelerated Reader data.

Iowa Test of Basic Skills-- (ITBS)-A group administered achievement test that provides a comprehensive assessment of student progress in the major content areas.

ITBS Reading Total-- The combined scores of the Vocabulary and Reading Comprehension sub tests.

Motivation to Read-- The desire found within each child that persuades a student to individually read.

Renaissance Learning-- A provider of technology-based student assessment programs for K-12 schools.

Standardized Test-- A test that is administered and scored in a consistent manner.

STAR Reading Enterprise-- STAR Reading Enterprise assessments offer skills-based testing and reports that provide data for screening, instructional planning, progress monitoring, and standards benchmarking.
Summary

Two popular online assessments that measure the strengths and weaknesses of student’s reading abilities are STAR Reading Enterprise and Accelerated Reader Enterprise. These two programs were created by the company, Renaissance Learning. The effectiveness of these two online reading programs were studied and evaluated. It was determined if a student’s results on the ITBS Reading Total, STAR reading assessment, and Accelerated Reader points influenced the students’ performance and predicted their future results on the ITBS Composite test. It was also determined if a student’s motivation to read and amount of time spent reading showed a relationship with the ITBS Composite score. Because reading is a necessary skill to be an effective test taker, it was shown that being a good reader can influence each subtest of the ITBS. A rich sample of 151 students was used for this study. The results of this study can enable teachers to predict the amount of students that will perform in the proficient level when taking the standardized test. Therefore, teachers can provide additional help in needed areas to advance students to perform in the proficient level when taking standardized tests.
Review of Literature

In 2002 the National Assessment of Education Progress (NAEP) administered an oral reading test to fourth-grade students to measure their oral reading skills. Approximately 40% of the nation's fourth-grade students were "non-fluent" readers (National Center for Education Statistics, 2002). Data analyses showed a strong correlation between oral reading fluency and reading comprehension. Students who were more fluent readers scored higher on standardized tests. Based on these NAEP scores, many students are not just scoring low in oral reading fluency, but in reading comprehension, as well. Unfortunately, less fluent readers often fall behind in standardized testing, educational achievement, and vocational success. Today's high-stakes testing is gaining more importance than it has in the past. Because of the No Child Left Behind law, schools are forced to show adequate yearly progress (AYP) in order to receive benefits from the federal government (Hirsch, 2006). Hirsch continues to write that although AYP is very difficult for schools to achieve, it is “praiseworthy inducement to fairness and accountability” (Hirsch, 2006, p. 97). High-stakes testing is essential to hold schools accountable for their quality of education and provides immediate feedback to administrators, teachers, students, parents, and the community about the progress that today’s youth is making. Critics of this testing suggest that it is “distorting education and there is an overemphasis on tests and accountability” (Hirsch, 2006, p. 97). While education has transformed to teaching-for-the-test, Hirsch writes that standardized testing is essential to keep track of each student’s educational progress while helping teachers work together to build upon skills as students travel through the education system (Hirsch, 2006). When parents receive their child’s standardized test results, what can they decipher from the test rather than just national percentile rank or a
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standard of proficiency? Hirsch writes that the Iowa Test of Basic Skills is a highly reliable and valid test. The test has proven to have such high accuracy, that it has the ability to measure real-world competencies (Hirsch, 2006). Standardized tests can predict future test scores, grades, and job performance and income (Hirsch, 2006). It is apparent why so much pressure is applied to today’s high-stakes testing, but how can teachers fully prepare students to achieve highly on these tests? In order for students to achieve on standardized tests, they must be strong readers that read a wide variety of texts over a large number of topics. Students must be knowledgeable about a wide array of subjects in order to have the schema to comprehend standardized test passages (Hirsch, 2006). With approximately 40% of our nation’s youth being classified as non-fluent readers, how will these students be able to be successful during high-stakes testing?

Stanley and Stanley agree with Hirsch when they say that, “the importance... of successful achievement on high-stakes test in reading... cannot be understated,” (Stanley and Stanley, 2011, p. 99). Because of the pressures in high-stakes testing, educators are continuing to search for ways to help improve students’ performance. It would be useful for educators to have a valid way to predict students’ scores so that they could help them in areas of reading deficiencies (Stanley and Stanley, 2011). Stanley and Stanley participated in a comprehensive research project that predicted the Florida Comprehensive Assessment Test (FCAT) by using the Reading-Level Indicator test (Stanley and Stanley, 2011). The Reading-Level Indicator is a 10-15 minute written test that can easily be scored by a teacher. The Reading-Level Indicator measures a student’s ability on sentence comprehension and vocabulary (Stanley and Stanley, 2011). After Stanley and Stanley completed a multiple-regression analysis, they found that the
Reading-Level Indicator could be used as a screening tool to help better prepare students to participate in high-stakes testing. These results proved to be similar to other studies carried out by Bennicoff-Nan, 2002 and Knutson, 2006. Because of its simplicity, educators can easily implement the Reading-Level Indicator into their curriculum to help identify areas of strengths and weaknesses so that they may modify their instruction to help better meet each student’s needs (Stanley and Stanley, 2011).

While Stanley and Stanley have a high regard to using a short reading placement test, such as the Reading-Level Indicator, Boucher feels that these tests “simply don’t deliver on their promises,” (Boucher, 2005, p. 23). Boucher writes that currently there is a push for using scientific programs. He feels that these reading programs are making teachers become less effective because they are scripted and leave no room for flexibility and creativity. Boucher has experience and wrote about the STAR test from Renaissance Learning Inc. He wrote about information that he found on the Renaissance Learning website. He wrote that Renaissance Learning claimed that this program promises that “it will give you accurate, reliable, norm-referenced scores immediately” (Boucher, 2005, p. 22). After Boucher administered the STAR test and the CAT 6 standardized test, he found that there was little correlation between the two tests. Boucher wrote that the STAR program was detrimental to teachers’, students’, and parents’ already low self esteem. Boucher pleads that teachers should stay away from the “slick presentations and miraculous claims” of commercial reading products (Boucher, 2005, p. 23). Teachers must stay current and well informed of literacy best practices and use their creativity and passion to drive their instruction.
Many educators have used Renaissance Learning for the basis of their independent reading program and have experienced much success. Pfeiffer, an educator in Kansas, wrote about the successes and honors that her district has gained since adopting Accelerated Reader into their literacy curriculum. Pfeiffer and her colleagues are advocates of Accelerated Reader because it supports individualization. Pfeiffer wrote that, “Accelerated Reader is based on individual guided reading practice, which allows readers to work at their own levels and choose books that reflect their own interests” (Pfeiffer, 2011, p. 61). Other professionals agree with Pfeiffer on the value of Renaissance Learning’s computer-based reading programs. Cregar wrote that Accelerated Reader is “advanced technology for data-driven schools,” (Cregar, 2011, p. 41). The Accelerated Reader program consists of students choosing books that are in their zone of proximal development. Once they have finished the book, they take a computer based quiz that can range from 5 to 20 questions. The student is then awarded points according to how many questions they answered correctly. Accelerated Reader is a program that can gauge reading comprehension and track reading improvement (Cregar, 2011). Accelerated Reader is in many school districts as their supplementary or primary reading program. It has reached to as many as 50,000 schools (Pavonetti, Brimmer, Cipielewski, 2003). Accelerated Reader was created in 1986 and has been called, “the world’s most popular reading management software,” (Pavonetti, Brimmer, Cipielewski, 2003, p. 301). Accelerated Reader works because it is research-based and is focused around free-choice, not a scripted program. Students that are achieving with the Accelerated Reader program are also the students that are achieving during state high-stakes testing. Pfeiffer found that students that acquired 20 AR points each quarter consistently scored well on the state standardized assessment (Pfeiffer, 2011). To back up this
finding, Pfeiffer quoted Tim Shanahan, “students are just getting a lot of testing practice” (Pfeiffer, 2011, p. 62). Pavonetti, Brimmer, and Cipielewski found that because reading is a fundamental skill, it affects all other content areas when completing standardized tests. The researchers also found that being a successful reader also affects attendance and self esteem (Pavonetti, Brimmer, Cipielewski, 2003). Kathryn Solley is also an advocate for the implementation of Accelerated Reader program in the elementary grades. Solley wrote that the effectiveness of this program depends on the way that teachers are utilizing this program. Without proper training on how to use the program, Accelerated Reader is often found as unsuccessful because no student progress was witnessed. Solley believes that students learn by creating a foundation of increasing levels of comprehension (Solley, 2011). Accelerated Reader gives students a foundation and can make a difference in the reading success of a child (Solley, 2011). Franklin and Stephens agree that computer-based reading programs, such as Accelerated Reader and Reading Counts, are a huge part of current reading curriculum (Franklin and Stephens, 2006). The reason for the popularity of computerized reading programs is the theory that persistence practice will improve results (Franklin and Solley, 2011). There are many reading professionals that support and disagree with computerized reading programs. Supporters of the program value the freedom of choice and improved attitudes toward reading, while other professionals believe that these programs turn reading into a reward based competition. Although there are different opinions from reading professionals, computerized reading programs, such as Accelerated Reader, are here to stay (Franklin and Stephens, 2006).

While reading in school is important to students’ academic achievement, it is also important that students are intrinsically motivated readers inside and outside of school.
Gambrell writes that the definition of motivation to read is the “likelihood of engaging in reading or choosing to read,” (Gambrell, 2011, p. 5). Unfortunately, according to the National Assessment of Educational Progress 2005 study, a substantial majority of fourth grade students are not intrinsically motivated to read (Gambrell, 2011). “Most educators agree that motivating students to read is one of the critical tasks of teaching,” (Mucherah and Yoder, 2008, p. 214). Mucherah and Yoder conducted a study where they found that students who valued reading, challenged themselves as readers, and enjoyed reading were more successful when completing high-stakes tests (Mucherah and Yoder, 2008.) While researching, it was found that middle school students who spend at least 6 hours per week reading did better academically and students who are less motivated to read are less likely to spend time challenging themselves with their school work. (Mucherah and Yoder, 2008). “Schools that invest in programs designed to increase students’ involvement in reading have students who perform better on reading comprehension tests,” (Mucherah and Yoder, 2008, p. 215). Mucherah and Yoder also found in their research that students who have low motivation to read and only read for social reasons did not score high on high-stakes tests (Mucherah and Yoder, 2008). Duncan agrees that students must be motivated to read and she writes about the importance of teachers instilling a lifelong love of reading. Duncan writes that within all the everyday tasks required of teachers, they must remember to “help cultivate one of the most important habits that they can possess: the practice of regular reading,” (Duncan, 2010, p. 90). People who read frequently acquire stronger literacy skills and tend to lead a healthier, active life (Duncan, 2010). Most importantly, when students become lifelong readers they become lifelong learners by possessing the skill of reading to learn (Duncan, 2010). Duncan writes that in order to instill the love of reading to
students, teachers must be a reading model, give students choices, provide reading time, provide access to materials, read aloud, provide opportunities to connect, and keep reading fun (Duncan, 2010). If educators cannot not instill the love of reading and students are not motivated to read, they will never reach their full literacy potential (Gambrell, 2011). Teachers must work to create classrooms that encourage and motivate students to read. This will help build the foundation to turn unmotivated readers into lifelong readers (Gambrell, 2011).
Research Methods

Research Design

Online test data was analyzed in this study to examine relationships between reading habits and reading achievement. Data was collected over the 2011-2012 school year from 151 intermediate private school students and analyzed using two correlation matrixes and a stepwise multiple regression analysis. In the results of the stepwise regression analysis, it was determined if a student’s results from the STAR reading assessment, ITBS Reading Total, and Accelerated Reader program can predict their score on the ITBS. In this stepwise regression analysis, the independent variables are the STAR reading assessment, ITBS Reading Total, and Accelerated Reader information and the dependent variable is the composite score on the ITBS. Additionally, a correlation matrix was used to determine if there was a relationship between personal reading habits and motivation with the ITBS. In this correlation matrix, the independent variables are the personal reading habits and motivation and the dependent variable is the ITBS composite score. Overall, this data can determine if being a good reader is essential to being a strong high-stakes test taker.

Study Group Description

A large sample of 151 4th–8th grade students was used in this study. These students attended a private catholic school in a suburban mid-western city. This suburban city is located 15 miles north of Kansas City, Missouri. The private school had very low diversity with 96% of the students being of Caucasian decent. Of the 151 students, one student is diagnosed with a learning disability and had modifications when completing the standardized test.
Data Collection and Instrumentation

Data was collected from 151 4th–8th grade students to study the predictability factors of standardized tests. The data from the independent variables was collected from the Renaissance Learning program, specifically STAR Reading Enterprise and Accelerated Reader Enterprise. A short reading survey was given to the students to gauge their level of motivation to read. The data from the dependent variable was collected from the ITBS. This standardized assessment was published by Riverside Publishing, which is part of Houghton Mifflin Harcourt.

Statistical Analysis Methods

A multiple regression analysis was performed to learn about the relationship between multiple independent variables (ITBS Reading Total, STAR Reading Assessment, Accelerated Reader points) with the dependent variable (ITBS Composite score) with 151 4th-8th grade students. Two correlation matrixes were completed to discover if independent variables (motivation to read and average daily minutes spent reading) related with the dependent variable (ITBS Composite score.)
Findings

Table 1: Stepwise Regression Analysis for ITBS Reading Composite, STAR Reading Assessment, and Accelerated Reader Points Earned vs. ITBS Composite Score

Model: ITBS Composite = 0.62 ITBS Reading Total + 0.18 STAR + 0.02 AR Points Earned + 13.83

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<th>Source</th>
<th>Beta Coef.</th>
<th>R²</th>
<th>SEE</th>
<th>F</th>
<th>p-value</th>
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<tr>
<td>AR Points</td>
<td>0.02</td>
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| Alpha = 0.25 |

A rich data base of 151 data points was used to conduct a multiple stepwise regression analysis to find if a student’s ITBS Composite score can be predicted from the results of their ITBS Reading Total score, STAR Reading Assessment score, and the amount of Accelerated Reader points that they have earned. Research was done to find the best predictive model for the ITBS Composite score. The null hypothesis used for this study was: The ITBS Composite score cannot be predicted from the ITBS Reading Total score, STAR Reading Assessment score, and amount of Accelerated Reader points earned. The data showed that the constant Beta Coefficient was 13.83, the ITBS Reading Total Beta Coefficient was 0.62, the STAR Beta Coefficient was 0.18, and the Accelerated Reader Points Beta Coefficient was 0.02. With this data, the regression model that the researchers have discovered is that for every 1 point increase on the ITBS Composite, the ITBS Reading Total will increase 0.62, the STAR will increase 0.18, and the Accelerated Reader Points will increase by 0.02.
The model power of the multiple stepwise regression showed moderate to strong power and accuracy. The value for R-Squared was .82. The value for $R^2$ must be 10% or higher to indicate practicality. This value accounted for 82% of the variance; therefore, it is strongly practical. The value for the standard error of estimate was 8.69. This number showed a very weak accuracy. The data is accurate above or below 8.69 points at 1 standard deviation. When studying the model power, it can be concluded that there was strong practicality with weak accuracy.

The model significance of the multiple stepwise regression was very strong. It was very significant based on the F-value and the P-value. The F-value of was 216.12. This number is a very high relative value when compared to zero. The P-value was 1.10971E-53. This number is significantly lower than the Alpha Level of 0.25. The P-value proved that there was no chance for a Type-I error. When studying the model significance, it was concluded that the null hypothesis was rejected: The ITBS Composite score can be predicted from the ITBS Reading Total score, STAR, and amount of Accelerated Reader points earned. It was forecasted that a student that scored a 61 on the ITBS Reading Total, 56 on the STAR, and acquired 68.6 Accelerated Reader points will receive a 63.6 on the ITBS Composite. The analysis showed that the ITBS score may fall anywhere between 46.3317 and 80.8551.

Conditions:

- Confidence Limits = 95
- ITBS Reading Total = 61
- STAR = 56
- Accelerated Reader Points Earned = 68.6
- Forecast = 63.5934
The Impact of Reading Achievement 20

Lower = 46.3317

Upper = 80.8551

Table 2: Correlation Study ITBS Composite vs. Daily Minutes Reading

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<th>Mean</th>
<th>r</th>
<th>R²</th>
<th>p-value</th>
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<tr>
<td>ITBS Composite</td>
<td>151</td>
<td>68.93</td>
<td></td>
<td></td>
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<tr>
<td>Motivation to Red</td>
<td>151</td>
<td>37.04</td>
<td>0.216</td>
<td>4.7%</td>
<td>0.00783934</td>
</tr>
</tbody>
</table>

Alpha = 0.25

The correlation matrix above was used to test the relationship between the amount of time a student spends engaged in reading each day to their ITBS Composite score. The null hypothesis that was tested states: There is not a significant relationship between engaged time spent reading and ITBS Composite scores. The matrix above demonstrated the following results. The average ITBS Composite score was 68.93. The average amount of time that students spend engaged in reading each day is 37.04. The coefficient of correlation was 0.216. This showed a very weak relative strength of relationship. The coefficient of correlation was positive which showed that there was a direct relationship. The variables moved in the same direction, which means: when amount of time spent reading increases, the ITBS Composite scores increase and when amount of time spent reading decreases, the ITBS Composite scores decrease. The percentage for R² was 4.7%. The value for R² must be 10% or higher to indicate practicality. This means that the information from the study is not practical. The p-value for this study was 0.008. In order to show significance in relationship, the p-value must be equal to or less than 0.25. Because the p-value of 0.008 was less than the set Alpha Level of 0.25, there is a significant relationship between time spent reading and ITBS Composite scores. The amount of
time that students spend engaged in reading does determine their ITBS Composite scores.

After examining the results of this study, it was concluded that the null hypothesis was rejected. There was is a significance relationship between the amount of time students spend reading and their ITBS Composite score.

Table 3: Correlation Study ITBS Composite vs. Motivation to Read

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>r</th>
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<td>ITBS Composite</td>
<td>151</td>
<td>68.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation to Red</td>
<td>151</td>
<td>2.77</td>
<td>0.649</td>
<td>42.1%</td>
<td>1.98676E-19</td>
</tr>
</tbody>
</table>

Note significance = or < .25

The correlation matrix above was used to test the relationship between students’ motivation to read and their ITBS Composite scores. The null hypothesis that was tested states: There is not a significant relationship between motivation to read and ITBS Composite scores. The matrix above demonstrated the following results. The average composite score on the ITBS was 68.93. The average ranking on the reading motivation was 2.77. The coefficient of correlation was 0.649. This showed a moderate relative strength of relationship. The coefficient of correlation was positive which showed that there was a direct relationship. The variables moved in the same direction, which means: when motivation to read increases, the ITBS Composite score increases and when motivation to read decreases, the ITBS Composite score decreases. The percentage for R² was 42.1%. The value for R² must be 10% or higher to indicate practicality. This means that the information from the study is practical. The p-value for this study was 1.98676E-19. In order to show significance in relationship, the p-value must be equal to or less than 0.25. Because the p-value of 1.98676E-19 was much less than the set Alpha Level
of 0.25, there is a significant relationship between motivation to read and ITBS Composite scores. The students who have a higher motivation to read achieve higher results in the ITBS Composite and the students who have a lower motivation to read score lower on the ITBS Composite. After examining the results of this study, it was concluded that the null hypothesis was rejected. There is a significance relationship between motivation to read and the ITBS Composite score.
Conclusions and Recommendations

The findings of this multiple stepwise regression show significant results on the predictability of the ITBS Composite score based on the ITBS Reading test, STAR test, and Accelerated Reader points acquired. From this study, it can be determined that reading is a fundamental and essential skill that can predict successful scores on standardized tests. In order for students to be able to achieve proficiently on standardized tests, they need to be able to fluently read and comprehend test material. Students that read often and read a wide range of text will have acquired an extensive amount of background knowledge that will help students better comprehend test questions. Educators can track data from reading assessments and programs to help identify students who need extra support to test in the proficient level in standardized testing. When comparing all of the independent variables and their levels of predictability of the ITBS, the ITBS Reading tests score is the most accurate measure. When looking at a student’s ITBS Reading score, an ITBS Composite score can be predicted. This proves that reading is a skill that is needed to achieve throughout the entire ITBS test. The next best predictor of the ITBS Composite score was the STAR reading assessment. This information can be used throughout the entire year to predict the results of the end of the year standardized assessment. Teachers can use this data to help students that are predicted to perform “not proficient” on the ITBS. By giving these students supplemental reading support, it was found that ITBS results will improve. The last independent variable that was tested was the amount of Accelerated Reader points acquired. This study showed the least amount of predictability. This can be understood by acknowledging that Accelerated Reader is not a
regular assessment and that students have found ways to “trick” the program so that they can receive a certain number of points to obtain a grade.

Two correlation matrixes were conducted to find if there is a relationship between the amount of time spent reading and the amount of reading motivation with the ITBS Composite score. These studies found that there is a significant direct relationship with both independent variables. It was proven that students who are motivated and spend a significant amount of time reading will score higher on their overall ITBS Composite score.

The results conducted from this study prove that reading is an essential skill that must be mastered to ensure academic and vocation success. Teachers must not only teach students how to read, but also how to love reading. Students must make reading a top priority in their lives so that they obtain the background knowledge and skills to reach their fullest potential during standardized testing and post-academic life. Gambrell included a quote by Carol Minnick Santa that teachers must remember when helping instill a love of reading into today’s youth, “It is not enough to teach children to become readers and writers; we want children to leave our school with the continuing desire to read, write, and learn. Our task is to pursue this vision so that it becomes a reality.” Teachers possess the power to turn children into readers. The results from this study show how important a teacher’s job is to turn the vision of No Child Left Behind reading standards into a reality.
References


