The Critical Nature of Reader Identity and Its Relationships with Literacy Engagement,

Motivation and Efficacy

Maya Marie Smith

A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2014

Reading Committee:

Roxanne Hudson

Dixie Massey

Elizabeth West

Sarah Walker

Susan Woods

Program Authorized to Offer Degree:

College of Education
Adolescents with disabilities often struggle with successes in high school due to reading comprehension difficulties. Reading achievement is impacted by many factors including motivations for reading, reading efficacy and reader identity. Motivation for reading has been well researched among typically-developing, elementary and middle school children (Guthrie & Humenick, 2004; Guthrie & Wigfield, 2000; Wang & Guthrie, 2004; Wigfield & Guthrie, 1997). However, less is known about the reading motivation of adolescents, particularly high school students with high-incidence disabilities. Additionally, not much is understood about the reading efficacy and reader identities of these adolescents. In order to develop evidence-based practices to assist struggling adolescents with disabilities, more information is needed concerning these impacting factors. In this study, survey data regarding the reading motivations, reading efficacy, reader identity and reading engagement was gathered from tenth grade students with Learning Disabilities and/or Attention Deficit Hyperactivity Disorder and typically-developing peers.
Correlational analyses and hierarchical multiple linear regressions were conducted among the four independent variables. Of the four independent variables, only reader identity was found to significantly predict reading engagement, although reading efficacy approached significant levels.
Dedication

To my son, Jack, who is my inspiration and my reason for striving to do the best I can with what I’ve been given.
Acknowledgements

I would like to extend my appreciation to my parents, who have believed in and supported me throughout this laborious and herculean enterprise.

I would also like to acknowledge the support of Rosanne Greenway and Sharon Xie in the dissertation data collection and analysis process.

I would particularly like to acknowledge the incredible support offered to me by my advisor Roxanne Hudson.
# Table of Contents

- List of Tables ................................................................. 9
- List of Figures ................................................................. 10
- Chapter One – Introduction and Statement of Problem ......................... 11
  - Important Reading Skills Necessary for Success in Secondary Classes .......... 13
- Chapter Two – Literature Review ........................................... 19
  - Self-Determination Theory of Reading Motivation .......................... 19
  - Adolescent Identity and Agency ......................................... 22
  - A Proposed Reading Engagement Model for Struggling Adolescents .......... 25
  - Disability ................................................................. 25
  - Reading Efficacy ......................................................... 28
  - Reading Motivation ....................................................... 30
  - Reader Identity .......................................................... 36
  - Reading Engagement ...................................................... 39
- Conclusions ................................................................. 42
- Purpose of the Present Study ................................................. 43
- Research Questions .......................................................... 43
- Chapter Three: Methods ..................................................... 45
  - Research Design .......................................................... 45
  - Participants .............................................................. 45
  - Measures ................................................................. 48
  - Student Record Data ..................................................... 48
List of Tables

1. Participant Demographics ................................................................. 48
2. Measurement of Student Progress (MSP) Levels ................................... 49
3. Reading Motivation Survey Items ......................................................... 51
4. Reading Efficacy Survey Items ............................................................. 52
5. Reader Identity Survey Items ............................................................... 53
6. Reading Engagement Survey Items ...................................................... 54
7. Models for Regression Analyses ........................................................... 55
8. Descriptive Statistics by Disability Group .............................................. 56
9. Descriptive Statistics by Gender .......................................................... 57
10. Zero-Order Correlation Matrix ............................................................. 58
11. Model Statistics for Regression Analyses .............................................. 59
List of Figures

1. A Reading Engagement Model for Struggling Adolescents …….. 26

2. A Revised Reading Engagement Model for Struggling Adolescents And Adolescent Identity and Engagement Theory 71

3. A Reading Engagement Model and Self-Determination Theory 74
CHAPTER ONE

Introduction and Statement of the Problem

As advances in early intervention in literacy show increasing successes (National Institute for Literacy, 2008), the attention of literacy researchers turns to adolescent literacy and to what has been described as a “marked stagnation in the literacy achievement of adolescents” (Carnegie Council on Advancing Adolescent Literacy, 2010, p. 8). One reason for this stagnation is a lack of the reading skills needed for success in disciplinary classes (science, history, mathematics and language arts). This struggle with literacy affects 67% of students in 4th grade, and 76% in 8th grade who are reading below proficient levels (NAEP, 2011), and as a result, are often unable to complete high school requirements and earn a diploma.

High school dropout rates are quite high across the nation (Alliance for Excellent Education, 2010), with approximately 7,000 students dropping out each day, and 1.3 million students dropping out of school each year. In Washington State alone, there were over 1,300 drop outs in 2007 (Johnson, 2008). Across the nation in 2010, the on-time graduation rate was 78% (Resnick, 2013), with 22% of secondary students dropping out or needing more time to graduate. While there are many potential reasons for this number of dropouts (Alliance for Excellent Education, 2010), it is safe to say that one reason is a lack of success in their secondary education and a lack of student engagement. In fact, “the six million secondary students who comprise the lowest 25 percent of achievement are twenty times more likely to drop out of high school than students in the top-performing quartile” (Alliance for Excellence Education, 2010, p. 2).

This failure in secondary schools becomes a huge problem for our society because too many youth who struggle end up without a good career (Newman, Wagner, Cameto, & Knokey,
2009), or involved in the justice system (Gagnon, 2010). In fact, various reports have put the rates of juvenile detainees with disabilities between 32%-95% (Gagnon, 2010; NJJDPC, 2012; Rozalski, Deignan & Engel, 2008). Additionally, a reported 22% of students who graduated with a diploma have been arrested, compared to 49% of youth who did not complete high school (Newman, et al., 2009).

It is really difficult to experience a successful life as an adult without a high school diploma. Success in secondary school leads directly to post-secondary school successes in employment and/or continued education (Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985). Fifty percent of graduates from special education across the nation enroll in postsecondary school, as compared to 16.6% of drop outs (Newman, et al., 2009). Additionally, those who complete high school are employed at a greater rate (61%) than those who drop out (41%), within four years of graduation. Such a large rate of unengagement (unemployed or non-enrolled in post-secondary education programs) is alarming, and demands our attention as educators and researchers. If students are experiencing unemployment up to four years after graduation, then they are not likely to be on track to a successful career. If students are not experiencing success as adults exiting our schools, then it could be argued that the education system needs to do a better job preparing them for transition to adult lives.

One of the major reasons students aren’t successful in high school is because they can’t pass core classes or state graduation exams. This struggle with academics includes students with disabilities, who earn a lower average GPA than their non-disabled peers (2.3 compared to 2.7; Newman, Wagner, Huang, Shaver, Knokey, Yu, Contreras, Ferguson, Greene, Nagle, & Cameto, 2011). The situation is even worse in content-area classes. The struggle to pass classes, and
academic core classes in particular, is a serious impediment to success in secondary school. Students must pass their core classes in order to progress towards receiving a diploma.

Additionally, many states require that students pass exit exams in order to earn a high school diploma (Johnson, Thurlow & Stout, 2007). A study of the impact of the exit exam in California on its students with disabilities found that less than 10% of students in full-time special education programs passed the English portion of the exit exam, and that only about 50% of students with disabilities mainstreamed in general education classes were able to pass the exam on the first attempt (Kravetz, 2006); resulting in few high school graduates.

A major cause for failure in these two tasks (passing core classes and high school competency exams) is that students don’t have the literacy skills needed to be successful. Recent reports indicate that as many as eight million students between 4th and 12th grades struggle with reading (NCES, 2003), and only 34% of fourth and eighth grade students are reading at or above proficiency level (NCES, 2011). With literacy skills this dismal, the impact on ability to access information in order to pass core classes and graduation exit exams is profound. If students are not able to read, they are not able to complete these two graduation requirements.

**Important Reading Skills Necessary for Success in Secondary Classes**

Some important factors that impact success in secondary literacy are fluency, vocabulary knowledge, background knowledge, reading comprehension, reading motivation and self-efficacy in reading, as well as a personal reader identity. Reading fluency is a critical skill that must be achieved in order for students to comprehend the texts they are reading (Torgesen, Houston, Rissman, Decker, Roberts, Vaughn, Wexler, Francis, Rivera & Lesaux, 2007). Fluency is therefore vital to reading achievement in secondary settings. Vocabulary skills become critical as students move from elementary to secondary settings (Scammacca, Roberts, Vaughn,
Edmonds, Wexler, Reutebuch, & Torgesen, 2007; Torgesen, et al., 2007), and encounter more and increasingly complex vocabulary in their content area reading at the secondary level. Building a rich vocabulary is therefore also a vital component of successful secondary literacy.

Strong background knowledge in the content area of text being read is also an important factor that impacts successful secondary reading and writing (Torgesen, et al., 2007). A student’s knowledge base and contextual background must continue to grow in order for continued comprehension to occur in both domain-specific and domain-general literacy contexts (Torgesen, et al., 2007). Background knowledge is, therefore, also critical.

Additionally, effective use of reading comprehension and cognitive strategies while reading is critical to successful literacy (Torgesen, et al., 2007). Use of these strategies becomes more important as students transition from elementary literacy expectations (learning to read) to secondary expectations (reading to learn). Deliberate instruction in reading-to-learn strategies is critical, as early inoculation in literacy is often not enough to carry students through their secondary reading demands (Snow & Moje, 2010). Reading comprehension and the ability to implement strategies to support comprehension are therefore consequential components to success in secondary literacy.

Reading motivation is also one of the key elements of an effective program for increasing achievement in adolescent literacy (Biancarosa & Snow, 2004; Torgesen, et al., 2007). Roberts and colleagues describe motivation as an “essential component” of instruction in literacy for adolescents attempting to comprehend difficult reading materials in their disciplinary classes (Roberts, Torgesen, Boardman, & Scammacca, 2008, p. 67). A high level of motivation can push struggling students to “persist even in the face of challenging texts” (Moje, Overby, Ytsvaer, & Morris, 2008, p. 112). And such persistence may make the difference between success or failure.
for student who struggle with comprehension. Therefore, it can be argued that motivation is a vital component of adolescent literacy intervention (Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008), although an elusive one (Applegate & Applegate, 2011). For adolescents, their academic motivation is often tied to identity formation and identity choices.

Adolescent youth are in a critical stage of identity formation, which is impacted by their environment, social interactions and the daily choices they make in their personal and academic lives. They are active participants and stakeholders in their own lives, a fact which is often not recognized by their teachers. The choices they make about their identity impact the participation and effort they put into school-related activities (Moore & Cunningham, 2006). Adolescents “enact identities that draw from their senses of self in spaces, times and relationships … and from the ways that their identity enactments are recognized” (p. 88). These identity choices can lead towards engagement with literacy activities or disengagement. Such a choice would have a lasting impact on literacy achievement, as time spent reading directly impacts literacy skill development (Cipielewski & Stanovich, 1992).

While engaging with their environments and experiences, youth often adopt identities that impede academic success, as a result of viewing educational institutions as power houses of repression, based on their ethnicity, race, gender, class identity, sexual orientation, or ability. Such a rebellion against this perceived repression or power structure can lead to disengagement, and often to failure or dropping out of school (Moore & Cunningham, 2006). As part of their identity formation, adolescents develop their self-concepts as readers through participation in or non-participation in literacy activities (Alvermann, Hinchman, Moore, Phelps, & Waff, 2006). Nielsen (2006) describes this identity formation well. “As we move from beginner to apprentice to fully functioning reader (student, working adult), we develop a greater sense of agency: Yes, I
can move this world.” (p.26). In addition to literature influencing and impacting their forming identities, adolescents are also defining their identities as readers through their experiences with this activity (Alvermann, Jonas, Steele, & Washington, 2006). As they succeed or struggle with literacy activities, “youth (see) themselves in such ways as high achievers, questioners, and disappointments relative to academic literacy” (Moore, 2006, p. 83). In this way, “student identities and subjectivities interplay with their literacy development” (Tatum, 2006, p. 66). In fact, “… identity construction is central to one’s literacy development” (p. 66). Adolescents are in a critical stage of their lives, one in which they are making choices that impact their identities, which in turn influence more daily choices, academic and personal, in turn sending them along a course of actions that has a huge impact on their futures, positive or negative.

The choices adolescents make are often based on their interest and motivation. Youth are busy establishing their identities, and asserting their agency, “free will and self-determination” (Moore & Cunningham, 2006, p. 132), through acting on their beliefs and interests. In academic contexts, reading motivation is a predictor of amount of time students spend reading (Guthrie, Wigfield, Metsala, & Cox, 1999), and thereby has a powerful impact on literacy outcomes. In this way, we can see that choices regarding how to spend their time are often based on interests, in both personal and academic contexts.

It is a concern that unsuccessful students with low motivation for reading will make identity choices that will lead to unsuccessful post-secondary experiences, such as unemployment, juvenile delinquency, and poverty. Low motivation is related to low achievement in a reciprocal way (Morgan & Fuchs, 2007), and it is possible that intervening in the area of literacy will improve motivation, but also intervening in motivation may increase literacy achievement, which is likely to increase success in high school and successful post-secondary
experiences. Either route may help students develop identities that set them on a course for academic success, and thereby successful post-secondary experiences. However, we don’t have enough information about the reading motivation of adolescents who are unsuccessful to enact many successful interventions.

Very few studies have been conducted that examine the motivation of adolescents with disabilities, and only two have been published which include students from high school settings (Deci, Hodges, Pierson, & Tomassone, 1992; Nelson & Manset-Williams, 2006). Deci, et al. examined self-perception and perception-of-context variables and the impact these constructs have on reading and mathematics outcomes, while Nelson and Manset-Williams focused on the impact of a reading program on the value of reading and self-concept of middle and high school students with disabilities. No studies that examine the motivation for and interest in reading of unsuccessful adolescents have been found. We need more information on the motivation for reading of this particular population in order to assist them with developing their reading skills, through promoting their motivation and self-efficacy in reading. This lack of information regarding the motivation and self-efficacy for reading, and reader identities of adolescents who struggle with academics is an important gap in the literature which needs to be addressed.
CHAPTER TWO

Literature Review and Conceptual Framework

The relationship between reading comprehension strategies and reading achievement for students has been long established (Bakken, Mastropieri & Scruggs, 1997; Jitendra, Hoppes, & Xin, 2000; Rogevich & Perin, 2008; Vaughn, Klingner, Bryant, 2001). A student who possesses greater reading comprehension skills and is able to access more fix-up strategies when he/she stumbles does better at literacy tasks than the student who does not have such skills and strategies readily available. However, as Afflerbach and colleagues (Afflerbach, Cho, Kim, Elliker & Doyle, 2013) point out, there is a lot more going on in engaged reading than simple strategy use. These researchers call for an “immediate” focus on other factors that impact reading achievement, including reading efficacy and reading motivation. For adolescents, an additional factor that may influence their engagement with literacy includes their identity as a reader. Additionally, for many students the presence of a disability adds another dimension to the experience of literacy engagement or disengagement.

This chapter will present relevant theoretical perspectives and review research on the reading efficacy, reading motivation, the formation of reader identity and reading engagement of both typically-developing students and those with disabilities. This chapter will conclude with the purpose of the study, research goals and questions.

Self-Determination Theory of Reading Motivation (SDT)

Self-Determination Theory (SDT) helps to inform our thinking about adolescents’ motivation for reading, and how motivation connects to reading efficacy and reader identity. Motivation for learning depends on basic human needs being met, which must be addressed in order for individuals to achieve to their full potential (Deci & Ryan, 2008). These basic needs are
autonomy, competence and relatedness. Autonomy, or the sense of control over one’s own life, is an important factor influencing engagement in academics, and relates directly to a sense of one’s own identity. Competence has been shown to be related to self-efficacy (the perception of competence), which impacts and is impacted by motivation for reading (Stenson, 2006). Relatedness is the sense of having a connection to a parent, teacher or peer. These basic needs, when met, can positively impact intrinsic motivation for reading, and when unmet, negatively impact such intrinsic motivation (Ryan & Deci, 2009).

Autonomous motivation, according to SDT, relates to choice and preference (Vansteenkiste, Lens & Deci, 2006), and to the “perception of control” (Guthrie & Coddington, 2009). The fact that autonomy is a basic need which, if not met, thwarts motivation for learning, and, if supported, increases intrinsic motivation for learning, indicates the importance of the assertion of agency in the daily identity choices being made by adolescents. In this way SDT aligns with Adolescent Identity and Agency theory to support our conceptual framework of reading engagement for adolescents with disabilities. Adolescents are in an important identity-formation phase of their lives (Atwater, 1996), which is related to their experiences, successes, motivation for, and engagement in learning activities. Opportunities for autonomy over learning activities result in increases in intrinsic motivation (Ryan & Deci, 2009), and in greater engagement in academic activities (Skinner, Wellborn, & Connell, 1990).

The basic need for competence relates directly with feelings of self-efficacy, where a student feels competent to complete the task set before him/her. Feelings of learned helplessness can erode self-efficacy, as is often the case with struggling students. The presence of self-efficacy for a reading task can influence a student’s “persistence, use of higher-level learning
strategies, and choice of challenging activities” (Blumenfeld, et al., 2006, p. 477), and in this way, positively impact their academic outcomes.

Relatedness, another basic need, also influences engagement in academic tasks (Blumenfeld, et al., 2006). Such feelings of relatedness can occur as a result of friendships established with peers, or connections made with teachers or parents. Relatedness has been shown to predict engagement in academic tasks (Furrer & Skinner, 2003). Additionally, research has shown that a feeling of relatedness is stronger in students in younger grades, and drops off in 5th and 6th grades while feelings of relatedness indicated stronger engagement for students in 6th grade, than for their younger peers (Furrer & Skinner). Social situations can “either support or stifle that natural basis for learning” (Ryan & Deci, 2009, p. 174.) Therefore, this social factor plays an important role on the motivation to participate and engage with school-related activities, including literacy, for older students.

There are some basic needs that a student needs to have met, including competence, autonomy and relatedness. Such basic needs take a position of priority in the lives of our youth, particularly if they are not being met. The basic need of autonomy, in particular, plays an important role in identity formation with youth. If autonomy in literacy interactions can be achieved, a student may begin to form a stronger reader identity, which may then lead to an increase in engagement in literacy tasks. When these basic needs are not met, a youth will tend to become less engaged (Skinner, Marchand, Furrer, & Kindermann, 2008), and in fact become disaffected with learning.

The needs for competence, autonomy, and relatedness become important when considering the transitional period of adolescence, and the carving out of one’s own identity that adolescents engage in. Through assertion of their autonomy, in the daily choices they make,
adolescents seek to meet one of these basic needs, while at the same time making important identity decisions that may have a lasting impact on their lives.

**Adolescent Identity and Agency**

This idea of the importance of autonomy works in conjunction with the ideas found in Adolescent Identity and Agency theory (Atwater, 1996; Moje & Dillon, 2006; Moore & Cunningham, 2006), which posits that by assertion of agency adolescents are acting autonomously and making decisions regarding their identities. The period of middle adolescence - mid to late teen years - is an important one for identity exploration, formation and restructuring (Atwater, 1996). During this period, youth are struggling with an identity crisis, trying to establish a relationship between their present selves and future potential selves (Côté, 2009), through decision-making, conflict and experimentation. The identity choices in which they enact a variety of roles as student, individual, peer, etc., vary from setting to setting, and are influenced by relationships with peers and adults, perceived abilities and obstacles, and access to materials and human resources (Moje & Dillon, 2006). It is a time of turmoil and change, of assertion of agency, and resistance to power. It is also a critical time in the formation of potentially long-lasting and life-changing identities, such as that of a “good reader”, “resistant student”, “trouble-maker”, etc. Choices made at this time impact academic progress, as well as social attitudes and relationships, and can lay the foundation for a life-long trajectory.

Although this fact is not always recognized by educators, adolescents are active participants and stakeholders in their own education and lives (Atwater, 1996). They are making important choices and are “actively engaged in revising their own (identities)” (p. 311). Such identity choices affect and influence participation and endeavor in school-related activities on a daily basis (Moore & Cunningham, 2006). While establishing their identity, or multiple
identities, adolescents assert their agency, “free will and self-determination” (Moore & Cunningham, 2006, p. 132), acting on their own beliefs. These decisions and beliefs shape their reality. This assertion of agency by youth can have a huge impact on their literacy and learning in general. Choices to engage in reading or to disengage with literacy activities impact reading skills, and may be based on their reader identity, reading motivation, and reading efficacy.

These choices are influenced by and have an impact on experiences in their school environment (Marsh & Stolle, 2006), based on how others position them, and how they position themselves. As part of their identity formation, adolescents develop their self-concepts as readers through reading experiences (Alvermann, Jonas, et al., 2006; Schoenbach & Greenleaf, 2009). Nielsen (2006) describes this identity formation well, “As we move from beginner to apprentice to fully functioning reader (student, working adult), we develop a greater sense of agency: Yes, I can move this world.” (p. 26). In addition to literature influencing and impacting their forming identities (Alvermann, Marshall, McLean, Huddleston, Joaquin, & Bishop, 2012; McCarthey, 2001), adolescents are also defining their identities as readers through their experiences with this activity (Alvermann, Jonas, et al., 2006). As they succeed or struggle with literacy activities, “youth (see) themselves in such ways as high achievers, questioners, and disappointments relative to academic literacy” (Moore, 2006, p. 83). Adolescents who view themselves as having positive reader identities are more likely to choose to actively engage in reading activities in an academic setting, as well as during their free time. We can see, therefore, that “identity construction is central to one’s literacy development” (Tatum, 2006, p. 66), and reciprocally, literacy development can have a powerful impact on identity formation.

While engaging with their environments and experiences, youth often adopt identities that impede academic success, as a result of viewing educational institutions as power houses of
repression, based on their ethnicity, race, gender, class identity, sexual orientation, and ability. Such a rebellion against this perceived repression or power structure can lead to disengagement by youths, and often to failure or dropping out of school (Moore & Cunningham, 2006), which can then lead to involvement with the juvenile justice system, unemployment, or inability to set up independent living as an adult (Leone, Christle, Nelson, Skiba, Frey & Jolivette, 2003; NJJDPC, 2012).

Many adolescents view their reader identity as fixed (Schoenbach & Greenleaf, 2009). They are either a “good reader” or a “bad reader”, and nothing can change that. In order to predispose adolescents for engaged literacy, teachers should assist students in viewing their identity as a reader as non-static. In fact, if adolescents are to become engaged readers, they must develop “resilient literacy identities” (Schoenbach & Greenleaf, 2009, pp. 105) to allow for growth in reading ability and reader identity. It is therefore imperative that researchers and educators take into consideration the perspectives and identities of the adolescents they seek to serve.

This view of adolescent identity, when applied to students in special education, becomes critical. Students with disabilities are struggling academically, at a minimum, and need additional supports to succeed, and to form positive self-identities. In addition to struggles with reading which often accompany a disability, the emerging identities of these youth are also impacted by the fact of their disability. Identity can be influenced by the perception of others, and therefore a disability will often be accompanied by a stigma, which impacts how others view a student, and thereby the student’s own identity (Parker & Yau, 2012).

These ideas regarding identity choices and assertion of agency over an adolescent’s own life frame our thinking about the role of reader identity and its impact on reading engagement. It is with
this in mind that this research project was conceptualized, in an effort to understand the experiences of adolescents with disabilities in relation to their reading engagement and the factors that impact such engagement: reading efficacy, reading motivation, and reader identity.

**A Proposed Reading Engagement Model for Struggling Adolescents**

A reading engagement model is proposed which incorporates factors influencing reading engagement. While reading comprehension strategies and skills and the presence of a disability both have an impact on the successes of adolescents with disabilities (Bakken, et al., 1997; Jitendra, et al., 2000; NCES, 2011; NJCLD, 2008; Rogevich & Perin, 2008), there are other important factors that are related to student success as well. I propose that feelings of reading efficacy are related to motivation for reading and formation of a positive or negative reader identity in a reciprocal fashion, as are motivation for reading and reader identity. I also theorize that all three of these constructs, in turn, predict the engagement or disaffection with literacy for adolescents who have been unsuccessful in school (see Figure 1). This section will review the literature focused on disability, reading efficacy, motivation for reading, reader identity formation, and reading engagement for adolescents with and without disabilities.

**Disability**

The presence of a disability often influences academic success for students, particularly in the area of literacy (Ratz & Lenhard, 2013). There are currently between 2% and 17% of students with disabilities scoring at or above proficient on the NAEP reading assessment for eighth grade (NCES, 2011), varying by state. This means that up to 83% of students with disabilities are not able to score at the proficient level in reading, compared with an overall national rate of 76%. Eight percent of eighth grade students with disabilities in Washington State
For struggling adolescents many important factors are related to reading engagement. Reading motivation, efficacy, reader identity and the presence of a disability are all conceptualized as predictors of reading engagement.

Figure 1. A Reading Engagement Model for Struggling Adolescents
scored at or above proficiency level, leaving 92% reading below proficient levels. These numbers indicate that students with disabilities are not doing as well as their non-disabled peers in literacy tasks, and therefore face a greater challenge with academics and literacy demands in particular.

For younger children, students with disabilities often have more difficulty than their typically-developing peers in acquiring the necessary literacy skills needed for academic advancement (Whitehurst & Lonigan, 1998). Even when given extensive intervention in early literacy, many children with disabilities do not catch up to their peers (Green, Terry, & Gallagher, 2014). Studies show that students with disabilities often lag behind their peers in literacy tasks. For young students with Intellectual Disabilities, van Tilborg and colleagues (van Tilborg, Segers, van Balkom, & Verhoeven, 2014) found that these students were behind their typically-developing peers in all measures that predict early literacy.

We know that students with disabilities, and with Learning Disabilities in particular, have extensive literacy needs, particularly at the secondary level (National Joint Committee on Learning Disabilities [NJCLD], 2008; Roberts, Torgersen, Boardman & Scammacca, 2008). Additionally, the struggle with reading and with comprehension of text that adolescents with disabilities face has real life implications. Connections have been made between continued failure in academics and problems with motivation and interest in literacy (Torgesen, et al., 2007). Furthermore, adolescents who enter the high school setting unable to read at grade level, are not prepared for the academic demands they encounter in disciplinary classes (Lyon, 1997), and face failure across academic contexts. Such failure is likely to lead to disengagement with academic and literacy activities.
The ability to read, or lack thereof, can therefore have a profound impact on successes in school, which in turn, impact future aspirations and accomplishments for these young people, including successful transitions into adult lives of employment and independent living (Hasazi, Gordon, & Roe, 1985; NJCLD, 2008).

**Reading Efficacy**

Self-efficacy is defined as the belief that one can accomplish the task at hand. “People acquire information to appraise self-efficacy from their actual performances, vicarious (observational) experiences, forms of persuasion, and physiological symptoms.” (Schunk, Meece & Pintrich, 2014, p. 145). They determine whether or not they can accomplish the task at hand, using these sources. Reading efficacy, also called self-efficacy for reading, is the self-efficacy a person feels towards a reading task.

With typically-developing students, reading efficacy has been found to differ between the genders for younger adolescents, being higher in female students than in their male peers, and also to vary according to grade level, being higher in eighth grade students compared to sixth graders (Mucherah & Yoder, 2008). For this reason, we may expect the findings for high school aged students to also vary, even among students who are struggling in school. Very few have been conducted that include students with disabilities. More data are needed with this population. In studies of students in fifth through eighth grades, reading efficacy has been shown to correlate with reading engagement, as measured by amount and breadth of reading (Baker & Wigfield, 1999). Additionally, middle school students who believed they read well, reported reading more frequently than did their peers who lacked reading efficacy for reading (Mucherah & Yoder, 2008). Reading efficacy has also been shown to correlate with reading achievement on assessments (Mucherah & Yoder, 2008), particularly predicting reading comprehension skills for
fifth grade L1 (English is their first language) and EFL (English as foreign language) learners in the United States and China (Lin, Wong, & McBride-Chang, 2012) and fifth grade students in Peru (Silva, Verhoeven, & van Leeuwe, 2011). Additionally, self-efficacy for reading science texts has been shown to uniquely predict learning and comprehension in science (Braten, Ferguson, Anmarkrud, & Stromso, 2013) for students in tenth grade.

Some studies focused on reading efficacy for students with disabilities have resulted in interesting findings. Dunn and Shapiro (1999) reported lower reading efficacy for students with disabilities, as they proceeded up the grade levels. In a study of elementary students (2nd – 7th grade) in Iran with ADHD and Reading Disabilities (RD), these researchers found that as students increased in age, their reading efficacy levels dropped below those of their peers in lower grade levels.

Reading efficacy has also been linked to academic achievement for elementary through high school students with disabilities. A study of students with LD and Emotional/Behavioral Disability (E/BD), in elementary through high school (Deci, et al., 1992) showed that motivational self-perception and perception-of-context variables consistently predicted academic achievement in reading. In this study, motivational self-perception is described as related to reading efficacy.

Another intervention study focused on the impact of two different reading curriculum programs on the reading efficacy of participants with RD (Nelson & Manset-Williams, 2006). Compared to Explicit Instruction, Guided Reading appeared to have a greater impact on the reading efficacy of 4th – 8th grade participants. These studies, while beginning to help us understand the area of reading efficacy for adolescents with disabilities, do not provide enough
information regarding the relationship between reading efficacy, reading motivation and reader identities for adolescents with disabilities. More empirical data are needed.

**Reading Motivation**

Motivation for reading has been shown to positively impact reading comprehension and successes (Guthrie & Wigfield, 2000) in elementary students both in the United States (Cox & Guthrie, 2001; Wigfield & Guthrie, 1997) and internationally (Wang & Guthrie, 2004). Becker et al. found that reading motivation in students at the fourth grade level was related to reading achievement in sixth grade (Becker, McElvany, & Kortenbruck, 2010).

Motivation has also been found to be a predictor for the frequency with which a student will read for personal enjoyment (Cox & Guthrie, 2001; Wang & Guthrie, 2004), and the amount of reading in school (Cox & Guthrie, 2001), which are indicators of reading engagement. In fact, students in fourth and fifth grades who were intrinsically motivated were found to read as much as three times more, and much more widely, than their peers with lower intrinsic motivation scores (Wigfield & Guthrie, 1997). Additionally, these researchers suggest that this is not a bi-directional relationship, where increased amounts of reading would lead to increases in motivation, but in fact, that this relationship is indeed predictive, and only flows in one direction. A study of sixth and eighth grade students showed that students who held high levels of reading motivation read more than did their peers with lower levels of reading motivation (Mucherah & Yoder, 2008).

Motivation has been described as “multifaceted” (Baker & Wigfield, 1999; Wigfield & Guthrie, 1997), indicating that there are sub-components of motivation that may impact academic achievement in various ways. These constructs of motivation are measurable and important to understand when considering the relation between reading motivation and
achievement (Baker & Wigfield, 1999). What are sometimes referred to as intrinsic motivations, in particular, have also been shown to be positively related to achievement for elementary students (Gottfried, 1990). The constructs of curiosity, involvement, and preference for challenge have been shown to be positively related to text comprehension after other motivational constructs and the amount of reading were controlled for, among 4th graders in the United States and China (Wang and Guthrie, 2004). Interestingly, these researchers also found some motivational constructs, including recognition and social motivations, to be negatively associated with reading comprehension. We can see, therefore, that the relationship between motivations for reading and reading achievement is not a simple one.

While several studies have established a connection between constructs of motivation and reading achievement outcomes in elementary students (Baker & Wigfield, 1999; Wang & Guthrie, 2004), and younger adolescents (Guthrie & Humenick, 2004), only one study with high school students was identified (Bozack, 2011). Bozack examined male high school students without disabilities, and found that they self-reported high levels of motivation for reading, despite teacher reports to the contrary. I hypothesize that motivation is correlated to reading efficacy and reader identity, and that it predicts reading engagement for adolescents because it has been found to have strong connections in prior research to efficacy (Bozack, 2011) and engagement (Cox & Guthrie, 2001), and because connections have been suggested between reader identity and adolescent choice (Moore & Cunningham, 2006), which is an important factor to engagement. Motivation is considered to comprise multiple aspects within the construct. While they do not stand alone, they are facets of the overall construct and are explained below.
**Interest/flow.** The concepts of challenge and curiosity have been shown to play a role in reading motivation for elementary students (Wigfield & Guthrie, 1995; 1997). This aspect of motivation has been shown to impact amount of reading, and thereby reading comprehension (Wigfield & Guthrie, 1997). Miller (2003) found that challenging reading tasks increased student satisfaction (enjoyment of the lesson) and task mastery goal orientation (which is the desire to “improve one’s understanding of a topic” (p. 48) and achievement scores for elementary students, while lowering what they termed their “ego social ratings” which is defined as desire to “outperform classmates” (p. 48).

Positive reader identity formation is also believed to be impacted by interest/flow in reading for adolescents with disabilities. Bozack (2011) found that the interest-flow construct of reading motivation correlated to positive reader identity, for non-disabled adolescent boys.

**Involvement.** Involvement is the personal satisfaction one experiences when reading a text of choice, and has been shown to be highly predictive of reading comprehension outcomes (Baker & Wigfield, 1999; Bozack, 2011; Lin, et al., 2012; Wang & Guthrie, 2004). When children become interested in a story, their involvement increases and as a result their concentration also increases (Wang & Guthrie, 2004). Additionally, reading involvement has been shown to have a relationship to engagement, measured by the amount of reading a student engages in for academic and personal purposes (Cox & Guthrie, 2001; Wang & Guthrie, 2004; Wigfield & Guthrie, 1997). Bozack (2011) found involvement to strongly correlate to a positive reader identity, for non-disabled adolescent boys. A study of students with LD and Emotional/Behavioral Disability (E/BD) in elementary through high school, suggests that differences between disability types may play a role in motivational constructs and their impact.
on achievement (Deci, et al., 1992). These researchers found that for students with E/BD, unlike their peers with LD, involvement was a strong predictor of achievement.

**Compliance.** Compliance in reading refers to striving for an external goal through completion of a reading task. Such external goals students are striving for may include approval by the teacher, staying out of trouble, etc. Similar to recognition, compliance has also been shown to be negatively correlated to reading comprehension achievement for fourth grade students (Wang & Guthrie, 2004) and adolescent males (Bozack, 2011). Students who are more motivated by compliance factors are less likely to be those with high levels of reading successes, as opposed to peers whose motivations are often described as “intrinsic”.

**Social motives for reading.** Social motives for reading refer to the desire to share with friends or family the experiences of reading a text. Social interaction is a construct of motivation that has been shown to be related to reading achievement in typically-developing third through sixth grade students (Baker & Wigfield, 1999; Furrer & Skinner, 2003; Silva, et al., 2011). In another study, it has been shown to be negatively correlated to reading achievement (Wang & Guthrie, 2004) for fourth grade students in the United States and China. Social motives for reading has also been shown to be related to reading amount for typically-developing students in third through sixth grades (Furrer & Skinner, 2003), and in fourth and fifth grades, for reading outside of school (Wigfield & Guthrie, 1997). Social motives for reading have been shown to be stronger in younger students, as opposed to their older peers (Everhart, 2005). Social interaction or supports have also been shown to impact other motivational constructs. Perceived reading support from parents or friends has been found to impact the motivational constructs of recognition and challenge (Klauda & Wigfield, 2012). Wang and Guthrie (2004) also found that children were often reading because their parents valued reading and encouraged them to interact...
with texts, and because they enjoyed sharing their reading with families and friends. If relatedness is a basic psychological need, in alignment with SDT theory, and is found to be an important factor impacting engagement and learning in children (Furrer & Skinner, 2003), then it may be an important component of reading instruction. Social interactions have been found to be key to academic motivation and rate of academic improvement (Furrer & Skinner, 2003).

Results of a study with students who were both disabled and non-disabled (Lee & Zentall, 2012) showed some interesting findings in social motivation in the fourth grade. Students with ADHD and Reading Disability (RD) and with RD alone showed equivalent social motivation scores to typically-developing peers through the fourth grade. However, there is a clear pattern of motivation decreasing after the fourth grade, accompanied by less reading outside of school for students with reading disabilities, as well as differences in reading motivation between disability types. Another study of students with LD and E/BD, in elementary through high school, (Deci, et al., 1992) found that teacher warmth was related to secondary student motivation, unlike with the elementary participants. Findings of this study suggest differences in motivation for reading between elementary and secondary students with disabilities, and between students within different disability categories.

**Comparisons of motivation between students with and without disabilities.** A comparison of fourth and fifth grade students with and without disabilities in Iran found that students without disabilities are both more motivated to read and have a greater reading attitude than their peers with dyslexia (Mihandoost, Elias, Sharifah, & Mahmud, 2011).

In a comparison of children with ADHD and their typically-developing peers, ages 7 to 11, children with ADHD self-reported higher levels of external motivations than did their typically-developing peers (Dunn & Shapiro, 1999). Additionally, these children with ADHD
also reported high levels of anxiety related to their ability to focus on reading tasks. They expressed a greater extrinsic motivation to read, indicating that they wanted to “look smart” (p. 340), compared to their peers who had an easier time with reading achievement, and were more inclined towards tasks that helped them to “learn something”. In this case, the motivation of not wanting to look like they struggled is very powerful, and may have impacted their successes in reading. For adolescents with disabilities, these extrinsic motivational factors may also be greater than in their typically-developing peers, if only because they struggle more with academics.

In another study of children in second through fifth grade, Lee and Zentall (2012) found that students with ADHD showed motivation scores equivalent to those of their typically-developing peers, and to peers with Reading Disability (RD) in the lower grades. However by the time the children with RD reached fourth grade, they exhibited less motivation that their non-disabled peers and those with ADHD. Additionally, students with both ADHD and RD showed lower motivation scores on some motivational constructs by the third grade. These researchers also found that in fourth grade students held higher motivation scores in these same constructs of reading motivation than students in third or fifth grades, for both students with and without disabilities.

Connections were also found between reading achievement and motivation for reading among struggling readers in middle and high school, both with and without LD (Melekoglu, 2011), after exposure to a READ 180 intervention. Findings indicate that while all participants improved in reading achievement, the students with LD had declining overall motivation scores, with a slight increase in self-concept (Melekoglu, 2011). Peers without disabilities did show increases in motivation scores, although not significant. This suggests a difference in motivation for reading between students with and without disabilities. More information is needed regarding
motivational differences between these groups of students, and comparisons to their peers without disabilities.

Taken together, these few studies comparing students with disabilities to their non-disabled peers show us a general trend of motivation decreasing as students move up the grades. These studies also point towards the possibility that students with disabilities might have overall lower or different types of motivation for reading than typically-developing peers, or those with different disability types. These studies do not provide enough information for researchers to fully understand what is happening uniquely with adolescents with disabilities.

**Reading motivation summary.** The multiple and various constructs of motivation for reading are complex, and the findings are varied. Some studies with typically-developing students have shown that students who possess high levels of certain types of motivated to read, often categorized as extrinsic, do worse on reading achievement assessments, perhaps because of a focus more on the reward, than on the act of reading (Wang & Guthrie, 2004). Others have found the opposite, with increased motivation related to increased reading achievement (Silva, et al., 2011). To date, there has only been a couple studies of the reading motivation of high school students (Bozack, 2011, Cantrel, Almasi, Rintamaa, Carter, Pennington, & Buckman) neither of which included students with disabilities.

**Reader Identity**

Identity has been described as “the intersection of features at any given moment” (McCarthey, 2001, p. 125), including race, class, gender, and ability, and as fluid and changing, impacted by interactions with people, institutions, and various practices. As adolescents negotiate their varied identities through decision-making in a variety of settings and social circumstances, they are impacted by personal, social and academic factors, and their decisions
influence their personal, social and academic potential future identities. Within these varied contexts, language is recognized to play a key role in an adolescent’s identity formation and view of self (Gee, 2001; McCarthey, 2001). A youth’s reader identity, therefore, is his/her conception about him/herself and literacy abilities. An adolescent might think of himself as a “good reader” or as a “bad reader”, for example. This reader identity is believed to be related to a youth’s reading efficacy, and reading motivation. Additionally, a youth’s reader identity is believed to impact his/her motivation for reading, and engagement in literacy activities.

How students view themselves as readers has not been extensively studied. One study examined the reader identities and interactions with texts of sixth grade students and found that students were motivated to become “good readers”, and also motivated to prevent being perceived by others as “bad readers” (Hall, 2010). This desire would inhibit them from engaging in tasks that would help them to become better readers because their fear of being perceived as “bad readers” would lead to avoidance of reading tasks. This shows the importance and impact of perceived identities on participation with reading tasks. Poor readers’ desire to mask their struggles can be preventative to their learning, and impact the engagement with learning tasks. In a second study with high school boys, Bozack (2011) found that reader identity was correlated with reading achievement, with a strong identity as a reader predicting better reading achievement. Additionally, this study found statistically significant correlations between reader identity and reading efficacy, and constructs of reading motivation.

Reader identity results in increased or decreased amounts of reading engagement. Identity formation is therefore a critical component of adolescent life, and has a huge impact on choices youth make, including whether or not to engage with academic or literacy activities. Additionally, identity views are closely related to literacy interests, or lack thereof. As
McCarthey (2001) explains, “literacy practices are one means through which identities are constructed” (p. 125). Therefore, literacy practices during the adolescent years, when such great strides and struggles are enacted towards identity formation, and when important identity decisions are being made are critical to academic successes (Moore & Cunningham, 2006).

Reader identity can have a powerful impact on reading and other literacy choices. “Who students are influences how they interact, respond to, and learn in classrooms” (McCarthey & Moje, 2002, p. 229). Students, adolescents in particular, will make decisions to engage with or disengage from reading, writing or interacting with text, based on their own reader identity formation, and their perceived roles within the contexts of various academic and personal settings. Researchers describe fifth grade students as having identities connected to literacy, “Especially for the avid readers and writers, much of their identity seemed to be tied to their literacy achievements” (McCarthey & Moje, 2002, p. 230). McCarthey and Moje (2002) describe books chosen by teachers being rejected by adolescents “because (students) could not identify with the people in the stories” (p. 229). This ability to identify with characters, or relate to content of reading as well as settings and perceived roles within those settings can have a powerful impact on academic choices, as illustrated above, in either a positive or negative manner. It is, therefore, imperative that researchers and educators become aware of the formation of reader identities, and take these identities into consideration when planning for literacy experiences designed to engage and enrich the lives and identity formation of adolescents. Additionally, and worthy of note, is the fact that a youth’s reader identity is often viewed differently by themselves than by adults in their lives (Bozack, 2011). I propose that reading identity is correlated with reading motivation and reading efficacy, and that it predicts reading engagement for adolescents with and without disabilities.
Very little is known about the construct of reader identity with adolescents. The research suggests that identity formation is a critical component of adolescence (Atwater, 1996), and Bozack (2011) made a connection to reading motivation for adolescents boys, and suggested that it was more intricate that her study could indicate. However, no data were found regarding the reader identity of adolescents with high-incidence disabilities.

**Reading Engagement**

Clear links have been established between engagement in school-related activities and (a) dropout prevention, school completion and success (Finn & Rock, 1997), (b) motivation (Blumenfeld, Kempler, & Krajcik, 2006), and (c) post-secondary outcomes (Finn, 2006) for typically-developing youth (Reschly & Christensen, 2013) and for those with disabilities (Reschly & Christenson, 2006; Sinclair, Christenson, & Thurlow, 2005). Those students who are more engaged have better academic and post-secondary outcomes. Academic engagement has been described as being multidimensional, and involves (a) behaviors, (b) emotions, (c) cognition (Reschly & Christenson, 2013), and (d) agency (Reeve, 2012). The behavioral aspects of engagement are often measured through attendance, suspensions, and participation in extracurricular activities (Mahatmya, Lohman, Matjaslo & Farb, 2012). Two aspects, namely emotions and cognition, are more difficult to measure, but it has been suggested that they are “determined by the extent to which the individual values and identifies with the activities” (Mahatmya, et al., 2012, p. 47). Identity and identification with academic activities, therefore, becomes a critical component of engagement. Agency, the fourth dimension of engagement, is also difficult to measure, but critical to the construct. Students are not simply reacting to academic settings when engaged, but also, “[generate] options that expand [their] freedom of
action and increase the chance [for them] to experience both strong motivation and meaningful learning” (Reeve, 2012, p. 162).

The construct of academic engagement is not simple, which may explain the difficulties researchers and educators encounter when attempting to increase the amount of engagement in students. However, it is critical to school completion and success, and researchers believe that it “drives learning [and] predicts school success” (Reschly & Christenson, 2013, p. 4). And yet, researchers have reported that “students are generally bored and disengaged in school” (Intrator & Kunzman, 2009, p. 31), especially at the secondary level.

Reading engagement is defined as “involvement in reading activities in which the reader displays … emotionally positive interactions with text” (Taboada, Townsend, & Boynton, 2013, p. 310). It has also been described as “the act of reading to meet internal and external expectations” (Guthrie, Klauda & Ho, 2013, p. 10). Such positive interactions with literacy activities has been shown to be an important component to reading successes, particularly for young adolescents. A number of studies have shown connections between reading engagement and motivation for reading and reading achievement, for young adolescent students.

Some intervention studies have focused on reading engagement as a dependent variable, and provided some contexts for increasing reading motivation in adolescents. In a study of 6th grade students, Cantrell and colleagues (Cantrell, et al., 2014) found that students who participated in the Learning Strategies Curriculum exhibited higher levels of cognitive engagement with reading activities, in addition to higher levels of motivation and efficacy for reading as well as strategy use, than did their peers who did not participate in this curriculum intervention. A second study involving 4th – 7th grade students, (Vieira & Grantham, 2011) found that “the more students were involved through reading, the more they found the story interesting,
and wished to read more stories” (p. 340), thus increasing their reading engagement. These researchers identified two levels of involvement with the stories by young readers: through outside observation (ie. listening to the story) and then internally, through identification with characters or aspects of the story. These studies indicate different methods for increasing reading engagement for students in this age group.

Reading engagement has also been shown to predict reading achievement for young adolescents. In a study of English Language Learners in the 5th and 6th grades (Taboada, Townsend & Boynton, 2013), researchers found that reading engagement predicted reading achievement. This study shows that reading engagement mediated the effects of general language proficiency and partially mediated the relationship between disciplinary vocabulary and comprehension in science classes. Engagement explained why science vocabulary predicted science comprehension and why English proficiency skills predicted reading comprehension. In a second study of 4th and 5th grade students, McElhone (2012) found that inclusion of a discourse strategy called conceptual press discourse was more effective than low press discourse in leading to higher levels of reading engagement outcomes. This mode of questioning involves pushing student thinking during class discourse, by pressing for more information. These two studies clearly show the connection between reading engagement and reading achievement.

Additionally, research has established reading engagement as a mediator between motivation for reading and reading achievement. Guthrie and colleagues (Guthrie, Klauda & Ho, 2013) found relationships among 7th grade students between reading motivation, reading engagement and comprehension outcomes for students receiving the Concept Oriented Reading Instruction (CORI). They established indirect connections through reading engagement between
reading motivation and reading outcomes. These researchers also posited that engagement has stronger long term (as opposed to short term) effects on reading achievement.

Additionally, the data suggest that adolescents with Learning Disabilities (LD) and Emotional/Behavioral Disabilities (E/BD) are less engaged than their typically-developing peers (Reschly & Christenson, 2006). This indicates that engagement with academics could be a critical component for students with disabilities, and to their future successes in secondary education. It is clear that reading engagement plays a pivotal role in the reading achievement of adolescents. With this in mind, I focus my research interest on the constructs that are related to and that predict reading engagement.

Conclusions

Successful engagement in reading is the end goal for reading researchers, teachers, and policy makers in the United States. Such achievement is vital because it has a powerful impact on the post-secondary lives of adolescents with disabilities. Those who do not develop literacy skills will have a difficult time passing the state graduation exit exams and academic core courses required for graduation from high school. Receipt of a high school diploma can be critical for post-secondary successes in education or employment, which lead to independent living and opportunities for quality life experiences. It is, therefore, an important step needed for all adolescents, including those with high-incidence disabilities, in order to achieve an independent and satisfying post-secondary life.

There is not much research to date examining the experiences of unsuccessful adolescents with and without disabilities on the constructs of motivations for reading, and its relationship to reader identity, reading efficacy, and reading engagement. In order to design more effective
interventions for adolescent literacy, we need a better understanding of these constructs that impact reading achievement at the secondary level.

For this reason, more empirical data are needed regarding the topic of adolescent literacy for unsuccessful youth. Exploration of the motivations for reading, reader identity, reading efficacy, and reading engagement of these youth could provide valuable insight into their experiences with literacy, that could be pivotal in assisting with the development of more interesting and effective literacy instruction for youth who are struggling or disenchanted with academic achievement.

With this in mind, this study has been designed to collect empirical data on the reading efficacy, reading motivation, reader identity and reading engagement of struggling adolescents with and without disabilities.

**Purpose of the Present Study**

The purpose of the present study is to examine the reading efficacy, reading motivations, reader identity, and reading engagement of tenth grade students with and without disabilities who are academically unsuccessful. Better understanding these constructs among these students will begin to build the research knowledge base for working with this population. Before we can design effective interventions to bolster the reading performance of high school students who are unsuccessful, we must better understand the phenomenon that is occurring within these youth in relation to literacy tasks at this pivotal time in their lives.

**Research Questions**

Based on the need for further information, as outlined above, the following research questions were asked:
1. What are the correlations between the constructs of interest (disability, reading efficacy, reading motivation, reader identity, and reading engagement) among unsuccessful 10th grade students with and without disabilities?

It is hypothesized that disability will be negatively correlated with the other constructs, because the presence of a disability is expected to negatively impact each of: motivation, efficacy, identity and engagement with reading. All other constructs are expected to be correlated with each other because connections have been made between each of these constructs in prior research.

2. What variables among reading motivation, reading efficacy, reader identity, and disability predict reading engagement among unsuccessful 10th grade students with and without disabilities?

It is hypothesized that each of these variables will predict reading engagement because each one is an important component of reading achievement, which we know to be related to reading engagement.
CHAPTER THREE

Methods

In order to answer the research questions, a correlational study was conducted that examined the motivation for reading, reader identity, reading efficacy and reading engagement for high school students with and without disabilities. This chapter will describe the following: the research design, the participants who were included, measures used, and the data analysis method.

Research Design

This research used data from a survey designed to measure different aspects of reading motivation, identity, efficacy, and reading engagement to examine the relations among the variables. In order to answer research question 1, a correlational analysis was conducted on the variables. In order to answer research question 2, a multiple linear regression analysis was used to determine whether the independent variables reading efficacy, reading motivation, reader identity and disability will predict the dependent variable reading engagement among struggling adolescent students.

Participants

Data collection was conducted with a convenience sample of tenth grade students (N = 52) with and without disabilities from high schools in two districts in western Washington. For purposes of this study, the presence of a disability was identified through qualification for special education or 504 services. The sample included participants from a range of socio-economic backgrounds, home languages, and cultures. School A has a 52.9% free and reduced lunch rate, and a 2.7% bilingual population. The student body consists of 57.4% white students, 15% Hispanic, 9.2% Asian/Native/Pacific Islander, and 11.5% African American. School B has a
63% free and reduced lunch rate, and an 8% bilingual student body. Additionally, 40% of the students are white, 15% Hispanic, 22% Asian/Native/Pacific Islander, 16% African American and 8% more than one race. School C has a 17.1% free and reduced lunch rate, and a 2.7% bilingual population. The student body consists of 72.1% white, 9.2% Hispanic, 22% Asian/Native/Pacific Islander, 1.9% African American, 5.5% more than one race. School D has a 22.9% free and reduced lunch rate, and 3.2% of the students are bilingual. Of the student body, 66.8% are white, 12.3% are Hispanic, 25.7% are Asian/Native/Pacific Islander, 3.2% are African American, and 4.7% more than one race.

Initial recruitment for this project included students with Learning Disabilities who were enrolled in tenth grade. The intended analysis was to involve differences among the constructs of interest for those who were “successful” and those who were “unsuccessful”. Conversations with teachers prior to recruitment assured me that students recruited for this study would be able to respond appropriately to the survey being read aloud. Teachers felt that students would be fully able to comprehend orally, and did not indicate any concerns for auditory processing. However, two changes were made to the eligibility for inclusion criteria: (1) inclusion of students who had ADHD, and (2) inclusion of students who were non-disabled, and who met the “unsuccessful” criteria. The initial change of inclusion criteria resulted from a conversation with a high school special education teacher who was assisting with student recruitment. At this particular high school, there were less than 10 students with LD in the tenth grade. This was very unusual, since we know that the incidence of LD is the highest of the special education categories. I spoke with this teacher about this unusual finding in her school, and she explained that there were many other students with LD enrolled in the tenth grade, but who were receiving services for special education under the category of Other Health Impairment: ADHD. Due to the high comorbidity
rates between these two disabilities, at this time it was determined to open up the recruitment of participants in this study to include those with ADHD.

A second interesting finding resulted from the recruitment process. I found very few (in fact a total of only three) students with disabilities who met the “successful” criteria. For this reason, I decided that there might be something worth examining in the students who were “unsuccessful”. For this reason, I opened up recruitment eligibility to include students without disabilities who met the “unsuccessful” criteria.

Teachers then recruited tenth grade students with and without disabilities who met the definition of “unsuccessful”. For the purposes of this study, “unsuccessful” is defined as having at least one of the following two characteristics: (1) received a failing score on the eighth grade Measurement of Student Progress (MSP) state-wide assessment of reading proficiency, or (2) received a failing grade in one or more high school classes. Inclusion criteria included the following: (1) enrolled in tenth grade, (2) having failed at least one high school class or the 8th grade MSP, regardless of disability status. Fifty two students were recruited into the study, from two school districts in Western Washington and from four high schools. In order to recruit participants for the study, teachers spoke to students and sent parental consent forms home with them. See Appendix B and C for recruitment letter and parental consent form. Additionally, parental consent forms were mailed home at three of the high schools. The return rate for consent forms was approximately 10%. Data were not included for five students because their data was incomplete. Additionally, another three students were dropped from the study because they did not qualify as “unsuccessful” based on inclusion criteria. Complete data were collected for 44 participants. Disability types included in the sample were Learning Disabilities (LD) and/or Attention Deficit/Hyperactivity Disorder (ADHD). See Table 1 for participant demographics.
Table 1

**Participant Demographics**

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Whole Sample (N)</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>School D</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>41% (18)</td>
<td>14%</td>
<td>5%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23% (10)</td>
<td>5%</td>
<td>9%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>7% (3)</td>
<td>2%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>African American</td>
<td>2% (1)</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>More than one race</td>
<td>25 (11)</td>
<td>5%</td>
<td>16%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Female</td>
<td>45% (20)</td>
<td>11%</td>
<td>25%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>ELL</td>
<td>16% (7)</td>
<td>7%</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Primary Disability</td>
<td>57% (25)</td>
<td>23%</td>
<td>14%</td>
<td>11%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Label**

<table>
<thead>
<tr>
<th></th>
<th>LD</th>
<th>ADHD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23 (10)</td>
<td>34 (15)</td>
</tr>
<tr>
<td>LD</td>
<td>7%</td>
<td>16%</td>
</tr>
<tr>
<td>ADHD</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Note.* Sample sizes are in parentheses. Schools A & B are from one district, and Schools C & D are from a second district. Disability category includes students who qualify for either special education or 504 services.

**Measures**

Data collection consisted of a group-administered survey measure of reading motivation, reading efficacy, reader identity and reading engagement, as well as data from student records.

**Student Record Data**

Scores from the eighth grade Measure of Student Progress (MSP) along with school-wide socio-economic status, attendance records, language status, grades, and academic areas serviced
by the IEP were obtained from student records. These data were requested from the school offices. The MSP is Washington State’s required third through eighth grade achievement test, with subtests in reading, writing, mathematics and science. For MSP score distribution, see Table 2. Level 4 is a passing score. There is missing data for 1 male participant from school A, 2 male participants from school C, one female and one male from school D.

Table 2

*Measurement of Student Progress (MSP) Levels*

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Students</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Level 4*</td>
<td>Level 3</td>
<td>Level 2</td>
<td>Level 1</td>
</tr>
<tr>
<td>School A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Girls</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Girls</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>School D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

* Level 4 is a passing score.
Survey Data

A survey instrument was used to measure four constructs: reading motivation, reading efficacy, reader identity, and reading engagement. The survey instrument was read aloud to students in order to ensure that reading decoding and comprehension issues did not interfere with motivation, efficacy, identity and engagement scores. Surveys were administered during the school day. Students were pulled from their classes to another unused classroom, where the surveys were read aloud by the author or an assistant (another doctoral student). The surveys were administered to all students who turned in consent forms at one time. However, surveys trickled in slowly, so more than once we returned to a high school to administer the survey a second and third time. Administration time for the survey was approximately 15 minutes. See Appendix A for project survey.

Reading motivation. The motivation questions used in this study were taken from the High School Literacy Project Questionnaire (HSLPQ; Bozack, 2011). This questionnaire was chosen because it was developed specifically for use with high school students, as opposed to other measures of reading motivation developed for elementary and middle school aged participants. Eighteen questions on this questionnaire asked about the four aspects of motivation described earlier. Items were included from subscales that had a reliability coefficient of .67 or higher in Bozack’s study, and were constructs of motivation considered to be important for adolescents with disabilities. One construct of motivation, recognition, was excluded from this study because it had questions similar to those in the reader identity scale. Seven questions on the survey apply to interest/flow, five to involvement, three to compliance, and three to social motives. Survey questions solicited responses from the following choices: (1) not at all like me,
(2) not really like me, (3) somewhat like me, and (4) a lot like me. For a list of the motivation questions included in this study, see Table 3. The range of possible scores for motivation on the instrument used in this study is between 18-72.

Table 3

*Reading Motivation Survey Items*

<table>
<thead>
<tr>
<th>Motivation Category</th>
<th>Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest/flow</td>
<td>1. I read to learn new information about topics that interest me.</td>
</tr>
<tr>
<td></td>
<td>2. If the teacher discusses something interesting, I might read more about it.</td>
</tr>
<tr>
<td></td>
<td>3. I like to read about new things.</td>
</tr>
<tr>
<td></td>
<td>4. If the subject is interesting, I can read difficult material.</td>
</tr>
<tr>
<td></td>
<td>5. If something is interesting, I don't care how hard it is to read.</td>
</tr>
<tr>
<td></td>
<td>6. I read about my hobbies to learn more about them.</td>
</tr>
<tr>
<td></td>
<td>7. I usually learn difficult things by reading.</td>
</tr>
<tr>
<td>Involvement</td>
<td>1. I don’t like to read stories with multiple characters.</td>
</tr>
<tr>
<td></td>
<td>2. I feel I can relate to characters in good books.</td>
</tr>
<tr>
<td></td>
<td>3. I read because I have to.</td>
</tr>
<tr>
<td></td>
<td>4. I like it when the questions in books make me think.</td>
</tr>
<tr>
<td></td>
<td>5. I enjoy a long, involved story or fiction book.</td>
</tr>
<tr>
<td>Compliance</td>
<td>1. I always try to finish my assigned reading on schedule.</td>
</tr>
<tr>
<td></td>
<td>2. Finishing every reading assignment is very important to me.</td>
</tr>
<tr>
<td></td>
<td>3. I always do my reading/literature work exactly as the teacher wants it.</td>
</tr>
<tr>
<td>Social Motives</td>
<td>1. I often talk to my friends about what I am reading.</td>
</tr>
<tr>
<td></td>
<td>2. My friends and I like to recommend good things to read to each other.</td>
</tr>
<tr>
<td></td>
<td>3. My parents and I sometimes discuss books we are reading.</td>
</tr>
</tbody>
</table>

*Note:* Reading motivation questions were taken from the High School Literacy Project Questionnaire (HSLPQ; Bozack, 2011).
In the current study, I combined the four aspects into a single Total Reading Motivation composite score because the subscale alpha coefficients I obtained were inadequate. The coefficient α for the entire scale was .81. This reliability coefficient is stronger than those obtained in Bozack’s study (2011).

**Reading efficacy.** I chose seven reading efficacy questions from a study done by Anmarkrud and Braten (2009) (see Table 4). Four of the items measured positive reading efficacy and three measured negative efficacy. For this study, responses from three items were flipped so all items used a larger number as a positive outcome. The range of possible scores in this study for reading efficacy is 7-28. In this study, the Cronbach’s alpha was .80, which is greater than that found in prior research (Anmarkrud & Braten, 2009).

Table 4

**Reading Efficacy Survey Items**

<table>
<thead>
<tr>
<th>Category</th>
<th>Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>1. I will not have problems understanding even the most difficult texts that we read in ninth grade.</td>
</tr>
<tr>
<td></td>
<td>2. It is easy for me to understand the content of a book.</td>
</tr>
<tr>
<td></td>
<td>3. Compared with the others in my class I have a good understanding of books that I read.</td>
</tr>
<tr>
<td></td>
<td>4. I understand what I read well.</td>
</tr>
<tr>
<td>Negative</td>
<td>5. I will probably have problems understanding much of what’s in the textbooks this school year.</td>
</tr>
<tr>
<td></td>
<td>6. Most of the others in my class are probably better than me at understanding what they read.</td>
</tr>
<tr>
<td></td>
<td>7. I am not particularly good at understanding the content of what I read.</td>
</tr>
</tbody>
</table>

**Reader identity.** Reader identity was measured using five items from the HSLPQ that form the construct called positive reader identity and items from the Teacher Assignments.
subscale, also from the HSLPQ (Bozack, 2011). The items on Teacher Assignments were omitted from this analysis because the subscale was unreliable (Cronbach’s alpha = .47). Question formats are identical to that of the motivational section of this tool. When examining the data, one item in the reader identity scale was excluded from the analysis because it did not have good item characteristics (see Table 5). The range of total possible scores for reader identity in this measure is 5-20. Cronbach’s alpha was acceptable (α = .72), and comparable to those obtained in Bozack’s study (2011).

Table 5

*Reader Identity Survey Items*

<table>
<thead>
<tr>
<th>Category</th>
<th>Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included</td>
<td>1. I consider myself to be a reader.</td>
</tr>
<tr>
<td></td>
<td>2. I like to learn new words when I read.</td>
</tr>
<tr>
<td></td>
<td>3. Being a good reader is important to success in life.</td>
</tr>
<tr>
<td></td>
<td>4. I read things that are not related to school.</td>
</tr>
<tr>
<td>Excluded</td>
<td>5. When I was younger I really liked to read.</td>
</tr>
</tbody>
</table>

*Note:* Reader Identity survey items came from the High School Literacy Project Questionnaire (Bozack, 2011).

**Reading engagement.** The construct of reading engagement was measured using the Index of Engagement in Reading from a study of 9th grade students in England by Luyten, Peschar and Coe (2008). Four items measured positive reading engagement while five items measured negative engagement. In order for all items to have the same scale, responses from five items on the reading engagement scale were flipped (See Table 6). The range of possible scores for reading engagement in this study is 9-36. The Cronbach’s alpha for this measure was .89.
Table 6

*Reading Engagement Survey Items*

<table>
<thead>
<tr>
<th>Directionality</th>
<th>Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>1. Reading is one of my favorite hobbies.</td>
</tr>
<tr>
<td></td>
<td>2. I like talking about books with other people.</td>
</tr>
<tr>
<td></td>
<td>3. I feel happy if I receive a book as a present.</td>
</tr>
<tr>
<td></td>
<td>4. I enjoy going to a bookstore or a library.</td>
</tr>
<tr>
<td>Negative</td>
<td>5. I read only if I have to.</td>
</tr>
<tr>
<td></td>
<td>6. I find it hard to finish books.</td>
</tr>
<tr>
<td></td>
<td>7. For me, reading is a waste of time.</td>
</tr>
<tr>
<td></td>
<td>8. I read only to get information that I need.</td>
</tr>
<tr>
<td></td>
<td>9. I cannot sit still and read for more than a few minutes.</td>
</tr>
</tbody>
</table>

*Note:* Reader engagement questions are from the Index of Engagement in Reading used in Luyten, Peschar, & Coe (2008).

**Data Analysis**

Descriptive statistics for all measures were obtained and are reported for the entire sample and then each subset of participants.

First, using SPSS, a correlational analysis was conducted to examine zero order correlations among all of the variables across the entire sample. Then correlations were calculated for those participants with and without disabilities. This provided a picture of relations among the variables in this sample. Finally, a Hierarchical Multiple Regression analysis was conducted to determine which constructs predict adolescent engagement with reading (see Table 7). Each variable was added one at a time to the analysis in order to determine its unique amount
of variance explained in the dependent variable. After Model 4 was run, all non-significant
dependent variables were removed, leaving the final model.

Table 7

Models for Regression Analyses

<table>
<thead>
<tr>
<th>Model</th>
<th>Dependent Variables</th>
<th>Independent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Disability</td>
<td>Reading Engagement</td>
</tr>
<tr>
<td>Model 2</td>
<td>Disability + Motivation</td>
<td>Reading Engagement</td>
</tr>
<tr>
<td>Model 3</td>
<td>Disability + Motivation + Reading Efficacy</td>
<td>Reading Engagement</td>
</tr>
<tr>
<td>Model 4</td>
<td>Disability + Motivation + Reading Efficacy + Identity</td>
<td>Reading Engagement</td>
</tr>
<tr>
<td>Model 5</td>
<td>Reader Identity</td>
<td>Reading Engagement</td>
</tr>
</tbody>
</table>
CHAPTER FOUR

Results

Results of the study will be reported in this chapter. First descriptive statistics will be reported, then results of the correlational analysis, and then finally the results of the hierarchical regression analyses.

Descriptive Statistics

Descriptive statistics were run on the independent variables (reading motivation, reading efficacy and reader identity) and the dependent variable (reading engagement). See Table 8. Each mean variable represents the average student response to the construct of interest (reading motivation, reading efficacy, reader identity and reading engagement), for either the whole sample, students with disabilities or students without disabilities. The standard deviation gives a sense of the spread of student responses to each particular construct.

Table 8

*Descriptive Statistics by Disability Group*

<table>
<thead>
<tr>
<th></th>
<th>Whole Sample</th>
<th>Students with Disabilities</th>
<th>Students without Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Reading Motivation</td>
<td>41.91 (7.62)</td>
<td>24-55</td>
<td>40.65 (7.45)</td>
</tr>
<tr>
<td>Reading Efficacy</td>
<td>15.05 (3.79)</td>
<td>8-22</td>
<td>15.04 (3.62)</td>
</tr>
<tr>
<td>Reader Identity</td>
<td>11.13 (2.65)</td>
<td>4-16</td>
<td>10.93 (2.79)</td>
</tr>
</tbody>
</table>
It is interesting to also look at how gender plays out among these variables. See Table 9 for descriptive statistics by gender distribution.

Table 9

Descriptive Statistics by Gender

<table>
<thead>
<tr>
<th></th>
<th>Whole Sample</th>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
<td>Range</td>
</tr>
<tr>
<td>Reading Motivation</td>
<td>41.91 (7.62)</td>
<td>24-55</td>
<td>43.08 (6.29)</td>
<td>31-55</td>
<td>40.50 (8.94)</td>
<td>24-55</td>
</tr>
<tr>
<td>Reading Efficacy</td>
<td>15.05 (3.79)</td>
<td>8-22</td>
<td>15.83 (3.54)</td>
<td>9-22</td>
<td>14.10 (3.95)</td>
<td>8-22</td>
</tr>
<tr>
<td>Reader Identity</td>
<td>11.13 (2.65)</td>
<td>4-16</td>
<td>11.67 (2.01)</td>
<td>8-15</td>
<td>10.45 (3.24)</td>
<td>4-16</td>
</tr>
<tr>
<td>Reading Engagement</td>
<td>20.66 (6.52)</td>
<td>10-35</td>
<td>20.29 (6.20)</td>
<td>10-34</td>
<td>21.10 (7.03)</td>
<td>10-35</td>
</tr>
</tbody>
</table>

Relations Among Variables

In order to answer research question 1, a Pearson’s correlational analysis of all the variables was conducted across the entire sample. This correlational analysis resulted in significant correlations ($p < .01$) between four of the five constructs, as indicated in Table 10. Interesting to note are that the correlations between disability and each of the other independent variables is a negative relationship, as might be expected, but none of them are significant. The other constructs each correlate significantly to each other at high levels.
Table 10

Zero-Order Correlations Matrix

<table>
<thead>
<tr>
<th></th>
<th>Disability</th>
<th>Motivation</th>
<th>Efficacy</th>
<th>Identity</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability</td>
<td>1</td>
<td>-.200</td>
<td>-.002</td>
<td>-.104</td>
<td>-.073</td>
</tr>
<tr>
<td>Motivation</td>
<td>1</td>
<td>.393**</td>
<td>.709**</td>
<td>.484**</td>
<td>.528**</td>
</tr>
<tr>
<td>Efficacy</td>
<td>1</td>
<td>.527**</td>
<td>.528**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>1</td>
<td></td>
<td></td>
<td>.688**</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.001 level (2 tailed)

Predictors of Reading Engagement Among Struggling Adolescents

In order to determine what variables predict reading engagement among unsuccessful 10th grade students with and without disabilities, a hierarchical multiple linear regression analysis was conducted in the following sequence: Model 1: DV = Disability, Model 2: Disability + Motivation, Model 3: DV = Disability + Motivation + Efficacy, Model 4: DV = Disability + Motivation + Efficacy + Reader Identity. Assumptions were tested by examining normal probability plots of residuals for outliers. No outliers were found. Additionally, histograms revealed that errors followed a normal distribution. Assumptions of multicollinearity and singularity were not violated. Independent variables, while correlated, were not highly correlated (r = .9 or above), so multicollinearity was ruled out. The assumption of singularity was not violated because independent variables were each distinct from the others.

The first model of the regression analysis indicated that Disability status did not significantly predict reading engagement. See Table 11 for the model fit statistics. Disability $\beta = -.07$ ($t = -.472$, $p = .639$).
Table 11

*Model Statistics for Regression Analyses*

<table>
<thead>
<tr>
<th>Model</th>
<th>Dependent Variables</th>
<th>$F$</th>
<th>$p$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Disability</td>
<td>.223 (1,42)</td>
<td>.639</td>
<td>.01</td>
<td>n/a</td>
</tr>
<tr>
<td>Model 2</td>
<td>Dis + Motivation</td>
<td>6.285 (2, 41)</td>
<td>&lt; .001</td>
<td>.24</td>
<td>.20</td>
</tr>
<tr>
<td>Model 3</td>
<td>Dis + Motiv + Efficacy</td>
<td>7.807 (3, 40)</td>
<td>&lt; .006</td>
<td>.37</td>
<td>.32</td>
</tr>
<tr>
<td>Model 4</td>
<td>Dis + Motiv + Efficacy + Identity</td>
<td>10.204 (4, 39)</td>
<td>&lt; .002</td>
<td>.51</td>
<td>.46</td>
</tr>
<tr>
<td>Model 5</td>
<td>Identity</td>
<td>37.70 (1, 42)</td>
<td>&lt; .001</td>
<td>.47</td>
<td>n/a</td>
</tr>
</tbody>
</table>

The second model of the regression analysis (DVs = Disability + Motivation) indicated that this model significantly predicted reading engagement. Disability $\beta = .03 (t = .181, p = .858)$. Motivation $\beta = .49 (t = 3.505, p = <.001)$. Reading Motivation uniquely explained an additional 24% of the variance.

The third model (DVs = Disability + Motivation + Efficacy) also significantly predicted reading engagement. Disability $\beta = .01 (t = -.052, p = .959)$. Motivation $\beta = .33 (t = 2.325, p = .03)$. Efficacy $\beta = .40 (t = 2.992, p = .01)$. Reading Efficacy explained an additional 13% of the variance.

The fourth regression model (DVs = Disability + Motivation + Efficacy + Reader Identity) also resulted in a statistically significant prediction of reading engagement. Disability $\beta = -.01 (t = -.140, p = .89)$. Motivation $\beta = -.02 (t = -.127, p = .90)$. Efficacy $\beta = .23 (t = 1.748, p = .09)$. Reader Identity $\beta = .579 (t = 3.37, p = .01)$. Reader Identity explained an additional 14% of the variance in the model after all other variables were entered.
For the final model, all non-significant dependent variables were removed. This left a model that included Reader Identity. Reader Identity $\beta = .69$ ($t = 6.140$, $p = .001$).
CHAPTER FIVE

Discussion

This study was conducted in an attempt to learn more about the reading motivation, reading efficacy, reader identity and reading engagement of struggling tenth grade students with and without disabilities, and to identify the connections between these constructs, if any. It was predicted that disability, reading motivation, reading efficacy and reader identity would all be significant predictors of reading engagement for unsuccessful adolescents. The results of this study partially validate this hypothesis, with only one independent variable (reader identity) predicting reading engagement, when all variables are in the regression model.

Summary and Interpretations of Findings

The findings of this study were somewhat surprising. There were interesting results for the comparisons between groups (disabled, non-disabled), for the predictive nature of reading motivation on engagement, and for reader identity.

Descriptive Statistics

It is interesting to note that the differences between groups when comparing disabled and non-disabled students were small. The student sample appears to come from the same population, with a normal distribution of scores. Across all of the constructs, we see scores starting lower for disabled adolescents, and mean scores are lower for all groups for all constructs except for reader identity. For both groups, reader identity mean scores are a little higher than the middle score. This finding that the two groups (disabled and non-disabled) were pretty similar was surprising. I expected to find that the two groups of students would might have different scores for motivation, efficacy, reader identity and particularly for reading engagement.
When comparisons by gender are made, this study shows that while girls have higher mean scores on reading engagement, boys have higher scores on all other variables (motivation, efficacy and identity). This is an interesting difference. The dependent variable is stronger in girls than boys, but the independent variables are not as strong.

**Correlations**

The correlational analysis revealed that all variables except for disability were significantly correlated to each other.

Disability was found to be negatively correlated to all other variables, as anticipated, but not at statistically significant levels. This is surprising, as I expected the presence of a disability to be counterintuitive to strong reading motivation, reading efficacy, reader identity and reading engagement for adolescents. Possible explanations for these findings are also discussed below.

Results from this study show that reading motivation was significantly correlated with reading efficacy, reader identity and reading engagement. This supports the findings of previous research (Baker & Wigfield, 1999; Bozack, 2011) and validates the ideas posited by Self-Determination Theory (SDT), which indicate the importance of three basic needs (autonomy, competence and relatedness) to student motivation. The construct of competence is very relevant to the idea of self-efficacy, which is simply the idea that a person can accomplish the task she sets out to do. The concept of autonomy emphasized within SDT is also one that is important to identity formation (Atwater, 1996). The finding that reading motivation was correlated with efficacy and identity supports these ideas. Furthermore, the finding that efficacy is correlated to motivation is not surprising, since efficacy is often incorporated as a component of reading motivation (Wigfield & Guthrie, 1995).
Worthy of note are the findings that statistically significant correlations between reader identity and reading motivation, and reading efficacy were established in this study. This is similar to the findings of Bozack (2011) who found that positive reader identity was significantly correlated with all constructs of motivation included in the study, and with efficacy, which was also shown to correlate to motivation constructs. This finding suggested that reader identity has a lot in common with the other independent variables of interest, which makes the results of the regression analysis even more surprising, as discussed below.

Significant correlations between reading engagement and the constructs of interest (motivation, efficacy and identity) were all found in this analysis, again substantiating prior research in regards to motivation and efficacy (Blumenfeld, et al., 2006; Cantrell, et al., 2014). However, the connection to reading identity is a new relationship that I am proposing is an important one for researchers to consider when examining constructs related to reading achievement for struggling adolescent readers.

Regression Analysis

I ran a sequential linear regression analysis, in which I entered each variable one at a time, in order to determine how much impact they each contributed to the model. Findings of this analysis were surprising in relation to the predictive nature of disability, motivation and identity on reading engagement.

Disability. One of the major findings of this study is that the presence of a disability did not predict reading engagement. In fact, disability accounted for only 1% of the variance in engagement, when it was the only predictor in the model. This finding was unexpected, since prior research has established that reading engagement is related to reading achievement for adolescents (Taboada, et al., 2013), and we know that students with disabilities often struggle
with both engagement (Reschly & Christenson, 2006) and reading achievement (Ratz & Lenhard, 2013) more than their typically-developing peers. One possible explanation for this finding is the sample population included in the study. Since this study only looked at struggling students (with and without disabilities), it’s possible that this may account for the lack of difference made by the presence of a disability. A sample that included a wider range of students might results in recruitment of many students without disabilities who were successful, while we found only a few with disabilities who met the criteria for successful. Therefore, recruitment of all tenth grade students, regardless of successful status, might have resulted in different findings, and differences between the groups in regards to reading engagement or the other variables of interest.

When comparing groups of students with and without disabilities, other researchers have had mixed findings. Some researchers have found that students without disabilities have higher reading motivation than do their typically-developing peers (Mihandoost, et al., 2011), while others have shown the extrinsic motivation of students with disabilities to be greater (Dunn & Shapiro, 1999), and yet other studies have resulted in equivalent motivation scores between the two groups (Lee and Zentall, 2012). It would have been interesting to see what the relationship between disability and engagement was, if anything, if students who were both successful and unsuccessful had been included in this study.

**Reading motivation.** Another interesting and unexpected finding of this study is that reading motivation did not predict reading engagement when reader identity was included in the model. In model 2 and 3, where disability, motivation and efficacy were independent variables, reading motivation was a statistically significant predictor of reading engagement. However, in model 4, when reader identity was added to the model, motivation was no longer predictive of
engagement. This is a somewhat surprising finding, because other researchers have established a predictive relationship between motivation and engagement for younger students (Cox & Guthrie, 2001; Mucherah & Yoder, 2008; Wang & Guthrie, 2004). Additionally, there is an abundance of research linking reading motivation to reading achievement, again with younger students (Baker & Wigfield, 1999; Becker, et al., 2010; Cox & Guthrie, 2001; Guthrie & Wigfield, 2000; Wang & Guthrie, 2004).

There are three possible explanations for these differences in results, the first being the age of the participants, the second being that the sample was limited to those who are struggling with literacy, and the third being the inclusion of reader identity in the regression model. The first possible explanation concerns itself with the fact that participants of this study were in tenth grade, whereas the vast majority of other studies in motivation and engagement are with students in elementary or middle school. This study was undertaken, and tenth grade intentionally chosen as the target population because it was hypothesized that older adolescents are a different population from elementary and younger adolescent students. There are not an abundance of motivation studies involving older adolescents. Therefore, we do not know much about how motivation and engagement in reading are related for this population.

A second explanation for the finding that motivation no longer significantly predicts engagement when reader identity is added to the model is the inclusion criteria of being “unsuccessful” in reading. This criteria effected who participated in the study. Among students with disabilities, there were only three students who met the “successful” criteria, but there were many non-disabled tenth grade students who were not recruited for this study because they were successful. As a result, this was not a representative sample of participants. It is, therefore, possible that this criteria of being “unsuccessful” as defined by having failed either the eighth
grade MSP or one or more high school classes, is impacting the motivation findings. It is possible that with a representative sample of tenth grade students, reading motivation would continue to be a significant predictor of reading engagement, even when reader identity is added to the model.

A third explanation for this surprising finding involves the inclusion of reader identity in the model of regression. To my knowledge, there have been no prior studies that have examined reader identity in this manner. So, we don’t really know much about reader identity and its relationship with motivation and engagement in reading. It is important to acknowledge the high correlations between reader identity and reading engagement, which may have impacted these findings. At this time, we need more information about the relationship between identity and the other constructs of interest in this study.

**Reading efficacy.** Results indicated that reading efficacy was also not a statistically significant predictor of reading engagement when reader identity was included in the fourth model, although levels did approach statistical significance. This was also a surprising finding, since prior researchers have found differences in reading efficacy between gender and grade levels (Mucherah & Yoder, 2008) and links between reading efficacy and reading achievement (Deci, et al., 1992). It may be that reading efficacy does predict reading engagement for struggling students, and that with greater statistical power I would have found such a predictive relationship. The fact that it approaches significant levels suggests that this might be the case.

The finding that reading efficacy was not a significant predictor of reading engagement is interesting when looked at alongside the ideas held in Self-Determination Theory (SDT). SDT proposes the importance of competence (a construct important to self-determination), and strongly connects this construct to reading motivation. This study found significant correlations
between efficacy and motivation, which aligns with the ideas behind SDT. However, this study failed to find efficacy to be a significant predictor of engagement. While this is not misaligned with SDT theory, it poses an interesting question about the importance of efficacy to reading achievement for older adolescent students who struggle with literacy.

**Reader identity.** My hypothesis that reader identity would predict reading engagement was held up in this study. Prior research (Bozack, 2011) has identified correlations between reader identity and reading achievement for adolescent boys without disabilities. The present study further expands on these findings, showing that reader identity is a significant predictor of reading engagement for struggling adolescent readers. Surprisingly, as mentioned above, when identity is added to the regression model, it becomes the only statistically significant predictor of reading engagement. In fact, in the final regression model ran for this study, reader identity was the only independent variable, and accounted for 47% of the variance in reading engagement. This finding suggests that reader identity plays a very strong role in the choices of struggling adolescents to participate in or avoid literacy activities. It even appears to play a more important role than motivation for reading.

Adolescent Identity and Agency Theory establishes the importance of identity formation in the literacy choice students make impacting their daily and academic lives (Moje and Dillon, 2006). Additionally, the importance of literacy activities to the formation of reader identities has also been established (Alvermann, Jonas, et al., 2006). This supports the finding that reader identity is a predictor of reading engagement for youth who struggle with literacy. A student who views himself as a poor reader is unlikely to choose to engage in reading tasks, whereas one who views himself as a good reader is much more likely to engage with literacy activities of his own volition, as he enacts identity choices related to literacy tasks.
This finding has some interesting implications for teacher education. Perhaps there is a need to focus some teacher training on the construct of reader identity formation, and familiarize student teachers with strategies for strengthening adolescent identity formation in relation to literacy activities for students who struggle with or avoid classroom literacy tasks. Reinforcement of literate identities that involve new literacies (those literacies that involve technology) might be an entry point for teachers into this discussion with adolescents.

**A Revised Reading Engagement Model for Struggling Adolescents**

The findings of this study have resulted in a revision of the original Reading Engagement Model (see Figure 2). While results from the analysis do not indicate a predictive relationship between reading motivation and reading engagement, I have not taken this construct out of the model, due to the strength of literature and findings of the current study which indicate a relationship does exist between these two constructs. It is possible that a larger sample would enable a finding of a relationship if this study were replicated. Additionally of note is the concept that many studies include efficacy as a component of motivation. In this study I utilized tools from prior research which tease apart these two constructs, and I believe they do measure something different. However, the correlations are so strong, that the research which incorporates efficacy into motivation may have some justification. If this is the case, then the predictive nature of reading efficacy on reading engagement is worth of note, as a possible factor for consideration when deliberating the connections between reading motivation and reading engagement.

The finding that disability does not predict reading engagement has some interesting implications. This tells us that there may not be very large differences in reading engagement between struggling students with disabilities and their struggling, typically-developing peers. It
Figure 2.

A Revised Reading Engagement Model for Struggling Adolescents and Adolescent Identity and Agency Theory

Figure 2. For struggling adolescents, reading motivation, efficacy and reader identity are correlated with each other. Motivation and efficacy are also correlated with engagement, but are not significant predictors. Reader identity predicts reading engagement. Adolescent Identity and Agency Theory is supported by the relationship between reader identity and reading engagement in this model.
is likely that impact on constructs such as reader identity would be negative and difficult for any student who struggles, not just those who have a diagnosed disability. Perhaps the struggle with reading is similar between these two groups. It might even be possible that students without disabilities who struggle with reading are more similar to their peers with disabilities who also struggle, than they are to their non-disabled peers who do not have difficulties with literacy tasks.

This revised reading engagement model for struggling adolescents reinforces the ideas of the Adolescent Identity and Agency theory which emphasizes the importance of identity formation enacted in adolescent daily life choices (Moje & Dillon, 2006). Identity plays a role in activities adolescents engage in, according to AIA theory, and this is validated by my model of reading engagement, and by the findings of this study, which indicate a statistically significant predictive relationship between reader identity and reading engagement (see figure 2). Identity choices, in fact, may play a very powerful role for struggling adolescents in academic participation, including those activities that rely on or support the development of literacy skills, and thereby successes or failures among literacy tasks. This idea is supported in the research (Tatum, 2006), which suggests a reciprocal relationship between identity formation and literacy development.

Schoenback and Greenleaf (2009) suggest that should adolescents come to view their literacy identities as “resilient” and not static, they may strive to change that identity, possibly from that of “non-reader” to “good reader”, for example. It might, therefore, be really critical for educators and education researchers to focus on this construct of reader identity and consider interventions that could bolster this literacy identity in a positive direction, helping these struggling youth to see their literacy identities as movable and in their power to manipulate into a
more positive characteristic. If we can develop effective interventions that successfully support the development of stronger and more positive reader identities for struggling adolescents, we may have a real impact on their reading engagement, which could be enriching for their academic experiences and successes. Bozack (2011) suggests that

for many teachers, the idea of engaging with literacy and building lessons designed to change aspects of student motivation can seem daunting and the results ambiguous. However, teachers’ ability to help students identify themselves as readers is a more straight-forward task and a much more inviting entry point for teachers (p. 69).

The findings of this study which support the importance of reader identity lead me to ask whether Bozack was correct. If indeed reader identity is an entry point for teachers to engage with adolescents around reading, then the findings of this study which indicate that increased reading identity will lead to increased reading engagement, are rather important for future adolescent literacy research.

In this study, I have interpreted autonomy (one of the basic needs according to Self-Determination Theory) to support the idea of identity formation, as youth enact their agency over their own lives. In this manner they are asserting autonomy over their own lives and filling a basic need. This idea is supported by the findings of this study, which indicate the importance of reader identity to engagement with literacy tasks. A youth who feels autonomous over his/her own literacy interactions is likely to grow under these conditions, and increased reading engagement may be a result of this extension of self into literary areas. In this way, Self-Determination Theory supports the interactions found in this study between reader identity and reading engagement (see Figure 3).
Figure 3. Self-Determination Theory supports the importance of various correlational relationships between constructs of interest in this model.
SDT also speaks to the importance of “competence” which directly relates to the idea of self-efficacy. As the findings of this study regarding the predictive relationship between reading efficacy and reading engagement are approaching statistical significance, I suspect that this relationship does exist, and have left it in the revised version of the Reading Engagement Model for Struggling Adolescents. If this relationship does in fact exist, then this study is further supporting the ideas resonant within SDT.

A third and important basic need of SDT is relatedness, which I have linked to the idea of social motivation, one of the sub-components of reading motivation as applied in this study. Researchers (Furrer & Skinner, 2003) have pointed out the increasing importance of relatedness and social interaction as student grow older, which makes it an important component of any model of engagement related to adolescents.

This revised model for reading engagement for struggling adolescents gives us a format for deliberating the potential methods of stimulating reading engagement in struggling adolescents. Focused intervention research on the effects of supported reading efficacy and reader identity formation may lead to important effects in reading engagement.

**Limitations**

As with any research study, there are several limitations to this study. One of the greatest limitations is sample size. The small size of this sample (N = 44) may not provide enough power to find important results and the small sample might not be representative of the larger population. A larger number of participants might yield results that hold more impact statistically, and would give a true picture of struggling adolescents with and without disabilities in the areas of reading motivation, reading efficacy, reader identity and reading engagement.
A second limitation is that the participants in this survey were recruited from a convenience sample of students from nearby school districts, whose teachers recruited them based on their qualifications for participation. Participation was limited to those students whose parents agreed to sign the consent form for participation, and who then chose to turn in the form to their teacher. A limited budget prevented the researcher from offering an incentive to student participants. Therefore these adolescents had little reason to agree to participate. There might, therefore, be something that those adolescents who agreed to participate have in common with each other that is different from those youths who did not choose to participate, or whose parents did not choose to offer consent for participation.

Additionally, the range of participants was limited to students who are considered to be unsuccessful. This limitation on participants may have an impact on the results found from analyses, and may in fact lead to findings that are not significant, where they would be significant if a wider range of participants were included in the study.

A third limitation was the use of a self-report survey. A student’s self-report may or may not reflect their actions related to reading and the related constructs of interest. Students may over-report their levels of motivation, efficacy, engagement or reader identity, which have not been verified through observation or other qualitative methods. It is also possible that issues of comprehension related to what the survey questions were really asking could have interfered with accurate results. In addition, some students may have simply decided to check any answer, rather than to think about the question and select the answer choice that best applied to them. Without triangulation of this data, I do not know how accurate these self-reported data are. It would be interesting to collect interview and observation data of students in and out of academic
contexts to see if what students have to say about their reading motivation, efficacy, engagement and identity and what we observe in their behaviors corroborate the survey findings.

Another limitation of this study is that the sample of students with disabilities was limited to those with LD and/or ADHD. We cannot, therefore, make any assumptions about the reading engagement of students with other disabilities. All we know is how the constructs of interest play out among students with these disabilities and those without disabilities.

A further limitation is the focus only on tenth grade students. While it is important to limit the variations among a sample population, which led to the decision to limit participation to tenth graders, we do not know how motivation, efficacy, identity and engagement play out in struggling 11th-12th graders, who are old enough to drop out if they choose, and who are still in school struggling to complete their high school diploma. One might assume that the motivation and engagement would be different for students in these grades.

**Directions for Future Research**

Findings from this study point to the need for more research around the connections between reader identity and reading engagement for struggling adolescents while also perhaps including reading achievement to gain a more explanatory model. I would recommend a replication of this study with a larger sample size, to increase the statistical power. Outcomes for reading efficacy in particular might in fact be statistically significant with a larger sample size.

It might also be interesting to examine the four questions that comprise the reader identity construct in this survey. Some questions may be more strongly predictive of reading engagement than others, and examination of this tool might lead to interesting findings. Along those same lines, the question that was excluded from the reader identity construct, which reads, “When I was younger I really liked to read” may in fact belong to a separate category: prior reading. It
might be enlightening to analyze this construct to see if there are any important relationships between it and reading engagement or motivation.

Another question worth pursuing is whether or not providing supports in the classroom that bolster reader identity might lead to an increase in reading engagement for struggling youth with and without high incidence disabilities. If students were engaged in dialogue about what a reader identity was, and helped to recognize all the various types of literacy involving technology that adolescents typically are fluent with they might begin to view themselves as strongly involved with literacy. Additionally, if these adolescents were asked to self-analyze the importance and extent of literacy in our society, and their own reader identities, this might lead to some awareness of the critical nature of literacy in our society, and their own literacy skills, which when involving new literacies is often not recognized. An intervention designed to answer this question, focused on bolstering the reader identity of disengaged youth, and measuring the impact of growth in these areas on engagement outcomes, would lead to some interesting findings. Additionally, it would be interesting to pursue what exactly is the relationship between the giant construct of reading motivation and reading engagement for struggling adolescents. We have an abundance of research with younger students, but not much which addresses this connection for high school students with disabilities. It is possible that this relationship is of a predictive nature, and that the replication of this study with a larger sample size, which would lead to more statistical power, might in fact lead to the findings of a directional relationship between these two constructs for this population.

Additionally, it would be interesting to look at whether or not there are differences in reading motivation, reading efficacy, reader identity and reading engagement among adolescents who are successful and those who are unsuccessful.
Implications for Practice

The discovery that disability does not predict reading engagement among struggling adolescents has some interesting implications for practice. It indicates that there may not be many differences in the reading engagement of struggling adolescents with and without disabilities. This means that interventions designed to increase the reading engagement of struggling adolescents may be effective for both populations of students, and we may not need to design separate interventions for those with LD and/or ADHD.

The finding that there are very few students with these disabilities in tenth grade who meet the “successful” criteria (having passed the 8th grade statewide assessment or passing all high school classes) is worthy of note. Students who are eligible for special education services have to have an identified disability that impacts their academics. Therefore, we expect to find that many of the students in special education might be struggling. However, this study recruited students who were receiving 504 services also. In order to be eligible for services under Section 504, a disability needs to impact a significant life function, which includes, but is not limited to education. In this category, it was expected that there would be more students who were successful academically. The fact that there were very few could indicate that students with disabilities who are successful are unidentified. It is possible that they are being served in the general education setting without this study being able to identify them, due to confidentiality issues. Teachers recruiting for this study would only have information about the disabilities of students they serve in special education or who are identified for 504 services. They would not have information about the disabilities of students who never needed special education or 504 services or who had been rescinded from special education. This again leads to the conclusion that disability is not the key factor worthy of concern, but that in fact it is the issue of being
successful or unsuccessful that must draw the attention of educators and education researchers. It would be very interesting to open this study up to identify students who were served in the past in special education, but who are not being successful in general education settings without specially designed instruction or accommodations and modifications to the curriculum. Such a study would be challenging due to confidentiality issues, and would entail self-disclosure by students recruited to the study, as to the presence of a disability and past participation in special education. However, this is where we might find this population of students with disabilities who are successful. And it would be very enlightening to examine their reading motivation, reading efficacy, reader identities and reading engagement in comparison to that of their unsuccessful peers, who are continuing to receive special education services.

Differences among gender are interesting and worth further examination. Females reported greater reading engagement, but lower motivation, efficacy and identity. So something else must explain why female adolescents are more engaged with reading than males. Perhaps this finding can be explained by traditional gender differences, where girls are found to have greater interpersonal sensitivity (Bem, 1974), which may lead them to be more sensitive to the expectations of others, such as teachers and society at large, and to parental influence (Oliva, Parra & Reina, 2014), where the expectation to engage with academics may be an influence.

Another interesting finding is the reading motivation did not play as important a role in reading engagement as expected. A current trend in the literature on adolescent literacy focuses on motivation as a critical component to literacy achievement. However, this study does not corroborate those conclusions. It is important to note that it also does not contradict them. It simply brings the question of the importance of motivation to reading engagement and thereby reading achievement into question. Perhaps what is happening with older struggling adolescents
in these spheres is somewhat different than what we are seeing with younger children and early adolescents. As there are only a few studies done with this population in regards to these constructs, it is impossible to draw any meaningful conclusions. However, it is worth further consideration and investigation.

Another interesting finding from this study leads to some implications for practice. This study highlighted the importance of reader identity in reading engagement for struggling adolescents. Results found that students’ sense of reader identity is predictive of their engagement with literacy activities. In fact, reader identity plays a more significant role in engagement than does motivation, which has been a powerhouse of focus in secondary literacy. Perhaps the emphasis for struggling adolescents should be on the formation of positive reader identities. Although I do not have the data to back this theory, it makes sense that reader identity would play a different role in reading engagement for adolescents who do not struggle, verses those who do. We might assume that successful adolescents would have stronger reader identities, which they would then enact to engage with reading tasks, leading to reading achievement. If this is the case, it is also possible that the suggested emphasis on reader identity for struggling adolescents might play out differently for those who are successful with literacy tasks.
References


Braten, I., Ferguson, L. E., Anmarkrud, O., & Stromso, H. I. (2013). Prediction of learning and
comprehension when adolescents read multiple texts: The roles of word-level processing, strategic approach, and reading motivation. Reading and Writing Quarterly, 26, 321-348. doi:10.1007/s11145-012-9371x.


doi:10.1023/A:1018747716137


doi:10.1037/0022-0663.95.1.148


literacies in adolescents’ lives (2nd Ed.). (pp. 5-27). New Jersey: Lawrence Erlbaum Associates.


Appendix A

Adolescent Reading Motivation and Identity Comparison (ARMIC) Project Questionnaire
Adolescent Reading Motivation and Identity Comparison (ARMIC) Project Questionnaire

Name: ________________________________    Date: __________________

High School ____________________________

Gender: ___ male    ___ female

Date of birth: ____/____/________

How do you identify?
__ American Indian/Alaskan Native
__ Asian
__ Pacific Islander
__ Asian/Pacific Islander
__ Black
__ Hispanic
__ White
__ Two or more races

Are you ELL? _____ yes _____ no

If so, what language do you speak at home? ____________________
**ARMIC Project Questionnaire**

<table>
<thead>
<tr>
<th>Read each statement and decide if it talks about a person that is like you or different from you.</th>
<th>Not at all like me</th>
<th>Not really like me</th>
<th>Somewhat like me</th>
<th>A lot like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I will not have problems understanding even the most difficult texts that we read in tenth grade.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I read only if I have to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. In comparison to my other school subjects, I am best at English/Literature.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I like to read about new things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I am a good reader.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. If the teacher discusses something interesting, I might read more about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Read each statement and decide if it talks about a person that is like you or different from you.</td>
<td>Not at all like me</td>
<td>Not really like me</td>
<td>Somewhat like me</td>
<td>A lot like me</td>
</tr>
<tr>
<td>7. Reading is one of my favorite hobbies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I read things that are not related to school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I am not particularly good at understanding the content of what I read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. If the subject is interesting, I can read difficult material.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I find it hard to finish books.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I understand what I read well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Read each statement and decide if it talks about a person that is like you or different from you.</td>
<td>Not at all like me</td>
<td>Not really like me</td>
<td>Somewhat like me</td>
<td>A lot like me</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>13. Finishing every reading assignment is very important to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I like talking about books with other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I often talk to my friends about what I am reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I read to learn new information about topics that interest me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. My parents notice that I’m a good reader.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. My parents and I sometimes discuss books we are reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Read each statement and decide if it talks about a person that is like you or different from you.</td>
<td>Not at all like me</td>
<td>Not really like me</td>
<td>Somewhat like me</td>
<td>A lot like me</td>
</tr>
<tr>
<td>19. When I was younger I really liked to read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. Compared with the others in my class I have a good understanding of books that I read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. I feel happy if I receive a book as a present.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. I know that my English grade will be good next year.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. I like to learn new words when I read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. Most of the others in my class are probably better than me at understanding what they read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>25. I enjoy a long, involved story or fiction book.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. I always try to finish my assigned reading on schedule.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. My friends and I like to recommend good things to read to each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. I don't like to read stories with multiple characters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. I like to get compliments for my reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. For me, reading is a waste of time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. I feel I can relate to characters in good books.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. I enjoy going to a book store or a library.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. It is easy for me to understand the content of a book.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. I read only to get information that I need.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. I always do my reading/literature work exactly as the teacher wants it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36. I cannot sit still and read for more than a few minutes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. I consider myself to be a reader.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Statement</td>
<td>Not at all like me</td>
<td>Not really like me</td>
<td>Somewhat like me</td>
<td>A lot like me</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Read each statement and decide if it talks about a person that is like you or different from you.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. I read because I have to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. I read about my hobbies to learn more about them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. People have told me that I’m a good reader.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. I usually learn difficult things by reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. I like it when the questions in books make me think.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Read each statement and decide if it talks about a person that is like you or different from you.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. If something is interesting, I don’t care how hard it is to read.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. Being a good reader is important to success in life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. I will probably have problems understanding much of what’s in the textbooks this school year.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix B

Internal Review Board (IRB) Forms:

Student Recruitment Letter
What is interesting and boring to adolescent readers?

How can we help students become interested in and good at reading?

My name is Maya Smith and I am a researcher at the University of Washington. These are the questions I am trying to answer in a research study I am doing in your school district. The school district and the reading teacher have agreed to let me work with them in this study. I plan to use the information I learn to help teachers better understand their students, and better help them learn to read. My mission is to help teachers understand how to motivate students to become better readers.

For this study, I am looking for students in reading and English classes.

I am asking your permission to give your child two surveys that ask about reading interest and motivation.

I have included a parental consent letter for you that outlines the surveys that will be given. Basically they are tests that ask students to read three stories aloud as quickly and carefully as they can and to say a word that best describes a picture. Additionally, I would like your permission to assess your child’s achievement in reading. **This process will take no more than 30 minutes.** The testing will take place during whatever time your child’s teacher thinks will be the least disruptive to your child’s education.

Participation in these surveys is voluntary and you may choose not to let your child participate.

If you give permission for your child to participate, he or she will be given the two surveys and two reading assessments.

If you would like to discuss this project with me, I would be happy to speak to you. Please call me at 206-221-3060 or email me at maya9@u.washington.edu if you have any questions.

Thank you in advance for your help. Please consider allowing your child to participate and return the signed consent form.
Appendix C

Internal Review Board (IRB) Forms:

Parental Consent Form
UNIVERSITY OF WASHINGTON

PARENT/GUARDIAN PERMISSION FORM

Adolescent Reading Motivation and Identity Comparison Project

Researchers:

Maya Smith, Doctoral Student, Area of Special Education, College of Education, 206-27-2711

Roxanne Hudson, Associate Professor, Area of Special Education, College of Education, 206-616-1945

Researchers’ statement:

We are asking your child to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether your child should be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we will ask your child to do, and possible risks and benefits, your child’s rights as a volunteer, and anything else about research or this form that is not clear. When we have answered all your questions, you can decide if you want your child to be in the study or not. This process is called “informed consent.” We will give you a copy of this form for your records.

PURPOSE OF THE STUDY

The purpose of this study is to better understand how your child thinks about reading such as why he/she reads (motivation), what kinds of things he/she likes to read, and how s/he views him/herself as a reader (reader identity). We want to connect these thoughts about reading to his/her achievement in reading. Specifically, we want to know whether student motivation for reading and reader identity are related.

STUDY PROCEDURES

If you choose to have your child participate, we will ask him/her to fill out a questionnaire about reading. Ms. Smith will read each item aloud so your child will only have to circle a letter for his/her answer. No reading or extensive writing is required. In addition, your child’s teacher will answer 8 questions about his/her reading engagement. We will share the results of the questionnaires with you and with your child’s teacher.

If you would like, Ms. Smith can meet you at your child’s school and show you examples of the questionnaire we want to have your child do, and the questionnaire your child’s teacher will complete. You simply need to contact her. Your child does not have to do both of the activities. Your child does not have to answer every question she asks.

We would like to get information from the school personnel about your child. We would like to get information about your child’s disability label, if applicable, gender, ethnicity, participation in services for
students who speak English as a second language, 8th grade MSP scores, transcripts attendance and behavioral referrals.

**ALTERNATIVES TO TAKING PART IN RESEARCH**

Taking part in research is voluntary. If you do not want your child to take part in this research project, please do not sign and return this consent form. Your child will take part in his or her regularly-scheduled classroom activities.

**RISKS, STRESS, OR DISCOMFORT**

Potential risks to your child include feeling singled out for this study. Some people may feel that providing information for a research project is an invasion of privacy. We will follow strict confidentiality policies, as explained below. However, the questionnaires will be given in small groups, so there will be others present. In addition, we are asking your child to write, which may be tiring. We have tried to minimize this stress by making the time spent writing very brief. Please contact Maya Smith or Dr. Hudson at the numbers listed above with any research-related injuries.

**BENEFITS OF THE STUDY**

Your child may not directly benefit from participating in this research study. However, it is possible that the information gathered during this study may help teachers provide better reading instruction.

**OTHER INFORMATION**

Taking part in this study is voluntary. Your child can stop at any time. Choosing to take part in the study, to not take part in the study, or to withdraw from the study will not affect benefits to which your child is otherwise entitled. For example, your choice will not affect your child’s grade, educational standing, or receipt of special education services.

Information about your child is confidential. We will code the study information. We will keep a link between your child’s name and the code in a separate, secured location until January 2015. Then we will destroy the link. If the results of this study are published or presented, we will not use your child’s name, school, or school district.

Government or university staff sometimes review studies such as this one to make sure they are being done safely and legally. If a review of this study takes place, your records may be examined. The reviewers will protect your privacy. The study records will not be used to put you at legal risk of harm.
A photocopy of the consent form and assent form will be given to your child to bring home to you.

Maya Smith, M.Ed.

Date

Parent of participant’s statement

This study has been explained to me. I give permission for my child to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I can ask Maya Smith or Dr. Hudson listed above. If I have questions about my child’s rights as a research subject, I can call the Human Subjects Division at 206-543-0098. I will receive a copy of this consent form.

Printed name of parent

Signature of parent

Printed name of student

Date
Appendix D

Internal Review Board (IRB) Forms:

Student Assent Form
To be read aloud with each student by Researcher

I am a researcher from the University of Washington. We are trying to learn about how to help teachers do a better job of teaching kids to read. In order to do that, we would like to know what you think about reading and what kinds of things you like to read.

If you choose to continue to participate in this study, I will ask you to answer some questions about why you read and what kinds of things you like to read. For example, we would talk together for no more than 20 minutes, when your teacher says it is OK. Your parent has also given us permission to talk with you.

Some students do not want to be part of research, and you do not have to talk with me.

You can say “no” and no one will be mad at you. You can say “pass” on any questions and stop at any time. This interview has nothing to do with your school grades. I won’t tell anyone who has been in our study. I will keep your name private. Do you have any questions? If you do have questions later, you can ask me or you can ask Dr. Hudson, who is my teacher. I will leave this with you so you can call one of us. I will also give your parents a copy of this form with your signature on it.

All information given by you will be kept confidential. The recordings and transcripts of the interview will be kept locked up, and your name will not be shared with anyone.

So, would you like to participate in this interview?

If yes, the researcher will say, Great, let’s get started. The first thing I’d like to ask you is...

If no, the child will be thanked by the researcher, walked to class, and dismissed from the study.

__________________________  __________________________
Maya Smith, M.Ed.  Date

__________________________  __________________________  __________________________
Student Name  Student Signature  Date