

The Relationship between Reading Comprehension and Interest in Post-Secondary Study and the
Assignment Method and Content of Readings Regarding Careers

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Abstract

The purpose of this study was to determine whether reading articles about careers of interest versus general careers would be related to secondary students' reading comprehension or affect their interest in pursuing post-secondary education. Interests were assessed via Secondary Interest Survey (PSIS), which was administered before and after students read 10 assigned articles about careers. A comprehension assessment was administered after each reading to determine whether students understood what they read and whether the article influenced their career interests or feelings about post-secondary education.

No significant differences were found between the comprehension or interests of the groups, which read about their own career interests or about random careers, but each group made gains in comprehension scores and interest in attending college or some other post-secondary institution after completing the readings and survey.

CHAPTER I

INTRODUCTION

Reading comprehension is one of the most valuable skills that any student can possess. The understanding of assigned texts is crucial in all areas of instruction. As students progress to the secondary level, texts become more complicated and rigorous. Students are expected to read independently more often, without the guidance of a teacher. More advanced readings can be a daunting task to students who struggle with comprehension.

To be successful in their academic endeavors and careers, students must derive meaning from texts from various genres and multiple areas of study. A common complaint of secondary English students is that assigned texts are not interesting and have little relevance to their lives. Even as increasing numbers of school systems adopting Common Core standards, textbooks used in instructional settings may be outdated and may seem non-relevant to students. Students may find these references under-stimulating and fail to complete reading assignments. Larson and Richards' (1991) findings that high achieving fifth to ninth graders experienced boredom when they felt under-stimulated support this contention.

Students with emotional disturbance in self-contained classrooms tend to veer off-task and misbehave when they feel assignments are uninteresting. Problematic behavior often results in disciplinary action, which frequently leads to time out of the classroom and missed instruction. Missed instruction decreases exposure to reading strategies and opportunities to practice reading in school. This situation is particularly troublesome as students with emotional disturbances often have multiple disabilities and struggle with reading which can affect their future education and/or careers in a negative manner. By the time these students have reached high school, many have received poor or failing grades related to their difficulty reading. This lack of success can

have a negative impact on these students' motivation to continue their education after high school. These students need motivation and encouragement to stay in class and learn. Interventions and specific instruction are needed which spark their interest and will help them recoup their deficits in reading. In a study of student academic motivation across three disciplines, researchers found that elective classes, which directly impact students' lives produced higher grades, study habits, and better efforts (Maurer, Allen, Gatch, Shankar, & Sturges 2013). These findings suggest that students' choices regarding what they study may be a powerful tool in motivation and outcomes.

Given these concerns and findings, research in the area of student motivation should focus on how educators can make assigned readings interesting and relevant while improving students' comprehension. In particular, it is important to learn whether providing more choices regarding what students read improves comprehension and motivation to read or learn. Additionally, it is important to learn how offering students' choices about what to read may affect their feelings or attitudes about post-secondary education.

Statement of Problem

Students who struggle with reading in secondary school may find standard curricular text selections uninteresting and consequently lack motivation to improve their reading or even pursue further education. Many curricula across the country do not offer students the opportunity to read varied genres or alternative texts which students might enjoy and which might encourage them to read and engage in reflection about what they have read. Struggling readers also may not recognize the cultural or personal relevance of standardized instructional materials.

In his role as special educator, this researcher was interested in learning whether adding choices of texts and customizing readings to match struggling readers' expressed career interests

would affect their reading comprehension and increase their interest in completing high school and/or postsecondary education.

Hypotheses

ho1: mean comprehension scores on texts regarding a career of interest to students in the treatment group = mean comprehension scores on assigned texts regarding career fields which were not tailored to match their interests of students in the comparison group

ho2: mean changes in interest in post-secondary education of students after reading texts regarding a career of interest = mean changes in interest in post-secondary education of students after reading assigned texts regarding careers which were not tailored to match their interests

Operational Definitions

Comprehension

Comprehension was defined as the understanding of what is read. All participants' comprehension of the career-related texts read was assessed with brief questions and scored using a rubric after they read each article. Articles were assigned about random careers or assigned and related to students' particular careers of interest.

Texts of Interest

The instructor gathered 10 articles each for members of the treatment group, which matched his or her expressed career interests on the initial Post-Secondary Interest Survey (PSIS).

Assigned Texts

The instructor assigned a similar type and number of texts related to careers to students in the control group, but these readings did not match the expressed educational aspirations or career interests of these students.

CHAPTER II

REVIEW OF THE LITERATURE

Many secondary students struggle with reading. This literature review seeks to describe why and how these students struggle with reading and how teachers and students perceive the issue. Additionally, the review describes interventions intended to improve students' reading skills and discusses deficits of struggling readers, uncover perceptions held by teachers and students about why secondary students struggle with reading, and examine reading interventions designed to help such students in secondary schools.

Section one reviews common difficulties experienced by struggling readers. Section two focuses on approaches to identifying struggling readers. Section three examines teachers' and students' perception of struggling readers. Section four explores interventions designed to help struggling readers become successful. Section five provides a summary of the finding of this literature review.

Difficulties Experienced by Struggling Readers

It is important for educators to understand what aspects of reading cause readers to struggle. In a study by Hock et al. (2009) in an urban school, 345 participants were tested in 11 measures of reading skills. The sample of the study consisted of proficient readers, struggling readers, and students with learning disabilities. It was found that "61% of the struggling adolescent readers had significant deficits in...domains of word level, fluency, vocabulary, and comprehension" (p. 21). Results from this study also suggest that subgroups of struggling readers "with learning disabilities scored significantly below the levels of the struggling reader group at large" (p. 21). The greatest deficits found in proficient readers were in fluency Knowing

what deficits are common and the bases for them is important information for educators to help them effectively plan for intervention for students experiencing reading deficits. Based on results from this study, it appears that reading fluency may be an important component for educators to consider in their assessment of student proficiency and instructional planning.

Reading Deficits in Middle School Children

Cirino, Romain, Barth, Tolar, Fletcher, and Vaughn (2012)-found that 85% of 1748 sixth through eighth grade struggling readers as identified through state reading comprehension proficiency measure, demonstrated weaknesses in comprehension, decoding, and fluency. This study concluded that “students showed overlap in term of the kind of difficulties experienced; while comprehension difficulties were common, they overlapped considerably with decoding and/or fluency, which are powerful factors in determining the availability of information during reading” (p. 1078).

Identification of Struggling Readers

Researchers such as Cirino et al., 2012, suggest that “simple screenings of accuracy and fluency, along with broad based measures that are typically used at the state or district accountability level, may be essential for pinpointing the sources of reading difficulties and the nature and level of intervention needed” (p. 1082). In a study published in 2011, 236 eighth-grade students from a suburban school in Georgia were screened for reading deficiencies with Oral Reading Fluency (ORF), and Sentence Mazes The first instrument, ORF, was “designed to measure an individual’s accuracy and rate of reading”(Allison & Johnson, 2011 p. 37). Students were given a grade-level passage to read in one minute. Rates and accuracy then were evaluated. The second instrument, The Sentence Maze, was a “sentence completion task...considered to be a general measure of reading performance and comprehension” (p. 38). The third instrument

used to this study was the Criterion-Referenced Competency Test (CRCT) This test “consists of “reading passages, and multiple choice questions designed to evaluate student skills in the following domains: reading skills and vocabulary acquisition, literary comprehension, and information and media literacy (p.38)” It was found that the CRCT over-identified children as struggling readers, and that ORF was a better predictor than The Sentence Maze. However, these measurements “require further investigation...to inform the most efficient and effective screening process for identifying students who are at risk for poor reading outcome” (p. 41). Although researchers have tried to develop targeted screeners to identify specific issues that affect struggling readers, none of the tasks have been found to be conclusive in identifying students’ deficiencies.

Silent Reading and Reading Skills and Deficiencies

Researchers such as Gilliam, Dykes, Gerla, and Wright (2011) assert that skill in-reading silently contributes to proficiency in reading comprehension. This concept is illustrated a study conducted by these researchers in 2011, in which 95 adolescents from the sixth to eleventh grade were observed while reading. The study intended to “explore the link between speech and reading to oneself among readers in secondary schools” (p.118). The researchers studied looked vocal and subvocal behaviors, such as lip movement, mumbling, whispering, and oral reading during individual reading activities” (p.118). The researchers found that “less than half of the secondary struggling readers read silently when reading to themselves. Of those students who did not read silently, a number of vocal and subvocal manifestations were common .Vocal manifestations while reading refers to making sounds such as reading words aloud or whispering, while subvocal manifestations are “characterized by movement of the lips or other speech organs without making audible sounds”(ahdictionary.com) This finding suggests to classroom teachers

that students who have difficulty reading silently and who demonstrate vocal and subvocal behavior may be struggling readers.

Teacher and Student Perception of Struggling Readers

“Parents and teachers know that the earlier children are identified [as struggling readers], the more likely they are to succeed in the future” (National Center for Learning Disabilities (NCLD) 2003, p. 8)).-In a survey conducted by the NCLD in 2003, parents and teachers were asked to express their views about education legislation know as Individuals with Disabilities Education Act (IDEA). Survey results indicated that parents and teachers believe “schools in the United States take too long to identify students with learning disabilities” (p.8). The survey also revealed that 44% of households contain a struggling learner, 78% of parents believe in alternative education focused on identification and intervention, and 65% of teachers think that their colleagues could use more training to help them identify students with learning disabilities. These survey results suggest parents and teachers do not perceive schools are doing enough to identify children with learning disabilities or doing so in a timely enough manner. Early identification is essential to students’ achievement.

Teachers’ Perceptions

Teachers’ perceptions regarding addressing reading instruction are important to understand as they can have a major impact on how the teachers deliver instruction. For example, a survey of 35 teachers in and out of service was conducted to determine how reading disabilities affect their lessons. Results indicated that “Teachers have difficulty clearly assessing and defining what it means to struggle with reading, less emphasis was placed on literacy skills in academic subjects other than Language Arts, teachers attribute struggles with reading to many aspects, tending to shy away from assertions of ineffective teaching in favor of internal issues

(learning disabilities etc.) and other external factors (parents, etc.)” (Moreau, 2014, p.8). The study concluded that most teachers felt that reading interventions are a specialist’s job rather than a responsibility of general educators, and they do not that they have adequate knowledge to help students who are struggling with reading. These perceptions can affect students in a negative manner when they discourage teachers from providing adequate instruction, or any instruction at all.

Students’ Perceptions of Remediation

A study conducted by McDaniel, Duchaine, and Jolivette (2010) collected perceptions of a Corrective Reading program from 18 students with emotional and behavior disorders. Deficits in reading are common in students with these types of disorders (Strong, Wehby, Falk, & Lane 2004). Interviews were conducted with the students to identify common themes regarding their perceptions about the program. Results from the study indicated that students felt the corrective reading classes were too long, were not at the appropriate grade level, and were too easy and redundant. Students also perceived the material as uninteresting. The students’ perception of their Corrective Reading course was revealing. All but two of the 18 students acknowledged that they have more than a “little bit” of difficulty reading but felt they were identified at a lower level than that at which they could read.

Interventions

A variety of interventions for struggling readers at the secondary level have been implemented successfully. Among those interventions are tutoring, media center support, teacher selection of appropriate texts, self-selection of appropriate texts, and offering texts at appropriate skill levels.

Tutoring

A study of a tutoring program for struggling readers in Texas was conducted by Harmon, Keehn, and Kenney in 2004. The tutoring programs focused on helping the students “develop an understanding of the strategic nature of reading and to encourage these reluctant readers to take control of their reading” (p. 46). The study had four components: student commitment, assessment, explicit strategy instruction, and metacognitive awareness. Evaluation of the programs indicated “tutoring programs for struggling readers need to consider the inclusion of explicit comprehension strategy as part of the instructional framework; strategies alone provide no assurance that students apply these strategies in their independent reading, and metacognition is the filter through which strategic knowledge is activated and used” (p. 69). As for the tutors, the study found “tutor training should emphasize several critical understandings about working with these learners, [and] tutors need to be ever vigilant about how tutees respond to instructional techniques and must continually search for other methods when one does not appear to work” (p.69). In short, many strategies must be taught and they should be tailored to the individual students. Tutors must understand that students may not always use strategies when reading on their own, and that metacognition is an invaluable skill, which augments comprehension unfamiliar texts.

Media Center/Library Support for Improving Reading

In addition to direct instruction in the fundamental skills that comprise reading, media specialists can improve students’ reading skills by creating interest in individual reading for all students, not just struggling readers. School libraries can be a valuable source of texts for most students. According to Chen (2004), libraries offer “a wide range of materials at different levels is available and accessible to struggling readers, they have a better chance of locating a book that

is easy or fascinating enough for them to read, enjoy, and finish” compared to their assigned grade-level texts (p.28).

Selecting Appropriate Texts

If a media specialist or teacher is able to help a struggling reader access texts which he or she deems interesting and the task of reading does not appear to be too daunting, the student may become motivated to read more independently and subsequently, become more confident in his or her reading as well. Teachers, tutors, and specialists need to find texts that students are able to understand and enjoy. Jamison Rog and Kropp (2005) emphasize the importance of “choosing the right reading materials and engaging students in meaningful learning activities which build strategic independence.”(p.35).

Self-Selection of Texts

Allowing students to read self-selected texts may be an important practice to help struggling readers build independence and become engaged. According to Johnson and Blair (2003), “In order for students to engage with text, they must feel like they have control in selecting materials that are interesting to them” (p.183).

Appropriate Books of Skill Level

In addition to selecting books of interest to students who struggle with reading, teachers and specialists must choose, and teach these students to choose, books that are at an appropriate level of difficulty. Most classrooms use grade-level books for instruction across all curricular areas. However, struggling readers will have difficulty overcoming their deficits and gaining new knowledge when they are required to read books, which they are unable to comprehend or, consequently, enjoy. In an ideal instructional situation, instruction would be based on students’

skill level. Allington (2007) writes “struggling readers would be given texts that are appropriately difficult within their level of reading development” (p.8). Classrooms include students who are achieving at many different levels. General educators typically use mandatory texts to support their instruction. Many times individual student’s skill levels are overlooked so lessons can align with course standards. Allington states “there seems scant recognition of any responsibility for supplying appropriate texts for struggling readers. Thus, it may be crucial to specialist teachers to locate such texts, hopefully in collaboration with struggling readers and general education teachers” (p.8). This observation reflects the aforementioned perception that the role of intervention is delegated to specialists by general educators and not actively practiced in mainstream classrooms. With regard to the question of whether books below skill level can be beneficial to struggling students, Johnson and Blair (2003) state, “Reading books that are too easy for them can be motivating. They begin to feel comfortable and confident with their reading ability. This might lead them to try something more challenging the next time they choose a text” (p. 186). Reading materials on and below their skill level has benefits for these students.

Conclusion

This review of literature discusses causes and symptoms of reading deficits, findings of screening practices, teacher and student perceptions, and interventions regarding challenges of and help offered to struggling readers. Fluency appears to be an area where most readers struggle. Oral Reading Fluency tests are more beneficial than Sentence Mazes for screening reading difficulties. Some teachers feel uncomfortable identifying struggling readers, and believe it is not part of their job to provide interventions for them. Students may find Corrective Reading courses boring and below their actual skill levels. Tutoring must be tailored to individual

students. Media Specialists can help struggling readers become interested in reading by guiding their pleasure reading selections and supporting teachers' choices of instructional texts. Self-selected texts of appropriate difficulty may motivate children and help them become confident in their reading, thus encouraging them to read more frequently and make increased progress. Teachers of struggling readers must be able to identify and help students choose books of appropriate skill levels to facilitate reading comprehension and improve students' motivation to read.

CHAPTER III

METHODS

Design

This study used a quasi-experimental pre-test/post-test design to examine whether reading texts of interest affected the reading comprehension and motivation to attend college or vocational schools of high school students enrolled in special education. The independent variable used in this study was the type of assignment of texts regarding careers, which participants read. These were either teacher-assigned texts regarding general careers or self-selected texts regarding careers of personal interest to the readers. The dependent variables were the comprehension of the articles and the students' level of interest in post-secondary education.

To test Hypothesis 1, comprehension was assessed for both groups via the same comprehension test after each reading and those scores were compared to determine whether the comprehension levels differed across the readings tailored to match career interests or about random careers.

Hypothesis 2 was tested by assessing students' interest in post-secondary education using a survey developed by the researcher before and after the intervention. Select survey results were compared to determine whether the participants' interests changed or differed depending on the method of selection of their readings.

Participants

The sample for this study was a convenience sample. Participants of this study were 10th grade students in a self-contained program for students with emotional disabilities in a suburban regional program in Maryland. One group was enrolled in the researcher's second period class

and met from 9 a.m.-10:30 a.m. Monday through Friday. This group consisted of four males and one female and was assigned to the control condition. The second group was enrolled in the researcher's third period class and met from 10:35 a.m.-12 p.m. Monday through Friday. This group of five males and one female served as the experimental group. The ages of the students in both groups ranged from 15-17 years.

Instruments

Post-Secondary Interest Survey

Prior to the intervention, both groups completed a teacher-developed survey regarding their interests in careers and post-secondary education called the Post-Secondary Interest Survey or PSIS. The survey also contained items on it, which assessed each participant's feelings about how well he or she could read in relation to the demands of the career in which he or she was interested. The survey contained both open-ended questions and items for which responses were ratings on a five-point scale. Ratings reflected the respondents' perceptions of their interests in post-secondary schooling and reading skills. A copy of the PSIS is located in Appendix A.

Reading Comprehension Assessment

All participants completed readings about careers and all were tested after each reading using the same teacher-generated comprehension assessment. A copy of the comprehension assessment and its rubric are found in Appendix B. These scores were later compared to determine whether there was a difference in mean comprehension scores for the readings which were assigned regarding careers in general (those read by the control group) and those which were of personal interest to the readers (those read by the treatment group).

Procedure

For this study, each class was assigned to either the control or treatment condition based on which period they attended English 10. This was done based on practical issues and to avoid exposure to the alternative strategies. The researcher felt students in the control group might have become frustrated if they were aware that they were not provided choices regarding their readings, which the treatment group was afforded. The researcher felt that the control group students' effort may have been reduced if they were frustrated.

Then, all participants in both groups completed the PSIS to assess their feelings about their reading comprehension and how they felt about pursuing secondary education and career interests. On the survey, students were asked to state what career they might want to pursue.

Then, each participant in the experimental group (third period) was given 10 newspaper/magazine articles to read regarding the career they indicated they would like to pursue. Each member of the control group (second period) was given ten of the same articles to read. These articles were about careers, which were selected by the instructor and which did not reflect the students' expressed career interests. All participants in the control group read the same 10 articles about the same careers. All articles for this study were from the Coin Career Library Database. The topics of the readings assigned to both groups are summarized in a chart (see Appendix D).

After completing each reading, each student in both groups completed a brief comprehension assessment using the same assessment, which was scored with the same rubric for all.

Finally, after completing the 10 readings, the Post-Secondary Interest Survey (PSIS) was re-administered to all students in both groups to see if the level of interest in post-secondary

study or plans of the students changed relative to the method of assignment and type of readings (general career information or articles tailored to their specific interests).

CHAPTER IV

RESULTS

The purpose of this study was to determine whether reading articles about careers of interest versus general careers would be related to secondary students' reading comprehension or affect their interest in pursuing post-secondary education. The study used a quasi-experimental pre-test/post-test design.

Comprehension

Null hypothesis one stated that the mean comprehension scores based on texts regarding careers of interest to the students would not differ significantly from those based on assigned texts regarding career fields which were not selected by the teacher to match the student readers' stated interests. To test this, comprehension was assessed after each of the 10 readings was completed by all participants in both groups. Scores on each of the five comprehension-related items on the assessment were rated using the rubric in Appendix B. Scores could range from zero to three on each item and from zero to 15 on each assessment. Scores on the five comprehension-related items were then averaged to yield mean scores for each item on the 10 assessments. Descriptive statistics of the item scores follow in Table 1.

Table 1

Descriptive Statistics of Mean Item Scores on Comprehension Assessments by Group

CONTROL GROUP N=5	Minimum	Maximum	Mean	Std. Deviation
Assessment				
1	1.20	2.60	1.96	.518
2	1.40	2.40	2.04	.410
3	1.80	2.40	2.04	.261
4	.80	2.80	2.08	.756
5	1.40	2.20	1.88	.303
6	1.40	2.60	2.08	.559
7	1.20	2.40	1.92	.460
8	1.80	2.60	2.12	.363
9	1.80	2.60	2.24	.297
10	2.00	3.00	2.32	.415

TREATMENT GROUP N=6	Minimum	Maximum	Mean	Std. Deviation
Assessment				
1	1.00	3.00	1.90	.690
2	1.20	2.80	2.10	.616
3	1.20	2.60	2.03	.599
4	.80	3.00	1.80	.800
5	.40	3.00	1.83	1.183
6	.80	3.00	1.80	.972
7	.20	3.00	1.67	1.143
8	.80	3.00	1.93	.864
9	1.20	3.00	2.10	.856
10	1.00	3.00	2.37	.794

The mean total scores on the 10 assessments were then averaged and compared for the treatment and control groups using a t-test of independent samples. Descriptive statistics follow in Table 2 and show that the control group mean (2.068) was slightly higher than the treatment group mean (1.953) and the scores of students in the control condition varied less than those of the treatment group.

Table 2

Descriptive Statistics for Mean Comprehension Scores Disaggregated by Group

GROUP	N	Mean	Std. Deviation	Std. Error Mean
TREATMENT	6	1.953	.641	.262
CONTROL	5	2.068	.113	.050

Table 3 contains the results of the t-test, which indicated that the mean difference of -.1147 between the two groups' mean scores (1.953 and 2.068) was not large enough to be determined statistically significant for this sample size ($t = -.392$, $p < .704$). Therefore, Hypothesis 1 was retained.

Table 3

Independent Samples t-Test Comparing Group Mean Comprehension Scores

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
-0.392	9	.704	-.1147	.2928	-.777	.548

Equal variances assumed

Post Secondary Interests

To illustrate the sorts of careers in which this sample was interested, a summary of careers of interest and the students' rationales for these choices before and after the reading intervention is presented below in Table 4.

Table 4

Pre and Post PSIS Results

Pre PSIS Section 1 Item 1 Career of Interest	Pre PSIS Section 1 Item 2 Why	Post PSIS Section 1 Item 1 Career of Interest	Post PSIS Section 1 Item 2 Why
CONTROL, N=5			
Basketball Player	Enjoys playing basketball	Basketball	Because I play it
Police Officer	Thinks it's fascinating	Farmer	I like it
Architect	Good at building	Architect	I have a good mind for it
Pro Athlete	Interesting Career	Pro Athlete	I would be getting paid for something I like to do
Hair Stylist	N/A	Veterinarian	I like animals
TREATMENT, N=6			
Technician	Create own objects	Surgical Technician	To make a lot of money
Video Game Reviewer	Playing games	Video Game Tester/Reviewer	I play games that I like
Culinary Arts	Cooked all my life	Culinary Arts	You get to cook stuff
Computer Engineer	Likes computers	Computer Engineer	I don't know yet
Something with video games	Likes video games	Video Gamer	N/A
Bartender	You can make good money and mixing drinks	Bar Tender	I will get paid a lot and like mixing

			drinks
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Hypothesis two stated that the mean changes in interest in post-secondary education would be the same for students after reading assigned texts regarding a career of interest or reading assigned texts regarding careers which were not tailored to match their interests. This was assessed by comparing the two groups’ post-intervention PSIS survey responses on several items, which inquired about their post-secondary interests and feelings about their options, related to post-secondary education. These comparisons follow.

Familiarity with Careers of Interest

Participants’ familiarity with the careers in which they stated interest was assessed by item three in section one of the PSIS, which asked students to rate how much they knew about the career or job in which they expressed interest. Rating options could range from 1 (nothing) to 5 (a lot, I am familiar with people who have this job). Descriptive statistics for these ratings on both the pre and post surveys for each group follow in Table 5 below.

Table 5
Descriptive Statistics for Pre and Post Intervention Ratings of Familiarity with Career of Interest Disaggregated by Group

CONTROL	N	Range	Mean	Std. Deviation
Pre familiarity				
CONTROL	4	3-5	3.75	.957
TREATMENT	6	1-5	3.33	1.366
Post familiarity				
CONTROL	5	4-5	4.20	.447

TREATMENT	5	3-5	4.17	.753
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Both groups' mean ratings of familiarity increased. The increase in mean ratings was from 3.33 to 4.17 for the treatment group (.836) and from 3.75 to 4.2 for the control group (.45). It is interesting that the mean post-intervention familiarity was slightly lower for the treatment group who read about their specific career of interest than for the control group. However, the treatment group's gain in familiarity ratings was nearly twice larger than that of the control group.

A t-test for independent samples was run to compare the mean gains in familiarity with careers of interest for the treatment and control groups. Gains were calculated for students with pre and post intervention data. Descriptive statistics of the calculable gains follow in table 6.

Table 6
Group Statistics for Gains in Familiarity

Group	N	Mean	Std. Deviation	Std. Error Mean	Range
CONTROL	4	.500	1.291	.646	-1 to 2
TREATMENT	6	1.833	1.602	.654	0 to 4

Results of the t-test in Table 7 indicated that the mean gains were not significantly different for the two groups ($t = -.346$, $p < .738$)

Table 7
Independent Samples t-Test Comparing Groups' Mean Gains
in Familiarity with Career of Interest

t	df	Sig. (2-	Mean	Std. Error	95% Confidence
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		tailed)	Difference	Difference	Interval of the Difference	
-.346	8	.738	-.333	.964	-2.556	1.889

Equal variances assumed

Likelihood of Pursuing Post-Secondary Education

Students rated how much they would like to continue their education after high school on the PSIS, item one, section two, using a 5 point Likert-type scale with response options ranging from 1 = not at all likely or true to 5 = extremely likely or true. Descriptive statistics of the pre and post intervention ratings for this item follow for each group.

Table 8

Descriptive Statistics regarding plans to continue education after high school

GROUP	N	Range	Mean	Std. Deviation
Control				
Pre	5	2-5	3.60	1.140
Post	5	2-5	4.00	1.414
Treatment				
Pre	6	1-5	3.50	1.225
Post	6	3-5	3.83	.983

Two T-tests for independent samples were conducted to compare these pre and post intervention ratings, results of which follow in Table 9. The t-tests indicated the mean ratings of how likely each group was to pursue post-secondary education did not significantly differ for the 2 groups before ($p < .892$) or after ($p < .823$) the intervention.

Table 9

t-test for Equality of Means of ratings of plans to pursue Post-Secondary Education

	t	df	Sig. (2-tailed) (p)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Pre	-.139	9	.892	-.100	.719	-1.73	1.53
Post	-.230	9	.823	-.167	.723	-1.80	1.47

Equal variances assumed

These hypotheses were tested and the results yielded means describing the students' perceptions and changes in them, which were presumably based on the intervention. The null hypotheses all were retained, suggesting the impact of the intervention on familiarity with careers of interest and likelihood of pursuing post-secondary education were not significantly impacted by the intervention. Below are summaries of the pre and post intervention likelihood of attending particular programs and feelings about whether the readings influenced students' plans for post secondary education. Trends are discussed in Chapter V.

Feelings About Various Post-Secondary Options

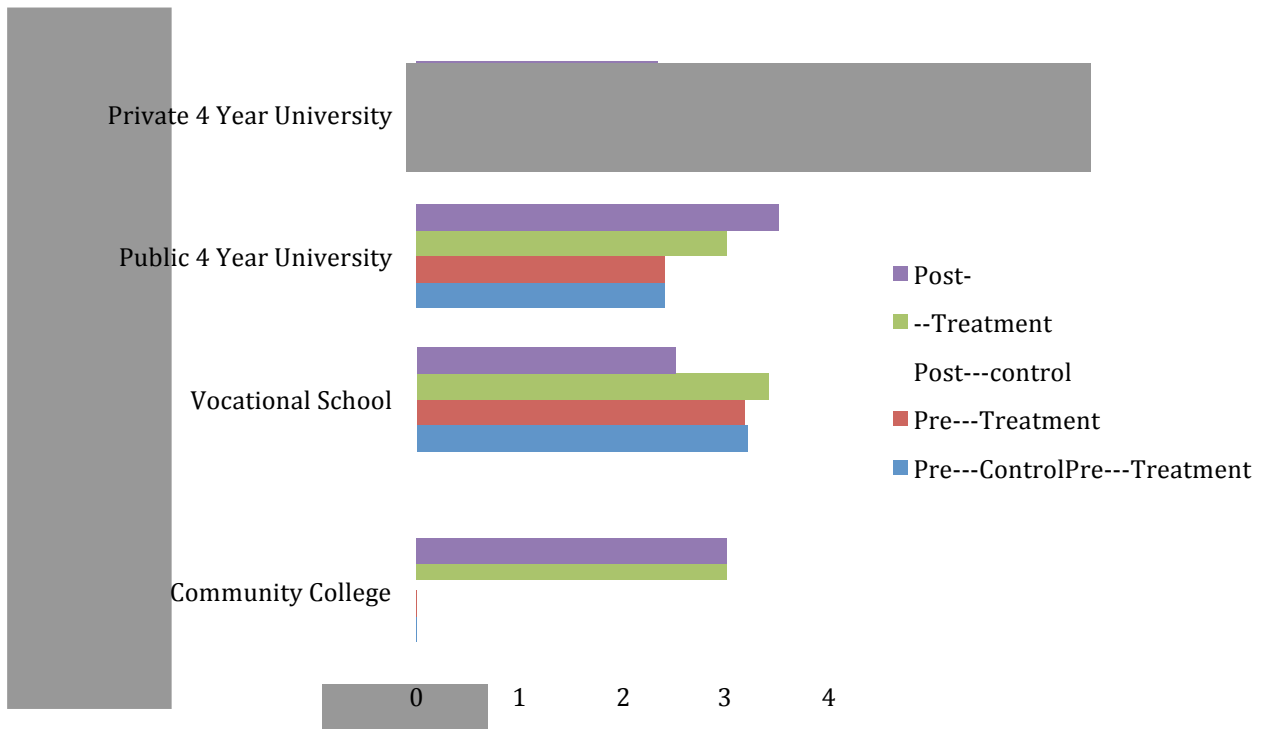
Item 2, parts a-d on Section 2 of the PSIS assessed participants' feelings about how likely it was they would enroll in a variety of post-secondary educational programs (community college, vocational school, public 4 year college and private 4 year college). Students replied by rating each option from 1 (not at all likely or true) to 5 (extremely likely or true). Descriptive statistics of these ratings were computed on the pre and post PSIS data for both the control and treatment groups. Results follow in Table 10 and are depicted in a chart in Figure 1.

Table 10**Descriptive stats for likelihood of attending each type of institution: Control Group**

	Range	Mean	Std. Deviation
Community College			
Pre control	1-4	2.200	1.304
Pre treatment	1-5	2.833	1.329
Post control	1-5	3.000	1.581
Post treatment	2-4	3.000	.632
Vocational School			
Pre control	1-5	3.200	1.789
Pre treatment	1-5	3.167	1.722
Post control	2-5	3.400	1.140
Post treatment	1-3	2.500	.837
Public Four Year College			
Pre control	1-4	2.400	1.517
Pre treatment	1-5	2.500	1.517
Post control	1-5	3.000	1.871
Post treatment	2-5	3.500	1.378
Private Four Year College			
Pre control	1-3	1.600	.894
Pre treatment	1-5	2.833	1.722
Post control	1-4	1.800	1.304
Post treatment	1-5	2.333	1.633

Figure 1

Mean ratings of likelihood of attending various post-secondary educational programs



Finally, students indicated whether they felt each article influenced their career or educational interests. Table 11 lists a summary of the number of articles students felt were influential. As can be seen, this varied from none to all of them for students in the Control group and from none to eight of them for students in the Treatment group, although more in the Treatment condition replied affirmatively that the reading influenced their thinking.

Table 11

Summary of whether article influenced students' career and/or educational interests:

(Item 6 on Comprehension Assessment)

Name	Number of articles (out of 10) student felt influenced career and/or educational interests	Percent of articles which student felt influenced career and/or educational interests
Control Student		
1	2	20
2	0	0
3	0	0
4	10	100
5	0	0
Experimental Student		
1	8	80
2	2	20
3	3	30
4	7	70
5	0	0
6	6	60

CHAPTER V

DISCUSSION

The purpose of this study was to determine whether reading articles about careers of interest versus general careers would be related to secondary students' reading comprehension or affect their interest in pursuing post-secondary education.

The results of this study supported the original null hypothesis as comprehension of texts regarding careers of interest to students in the treatment group did not differ significantly from comprehension scores of students in the comparison group who read assigned texts regarding career fields which were not tailored to match their interests.

The results of several other comparisons also generally supported null hypothesis two which stated that the content of and method of assigning readings would not impact interest in post-secondary education. Mean ratings of interest in post-secondary education of students who read texts regarding a career of interest to them did not differ significantly from those of students who read assigned texts regarding careers which were not tailored to match their interests either before or after the readings were completed. Table 8 shows that both groups had similar ratings about how likely they were to continue their education after high school before the study was conducted. After completing the assigned readings, both groups gained interest in attending post-secondary education and the mean ratings again were similar: 4.00 for the control and 3.83 for the treatment group. Despite similar gains for each group, inspection of responses to item 6 on the comprehension assessment revealed that reading about a career of interest was perceived by students to influence their career or educational interests more often than the group that did not read about a career of interest. Tallying responses revealed that the 24% of the articles were rated influential by the control group's (12/50) while 43% (26/60) were rated as influential by the

treatment group. This was likely due to the fact that participants in the treatment group received articles that were specific to their interests, whereas the control group read random career-related articles.

Implications of the Study/ Theoretical Consequences

The findings of this study suggest that reading about careers may increase students' interest in attending post-secondary institutions. Results for both control and treatment groups revealed some gains in interest in post secondary education on the PSIS survey over the course of the study. The findings also suggest that reading about careers of interest and non-interest may have yielded slight increases in reading comprehension based on the findings presented in Table 1.

Findings in Table 11 suggest that students in the treatment group were more influenced by the readings. This finding likely was related to the relevance of the articles they read to their personal interests and goals.

Both groups indicated they experienced gains in familiarity with their career of interest on the Post PSIS. This was interesting as only the treatment group read about careers of interest to them, while the 10 articles read by the control group were intentionally not related to the careers in which they expressed interest. It is possible that the control group became familiar with careers that were not those in which they expressed interest. However, such familiarity should not have affected the ratings on the PSIS, on which the post intervention career choices remained the same from the initial PSIS.

Threats to Validity

Sampling Issues: Size and Characteristics

Due to practical matters and time, only 11 students participated in this study. The researcher was not able to access a greater number of participants because of the location of the study and student population and time constraints. In order to generalize these findings to other populations, a larger and more diverse sample, that is, a sample outside of the self-contained special education environment, should be used. A larger and more diverse sample would enable more precise conclusions to be made regarding whether and how reading texts of interest or being allowed to select one's own readings influence high school students' feelings about pursuing post-secondary education.

Student Characteristics

Peers/Classroom Dynamics

A possible constraint for this study was the method used to make up the comparison groups. Students with emotional disabilities perform differently depending on the student make-up of the classroom. This consideration influenced the researcher's decisions about how to form the treatment and control groups.

Reading Levels

In a self-contained program, students are not necessarily grouped by their reading levels, which can vary widely. The students in this study were not given any type of reading assessment to determine their current level or inform group construction before the study took place and the difficulty of the readings assigned to participants was not matched to skill levels. Some students

in this study typically have reading supports, which were not utilized during the readings or assessments, related to this study.

Psychosocial Issues

The population of participants in this study also tends to experience high mobility rates due to family socioeconomic issues and some students miss instruction due to hospitalizations when they are in crisis. The selected students were able to complete this brief study, but these issues could affect a longer, more controlled study and affect the validity of its results.

Fluctuation in Interests

Interestingly, only two students changed their response on the Post PSIS regarding what career they might be interested in pursuing. Both of these students were in the control group. It is possible that reading about careers other than the one in which they stated initial interest caused them to consider other types of careers to pursue. Depending on the developmental stage of the student, learning about options versus a specific career might be beneficial.

Time

The duration of this study was brief; data were collected over only two weeks, which may not have been a long enough period to make a lasting or real difference in goals or perceptions. It is also possible that this particular population of students grew bored with the daily articles. This attitude may be reflected in the responses of 36%, of students in both groups who reported on Item 6 questions of the Comprehension Assessment (Table 11) that the articles did not influence them. If students were not interested in the readings, that lack of interest likely affected both their comprehension and PSIS scores and may have obscured the researcher's ability to determine the actual relationship between the variables.

Comparison to Findings in Previous Research

Related studies have investigated how interest levels of text can impact student engagement. Jamison Rog and Kropp (2005) emphasize the importance of “choosing the right reading materials and engaging students in meaningful learning activities which build strategic independence” (p.35). In this study, results for students in both groups indicated mean gains in reading comprehension. These gains may have been related to the readings being of some interest to students.

A threat to validity of the study noted above was the issue of time. Since this study was two weeks long, students may have gotten bored and many reported they did not feel influenced by some or all of the ten articles. In a study conducted with students with similar disabilities, McDaniel, Duchaine, and Jolivette (2010) collected perceptions of a Corrective Reading program from 18 students with emotional and behavior disorders. They found that many students found the program too long, too easy, and too redundant. The student participants in this study may have experienced these types of feelings after reading 10 articles of similar styles. It is possible that they grew familiar with the style of the articles and read through each quickly, reducing its influence. They also may have been may challenged and frustrated by the articles or perhaps they just found them uninteresting. While this subgroup may have tired of the exercise in two weeks, it is a rather short interval in which to expect major changes in attitudes or interests for most youth.

Implications for Future Research/Conclusions

Future studies appear warranted to learn more about the connection between the content and method of assigning readings and comprehension and the impact of these factors on interests in post secondary education or careers. Findings of such studies might inform the

design of effective interventions-that may simultaneously improve reading and career planning and success.

When conducting future studies to extend these findings, researchers should account for students' reading levels when assigning readings to ensure students can understand them and are motivated to complete them. In addition, to relate the findings more completely to the literature review, large banks of appropriate articles from which to select should be established and student choice of readings could be included as a variable. It also would be beneficial for researchers to design a study that would include assessment of students' reading levels to help students determine whether their reading abilities are commensurate with the reading demands of their careers of interest. This approach might promote student motivation for reading skill development as well as career preparation.

Conclusion

Determining whether reading articles about careers of interest versus general careers would be related to secondary students' reading comprehension or affect their interest in pursuing post-secondary education is an important area for study topic as secondary schools prepare students for further education or success in their work environments. Students may find careers interesting by exploring different fields and improve reading comprehension while doing so

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Appendix A

Post Career and College & Vocational School Interest Survey

Section 1

Please state what career or job you may see yourself pursuing after high school. (

The career I chose to research after completing high school is _____

State a clear reason you found this career or job interesting.

Using the scale below, rate from 1-5 how much you know about this career or job?

1=nothing

2= a little

3=some

4= quite a bit

5=a lot, I am familiar with people who have this job

Section 2

Key

1--- Not at all likely or true

2--- Unlikely or true

3--- Maybe possible

4--- Likely or true

5--- Extremely likely or true

Please select the rating (1-5) that best reflects how likely or true each statement is for you at this time:

1. I would like to continue my education after high school.

1 2 3 4 5

2. After graduation from high school, how likely is it you will attend

a. A community college

1 2 3 4 5

b. A vocational school. (Devry, Lincoln Tech, etc.)

1 2 3 4 5

c. A public four year college

1 2 3 4 5

d. A private four year college

1 2 3 4 5

3. I would continue my education if I could study what I wanted.

1 2 3 4 5

4. I find learning for the sake of learning fun.

1 2 3 4 5

5. In order to prepare for my future job, I want to learn as much as possible.

1 2 3 4 5

6. The idea of learning about a career excites me.

1 2 3 4 5

7. I think that school can help me prepare for a career

1 2 3 4 5

8. Reading is important to success in school

1 2 3 4 5

9. My reading skills are adequate for the career I would like to pursue

1 2 3 4 5

10. I think I comprehend what I read as well as most students my age

1 2 3 4

Score	Possible Score	Assessment Items
		Rate the response for each item with this scale 3= fully accurate response 2= adequate response but no justification of why it was given 1= partially correct response 0= incorrect response
	3	Item 1 Career Discussed
	3	Item 2 Audience
	3	Item 3 Purpose
	3	Item 4 Claim
	3	Item 5 Claim Support
	Not scored	Item 6 Influence on Student
	15 max. possible	TOTAL SCORE

Appendix C
Assigned Readings by Condition and Career Interest

Career of Interest	Title of Article #1	Title of Article #2	Title of Article #3	Title of Article #4	Title of Article #5	Title of Article #6	Title of Article #7	Title of Article #8	Title of Article #9	Title of Article #10
CONTROL										
Basketball player	Radiologist	Chef	Video Game Designer	Computer Programmer	Air Traffic Controller	Firefighter	Civil Engineer	Animal Caretaker	Dentist	Chemist
Police Officer	Radiologist	Chef	Video Game Designer	Computer Programmer	Air Traffic Controller	Firefighter	Civil Engineer	Animal Caretaker	Dentist	Chemist
Architect	Radiologist	Chef	Video Game Designer	Computer Programmer	Air Traffic Controller	Firefighter	Civil Engineer	Animal Caretaker	Dentist	Chemist
Pro Athlete	Radiologist	Chef	Video Game Designer	Computer Programmer	Air Traffic Controller	Firefighter	Civil Engineer	Animal Caretaker	Dentist	Chemist
Hair Stylist	Radiologist	Chef	Video Game Designer	Computer Programmer	Air Traffic Controller	Firefighter	Civil Engineer	Animal Caretaker	Dentist	Chemist
EXPERIMENTAL										
Technician	Telephone Installer/Technician	Cardiovascular Technician	Computer Service Technician	Automotive Technician	Dental Laboratory	Broadcast Technician	Electroencephalographic Technician	Emergency Medical Technician	Veterinary Technician	Surgical Technician

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Video Game Reviewer	Video game Tester	Video Game Programmer	Video Gamer Designer	Video Gamer Tester Openings	Video Gamer Journalist	Game Journalist	Video Game Marketing	Video Game Designer #2	Writing for the game industry	Getting into the Video Game industry
Culinary Arts	Chef	Chef Jobs and Chef Descriptions	Description of a Culinary Chef	Culinary Job Descriptions #2	Food Service Manager	Restaurant Manager	Farm Manager	Line cook	Baker	Pastry Chef
Computer Engineer	Computer Engineer	Computer Hardware Engineer	Education Required to be a Computer Engineer	Computer Hardware Engineer #2	Electronics Technician Engineer	Project Applications Engineer	Mechanical Engineer	Computer Systems Analyst	Computer Support Specialist	Computer Control Tool Programmer
Something with Video Games	Video game Tester	Video Game Programmer	Video Gamer Designer	Video Gamer Tester Openings	Video Gamer Journalist	Game Journalist	Video Game Marketing	Video Game Designer #2	Writing for the game industry	Getting into the Video Game industry
Bar Tender	Bar tender	Waitress	Food and Beverage Service	Bar Back(Bartender's assistant)	Mixologist	Shot Girl	Liquor Representative/Sales	Food Service Manager	Flight Attendant	Cashier

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