The Relationship Between Motivation and Reading Comprehension

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THE RELATIONSHIP BETWEEN MOTIVATION AND READING COMPREHENSION

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MASTERS THESIS
Submitted to the Graduate Faculty of the School of Education
Grand Valley State University
Advanced Studies in Education
In partial fulfillment of the Degree of Master of Education

April, 2000
ACKNOWLEDGMENTS

The completion of this Masters thesis would not have been possible without the support of my wife, Cynthia J. Knoll and our three children, Alex, Julie and Jefferson. I would also like to acknowledge the voluntary help of my 3\textsuperscript{rd} and 8\textsuperscript{th} hour English 10 students. They were instrumental in the study itself and provided me with the incentive to learn more as a teacher.

Christopher L. Knoll
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ABSTRACT

This study is an exploration of the relationship between motivation and reading comprehension in tenth grade English/language arts students. The fifty-five voluntary participants were tenth grade students at West Ottawa High School in Holland, Michigan. They were given a short story to read and then a short test for motivation and a reading comprehension quiz were administered. Both assessment tools were then scored and the results analyzed, using the Pearson $r$ to measure the significance of the coefficient. The resulting correlation (0.73) between motivation and reading comprehension indicates that there is indeed a strong relationship between the two variables. This strong relationship seems to indicate that a focus upon the motivation of students with low reading scores would be beneficial to those individuals.
CHAPTER ONE: THESIS PROPOSAL

Problem Statement

Students with low motivation to achieve in school most likely also have very low reading comprehension. Whether the focus of an approach is directed at parents, teachers, students, or some other influence such as the curriculum or choice of text, there has always been a critical area of attention for reading comprehension. That area is the motivation of students. It seems that teachers are constantly striving to find ways to motivate children to read (McNinch, 1997). It has been suggested that building motivation is an essential step in developing children who will turn into readers (Anderson, et al., 1985). One cannot expect students to comprehend printed material if they have not read that material. It is just as unreasonable to expect them to want to read without any motivation.

When students are highly motivated to read, the likelihood that they will comprehend the reading material increases. Additionally, since a lifelong love of reading is a highly desired outcome of reading instruction (Johns and VanLeirsburg, 1994), there must be some initial motivation fueling that love of reading. Over the past twenty years, there have been many different models of reading instruction put forth, yet few of these
methods take into account the importance of motivation.

In fact, a large majority of the “solutions” or attempts at improving reading comprehension seem to focus too heavily on the mechanics of reading without delving into the emotional or psychological aspects. For veteran classroom teachers, the link between good motivation to succeed and high reading comprehension may be too obvious to bother with. Yet, without the statistical data to back up their “gut instincts” about student readers, many teachers may be focusing on the wrong area for improvement.

Due to the difficulties in determining what can intrinsically motivate students to read, it is informative to examine some of the extrinsic motivations. One such method of extrinsically motivating students to read was the “Earning by Learning” (EBL) (Johnson, 1995) program. This unique approach attempted to increase the reading attitudes of academically at-risk students by combining extrinsic rewards coupled with adult attention and approval (McNinch, 1997). McNinch noted that external rewards could also supplement and help to build intrinsic motivation if the extrinsic events had personal value for the student (McNinch, 1997). While such rewards did have a positive effect
on the attitudes towards reading in general, that positive effect dropped off when the category of "academic reading" was examined. The critical connection, however was the idea of the "personal value for the student." Each of us brings our own experiences, set of expectations and prior knowledge to any reading task. What a student may value in reading certain passages may not coincide with what the teacher values.

While it may not seem fair to measure students' comprehension based solely upon the teacher's interpretation of what is significant, it is important to take that into account when examining student achievement on comprehension tests. This influence of the teacher can have a very positive effect on the academic confidence of students. If teachers can find connections for individual students, there is a greater chance of a more positive attitude towards reading. In fact, successful reading comprehension may hinge on teachers who believe that their own instruction influences students' perception of themselves (Colvin and Schlosser, 1998). In other words, if teachers are convinced that they have an impact on reading comprehension, they most likely will have an impact on reading comprehension (especially if they have taken into account the individual needs and experiences of the students).
Importance and Rationale of the Study

While the approach and methodology of various reading programs have been quite different, the goal has remained unchanged; improve the reading comprehension of students in an attempt to improve their achievement. Studies have focused upon thinking aloud, social interaction and the use of verbal reports (Kucan and Beck, 1997). Some educators have stressed critical thinking skills (Fitzpatrick, 1993) while others have examined the development of confidence by teachers (Colvin and Schlosser, 1998). At least one method of improving reading comprehension relies on what the teachers value in the text (Jetton and Alexander, 1997). Yet another study explores the value of directly teaching comprehension skills (Lloyd, 1996).

Although the concept of testing for a positive attitude may seem to be too nebulous or intangible, valid measurement tools do exist that accurately determine the level of motivation. When one looks at the means of ascertaining the motivational needs of a specific age group such as adolescents, it is possible to quantify the connection between personal needs and educational provisions (Millar and Gallagher, 1996). The
development of a scale to document and organize adolescent concerns could formulate the basis for educational programs of motivation or individual guidance.

Any thorough scrutiny of available methods and assessments for both motivation and reading comprehension must also take into account various other factors involving the students, teachers and text. When all of the factors involved are accounted for, it should be obvious that an increase in motivation will bring about an increase in reading comprehension.

**Background of the Study**

Understanding the written word is one of the most essential of all academic skills. It is an ability as vital to the student in first grade as to the high school senior. Comprehending the reading material is applicable in almost every subject area at every grade level and is one of the life-long skills needed for success. Since reading has always permeated the curriculum to such an extent, improving reading comprehension has long been a goal of many educators. Indeed, since high achieving students are generally good readers, and poor achievers are generally poor readers, any
approach towards improving school achievement must focus in a substantial part on increased reading comprehension (Wallace, 1995).

Many students seem to read for school situations only if the outcome of that reading is clearly supported and/or directed by the teacher. In fact, some researchers are considering the contextual factors in classrooms as possible influences on what readers deem interesting and important (Jetton and Alexander, 1997). Indeed, teachers have often signaled what was important in a passage through their questions, topics for discussion and evaluation tools. In addition to the student’s own experiences, one must also take into account the idea that what motivates a student to read, recall and understand may very well be influenced by what the teacher values or seems to value.

Statement of Purpose

To that end, this study will (in part) depict the methodology used to examine the relationship between motivation and reading comprehension. The purpose of this study is to investigate the effect of motivation on the reading comprehension of tenth-grade English/language arts students. More specifically, this study will first test a group of 55 tenth-grade
students at West Ottawa High school in Holland, Michigan for motivation to achieve. West Ottawa High school has a student population of 1736 students in grades 9-12 who come from a variety of socio-economic and cultural backgrounds. The test to be used for measuring the motivation is the "Achievement Motivation" test developed by Ivan L. Russell. After administering the motivational assessment, students will be assigned the short story, "The Bet" by Anton Chekhov, to read on their own in their textbooks; The World Masterpieces published by Prentice Hall. They will then be tested on their comprehension of the story, utilizing a reading comprehension quiz developed by the publishers of the textbook.

Once both tests have been graded and the results are analyzed, the degree of relationship between motivation and comprehension will be thoroughly depicted. This study then, will explain the relationship between these two quantifiable variables with the intention of offering an area of focus for improved reading comprehension.

Should the correlation prove to be rather high, then the prediction could be made that those students who are motivated to succeed will likely do well in the area of reading comprehension. Any suggestions for improving student comprehension therefore would focus on motivational
techniques. If, on the other hand, the relationship between the two variables proves to be rather low, a recommendation for teachers to continue to stress the mechanics of reading comprehension will be made. In either instance, this study hopes to offer a clear statistical reason(s) for the improvement of reading comprehension.

**Limitations**

As is the case with any study of this type, there are several limitations inherent in the very nature of the study. Since the test for motivation and the test for reading comprehension are being administered to a fairly small number of subjects (55), any predictions stemming from the data need to account for that sample size. Individual difficulties in terms of reading and comprehension may also come into play. Additionally, the sample includes a fairly diverse group of individuals, but that diversity is limited in part by the location of the participating school system. West Ottawa High school has a student population that is 80% Caucasian, 6.8% Hispanic, and 9.4% Asian, but only 1.7% African-American.

Other limitations fall into the category of variables such as room
temperature at the time of the tests, the subjects’ emotional and physical state (alert, sleepy, hungry, etc.) and additional minor factors that could influence the outcome on either test. While the age group of the subjects may seem to be a limitation, it is very likely that the same type of study conducted with older or younger subjects will have similar results.

Summary

The final report will include the results of both the tests for motivation and for the reading comprehension test. Written and numerical analysis of the results will focus on the relationship between the two variables. Standard formulas for determining the level of correlation will be utilized, as well as tables and graphs depicting that relationship. Recommendations for the use of the resulting statistics will also be included.

According to Thomas & Moorman (1983):

“The student who can read, but chooses not to, is probably the most crucial concern confronting our educational institutions today. It is not illiteracy we are combating, but aliteracy.”

If this is the case, then a study of motivation and how it may be related to
reading comprehension would be a very valuable tool indeed. As the various approaches towards improving reading comprehension are explored, along with the methods of understanding motivation to achieve, this study intends to explore the relationship between the two.
CHAPTER TWO: REVIEW OF LITERATURE

As was mentioned in chapter one, the variety of approaches for improved reading comprehension is as deep and complex as the educational philosophies of today’s teachers. There may not be any one simple solution, but rather, an array of strategies aimed at ameliorating reading comprehension problems. Certainly, if all other factors (ability, experience, etc.) are taken into account, there is one vital area that could stand scrutiny. It may well be that the student who can read, yet chooses not to, is the “...most crucial concern facing our educational institutions today” (Thomas & Moorman, 1983).

Reading Comprehension

Yet another definition of reading comprehension may expand on the aforementioned one. Not only does reading comprehension at the most basic level include mastery of “the basic decoding skills that serve to attach meaning to written symbols” (Wagner & Sternberg, 1987), but it also encompasses the prior knowledge of the reader. In addition to these skills, reading comprehension may also entail “the ability to determine how and where to apply one’s reading resources in order to maximally reach one’s goals in a comprehension given situation” (Wagner &
In other words, beyond the mechanical skills of reading and the application of the reader's prior knowledge and experience, a reader also needs to know what is to be done with the information he or she is processing.

Along with that knowledge is the idea that even shallow comprehension may not be taking place. If a reader "understands all of the words and sentence, but fails to grasp the gist of a text," (Just & Carpenter, 1987) then they are only comprehending the most superficial of meanings of the written word. Many times, the cause of such shallow comprehension is the reader's prior knowledge of a topic or lack thereof. It can be said then, that "those portions of a text that are more important to a reader's goals are read more carefully, and this selectivity in reading contributes to the levels effect in recall" (Just & Carpenter, 1987). How prior knowledge is used by a reader though, can hinge upon the type of reading task at hand. If "readers know that their recall will be tested, then they spend more time on the sentences that contain new facts; subsequently, they can recall the sentences with new facts just as well as the sentences with old facts" (Just & Carpenter, 1987).
Since reading comprehension is so critical in terms of academic success, it can be argued that motivating a student to read is equally crucial. In order to understand the significance of what is read one must be a critical reader. Critical readers have the ability to "move forward or backward through the text..." and can "relate different parts of the text to each other to get a better grip on understanding" (Chapman, *Making Sense*, 1993).

If that is the sign of a critical reader, why does this study focus upon the high school student in general and the tenth grader in particular? In part, it is because this study is concerned not so much with the mechanics of reading (nor with the ability to read itself) but rather with the process behind comprehension. Additionally, certain "elements of critical reading in various subject areas are more easily learned at the high school level than earlier" (Chapman, 1993). Of course, a large part of what a high school student brings to the text, prior experience with the topic, familiarity with the vocabulary, knowledge of syntax, etc. all combine to increase that reader's knowledge about the subject. In fact, "the greater the volume of information known about any particular
subject, the deeper the potential understanding of that subject” (Chapman, 1993).

That “deeper understanding may be one of the obstacles faced by classroom teachers who are trying, among many other tasks, to determine what their students have gleaned from the reading. Since many of the traditional strategies for improving reading comprehension have been found “to promote recall rather than comprehension,” (Chapman, 1993) secondary teachers are understandably reluctant to apply those strategies. Strategies that focus on a deeper understanding though, should be a different story. If there is a connection for the reader with the text, then there is a greater chance at recall and understanding. Indeed, “people remember connected discourse better because their prior knowledge and expectations permit them to form a highly interconnected representation” (Goetz and Armbruster, 1980).

Teachers seeking effective approaches to improved comprehension therefore, must make those connections, or help their students do so. In attempting to improve reading comprehension, there is yet another factor that requires some exploration. Some studies have shown that the greater an individual’s interest with the text, the greater their comprehension of
that text. Since "students who are personally involved in reading remember texts better and achieve a deeper understanding of those texts," *(Smith & White, 1987)* it is clear that teachers need to help their students make those personal connections with the reading material. While that may seem to be a very difficult task, it may also prove to be the most beneficial.

Before testing for comprehension, however, instructors would do well to set realistic goals for their students in terms of the important information of the text. It is unreasonable to expect a reader to recall and understand every detail of a selection, so remembering "the gist or main points of a text seems a more realistic objective" *(Goetz & Armbruster, 1980)*. Keeping in mind the fact that, adults are readily able to identify and concentrate on important portions of a text" but it is likely that "children are less able to identify and utilize important elements," *(Goetz & Armbruster, 1980)* secondary teachers in particular have a responsibility to guide their students in reading for comprehension.

While dependence upon the teacher might at first seem to be detrimental for the student, it is sometimes necessary before students are
able to read and understand for themselves. The downfall of this teacher
guided method however may be the teacher’s own knowledge base. At
least one study has suggested that “students’ ability to judge what
information in text their teachers valued and their proficiency at using that
knowledge were at least partially dependant on the teacher’s content
knowledge and pedagogical skills.” (Jetton & Alexander, 1997) It is
worth noting, however that “factors within the learners may also” (Jetton
& Alexander, 1997) have an effect on the comprehension.

Part and parcel of that responsibility to guide their students’ reading
is the clear delineation of goals for a reading selection. Obviously, a
general goal would be “understanding the text.” Yet what is entailed in
that understanding? Specifically, what do the students perceive as the
objective of the reading task? “Readers’ purposes vary and, as such,
criteria of comprehension also change as a function of the particular
reading task at hand” (Brown, 1980).

To achieve true comprehension then, readers must go beyond the
basic decoding of the text. They must think about what they have read on
a deeper level than the simple perception of the meaning of the words.
“The comprehension processes interprets language, transforming from linguistic symbols to a more abstract symbolic representation—that is, from language to thought” (Dechant, 1991). This clearly leads to a discussion of what that deeper meaning in the text is.

Failure in early grades may also have an impact on the ability to comprehend what is read in later school years. “Students who fail to read well early in their school careers rarely catch up,” (Madden, et.al., 1997). This means that what started out as an achievement problem can, in the secondary levels of education develop into problems of “low self-esteem, anxiety, poor motivation and avoidance” (Madden, et.al., 1997). Secondary educators then, may be dealing with a motivational factor that goes much deeper than simple indolence or lack of attention.

“Many students find the reading material in their subject matter classes difficult to understand” (Ryder and Graves, 1994). Their ability to understand the text is limited by their lack of prior knowledge about the subject. It is left to the teacher then, to understand their level of prior knowledge and to build upon it, or to build a bridge from what the students already know, to the unknown in the text. Once that is
accomplished, then the level of proficiency for each reader can be improved and deepened.

Proficient readers understand why they are reading and they have a full supply of strategies to apply to various texts for comprehension. They will apply these strategies before, during and after the reading to help themselves understand what was read and to learn from it. Teachers can help promote this high level of proficiency in several ways. At first, the instructor may need to provide direct, explicit instructions on what to look for in the text. As Students become more adept at reading the information, the teacher may relinquish some of that control and just offer "supportive instruction" (Ryder & Graves, 1994) which would give help when it is needed. The eventual goal obviously is for the students to actively become proficient and independent readers. This is a type of reading instruction most appropriate for the secondary level.

In fact, if students are to be brought to such a level of understanding, they may need to do so through more "interactive instruction." (Kucan & Beck, "Review of Educational Research," 1997) The focus of such reading instruction moves from teacher-led instruction, through independent student centered strategies, to peer-led
approaches. Such an approach relies in a large part on the reading comprehension of the group, but should not ignore the abilities of the individuals. In “Evaluating the effects of Collaborative Strategy Instruction,” Anderson and Roit (1993) compared gains on standardized test scores and found that 80% of the students in the collaborative strategy group demonstrated gains compared to only 50% of the students in a control group.” (Kucan and Beck, 1997)

“Another direct approach for helping students understand important information in text…is Questioning the Author.” (Beck, et.al.) Utilizing that strategy entails a “kind of shared thinking aloud.” (Kucan & Beck, 1997) This is an approach for engaging the students with the text with the author as a person who is attempting to convey some message. It is up to the students to determine (using their prior knowledge and ability to understand the text) just what that message is. One of the advantages to this approach is obviously the power of the added experience and knowledge base of the group.

Indeed, “when students participate in discourse environments and engage in dialogue or communication, their learning is not confined to
knowledge constructed as a product...but also includes a developing understanding of and ability to use the processes by which such knowledge is constructed.” (Kucan & Beck, 1997) Students therefore, acquire and hone a much deeper comprehension of the subject matter, which also adds to their knowledge base, giving them a deeper motivation to gain more knowledge.

An increase in reading comprehension may also come about as a result of a similar strategy known as CR or “Collaborative Strategic Reading.” (Klinger & Vaughn, 1999) Utilizing this approach, students, with the help of the teacher and peers, “increasingly become more proficient at applying comprehension strategies and constructing knowledge while reading from the context area texts.” (Klinger & Vaughn, 1999) Students are taught to first get a grasp of what the main idea is, and then explore the unknowns in the text such as unfamiliar vocabulary or concepts. On the surface, this may seem to be a more elemental approach, but it may also be one that works better with certain students.

Motivation

Unless one utilizes a definition for motivation such as mentioned
above, the danger in attempting to understand motivation lies in focusing upon the wrong aspect of behavior. "Teachers are quick to agree that school motivation is evident in classroom behavior, but they tend to describe it in terms such as enthusiasm, involvement, attentiveness and joy." (Russell, 1969) While those behaviors may be indicative of a certain amount of general motivation, they do not clearly indicate a high level of motivation in terms of academic achievement. What is needed then, is a clear understanding of just what that motivation is and how it can influence adolescents and their ability to learn.

Adolescents at the secondary level may, in many cases, be going through a period of change in their own lives which may obstruct or interfere with the academic goals. In fact, some "adolescents are developing critical beliefs about themselves as learners at the same time they are constructing multiple dimensions of self, including self-worth." (Colvin & Schlosser, 1998). In this scenario then, the teacher may have a greater impact on how well that type of student comprehends what is read.

It would be very important for such a teacher to be certain that the tasks given to those students be at the appropriate level of challenge.
Students should be “given material that is slightly beyond their ability to complete when working alone but that they can successfully complete when they receive assistance from a teacher or a peer.” (Colvin & Schlosser, 1998) The idea of allowing the group to help determine what is learned could help offset another possible obstacle on the road to effective motivation.

When one is attempting to deal with what motivates students to achieve in school, the cultural aspects of motivation should also be addressed. Students from backgrounds where “the group’s success is more important than individual achievement and cooperation rather than competition is emphasized,” (Chapman, 1993) may struggle with the expectations of the teacher and the school. At the same time, any personal achievement in school could leave those same students open for blame from their own group. These are critical variables to keep in mind when measuring for motivation and achievement.

Clearly though, if a teacher chooses tasks with appropriate levels of challenge for the students, the chances of motivating those individuals improve dramatically. “Tasks that are beyond but not too far beyond
students' current ability to perform can... be strong motivators of student effort” (Chapman, 1993). Obviously, the key in this situation is to know the students well enough to determine the appropriate level of difficulty.

In fact, since knowledge of the students is so vital, it would also help if the teacher could harness the natural interest and motivation present in any reader. Since “interest is a major initiator of motivated behavior,” (Dechant, 1991) then any instructor wishing to improve the motivation of their students must first spark their interest.

Some approaches to teaching reading comprehension may focus too much on what the teacher expects the students to get out of the text. In fact, it is possible that the traditional method of asking questions before the reading about the reading in an attempt to spark interest on the part of readers may actually hinder the readers’ comprehension of the text. “The use of a purpose-setting question is not necessary for children to... adequately understand” (Mathews & Paile, 1993) what they are reading.

According to Barbara L. McCombs and Jo Sue Whisler, in their

“The depth and breadth of information processed, and what and how much is learned and remembered, are influenced by (a) self-awareness and beliefs about personal control, competence and ability; (b) clarity and saliency of person values, interests and goals; (c) personal expectations of success or failure; (d) affect, emotion and general states of mind; and (e) the resulting motivation to learn.”

From the perspective of the student-centered curriculum then, motivation takes on a very personal aspect for individual students. Since many experts feel that motivation cannot be forced on an individual from the outside, this view may seem to leave teacher little choice but to focus on some other aspect of instruction.

In fact, “teachers cannot make learning happen; they can encourage and persuade with a variety of incentives” (McCombs & Whisler, 1997). This sort of empowerment of the student might smack of taking some power away from the teacher. It is, however more of an empowerment for everyone in the classroom, since it places more responsibility on the students and allows the teacher more time and effort to be focused on other teaching strategies. It is possible for teachers to give more control over the learning to the students without losing 24
authority in the classroom. McCombs and Whisler further aver that "teachers who know and appreciate the role of motivation in learning will spend time and energy creating a climate in which positive beliefs, attitudes, perceptions and feelings are developed and nurtured."

If the teacher does not address those beliefs, attitudes and feelings, then the impact of any "motivational" strategy is likely to fall short of the goal. Incentive programs intending to encourage and promote reading "frequently ignore student differences in performance, ability and interest" (Johns and VanLiersburg, 1994). What is needed is more focus on the student as the reader. According to Johns and VanLeirsburg, "any framework to motivate readers must involve at least four essential preconditions..." A supportive classroom environment, appropriate level of difficulty of the text, meaningful learning objectives and moderation and variety of extrinsic motivation techniques. Essentially though, the art of motivation requires sensitivity to what will work with any one individual student.

Following this line of reasoning, the reader who "takes the most to the printed page gains the most" (Dechant & Smith, 1977) from the printed page. In other words; the greater the knowledge and experience of
a reader, the more they will be able to understand what they read. Reading comprehension then, becomes so much more than a gaining of and processing of information. It is also part of a complex activity involving ongoing input, transformation and formation of information.

Just as the act of reading exists as a complex thinking activity, so too does motivation exist as an initiating, sustaining drive within the person. Motivation in this instance can be seen as the drive that brings a person either relief from some pain or tension within themselves. "The motive is inferred from the behavior and is an outgrowth of a need" (Dechant and Smith, 1977). Any instructor who wishes to tap into that inner motivation must first understand how it applies to achievement.

Since it is clear that teachers cannot actually motivate students, what can they do to have a positive effect on achievement? They can "make things attractive and stimulating... provide opportunities and incentives... allow for the development of competence and match student interest with learning activities" (Wlodkowski, Motivation and Teaching, 1986). How this can be done will be explored further.
Of course, knowing what motivates or drives the student cannot help if there are certain physiological needs that have not been met. Unless those needs are met, “learning becomes a difficult, if not impossible, task because the student’s energy is devoted to coping with the pain and state of deprivation her/his body is feeling” (Wlodkowski, 1986). While those basic needs such as food, water, rest, etc. are quite obvious; not all physiological needs are quite as blatant. “One of the most easily missed and most often abused is the need for sensory satisfaction or, as it is more commonly known, the need for stimulation...this is a pervasive need that constantly influences student motivation” (Wlodkowski, 1986).

That need for stimulation can be thwarted just as easily sit can be fostered by the teacher or the learning environment, including the reading material itself. If the material is too easy, or if the test for comprehension is not challenging enough, than the students interest is not thoroughly engaged for a repetition of a similar task in the future. As Bernard Weiner stated in his book entitled, *Human Motivation* (1989), success (a reward)
at an easy task should not augment the probability of undertaking that task again...there is likely to be little desire” to compete or to try again. An important part of the teacher’s role then is to choose those activities that offer a certain level of challenge for each of the students.

Awakening that interest through challenging reading tasks may not be easy, but it is crucial. Research suggests that “motivation and confidence are fostered by an environment that promotes learning goal orientation, rather than performance goal orientation.” (Gaskins & Gaskins, 1997) To attain such learning goal orientation, a student needs to be involved in tasks that they view as “meaningful, challenging and interesting” (Gaskins & Gaskins, 1997). Additionally, if the students feel that they had some say in the process, the motivation will be that much more meaningful for them.

Of course, that motivation can be enhanced by the instructor, given the correct approach. Since the “amount of effort students direct to learning is, to some degree determined by the level of interest in the task, available prior knowledge, and ability to learn” (Ryder & Graves, 1994) are very closely linked to that effort. Pre-reading activities can therefore
have a positive impact on both the motivation of the readers and their level of comprehension.

Any activity led by the teacher should have as its goal, the intrinsic motivation of the students. “Intrinsically motivated students engage in assignments willingly and are eager to learn classroom material” (Ormrod, 1995). Promoting that sort of motivation can be accomplished only with a clear understanding of individual students and their needs. An entire class will not always be motivated by the same things, since each individual brings with them an independent set of experiences, prior knowledge, expectations and personality. If a teacher can help the students see the importance of the subject and relate it to the students’ interests, while modeling their own interest in the subject and encouraging the students to learn from any mistakes, the chances for improved motivation and improved reading comprehension are much better.

There are those who would argue that extrinsic motivation is a valuable tool for building a student’s intrinsic motivation. “Competence or successful task completion, is one type of school activity that can make children feel good about themselves and increase feelings of self-esteem.”
(McNinch, 1997). It would appear that such extrinsic rewards would need to be linked quite closely to an intrinsic gain, and that such a method could only work with a particular type of student. This would seem to be a case of motivating for motivation’s sake alone, and should be approached with some reservations. While it may be true that “extrinsic motivational techniques are important to any reading program” and that “they are useful in increasing reading participation” (McNinch, 1997), it is unlikely that there would be any lasting gains made in terms of comprehension.

Summary

After careful scrutiny of the elements of reading comprehension as well as the aspects of academic motivation, it would seem that the two may very well be linked. Despite (or perhaps due to) the variety of approaches taken towards improving reading comprehension, little attention has been paid to the connection with motivation. Many teaching methods focus upon motivation as a sort of general objective, yet the possibility that improved motivation could affect a specific area of academic prowess remains undetermined.
What sort of relationship exists (if any) between these two items? Would the results of a test for motivation correspond with those of a test for reading comprehension? Specifically, just how strong a correlation is there between reading comprehension and motivation? The next chapter intends to answer all of these questions in addition to offering some direction for further study.
CHAPTER THREE: THESIS DESCRIPTION

Introduction

As previously stated, the purpose of this study is to examine the relationship between reading comprehension and motivation in 10th grade high school students. Attempts to improve the reading comprehension of secondary students often take one of two general approaches. Classroom instruction either focuses upon motivating the students to read or on various methods of understanding the material to be read. Since a large majority of high school sophomores already have the ability to read, attention to the mechanics of reading is not needed.

This study, therefore, measures the correlation between comprehension and motivation in order to offer some direction for those teachers interested in improving academic achievement. A high correlation between the two would indicate that an emphasis on motivation is needed, while a low correlation would call for more direct instruction of methods of comprehension. In other words, if a student with low academic motivation can still do well on a basic reading comprehension quiz, then the teacher may want to put more effort in methods of improving that comprehension.
Subjects

The 55 voluntary participants in this study are all enrolled in a standard 10th grade English course at West Ottawa High School in Holland, Michigan. The course is neither remedial nor advanced and is intended for tenth graders of a wide range of abilities. Of the 55 participants, eight are currently receiving resource help from the Special Education department of West Ottawa High school. None of the participating student is currently enrolled in a gifted and talented program, although two individuals are former honors students in English. West Ottawa High School has a student population of 1,726 individuals in grades 9-12. 51% of the subjects are female and 49% are male. The diverse ethnic background reflects that of the school at large with 74% Caucasian, 11% Hispanic, 2% African American, 2% Arab American, and 2% Indian.

Design of Study

Procedure

All participants were first asked to read the short story entitled “The Bet” by Anton Chekhov and translated form the original Russian into
English by Ronald Wilks. The story is a selection from an assigned tenth grade textbook, *World Masterpieces*, published by Prentice Hall (1995). According to the Fry Readability Graph, this particular short story has an eighth grade readability level. In three randomly chosen 100-word selections from the story, the average number of sentences per 100 words was 5.8. The average number of syllables per 100 words was 148.3. Plotting those two points on Fry's Readability Graph results in an approximate reading level of eighth grade.

Much of the vocabulary used in the story is quite accessible for a tenth grade student. This edition of *World Masterpieces* utilizes footnoted definitions for the eleven words deemed too difficult or unfamiliar for tenth grade students. Several examples of such vocabulary are "abstruse," "indefatigable," "ethereal," and "posterity."

The story is illustrated with a copy of the painting "Diego Martelli" by Edgar Degas which depicts a solitary man in a small bedroom with books and documents scattered around him. A second illustration in the story is that of a dark rustic room with a view of springtime through two windows. This is a copy of the painting entitled "The Merry Month of May" by S. Zhukovsky. Both illustrations relate quite closely to events in
The story depicts the wager between a rich banker and a young lawyer regarding the argument over capital punishment versus life imprisonment. The young lawyer claims that life in prison is still life and therefore better than the death penalty. He bets the banker that he could remain in prison for fifteen years. The banker agrees to pay the lawyer two million rubles if he can stay imprisoned for fifteen years. Over the course of the fifteen years, the lawyer eventually decides that material wealth and the values of his society are misguided and wrong. He rejects the money by leaving his cell through the window several hours before the deadline. Ironically, the banker was ready to kill the lawyer to avoid paying the money because he had lost much of his fortune over the fifteen-year period and only had about two million remaining.

Participants were given the reading assignment two days in advance of the assessments. An objective instrument known as the Achievement Motivation Test designed by Ivan Russell of the University of Missouri at St. Louis was then administered to the students involved in the study. The assessment used to measure reading comprehension was a short, ten-question quiz based upon the assigned reading. The students
were not allowed to utilize the text or any form of notes during the quiz. The publishers of the textbook designed the reading assessment to be utilized by educators as a check of recall and understanding of events and facts from the story.

To ensure the privacy of the participants, each was assigned a random 5-digit ID number to be utilized in place of names on both evaluation tools. Both the motivation test and the reading quiz were then scored using the answer keys provided. Each item on the test for motivation was assigned the value of 1 point for a total of thirty points, while the test items on the reading quiz were assigned a value of 3 points for a total of thirty points. Since the relationship between the two sets of scores was a linear one, the scores for the motivation scale were then compared to the score of the reading comprehension assessment utilizing the formula for the Pearson $r$.

Instrumentation

The Achievement Motivation Test is a thirty-item evaluation tool comprised of "yes" or "no" questions about several aspects of academic achievement such as; competition, goal setting, time management, reward seeking, effort in class, completion of assignments and others. First
published in February of 1969, the most recent update to the database of this measurement tool was in 1995. The test was created by Ivan L. Russell of the University of Missouri at St. Louis as an “objective measure of motivation for school learning” (Russell, 1969).

Originally designed with questions submitted by veteran teachers to measure student motivation towards school learning in general, the test was initially compared with scores on achievement tests in different subject areas. Those areas were reading, arithmetic, and language. Russell’s findings indicated a reliability coefficient of .945 “from the Spearman-Brown prophecy formula” (Russell, 1969). Several examples of test items indicate the type of questions asked on the Motivation Achievement Test can be found in Appendix F.

The reading quiz created by the publishers of World Masterpieces consisted of ten short answer questions dealing with the short story, “The Bet.” Students were expected to recall facts about events from the story and respond to the questions regarding those facts. The answer key provided by Prentice Hall Publishers determined scoring. A typical question on the reading comprehension quiz asked the students to fill in the blank in the following: “The bet results from a conversation
about the merits of _____________________________ over life imprisonment.

Data Collection

Once both assessment tools were scored, raw point scores were recorded according to the 5-digit ID number for each individual participant. For the purpose of analysis, the test for motivation was designated as the “X” variable and the reading comprehension test was designated the “Y” variable. Raw scores for each test were then totaled separately.

Additionally, each participant’s set of two scores was multiplied to arrive at an “XY” for every individual. In order to provide further components for the Pearson $r$ correlation formula, every raw score was squared separately, and the totals for “X,” “Y,” “XY,” “X squared” and “Y squared” were calculated.

Data Analysis

Once all of the above-mentioned tabulations of distributions were complete, the appropriate numerical figures were entered into the formula
for the Pearson $r$. Since the Pearson $r$ "takes into account each and every score in both distributions; it is...the most stable measure of correlation" (Gay, 1996). A coefficient of 0.73 resulted from the calculation for the Pearson $r$. In order to determine the statistical significance of the coefficient, it was then compared with the value of the correlation coefficient at fifty degrees of freedom and a .05 significance level on a statistical table designed for that purpose (Gay, 1996).

Results

The resulting coefficient of 0.73 clearly indicates a high correlation between the two variables, namely, achievement motivation and reading comprehension. In other words, the relationship between motivation and reading comprehension is clearly a strong one. Any coefficient of .40 and above would indicate at least some relationship between the two variables, but the obviously high correlation of .73 is very indicative of a real relationship between the two variables. Participants in this study with high motivation towards school learning generally did well on the reading comprehension test just as those students with poor motivation generally did poorly on the comprehension test.
Bar graphs of scores for both tests represented by percentages as well as graphs of the raw scores indicate this same correlation in a blatantly visual depiction (see tables 1-4 in appendices). On all four graphs, the numbers on the vertical axis represent the number of subjects while the horizontal axis depicts the score for that particular test. For those two graphs labeled “Percentage,” the large numbers on the right end of the horizontal axis are percentages of scores on indicated test. While the listing of each individual set of scores would be both unwieldy and tedious, such a detailed list would also indicate the high correlation between the two variables. Despite the overall trend, there were participants who scored lower on the motivation test than on the comprehension test, and those who did just the opposite.

In terms of percentages, the highest score on the motivation test among the fifty-five participants was an 86.7% while the highest score on the test for reading comprehension was 90%. The lowest score in terms of percentages was 13.3% on the motivation assessment and 20% on the reading comprehension test. The average score on the scale for motivation towards school learning was 56.6% and the average score on the reading assessment was 61.9%.
The high correlation between reading comprehension and achievement motivation found in this study coincide quite closely with the original results of the test for motivation. In that instance an $r$ factor of .718 was derived from a comparison of the test for motivation scores with those of a general “Reading Achievement” test. While this study looks at a more specific reading skill (i.e. comprehension), it is interesting to note the similarity in the relationships.

**Discussion**

Obviously, the high correlation between motivation and reading comprehension leads to several conclusions. The first of these conclusions is the idea that classroom instructors need to focus as much on the motivation of their students as on direct instruction of reading comprehension techniques. Common sense alone would tell most teachers that their students who are motivated to read *will read* and will most likely (or more likely) succeed in terms of comprehension. It is quite evident that the comparison of scores in this particular study reinforce the idea that motivated students will comprehend better than non-motivated students. A logical course of action, therefore, would be to scrutinize not
only the level of motivation in students, but also methods of raising that level.

After an analysis of the scores on both evaluation tools, it is also clear that there may be a small number of students who can perform at an acceptable level academically without the motivation of other students. Such students are obviously intelligent enough to succeed on a standard reading comprehension quiz, but they may not display or possess the traditional motivation towards learning that is the hallmark of the achieving student. The teacher’s goal in that case should be more of motivation or inspiration and may require a tremendous effort.

As with any study of this type, there is still much to be learned with regards to what motivates students. Reading for academic classes exists as a fairly low priority for those individuals without much academic motivation. Perhaps a study involving surveys and other descriptive types of research would shed more light on the cause of low motivation. The purpose of this study was merely to clarify the relationship between motivation and reading comprehension. Since that relationship seems to be a strong one, it is now time to capitalize on that relationship for improvement in both areas.
While there may be many different approaches for improving or inspiring motivation in students, the choice of approach is best left to the educators with the knowledge of their students. Studies such as this one seek to offer hard proof that the motivation of students is a worthwhile endeavor. This is not to say that teachers should abandon direct instruction of reading comprehension skills. On the contrary, the acquisition of such skills needs to be a goal of every student. What this study indicates is the need for motivational approaches in addition to the teaching of skills.

Conclusion

As stated in Chapter One, teachers “cannot expect students to comprehend printed material if they have not read that material.” After careful examination of the relationship between reading comprehension and motivation, the direction of teachers’ efforts is blatantly clear. A focus on improved motivation will lead to improved reading comprehension. This is an aspect of learning that cannot be ignored and may lead to even more relationships between learning and motivation. Since reading is a basic and vital part of the learning process at almost
every level of education, improved comprehension of what students read must be a major goal of all educators. If the high correlation between reading comprehension and motivation of .718 is any indication, students’ motivation towards learning has an important impact on academic success. Educators who are able to tap the wealth of motivation in their students, will therefore help those students to reap the rewards of improved comprehension and all that it entails.

Plans for Dissemination

This study will be on file at Grand Valley State University’s library. Additionally, a copy will be shared with the English Language Arts Department of West Ottawa High School. A copy will also be made available to interested teachers in all departments of West Ottawa high School, as well as throughout the West Ottawa Public School district.
DISCLAIMER

To the best of my knowledge, all of the sources utilized in the creation of this document were properly credited for authors’ rights. There is no infringement of any copyright for any of the documents cited. Additionally, all sources used in the document are cited on the following pages.
References


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APPENDIX A

Definitions: For the purposes of this study, the following terms will be delineated:

Motivation:

1. "those processes that can arouse and instigate behavior; give directions and purpose to behavior; continue to allow behavior to exist and lead to choosing or preferring a particular behavior." (Gay, 1996)
2. "A state that energizes, directs and sustains an individual’s behavior." (Ormrod, 1995)

Motivation to Learn:

"The tendency to find school-related activities meaningful and worthwhile and therefore to try to get the maximum benefit from them." (Ormrod, 1995)

Intrinsic Motivation: “an individual’s internal desire to perform a particular task.” (Ormrod, 1995)

Extrinsic Motivation: that which is promoted by factors external to the individual and unrelated to the task being performed.” (Ormrod, 1995)
Comprehension is defined as:

"relating whatever we are attending to in the world around us to the knowledge, intentions and expectations we already have in our heads. It is the identification and apprehension of meaning and making sense of print. Also, it is the reduction of a reader's uncertainty." (Smith, F. 1988)

Reading: 1. "interpretation of experience and of graphic symbols to include word recognition, comprehension and semantic and syntactic structures. It is the building of a representations of text and word recognition" (Dechant, 1991). 2. "a multi-component skill that deals with the sequence of words, phrases and sentences that make up a text. Readers try to interpret each word of a text as they encounter it, using a strategy of interpretation." Reading is also "silently processing a written text to gain new information to use, analyze or be entertained with" (Just & Carpenter, 1987).

Reading Comprehension:

"the correct association of meanings with word symbols, the evaluations of meanings which are suggested in context, the selection of the correct meaning, the organization of ideas as they are read, the retention of these
ideas and their use in some present or future activity. It includes the ability to reason one’s way through smaller idea segments and to grasp the meaning of a larger unitary idea.” (Edwards, 1957)

Aliteracy: conscious denial of literacy through choosing not to read or write. (Thomas & Moorman, 1983)

Literacy: ability to engage in reading tasks required in society at any given point in time. (Ryder & Graves, 1994)
APPENDIX B-Graph of Motivation Test Raw Scores

The numbers 0-20 on the vertical axis represent the number of subjects while the numbers 0-25 on the horizontal axis represent the raw scores (out of a possible total of 30) on the test for motivation.

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Percent Score</th>
<th>Grade Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>26.00</td>
<td>86.7</td>
</tr>
<tr>
<td>Minimum</td>
<td>4.00</td>
<td>13.3</td>
</tr>
<tr>
<td>Range</td>
<td>22.00</td>
<td>73.3</td>
</tr>
<tr>
<td>Median</td>
<td>17.00</td>
<td>56.7</td>
</tr>
<tr>
<td>Average</td>
<td>16.98</td>
<td>56.6</td>
</tr>
<tr>
<td>Std deviation</td>
<td>5.50</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Statistics for 55 students, 93.2% of class. Excluded: 4 Unscored.
APPENDIX C-Graph of Comprehension Test Raw Scores

The numbers 5-25 on the vertical axis represent the number of subjects while the numbers 5-30 on the horizontal axis represent the raw scores (out of a possible total of 30) on the test for comprehension.

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Percent Score</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>27.00</td>
<td>90.0</td>
</tr>
<tr>
<td>Minimum</td>
<td>6.00</td>
<td>20.0</td>
</tr>
<tr>
<td>Range</td>
<td>21.00</td>
<td>70.0</td>
</tr>
<tr>
<td>Median</td>
<td>19.00</td>
<td>63.3</td>
</tr>
<tr>
<td>Average</td>
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<td>61.9</td>
</tr>
<tr>
<td>Std deviation</td>
<td>5.32</td>
<td>17.7</td>
</tr>
</tbody>
</table>

Statistics for 55 students, 93.2% of class.
Excluded: 4 Unscored.
APPENDIX D-Graph of Motivation Test Percentages

The numbers 0-15 on the vertical axis represent the number of subjects while the numbers 10-90 on the horizontal axis represent the scores as percentages (out of a possible total of 100) on the test for motivation.

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Percent Score</th>
<th>Grade Name</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>Minimum</td>
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</tr>
<tr>
<td>Range</td>
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<td>Median</td>
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<tr>
<td>Average</td>
<td>16.98</td>
<td>56.6</td>
</tr>
<tr>
<td>Std deviation</td>
<td>5.50</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Statistics for 55 students, 93.2% of class. Excluded: 4 Unscored.
APPENDIX E-Graph of Comprehension Test Percentages

The numbers 0-15 on the vertical axis represent the number of subjects while the numbers 20-100 on the horizontal axis represent the scores as percentages on the test for comprehension.

<table>
<thead>
<tr>
<th>Raw Score</th>
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</thead>
<tbody>
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<td>6.00</td>
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<td>18.56</td>
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<tr>
<td>5.32</td>
<td>17.7</td>
<td></td>
</tr>
</tbody>
</table>

Statistics for 55 students, 93.2% of class.
Excluded: 4 Unscored.
APPENDIX F-Sample Questions From the Motivation Test

The following are three examples of the yes/no questions utilized on the Test for Motivation For School Achievement:

Sample #1: “Students should set their goals only as high as they can easily reach.”

Sample #2: “Would you like to take a school subject in which no tests were given?”

Sample #3: “Do you stick to an assignment until it is completed even though it is dull and boring to you?”
NAME: Christopher L. Knoll

MAJOR: (Choose only 1)

- Ed Tech
- Elem. Ed
- Elem. LD
- CSAL
- Ed Leadership
- G/T Ed
- Sec/LD
- Sec/Adult
- Early Child
- SpEd PP
- Read/Lang. Arts
- ________
- ________
- ________
- ________
- ________
- ________
- ________
- ________
- ________
- ________
- ________

TITLE: The Relationship Between Motivation and Reading Comprehension

PAPER TYPE: (Choose only 1) SEM/YR COMPLETED: Winter/2000

- Project
- X Thesis

SUPERVISOR'S SIGNATURE OF APPROVAL

Using the ERIC thesaurus, choose as many descriptors (minimum 5) to describe the contents of your paper.

1. Learning Motivation
2. Reading Motivation
3. Student Motivation
4. Reader-text Relationship
5. Reading Comprehension
6. Comprehension
7. ________
8. ________
9. ________
10. ________

ABSTRACT: Two to three sentences that describe the contents of your paper.

This thesis represents a study focusing on the correlation between student motivation and reading comprehension. A test for motivation was given to tenth grade students and the scores were compared with those from a reading comprehension test by the same group of students.