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**Abstract**

The present study examined the relationships among grade level, students' reading achievement, teacher perceptions of student ability, and students' reading self-concept beliefs. Spearman correlations and independent samples *t*-tests were used to determine the relationships, if any, among these variables. Results revealed significant relationships between student and teacher perceptions of reading ability and students' actual reading achievement. A significant difference was also found between first and fifth grade students with respect to reading competency beliefs. Implications of the findings are discussed.

# Chapter One: Statement of the Problem

## Introduction

Throughout the elementary school years, and specifically in grades one through three, the primary task facing students is the acquisition of basic reading skills. The ability to read provides students with a foundation upon which to build more advanced academic skills. Unfortunately, research shows that 37% of fourth-grade students achieve below a basic level of reading skill. In addition, only 31% of fourth-graders are considered at or above a level of proficiency (National Center for Education Statistics, 2003). Students with reading disabilities account for the largest portion of students receiving special education services; approximately 80% of students classified as learning disabled are identified as having a reading disability (Lerner, 1989).

The effects of literacy are far-reaching. In their longitudinal study, Cunningham and Stanovich (1997) found that exposure to reading in first grade was a significant predictor of declarative knowledge and verbal ability in eleventh grade, even after controlling for general cognitive ability. In addition, they found the speed of initial reading acquisition to be related to reading comprehension, vocabulary, and general knowledge in grade eleven (Cunningham & Stanovich, 1997).

Bandura (1993) suggested that in order for students to become competent in learning, they must acquire not only the skills, but also self-efficacy beliefs to use those skills effectively. Such beliefs influence students' aspirations, goal commitments, resilience, and levels of motivation and perseverance (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Children's academic self-competence beliefs then directly contribute to their academic achievement (Bandura et al., 1996).

**Self-Efficacy**

The construct of perceived self-efficacy, or people's beliefs in their capabilities to produce certain results, was developed by Bandura (1977) within a social-cognitive model that suggested a reciprocal relationship between a person, the environment, and behavior. Completing difficult tasks requires a person to expend considerable effort to remain on task and to use analytic thinking. Consequently, people with high self-efficacy set challenging goals for themselves and effectively regulate the effort necessary to overcome obstacles and reach their goals. Self-efficacy is not a global trait, but rather a specific set of beliefs related to distinct areas of functioning, such as academics.

The terminology regarding self-beliefs is ambiguous in the literature; theory and research has been hindered by references to an ambiguous group of competing terms. The terms most frequently used are self-concept, self-esteem, and self-efficacy. Empirical efforts to distinguish among these terms have been met with limited success. The terminology is complicated by the ambiguous nature of the specific aspects of self-belief. As a result, it may not be appropriate to assume clear or consistent conceptual distinctions among self-belief terms. For the purposes of the current review, the terms "self-concept" and "self-efficacy" will be used interchangeably according to the terminology of the authors of the studies discussed (Valentine, DuBois, & Cooper, 2004).

Self-concept usually refers to knowledge of the self-schema, or the beliefs a person holds about his or her attributes either broadly or within a specific domain (Ommundsen, et al., 2005). For students, academic self-concept is of particular importance. Students with a high academic self-concept are more confident in their academic attributes or qualities; when these students feel they possess a negative attribute, they view it as relatively insignificant. Regardless of obstacles

and setbacks, high academic self-concept motivates students to pursue their goals (Ommundsen et al., 2005). As a result, self-efficacy beliefs can influence the development of cognitive competencies; children's beliefs about their abilities to regulate their own learning and master different academic subjects affect their level of motivation and actual academic achievement (Bandura, 1977).

In order to manage challenging situations, people may need a resilient belief that they can achieve the desired results through their effort while remaining undaunted by setbacks or failure (Bandura & Locke, 2003). If a person is overcome with self-doubt, he or she will have difficulty performing even well-established skills; therefore, a strong belief in one's efficacy is necessary to activate and sustain the effort required for success (Bandura & Locke, 2003).

**Self-Efficacy and Academic Achievement**

Bandura (1977) proposed a reciprocal relationship between self-efficacy and achievement. A high sense of efficacy enhances one's motivation to strive towards goals and to persevere on difficult tasks. In addition, people with high academic self-esteem perform better than people with low academic self-esteem after an initial failure, and are more likely to persevere when confronted with obstacles (Schrauger & Sorman, 1977). Similarly, when students with high academic self-efficacy succeed, they assume their success was caused by their abilities and effort; therefore, they feel they have control over their outcomes. In turn, these students are not overly concerned with failure, are task-focused, and have a high expectancy for success. They believe they possess the qualities necessary for success (Haugen, Ommundsen, & Lund, 2004). Following success, these students attempt to maintain that success, and as a result, demonstrate sustained effort, attention, and concentration when involved in academic tasks (Bandura & Locke, 2003). Conversely, students with low academic self-efficacy are inclined to

try to protect their sense of efficacy, often engaging in self-handicapping strategies in order to provide an explanation for failure (Bandura & Locke, 2003).

In their 2004 meta-analysis, Valentine, DuBois, and Cooper examined the relationship between academic achievement and self-beliefs, including self-concept, self-esteem, and self-efficacy. Self-concept was defined broadly as the self-perceptions formed by a person through different experiences with and interpretations of the environment. Self-esteem was described as representing one's own evaluations of the components of self-concept. Finally, self-efficacy referred to one's beliefs in his or her capabilities to organize and execute the behavior necessary to manage a specific situation or produce a desired result. Perceived self-efficacy was viewed in many studies to be related more to specific areas or domains of functioning and to be more directly associated with goals than self-concept and self-esteem (Valentine et al., 2004).

Their findings indicated that self-beliefs can influence academic achievement; the results offer support for theories of learning and development that view the self as a causal agent. The authors found that beliefs about the self pertaining specifically to the academic domain represent a more central influence on achievement than more global or general self-beliefs and feelings. These results suggest a potential for students' beliefs and feelings about their academic abilities to shape their actual levels of learning and school performance over time (Valentine et al., 2004).

Interestingly, the authors' findings provided limited evidence for the effects of global or generalized self-beliefs on academic achievement. Such constructs as general self-concept and global self-esteem may be too broad and complex to predict adaptive outcomes in a specific area of functioning such as school. Furthermore, the authors found evidence for stronger effects when assessment focused on self-beliefs and achievement within the same domain. These findings provide support for the importance of specificity in measurement (Valentine at al.,

2004). Therefore, the current study will measure only academic self concept of reading and reading achievement.

**Self-Efficacy and Self-Regulation Strategies**

Ommundsen, Haugen, and Lund (2005) sought to examine the relationship between academic self-concept beliefs and students' self-regulation strategies. Specifically, they looked at four self-regulation strategies: motivation/diligence, concentration, information processing (adaptive), and self-handicapping (maladaptive). Motivation/diligence referred to students' willingness to work hard, their persistence, and their preparedness for classes. Concentration was defined as students' abilities to neglect distractions and to focus on study activities. Information processing referred to the extent students use strategies to organize information, monitor comprehension, and relate new material to prior knowledge. Finally, self-handicapping refers to self-preservational strategies that students employ to protect or enhance self-esteem. Therefore, if a student's performance is at a low level, the circumstances, rather than a lack of ability or effort, may be assumed as the cause. For example, a student who failed a midterm exam may attribute his failure to a difficult or unfair exam, rather than to his lack of preparation or comprehension of the concepts assessed by the test questions. Established by students themselves, these strategies allow them to draw attention to factors other than low ability.

Ommundsen and his colleagues hypothesized academic self-concept to be positively correlated with the three adaptive self-regulation strategies and negatively correlated to self-handicapping strategies. As expected, academic self-concept was positively related to motivation/diligence, concentration, and information processing, and negatively related to self-handicapping strategies (Ommundsen et al., 2005).

Consistent with previous theory and research, the results suggest that students with a strong sense of confidence in their academic abilities may perceive themselves as having control over their learning. As a result, these students appear well equipped to set goals, work diligently toward those goals, and self-monitor for comprehension in order to reach those goals. Alternatively, a negative self-concept of academic ability may generate beliefs of inefficacy. Students with a negative self-concept often believe that effort does not pay off; therefore, when attempting tasks, they may not expend much effort or they may give up easily. As a result, this becomes a cycle of behavior that may result in a self-fulfilling prophecy that strengthens students' perceptions of inefficacy, further perpetuating a low self-concept of ability and weaker diligence, concentration, and information processing (Ommundsen et al., 2005).

**Self-Efficacy Beliefs Across Grade Levels**

Research suggests that perceptions of self-efficacy do not remain stable over time. More specifically, as students become older, their perceptions of themselves as students becomes increasingly negative (Nunez, Gonzalez-Pienda, Gonzalez-Pumariega, Alvarez, Gonzalez, Cabanach, Valle, & Rodriguez, 2005). Competence beliefs are highest in first grade and steadily decline as the children get older, continuing beyond the elementary school years (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002). Another study found children's academic self concept to be highest in the first year of schooling; their findings showed that these optimistic self-perceptions declined throughout the following two school years (Bouffard, Marcoux, Vezeau, & Bordeleau, 2003).

**Teacher Expectations and Teacher Perceptions**

The correlation between students' academic self-concepts and their actual achievement has important implications for educators. Studies have shown that teachers' expectations can

have an impact both on students' expectations for their performance as well as their actual achievement (Cooper, Findley, & Good, 1982; Jussim & Eccles, 1992; Kuklinski & Weinstein, 2001; Rappaport & Rappaport, 1975). In addition, another study found teacher's perceptions of a student's ability to be strongly correlated with student achievement (Cooper, Findley, & Good, 1982). There appears to be a dearth of research on the relationship between teachers' perceptions of students' ability and students' academic self-efficacy beliefs. Because teacher perceptions have an effect on student achievement, and achievement is related to academic self-efficacy, it could be expected that teacher perceptions would be related to student self-efficacy beliefs. The current study aims to explore this phenomenon.

**The Current Study**

The goal of the current study was to add to the body of research in the domain of academic self-efficacy. Unlike most previous research, this study looked specifically at students' academic self-concepts of reading. The current study used a self-concept survey specific to reading ability. First, this study examined the relationship between reading self-concept and grade level. Consistent with previous research, it was expected that as students progressed through elementary school, reading self-concept would decline. It is important to note that the current study was not a longitudinal study; therefore, the data used was cross-sectional across a sample of elementary students. Second, the current study examined the relationship between reading self-concept and actual reading achievement. Previous research suggested that reading self-concept would be higher in students with more developed reading abilities. In addition, research suggested that this difference would be most notable in the higher grade levels; previous findings suggest that younger students often have more positive feelings of academic self-efficacy than older students. Third, this study examined the relationship between teacher

perceptions of student ability and students' actual achievement. Previous research suggested that teacher perceptions would be positively correlated with student achievement. Finally, the current study examined the relationship between teacher perceptions of student ability and students' self-efficacy beliefs. It was hypothesized that teacher perceptions would be positively correlated with students' perceived academic self-efficacy.

**Research Questions**

1. **What is the relation between academic self-concept and absolute reading performance for first- and fifth-grade students?** It was hypothesized that at the first grade level, there would be little to no correlation between students' reading self-concept and their absolute reading performance. It was hypothesized that at the fifth grade level, however, there would be a correlation between student's beliefs about their reading ability and their actual reading ability.
2. **How does academic self-concept of reading relate to a student's grade level?** It was hypothesized that first grade students would have a significantly higher self-concept of reading than would fifth grade students due to an increased awareness of their own abilities compared to their peers.
3. **What is the relation between academic self-concept and teacher perceptions of student reading performance?** It was hypothesized that there would be a positive correlation between students' reading self-concept and their teachers' perceptions of their reading performance.
4. **What is the relation between teacher perceptions of student reading ability and students' absolute reading performance?** It was hypothesized that there would be a

correlation between teacher perceptions of student reading ability and students' actual absolute reading ability.

## Chapter Two: Literature Review

Bandura (1977) suggested that self-competency beliefs develop as a result of reciprocal relationships among the individual, their environment, and their behavior. In school, the completion of difficult tasks requires students to sustain considerable effort to remain on task and to use analytic thinking and reasoning skills. Students with high academic self-efficacy set challenging goals for themselves and effectively regulate the effort necessary to overcome obstacles and reach their goals.

Students with high academic self-concepts are more confident in their academic attributes or qualities; when these students feel they possess a negative attribute, they view it as relatively insignificant. Regardless of obstacles and setbacks, having a high academic self-concept motivates students to pursue their goals (Ommundsen et al., 2005). Children's beliefs about their abilities to regulate their own learning and master different academic subjects can, in turn, affect their levels of motivation and actual academic achievement (Bandura, 1977).

### Relation Between Perceived Competence and Reading Achievement

Within the context of reading, the motivational influence of students' self-competence beliefs help determine whether students seek or avoid opportunities to read, the level of effort put into reading, and the amount of persistence students demonstrate in pursuing comprehension (Henk & Melnick, 1995). Several studies have shown strong positive correlations between children's perceived competence and their actual achievement.

Students with learning difficulties, regardless of their classification or placement, have significantly lower achievement-related self-perceptions of ability than typical students (Chapman, 1988b). These students appear to lack confidence in the skills required for successful academic performance, therefore tending to give up more easily or avoid the task altogether

(Zimmerman, 2000). Consequently, low self-perceptions of ability are associated with low expectations for future achievement (Chapman, 1988a). Given the importance of reading and the number of students who demonstrate reading difficulties, reading-related self-perceptions have been viewed as increasingly important (Henk & Melnick, 1995).

Academic self-concept is defined as the perceptions, knowledge, views, and beliefs that students hold about themselves as learners (Chapman & Tunmer, 2003). In 2000, Chapman, Tunmer, and Prochnow examined the relationship between reading performance and academic self-concept. They followed a sample of 5-year-old children across three years and, using the Reading Self Concept Scale, classified the children as having positive, negative, or typical self-concepts. Children's pre-reading and reading skills were also assessed, including letter identification, phoneme deletion, sound matching, and reading comprehension. They found that children with negative academic self-concepts entered kindergarten with considerably poorer basic reading skills, including phonological sensitivity and letter-name knowledge, than children with positive academic self concepts. In addition, children with negative academic self-concepts demonstrated more pessimistic attitudes toward reading and felt less competent as readers than did children with positive academic self-concepts.

By second grade, the students with negative self-concepts viewed themselves as less competent in reading, having more difficulty with reading, and liking reading less than children with typical or positive academic self-concepts. These children also read lower level books and performed at lower levels on measures of word recognition and reading comprehension (Chapman, Tunmer, & Prochnow, 2000). These findings are consistent with the theory that initial and ongoing performance in learning to read is reflected in achievement-related self-perceptions, which are subsequently related to early reading experiences.

In 1986, Ladd and Price found a correlation between children's perceived competence in reading and their actual reading achievement. In 2002, Jacqueline Lynch also examined this relationship. In Lynch's study, eight- and nine-year old children were administered the Reader Self-Perception Scale (RSPS) as well as a reading test. Consistent with previous research, Lynch found a significant relationship between children's self-perceptions of progress and children's overall achievement in reading (Lynch, 2002).

**Performance, Perceptions, and Classification: LD versus Non-LD**

Because previous research has demonstrated a strong correlation between academic self-concept and achievement, it might be expected that children identified as having a learning disability would have more negative academic self concepts. These children have often experienced considerable failure and negative feedback about their competence. This repeated failure may accelerate the decline of their perceptions of competence in academic areas and may negatively impact their beliefs about their overall intellect (Hanich & Jordan, 2004). In addition, the label of being "learning disabled" may also negatively affect self-concept (Good, 1982). Furthermore, pulling students with learning disabilities out of their regular classrooms for special instruction and educational programs may facilitate social stigma and highlight a sense of difference from other students (Biklen & Zollers, 1986). In support of this notion, a 2004 meta-analysis by Seleshi Zeleke indicated that 89% of studies reviewed found that students with learning disabilities had more negative academic self-concept than their low achieving, average achieving, and high achievingeers (Zeleke, 2004).

In 1990, Grolnick and Ryan sought to examine the relationship between academic self-concept and achievement, specifically with regard to students with learning disabilities and non-identified low-achieving students. The subjects in their study were 148 third- through sixth-

grade students who were identified either as having a learning disability or not having a learning disability. The students composed four groups: students with learning disabilities, matched-IQ students without learning disabilities, randomly selected students without learning disabilities, and low-achieving students without learning disabilities. The students were administered the Perceived Competence Scale to assess their self-perceptions of cognitive and general competence.

Grolnick and Ryan (1990) found that children with learning disabilities perceived themselves as significantly less competent cognitively than their matched-IQ counterparts. This supports Good's notion (1982) that labeling students may negatively affect their self-concept. Interestingly, there was no significant difference found between the self-perceptions of students with learning disabilities and the non-classified, low achieving students (Grolnick & Ryan, 1990). This provides support for the theory that both types of students experience failure and negative competence feedback at school, which likely becomes internalized and represented in a more negative self-concept (Bandura, 1996). These findings also suggest that academic self-concept may be related more to actual performance in the classroom than overall cognitive ability.

Polychroni, Koukoura, and Anagnostou (2006) sought to further examine the relationship between academic self-concept and reading performance among students of differing abilities. They studied 242 fifth- and sixth-grade students. The students were categorized into three groups: classified with a learning disability, average/low performing, and high performing. The students were administered the Students' Perception of Ability Scale (SPAS) in order to assess the children's self-perceptions of their academic abilities and school-related achievement.

The results of their study revealed significant differences in self-concept between the group of students with learning disabilities and the other two ability-level groups. When compared to the high and average/low performance groups, students with learning disabilities reported lower levels of self-concept regarding reading ability, general ability, and total academic self-concept. In addition, the results revealed significant differences between the group of students with learning disabilities and the high performance group regarding reading, general ability, and total academic self-concept. Furthermore, students in the learning disabled group perceived reading as less of a means of school achievement than did the students in the other two groups; academically, the students with learning disabilities valued reading less than their peers. These findings suggest that, despite the learning disabled students' participation in a special education intervention program, these students still considered themselves less able than non-learning disabled students (Polychroni et al., 2006).

These findings may support the theory that labeling students as learning disabled may negatively impact their feelings of academic self-worth. However, this study did not separate the average performing students from the low performing (non-classified) students. It is possible, therefore, that the average performing students had more positive self-concept beliefs than the low performing students; when averaged together, these mean self-concept beliefs were significantly more positive than the beliefs of students with learning disabilities. It is unclear, however, if the beliefs of the students with learning disabilities were significantly more negative than the beliefs of only the low achieving students. As previously discussed, the findings of Grolnick and Ryan (1990), and of Good (1982), suggest that low achieving students may have self-efficacy beliefs similar to those of students with learning disabilities.

In 2001, Heyman examined whether self-perception of a learning disability was significantly related to children's academic self-concept. The participants in Heyman's study were 87 children with learning disabilities in grades three through six in New York City public elementary schools. She hypothesized that among students with learning disabilities, self-perception of learning disability would be positively related to academic self-concept. Consistent with her hypothesis, Heyman found that, even after controlling for extraneous variables, self-perception of a learning disability was significantly related to academic self-concept. The results of Heyman's study suggest that self-esteem is related to acceptance of the learning disability, including both the recognition of its existence and the subordination of its overall importance. Consistent with Bandura's theory of the reciprocal effect of self-concept on achievement, these results suggest that self-perception of the disability may have an effect on academic self-concept, which in turn may influence achievement (Heyman, 2001).

In 2002, Bear, Minke, and Manning conducted a meta-analysis of the on the self-concept of students with learning disabilities. Overall, Bear and his colleagues (2002) found that children with learning disabilities viewed themselves less favorably than non-learning disabled students in terms of academic competence. More specifically, they were interested in further examining academic self-concept as a function of educational setting. Their meta-analysis of sixty-one studies found that children with learning disabilities who receive special education services in either segregated (i.e. self-contained) or mainstreamed (i.e. resource) settings have more favorable self-concepts of academics than children with learning disabilities in regular classrooms who receive no special education or remedial services. In addition, students with learning disabilities in both inclusive classrooms and resource rooms held significantly lower self-perceptions of intellectual and academic competence than students with learning disabilities

in self-contained classrooms. These findings suggest that students with learning disabilities recognize their academic deficits in an environment conducive to peer comparisons; students in self-contained settings compare themselves to other self-contained students and conclude that they are not performing so poorly, which results in higher self-perceptions of competence. Similarly, students with learning disabilities in more inclusive settings tend to compare themselves to their peers without learning disabilities (Bear et al., 2002). These findings suggest a role of peer comparisons in determining students' feelings of academic efficacy. Theoretically, this role may be expanded to include low achieving, non-classified, students. Therefore, the present study will examine the role of peer comparisons in determining students' feelings of reading competence.

Similarly, a 2005 study by Nunez, Gonzalez-Pienda, Gonzalez-Pumariega, Roces, Alvarez, Gonzalez, Cabanach, Valle, and Rodriguez suggested yet another dimension of academic self-concept heterogeneity among students with learning disabilities. Nunez and his colleagues aimed to determine whether there are significant differences between students with and without learning disabilities with regard to self-concept, causal attributions, and academic goals. They also wanted to determine whether students with learning disabilities present with uniform or heterogeneous attributional profiles and to explore differences between these profiles on the dimensions of self-concept, academic goals, perception of competence, and academic achievement.

The results of this study indicated the existence of two very distinct attributional profiles in students: Helplessness Profile (HP) and Adaptive Profile (AP). Students with the Helplessness Profile were characterized as attributing failures to internal factors and attributing successes to external factors; students who fit the Adaptive Profile generally internalized

successes and externalized failures. Nunez and his colleagues (2005) found that students without learning disabilities attributed their academic successes significantly more to internal factors such as ability or effort, and their failures significantly less to lack of ability or lack of effort than did their classmates with learning disabilities. With regard to academic self-concept, students with learning disabilities rated themselves significantly lower overall than did students without learning disabilities. As a group, students with learning disabilities were significantly less oriented toward learning goals, achievement goals, and seeking social acceptance through academic involvement.

Nunez and his colleagues looked at the relationship between eleven dependent variables and attributional profile: general self-concept, academic self-concept, reading self-concept, mathematics self-concept, parent relations, peer relations, learning goals, social reinforcement goals, and achievement goals. The researchers identified two attributional profiles: Helplessness Profile (HP) and Adaptive Profile (AP). The Helplessness Profile described students who internalized failure and externalized success; they attributed their academic failures to a lack of ability and effort, and they attributed their academic successes to external causes. Conversely, the Adaptive Profile referred to students who internalized success and externalized failure. Students with an Adaptive Profile attributed their successes to ability and effort, and they attributed their failures to external causes. For all of the dependent variables, significant differences were revealed between the groups of students with learning disabilities and a helplessness profile (LD-HP) and their peers without learning disabilities; these differences consistently favored the non-learning disabled group. However, there were no statistically significant differences between the students with learning disabilities who had an adaptive profile (LD-AP) and the non-learning disabled students except on the academic dimensions of

self-concept (academic self-concept, reading self-concept, and mathematics self-concept) and learning goals (Nunez et al., 2005). In addition, with respect to academic achievement, significant differences were found between the LD-AP and LD-HP groups; these differences were in favor of the LD-AP group. Students who had a learning disability and an adaptive attributional profile demonstrated significantly higher academic achievement than students with a learning disability and a helplessness profile.

These results suggest that although students with learning disabilities consistently demonstrate lower self-concepts in the academic domains, including reading, students with adaptive profiles have more positive self-concepts in other domains. Furthermore, students with learning difficulties experience greater achievement when they possess an adaptive attributional profile. These findings suggest that fostering an adaptive profile in students may raise their academic self-concept, and by extension, their academic achievement. The findings of Nunez and his colleagues highlight the heterogeneity of students with learning disabilities and suggest important educational and social implications for students with learning disabilities and a helplessness profile (Nunez et al., 2005).

**Changes in Self-Perceptions**

Research has suggested a reciprocal relationship between academic self-concept and academic performance. Given the predictive value of children's competence beliefs, research began to scrutinize the stability of these competency beliefs. Nunez and his colleagues (2005) found that, in general, as students become older, their self-perceptions of themselves as students becomes increasingly negative. Several other studies have examined the relationship between academic self-concept and a student's age or grade level.

In 2002, Jacobs, Lanza, Osgood, Eccles, and Wigfield studied changes in children's self-competence beliefs in three domains (mathematics, language arts, and sports) across grades one through twelve. They expected competence beliefs to be highest in first grade across all three domains, with decreases across grades one through twelve. They also expected to find gender-role stereotypic differences among self-competencies across the three domains.

As part of the Childhood and Beyond longitudinal project, data were collected between 1989 and 1999 from children in middle-class, suburban, primarily European American elementary schools. As expected, Jacobs and her colleagues found that competence beliefs were highest in first grade across all three domains and steadily declined as the children got older, continuing beyond the elementary school years. The results also showed that by sixth grade, males and females held significantly different competence beliefs in math, language arts, and sports. On average, males believed they were more competent in sports and math than did females, and females believed they were more competent in language arts than did males. Previous research suggests that children's perceptions may be unrealistically high before age seven or eight and they may not make use of social comparison to their peers (Stipek & Mac Iver, 1989). The findings by Jacobs and her colleagues (2002) are consistent with this notion, as children's self-perceptions were highest during first grade.

Bouffard, Marcoux, Vezeau, and Bordeleau (2003) further examined the changes in self-perceptions across grades, and specifically the changes across the early elementary years. Bouffard and her colleagues used a questionnaire to assess children's perceptions of competence in reading. As expected, they found children's academic self concept to be highest in the first year of schooling. In addition, their findings showed that these optimistic self-perceptions declined throughout the following two school years. Interestingly, the decline of reading self-

perception began earlier for boys than it did for girls. Furthermore, the children's self-perceptions of competence in reading were significantly related to their year-end performance (Bouffard et al., 2003). These findings are consistent with previous research regarding the correlation between self-competence beliefs and performance, as well as the marked decline in these beliefs across school years.

**Reasons for Change**

Although research has clearly demonstrated that academic self-concept is highest during the earliest years of schooling and declines as students progress through school, several researchers have proposed theories as to why self-concept declines over time. It is possible that in young children, a global perspective of being smart later develops into more differentiated, domain-specific self-perceptions of competence. This declining perception of competence reflects an optimistic bias for very young children and increases in accuracy as they grow older (Jacobs et al., 2002). Similarly, Marsh and Ayotte (2003) proposed that although the self-concepts of very young children are consistently high, with increasing life experience, children learn their relative strengths and weaknesses. This results in a declining level of overall self-concept (Marsh & Ayotte, 2003). Marsh and Ayotte (2003) examined this phenomenon and found that, with age, there were small declines in self-concept and academic self perceptions of competence became increasingly differentiated by domain. This supports the theory that overall perceptions of competence decline as children become more aware of their domain-specific strengths and weaknesses.

**Importance of Reading Self-Concept: Generalization**

Although research shows that children's self-perceptions of concept become more differentiated over time, some research suggests that these domain-specific self-concepts can

become generalized to affect children's feeling over overall academic competence (Chapman et al., 2000). As suggested by Hanich and Jordan (2004), repeated domain-specific failure may negatively impact students' beliefs about their overall intellect. Reading is a foundational process that spans academic domains, enabling students to succeed, or facilitating their failure, in more disciplines than just reading itself (Good, Simmons, and Smith, 1998). Consequently, although some children are able to compartmentalize their academic self-concepts into domain-specific strengths and weaknesses, other children may generalize their repeated failures across disciplines as a result of poor reading skills into a more global negative academic self-concept.

Hanich and Jordan investigated this concept in their 2004 study. Using a sample of third grade children with differing levels of achievement, Hanich and Jordan assessed both their domain-specific and overall competence beliefs. Children were identified as having a math disability only (MD), a reading disability only (RD), a math disability and a reading disability (MD-RD), and normal achievement (NA). Like previous research, Hanich and Jordan found a significant correlation between children's competence beliefs and their actual performance in math and reading. In addition, results showed that children's perceived intellectual ability was significantly related to their perceived competence in mathematics and to perceived competence in reading (Hanich & Jordan, 2004). These results support the theory that domain-specific self-concepts can generalize to global perceptions of overall intellectual ability.

**Implications for Educators**

The correlation between students' academic self-concepts and their actual achievement has important implications for educators. Studies have shown that teachers' expectations can have an impact on both students' expectations for their performance as well as their actual

achievement (Cooper, Findley, & Good, 1982; Jussim & Eccles, 1992; Kuklinski & Weinstein, 2001; Rappaport & Rappaport, 1975).

In 1975, Rappaport and Rappaport conducted a study in which students in a treatment group were frequently and strongly praised for their performance on challenging perceptual-motor tasks (ranging from block-building to executing verbal commands). Every effort was made to create in the student the feeling that he or she possessed exceptional talent. The students were also told in direct language that they would undoubtedly experience success in school. Students in the control group simply performed the tasks and were not given feedback. The students who were praised and told that they would succeed performed significantly better than the students who did not receive feedback. Interestingly, the praise was not provided by the students' teacher, which suggests that praise and high expectations do not necessarily have to come from the teacher, but rather any adult in the child's educational life could provide this positive feedback. One might expect that if the child is praised, his or her expectations for success may rise. Consistent with previous research proposing a correlation between children's expectations for future success, based on their previous successes or failures, and their actual achievement, it could be argued that their achievement may rise as well.

Kuklinski and Weinstein (2001) developed a path model to explain this phenomenon. They conducted a one-year longitudinal study that measured teachers' expectations as well as students' self-expectations for academic performance. They also measured students' actual achievement. Kuklinski and Weinstein discovered that teacher expectations can influence students' actual achievement through an indirect pathway. They found that teacher expectations influence children's self-expectations, which then influence their achievement. This suggests that by verbalizing positive expectations for students, teachers can help students raise their own

expectations for themselves. This could be particularly important for students whose future expectations are marred by their past failures, such as children with a history of low achievement. These low achievers often have low academic self-concept due to a pattern of past failure and low expectation for future success (Hanich & Jordan, 2004). The findings of Kuklinski and Weinstein suggest an important, although perhaps indirect, connection between teacher expectations and students' self-concept and subsequent achievement.

These findings are further supported by Cooper, Findley, and Good (1982), who assessed teachers' perceptions of students' ability as well as the students' actual achievement. They found teachers' perceptions of student ability to be strongly correlated with student achievement. In addition, perceived ability was also related to achievement change. The more a teacher overestimated a student's ability, the more achievement gain the student made over time. As research suggests student achievement to be an integral component of academic self-concept, the more teachers can improve achievement, the more they may see growth in students' own perceptions of competence (Cooper, Findley, & Good, 1982).

**Implications for Current Research**

Previous research has provided a framework for understanding the relations between student perceptions and academic achievement. Given the importance of reading and reading-related academic tasks in school, research on reading self-perceptions are viewed as increasingly important. The notion that student perceptions are fluid and subject to change is supported by previous findings. Several studies have proposed pathways through which students' perceptions, and in turn student achievement, can be changed for the better. Research has demonstrated the impact that teacher perceptions can have on student achievement, and the implications of teacher expectations and praise on student performance are substantiated by research findings.

Researchers have theorized that academic self-concept is not a global trait, but rather a set of beliefs regarding a specific academic area, such as reading or math. However, these domain-specific specific beliefs can become generalized and can influence self-concept beliefs across other domains. The reading domain is central not only to Language Arts curriculums, but reading also serves as a pathway to other domains, including social studies, science, and even applied mathematics (i.e. word problems). As such, it is important to explore the mechanisms behind self-concept beliefs in reading, including its relations with reading achievement and teacher perceptions.

# Chapter Three: Method

## Participants

Data collection took place during the winter of 2010. Approval for data collection and analysis with human subjects was granted by the Institutional Review Board at Rochester Institute of Technology. Informed consent forms were sent home to the parents of all students in the first and fifth grade at two suburban elementary schools near Rochester Institute of Technology, in Rochester, New York. All students whose parents returned signed consent were recruited to participate. Each student voluntarily participated and provided assent.

The overall sample consisted of 81 participants. Of these, 47 participants were female, and 34 were male. Most participants (70) were Caucasian, and other participants were African American (4), Asian (3), and Indian (4). Of the 81 participants, 77 were enrolled in general education programs, and 4 were enrolled in special education programs.

The first grade group consisted of 45 participants; 23 (51%) were female and 22 (49%) were male. The majority of participants were Caucasian (41; 91%); other participants were African American (2, 4%) and Asian American (2; 4%). Of the first grade participants, 42 were enrolled in general education programs, and 3 were enrolled in special education programs. The fifth grade group consisted of 36 participants, 24 (66%) of whom were female, and 12 (33%) of whom were male. Fifth grade participants were mostly Caucasian (29; 80%), and other participants were African American (2; 5%), Asian (1; 3%), and Indian (4; 11%). Of the 35 fifth grade participants, only 1 was enrolled in a special education program**.**

## Measures

**Reading self-concept.** To measure students' reading self-concept, a Student Reading Questionnaire (SRQ) was administered to the participants in both grades. The SRQ was

developed for the current study, and it is intended to measure students' perceptions of themselves as readers within their classroom instructional environment and compared to other students in their class. As seen in Appendix A, the SRQ contained five questions in simple language so as to be easily understandable and not overwhelming to first grade students. The fifth grade SRQ was identical to the first grade SRQ, to provide item consistency for data analysis. Because of the young age of the first grade participants, all items were scored on a 3-point scale, with 3 representing the highest level of perceived reading competence. Scores on the SRQ range from 1-15, with higher scores reflecting more positive reading self-perceptions. An example of an item on the SRQ is: "Do you think you read as well as other kids in your classroom?"

**Absolute reading achievement.** AIMSweb curriculum-based measurement probes in reading (R-CBM and maze) were used to assess children's current reading performance. R-CBM probes are designed to estimate a student's skill level in reading; the R-CBM and maze probes provide a general indicator of reading achievement by assessing reading fluency. The MAZE probes also assess reading comprehension. Samples of both types of probes, R-CBM and maze, can be seen in Appendixes B and C. AIMSweb is a web-based system that provides curriculum-based measurement and curriculum-based assessment tools. These tools are used for screening and monitoring the progress of students in kindergarten through 8$^{th}$ grade. The National Center on Student Progress Monitoring (NCSPM) (http://www.studentprogress.org; Edformation, 2008) evaluates and distributes information on the acceptability and rigor of commercial progress monitoring systems. The assessment tools provided by AIMSweb have received a favorable review by the NCSPM.

***R-CBM.*** The R-CBM probes were administered to students individually by trained graduate students as part of a larger school-based data collection effort. Standardized

instructions directed the student to read aloud for one minute. At the end of one minute, the student was instructed to stop reading and the total number of words read correctly (WRC) was calculated. Although R-CBM is regarded as measure of oral reading fluency, research suggests that it is also a valid indicator of overall reading expertise and development, especially in the elementary grades (Fuchs, Fuchs, Hosp, & Jenkins, 2001). The AIMSweb R-CBM probes are curriculum-independent stories that are deliberately written for assessment purposes. These passages are grade-level specific, and therefore vary in difficulty from one grade level to the next. The first grade passages, approximately 250 words in length, were used in the current study. First grade R-CBM passages have an alternate-form reliability coefficient of .89 (Howe & Shinn, 2002).

***CBM Maze.*** The maze reading passages are standardized, group administered tests that serve as a general outcome measure of reading. The maze probes were administered to each fifth grade class as a group by trained teachers. In CBM maze passages, every seventh word is deleted and replaced with a group of three word choices; one word is the correct replacement word and the other two are distracter words. Standardized instructions directed the students to read silently for three minutes, and to circle the word in each group that makes the most sense. Maze passages are regarded as a measure of reading fluency and reading comprehension. These passages are grade-level specific, and vary in difficulty from one grade level to the next. The fifth grade maze passages, approximately 370 words in length, were used in the current study. The maze probes used in the study contained approximately 51 choices. The maze task has criterion-related validity with R-CBM and standardized group achievement tests of reading; the criterion validity coefficient of the maze task is .83 (www.rti4success.org; National Center on

Response to Intervention, 2009). In addition, the maze task has a test-retest/alternate form reliability coefficient ranging from .77 to .89 (www.rti4success.org).

**Teacher ratings of student reading ability.** Each teacher rated each participating student's reading ability relative to other students in the class. All teachers were asked to fill out an Alternate Ranking form, as seen in Appendix D. The fifth grade teachers ranked each student in order of reading ability, so that the student with the highest reading ability was ranked in the first spot, and the student with the lowest reading ability was ranked in the last spot. The first grade teachers were not willing to complete the Alternate Ranking form. Therefore, in the first grade classes, these ratings were derived from the homogeneous reading groups the teachers created for reading instruction; a number was assigned to each reading group, with five representing the highest ability group and one representing the lowest ability group. In order to maintain consistency between the teacher ratings at both grade levels, the fifth grade rankings were equally divided into five homogenous groups, and each group was assigned a number from one to five, with higher numbers representing higher reading ability.

**Procedure**

Students in first grade were individually assessed during a typical school day in the winter of 2010. Reading achievement data was collected as part of a larger district initiative, and reading achievement data was collected on all students in first and fifth grade. Students in fifth grade were assessed in groups with their classmates during the same time period. Children were assessed on the measure of reading self-concept and on the measure of reading achievement. All measures were administered to all children during the same time period. Reading self-concept and reading achievement were assessed once for each child. One grade-level AIMSweb (R-CBM or maze) passage was administered to each child; first grade students were administered R-

CBM passages, and fifth grade students were administered maze passages. Each student was also administered the questions on the SRQ. Teachers were asked to assign each student a number from 1 to 5 based on their reading ability relative to their peers; a rating of 5 indicated the highest reading ability relative to peers, and a rating of 1 indicated the lowest reading ability relative to peers. Administration of the measures was conducted over a 4-week span, and trained graduate students and teachers administered the measures. Prior to all data collection, all graduate students and teachers received training on administration of all measures.

**Data analysis**

Spearman correlation analyses were used to determine the relations, if any, among reading self-concept, absolute reading achievement, and teacher ratings of student reading ability. Mean comparisons were used to determine if significant differences exist between first and fifth grade students' reading self-concept scores.

## Chapter Four: Results

Descriptive statistics are presented in Tables 1 and 2. The average R-CBM score for first grade participants was 58.76 (*SD* = 35.34, range 12-135), and the average MAZE score for fifth grade participants was 26.11 (*SD* = 6.60, range 13-39). The average SRQ Composite score for the overall sample of first and fifth grade students was 13.27 (*SD* = 1.65, range 7-15). The average SRQ Composite score of first grade participants was 13.73 (*SD* = 1.23, range 9-15; the average SRQ Composite score of fifth grade participants was 12.69 (*SD* = 1.93, range 7-15).

Table 1
*Descriptive Statistics- First Grade*

| | *Mean* | *Standard Deviation* | Range |
|---|---|---|---|
| R-CBM | 58.76 | 35.34 | 12-135 |
| SRQ Composite Score | 13.73 | 1.23 | 9-15 |
| SRQ Question 1 | 2.91 | 0.36 | 1-3 |
| SRQ Question 2 | 2.27 | 0.75 | 1-3 |
| SRQ Question 3 | 2.96 | 0.30 | 1-3 |
| SRQ Question 4 | 2.73 | 0.50 | 1-3 |
| SRQ Question 5 | 2.87 | 0.41 | 1-3 |

Table 2
*Descriptive Statistics- Fifth Grade*

| | *Mean* | *Standard Deviation* | Range |
|---|---|---|---|
| MAZE | 26.11 | 6.60 | 13-39 |
| SRQ Composite Score | 12.69 | 1.93 | 7-15 |
| SRQ Question 1 | 2.53 | 0.61 | 1-3 |
| SRQ Question 2 | 2.33 | 0.63 | 1-3 |
| SRQ Question 3 | 2.67 | 0.68 | 1-3 |
| SRQ Question 4 | 2.64 | 0.64 | 1-3 |
| SRQ Question 5 | 2.60 | 0.60 | 1-3 |

. The relation between first-grade students' reading self-concept score and their absolute reading performance was tested using a Spearman correlation; the results are in Table 3. Consistent with expectations, the results indicate that there is no significant correlation between first grade students' reading performance and their overall reading self-concept, $R_s(43) = 0.11$, ns. Additional Spearman correlation analyses were run on each individual question of the SRQ to determine if any of the reading self-concept constructs correlated with absolute reading performance. These correlations also were not significant at the first grade level.

The relation between fifth-grade students' reading self-concept score and absolute reading performance was examined using a Spearman correlation. The results indicate that, contrary to expectations, there is no significant relationship between fifth grade students' reading performance and their overall reading self-concept score, $R_s$ (34) = 0.28, ns. Additional Spearman correlation analyses were conducted on each individual item on the SRQ to determine if there is a relationship between any of the specific reading self-concept items and absolute reading performance. The results of these analyses indicate a significant correlation between students' absolute reading performance and their feelings of competence as a reader compared to other students in the class $R_s$ (34) = 0.39, $p<0.05$; higher absolute reading scores are associated with more positive beliefs of reading competence compared to peers. In addition, a significant relationship is evident between students' absolute reading performance and their beliefs that they are good readers, $R_s$ (34) = 0.43, $p<.05$. Higher absolute reading scores are associated with more positive beliefs of being a "good reader." These results support the hypothesis that, at the fifth grade level, some aspects of students' reading competency beliefs would be related to their actual reading ability.

Table 3
*Spearman Correlations Between Reading Self-Concept and Absolute Reading Performance*

| | Spearman's rho | |
|---|---|---|
| | First Grade: R-CBM | Fifth Grade: MAZE |
| SRQ Composite Score | 0.109 | 0.281 |
| SRQ Question 1 | -0.103 | -0.058 |
| SRQ Question 2 | 0.248 | 0.385* |
| SRQ Question 3 | 0.070 | 0.222 |
| SRQ Question 4 | -0.152 | 0.118 |
| SRQ Question 5 | 0.121 | 0.431* |

*. Correlation is significant at the 0.05 level (2-tailed).

It was expected that first grade students would have a significantly higher self-concept of their reading ability than would fifth grade students. This hypothesis was tested using mean comparisons; the results can be found in Table 4. The results of an independent samples *t*-test indicate a significant difference between the overall reading self-concept beliefs of the first grade group and the fifth grade group, $t(56) = 2.81$, $p = 0.007$. Mean values suggest that the fifth grade group endorses significantly lower mean SRQ Composite scores ($M = 12.69$, $SD = 1.92$) than the first grade group ($M = 13.73$, $SD = 1.23$). These results support the prediction that fifth grade students would report lower feelings of competence as readers than would first grade students.

Additional analyses were conducted to determine if significant differences exist between the first and the fifth grade groups with regard to specific SRQ items. The results of an independent samples *t*-test indicate a significant difference between first and fifth grade students with regard to the belief that their reading ability has improved since the start of the current school year, $t(53) = 3.34$, $p = 0.002$. Mean responses values for Question 1 on the SRQ suggest that first graders ($M = 2.91$, $SD = 0.34$) endorse significantly higher feelings of reading improvement than do fifth graders ($M = 2.52$, $SD = 0.61$). A second independent samples *t*-test yielded a significant difference between first and fifth grade students with regard to enjoyment of reading, $t(45) = 2.38$, $p = 0.021$. Mean response values for Question 3 on the SRQ suggest that first graders ($M = 2.96$, $SD = 0.30$) report enjoying reading more than do fifth graders ($M = 2.67$, $SD = 0.68$). The results of another independent samples *t*-test indicate a significant difference between first and fifth grade students' descriptions of themselves as "good readers," $t(56) = 2.25$, $p = 0.028$. Mean response values for Question 5 on the SRQ suggest that the first grade students ($M = 2.87$, $SD = 0.41$) endorse more feelings of being a "good reader" than the fifth grade

students ($M$ = 2.60, $SD$ = 0.60). These results support the expectation that some aspects of students' reading competency beliefs would be a function of grade level.

Table 4
*Independent Samples Test for Reading Self-Concept and Grade Level*

| | *Mean* | *Standard Deviation* | *t* | Sig. (2-tailed) |
|---|---|---|---|---|
| SRQ Composite | | | | |
| First Grade | 13.79 | 1.23 | 2.81 | 0.007* |
| Fifth Grade | 12.69 | 1.92 | | |
| SRQ Question 1 | | | | |
| First Grade | 2.91 | 0.36 | 3.34 | 0.002* |
| Fifth Grade | 2.53 | 0.61 | | |
| SRQ Question 2 | | | | |
| First Grade | 2.27 | 0.75 | -0.43 | 0.666 |
| Fifth Grade | 2.33 | 0.63 | | |
| SRQ Question 3 | | | | |
| First Grade | 2.96 | 0.30 | 2.38 | 0.021* |
| Fifth Grade | 2.67 | 0.68 | | |
| SRQ Question 4 | | | | |
| First Grade | 2.73 | 0.50 | 0.73 | 0.469 |
| Fifth Grade | 2.64 | 0.64 | | |
| SRQ Question 5 | | | | |
| First Grade | 2.87 | 0.41 | 2.25 | 0.028* |
| Fifth Grade | 2.60 | 0.60 | | |

*. Mean difference is significant at the 0.05 level

It was also hypothesized that there would be a positive correlation between students' reading self-concept and their teachers' perceptions of their reading performance. This hypothesis was tested using a Spearman correlation; correlations were first run with the overall sample of students (first and fifth grade samples combined), and then on each group separately. The results of these analyses can be found in Table 5. As expected, results indicate that in the overall sample, teacher perceptions are significantly related to students' overall feelings of reading competence, $R_s(79) = 0.259$, $p<.05$. This relationship is in the expected positive direction; higher teacher perceptions of student reading ability are related to higher student perceptions of their own ability. Additional Spearman correlations were used to test the specific items on the SRQ. Results indicate that teacher perceptions of student reading ability are significantly positively correlated with students' feelings of competence as readers compared to their peers, $R_s(79) = 0.310$, $p<.05$, and also with their enjoyment of learning to read, $R_s(79) = 0.267$, $p<.05$. These results support the hypothesis that teacher perceptions of student ability are positively correlated with students' beliefs about their own reading ability.

Similar Spearman correlations were used to test this hypothesis separately at each grade level. At the first grade level, teachers' perceptions of student reading ability are not significantly correlated with students' overall reading self-concept score, $R_s(43) = 0.191$, ns, although the modest correlation is in the expected direction. Teacher perceptions are, however, significantly positively related to students' perceptions of their reading ability relative to their peers, $R_s(43) =0.334$, $p<.05$. Higher teacher ratings of reading ability are associated with more positive student feelings of reading competency compared to peers. At the fifth grade level, teacher perceptions of student reading ability are significantly positively correlated with students' overall reading self-concept score, $R_s(34) = 0.362$, $p<.05$; higher teacher perceptions of

student reading ability are related to higher fifth grade students' perceptions of their own ability. In addition, there is also a significant positive relationship between teacher perceptions of student ability and students' enjoyment of learning to read, $R_s(34) = 0.425$, $p<.05$. Higher teacher ratings of student ability are associated with students endorsing more positive feelings of enjoyment toward learning to read.

Table 5
*Spearman Correlation Between Reading Self-Concept and Teacher Perceptions of Reading Ability in Overall Sample, First Grade, and Fifth Grade*

| | Spearman's rho Correlation Coefficient | | |
|---|---|---|---|
| | Overall Sample | First Grade | Fifth Grade |
| SRQ Composite | 0.259* | 0.191 | 0.362* |
| SRQ Question 1 | 0.032 | -0.101 | 0.130 |
| SRQ Question 2 | 0.310* | 0.334* | 0.274 |
| SRQ Question 3 | 0.270* | 0.060 | 0.425* |
| SRQ Question 4 | 0.077 | 0.011 | 0.146 |
| SRQ Question 5 | 0.105 | -0.016 | 0.202 |

*. Correlation is significant at the 0.05 level (2-tailed)

Finally, it was expected that there would be a correlation between teacher perceptions of student reading ability and students' absolute reading ability. A Spearman correlation was used to test this hypothesis at each grade level, and the results are depicted in Table 6. The results indicate, that at both the first and fifth grade levels, a significant positive correlation exists between teacher perceptions of student ability and students' absolute reading ability (first grade: $R_s(43) = 0.837$, $p<.05$; fifth grade: $R_s(34) = 0.425$, $p<.05$). Consistent with expectations, higher student absolute reading scores are associated with more positive teacher ratings of reading ability.

Table 6
*Spearman Correlations Between Teacher Perceptions of Student Ability and Student Absolute Achievement*

| | Spearman's rho Correlation Coefficient | |
|---|---|---|
| | R-CBM | MAZE |
| Teacher Perceptions | | |
| First Grade | 0.837* | --- |
| Fifth Grade | --- | 0.425* |

*. Correlation is significant at the 0.05 level (2-tailed)

# Chapter Five: Discussion

## Summary of Findings and Implications for Theory

The current study examined the relationship between reading competency beliefs and grade level. It was hypothesized that first grade students would have significantly higher reading self-concept beliefs than would fifth graders. As expected, results indicated that first grade students reported significantly higher overall reading competency beliefs than did fifth grade students. Students in the first grade sample also endorsed significantly more agreement with the statement that they see themselves as a "good reader." These findings are consistent with research that suggests self-concept beliefs do not remain stable over time. More specifically, as students become older, their self perceptions as students become increasingly negative (Nunez et al., 2005). Previous findings suggest that academic competency beliefs are highest in first grade and steadily decline as children get older (Jacobs et al., 2002). This declining perception of competence may reflect an optimistic bias for very young children that increases in accuracy as they grow older (Jacobs et al., 2002). Children's perceptions may be unrealistically high before age seven or eight, and they may not make use of social comparison to their peers (Stipek & Mac Iver, 1989). With additional life experiences, children learn their relative strengths and weaknesses. This may result in declining beliefs of self-competence (Marsh & Ayotte, 2003). These findings are further supported by the current results, specifically with regard to the reading domain.

First grade students also reported significantly higher feelings of reading improvement since the beginning of the present school year. This finding was not anticipated, but it is likely due to the differences in reading growth rates between first and fifth grade students. Previous research suggests that in first grade, students actually make more progress with respect to

reading ability than in fifth grade; reading growth rates are highest in first grade and steadily decline as students advance through the years of schooling. The reading growth rate of students in first grade is approximately triple that of students in fifth grade (Deno, Fuchs, Marston, & Shin, 2001). As a result, differences between first and fifth grade students' feelings of reading improvement are likely due to differences in actual reading growth; students' responses to Question 1 on the SRQ almost certainly reflect different reading growth rate trajectories typical of their grade levels.

This finding may also be attributed to the differences between first and fifth grade instructional reading curriculums. First grade students receive intensive reading instruction, and are likely to feel they have made substantial progress in their reading ability since the beginning of first grade. Fifth grade students, however, receive little reading instruction; instruction focuses more on reading comprehension and higher level reasoning skills. Therefore, fifth grade students are not likely to feel that their reading ability has significantly improved since the beginning of the year.

The present study also examined the relationship between student perceptions of reading ability and absolute reading achievement. Specifically, it was hypothesized that at the first grade level, there would be little to no correlation between students' reading self-concept and their absolute reading achievement. It was also predicted that at the fifth grade level, however, there would be a significant correlation between students' beliefs about their reading ability and their actual reading ability. Most participants, across both grade groups, reported fairly high levels of perceived reading ability; mean perceived reading competence scores were moderately high across the sample.

Consistent with expectations, there was no meaningful relationship between first grade students' reading self-concept and their actual reading performance. Contrary to expectations, there was no meaningful relationship between fifth grade students overall reading self-concept and their absolute reading achievement. There was, however, a significant correlation between fifth grade students' reading performance and two explicit self-concept beliefs. Specifically, there was a significant positive correlation between fifth grade students' reading achievement and their assertion that they read as well as their peers. There was also a significant positive correlation between fifth grade students' reading achievement and their endorsement of being a "good reader." These results supported the first hypothesis.

The results of this hypothesis at the first grade level are consistent with expectations and with previous research. Previous findings, as well as the results of the current study, suggest that student competency beliefs are highest during the early years of schooling, and steadily decline as children get older (Bouffard et al., 2003; Jacobs et al., 2002). Therefore, it was expected that first grade students would have fairly high overall feelings of reading competence, regardless of their actual reading achievement. This assertion was supported by the present findings. The mean SRQ Composite Score of first grade students was 13.73 out of 15. This supports the notion that first grade students have high feelings of academic competence; at the first grade level, these feelings are not necessarily related to their actual achievement.

The results at the fifth grade level of this hypothesis are inconsistent with expectations. There was no meaningful association between overall reading competence scores and actual reading achievement, but the correlation was modest and in the expected positive direction. Because these results were in the expected direction, the null results suggest a possible Type II error, best accounted for by methodological factors. It is possible that, due to the small sample

size of the fifth grade group, the results lack statistical power. In other words, the sample size was so small that a significant relationship between the two variables could not be detected. Because results indicated greater perceived competency beliefs in students with higher reading achievement, although not significantly so, the use of a larger sample may increase the statistical power to detect differences at the level of significance. However, because the sample size was sufficient to detect significant correlations on other variables, any relationship found between overall competency beliefs, as measured by the SRQ composite score, and reading achievement due to an increase in statistical power is not likely to be one of strong magnitude. Furthermore, it is possible that the overall SRQ score is not a valid measure of students' feelings of reading competence. Certain items on the SRQ may not accurately reflect fifth-grade students' overall competency beliefs, and therefore, the SRQ composite score may not truly represent students' overall beliefs. As a result, statistical analyses were conducted on each item of the SRQ in an effort to identify relationships between particular constructs of the SRQ and reading achievement. These analyses yielded more specific results that were in line with expectations.

Although there was no relationship between overall competence scores and reading achievement at the fifth grade level, there was a significant correlation between reading achievement and two specific constructs of perceived reading competence. Students who believe they read as well as their peers, and students who believe they are a "good reader" had higher absolute reading scores. Previous research suggests that students with learning disabilities recognize their academic deficits in an environment conducive to peer comparisons (Bear et al., 2002); the present findings extend this theory to students without learning disabilities. Students tend to compare their academic competency to that of their peers. The current research suggests

that students may internalize these peer comparisons, and use them as a basis for determining their own competency beliefs.

Overall, these findings are consistent with the hypothesis that reading competency feelings, in some way, would be positively associated with actual reading achievement. These results are also consistent with previous research that suggests student competency beliefs contribute to academic achievement (Bandura et al., 1996).

Historically, and as supported by the current findings, students with learning difficulties have significantly lower achievement-related self-perceptions than students without learning difficulties. Because the current study only looked at student achievement, the findings provide support for previous research that suggests low-achieving students, regardless of special education status, have lower self-efficacy beliefs than do higher achieving students (Grolnick & Ryan, 1990). The results of the present study provide support for the theory that these students experience failure and negative competence feedback at school, which likely becomes internalized and represented in a more negative self-concept (Bandura et al., 1996).

Consequently, these low self-perceptions of ability are associated with low expectations for future achievement (Chapman, 1988b). Students with a strong sense of confidence in their academic abilities may perceive themselves as having more control over their learning; these students appear better equipped to set goals, towards which they work diligently, and self-monitor in order to reach those goals. Alternately, a negative self-concept of reading may generate beliefs of inefficacy. These students may believe that effort does not pay off, and therefore, they may not expend much effort on difficult tasks or they may give up easily. This becomes a cycle of behavior that can result in a self-fulfilling prophecy that strengthens students' perceptions of inefficacy, leading to a lower self-concept of ability (Ommundsen et al., 2005).

Given the importance of reading and reading achievement, especially during the elementary years, reading-related self-perceptions are viewed as increasingly important (Henk & Melnick, 1995). Students who believe they lack reading competence may give up easily on reading tasks or avoid them altogether. As children progress through school, reading becomes less an isolated task and more part of a pathway to other academic domains. The current findings suggest that, at the fifth grade level, a student who lacks success in reading is more likely to develop negative feelings about his or her reading competence. As a result, this student may avoid reading tasks altogether, such as reading a social studies or science textbook. Thus, a negative self-concept of reading ability may have a negative impact on students' effort and performance across other academic domains in which reading is a primary pathway to learning. This, in turn, could affect self-efficacy beliefs, continuing the cycle of self-fulfilling behavior.

The second half of the present study examined the association of teacher perceptions with students' achievement as well as their own perceptions. As expected, higher teacher perceptions of students' reading ability were associated with greater student absolute reading achievement at both grade levels. Students in the elementary grade levels are often grouped for reading instruction by reading ability. In order for these homogenous groups to serve their purpose, the groupings should be accurate. This finding indicates that teachers' perceptions of students' reading ability relative to other students in the class are fairly correct. The results of the present study suggest a relationship not only between student reading performance and their own perceptions of reading competence, but also between student reading performance and teacher perceptions of student reading competence.

Finally, the current study examined the relationship between students' reading self-concept and teacher perceptions of students' reading ability. It was hypothesized that there

would be a positive correlation between students' reading self-concept and their teachers' perceptions of their reading performance. In the overall sample of first and fifth graders, a significant positive correlation was found between these two variables. As expected, higher student SRQ composite scores were associated with higher teacher perceptions of reading ability. Further analyses were conducted to determine if there was a significant relationship between teacher perceptions and the specific constructs of reading self-concept. Results indicated that positive teacher ratings were associated with more positive student beliefs that they read as well as their peers. Results also indicated that higher teacher ratings were associated with more feelings of enjoyment of learning to read.

This hypothesis was also tested at each individual grade level. In the first grade group, teacher perceptions were not significantly correlated with overall student self-concept scores; this may have been the result of a lack of statistical power due to the small size of the first grade sample. However, upon further analysis of the specific self-concept items, it was found that teacher perceptions of student reading ability relative to other students was significantly positively correlated with students' perceptions of their reading ability relative to their peers. The more positively teachers ranked students' reading ability relative to the class, the more positively students rated their own ability relative to their peers. At the fifth grade level, teacher perceptions were found to be significantly related to overall student self-concept scores; consistent with expectations, higher teacher ratings were associated with higher student ratings of their own reading ability. Teacher ratings were also found to be associated with fifth grade students' ratings of enjoyment of learning to read.

These results support the hypothesis that there would be a significant positive relationship between teacher perceptions and students' own perceptions about their reading ability. Previous

research also found teachers' perceptions of student ability to be strongly correlated with student achievement (Cooper et al., 1982). This study examined the reading domain of student achievement, adding to the current body of research on the relationship between student achievement and teacher perceptions.

**Implications for Practice**

In light of previous research, the findings of the latter two hypotheses of the current study have important implications for educators. The current study found teachers' perceptions of student reading ability to be significantly related to students' own perceptions. In addition, consistent with previous research, this study found that teachers' perceptions of student reading ability are also significantly correlated with student reading achievement. Not only are teachers' perceptions strongly related to student achievement, they are also related to achievement change (Cooper et al., 1982). The more a teacher overestimates a student's ability, the more achievement gain the student makes over time (Cooper et al., 1982). In turn, because research suggests that student achievement is an integral component of academic self-concept, the more teachers can improve achievement, the more they may see growth in students' own perceptions of competence (Cooper et al., 1982). The results of the current study suggest that these same associations are possible with reading achievement and perceptions of reading ability.

The findings of the present study are consistent with previous research that suggests teacher expectations can influence children's self-expectations, which can influence their achievement (Kuklinski & Weinstein, 2001), and they extend the current body of knowledge to the specific domain of reading. These findings suggest that teachers play an important role in the development of students' self-concept beliefs, and by extension, their academic achievement. As such, teachers should provide direct positive feedback to students at frequent intervals. Research

suggests that this feedback should focus on praising students' effort and ability to aid in the internalization of success. Students who internalize their academic successes are likely to have a higher academic self-concept than students who externalize success (Nunez et al., 2005). Students with a higher self-concept, in turn, are likely to experience higher academic achievement.

These results also have important implications for children's future career aspirations. Past research suggests that perceived academic self-efficacy is a more significant predictor of perceived career self-efficacy; actual academic achievement adds little to no predictive value (Bandura, 2001). Bandura (2001) found that children's beliefs about their academic efficacy had the most pervasive, direct impact on their judgments of their career efficacy. As teachers' beliefs were found in the current study to be significantly correlated with students' beliefs, teachers may influence students' career self-efficacy beliefs through an indirect pathway. This research suggests that teacher beliefs can have a far reaching impact on student beliefs, and can extend beyond the school years.

**Limitations and Future Directions**

Admittedly, the current study is not without limitation. Due to the cross-sectional nature of this study, it is impossible to determine cause-and-effect relationships between reading self-concept scores and grade level. Although it is possible that an increase in life experiences leads to more differentiated beliefs about personal strengths and weaknesses, it is also possible that the sample of fifth grade students in the current study also had lower feelings of reading competence as first graders. It would be necessary to collect data prospectively to be sure that reading self-concept feelings are truly higher in first grade. Only a longitudinal study would be able to suggest with confidence that the difference in reading self-concept scores between first and fifth

grade students is truly due to developmental progression and increased life experiences that cause differentiation of self-concept beliefs. Similarly, due to the correlational nature of the present research, no cause-and-effect relationship between the variables can be inferred. Therefore, further longitudinal research needs to be conducted in order to establish more definitive causal relationships.

In addition, the results of the current study are limited by the unknown validity of the SRQ measure. The SRQ was developed for the current study and it was intended to measure students' overall self-competence beliefs in the domain of reading. However, the SRQ was not formally tested, and as such, it may not have accurately measured these beliefs as intended. Without field and reliability testing, it is unknown whether the SRQ is truly a reliable and valid measure of reading self-concept.

Several other limitations to the current study warrant acknowledgement. As previously mentioned, the present sample was limited to students whose parents returned consent for their participation. Second, it was a sample of convenience from two local upper middle class elementary schools, not a representative sample of the elementary school population. The sample consisted of primarily Caucasian, upper middle class female students in general education settings; as a result, the findings of this study may not generalize to more diverse groups of students. Finally, as with any study based partially on self-report data, the present research findings are limited by the ability of the student participants to accurately report their feelings of reading competence.

The results of the current study suggest noteworthy implications for future research on perceptions of reading competence. First and foremost, further research would benefit greatly from a larger sample size. Because the results of the current study were in the expected

directions, although not always significantly so, it is possible that the small sample size played a role in any null results. By using a larger sample, future researches in this area might be able to detect more significant results. In addition, it would be helpful to have a larger male population, as well an increased number of participants enrolled in special education programs, so that the sample would be more balanced with regard to gender and level of educational service.

The current study adds to the existing body of research on students' self-concept beliefs and actual achievement. The present findings provide validation for the assertion that these two variables are significantly related. This study also provided support for the theoretical relationship among teacher beliefs, student beliefs, and student academic achievement. By incorporating some or all of the methodological design changes previously discussed, future research in this area may be better able to replicate similar findings, and even produce more significant results.

Bandura (1993) proposed that in order to become competent in learning, students must acquire not only the skills, but the self-efficacy beliefs to use those skills confidently and effectively. These beliefs influence students' goals, aspirations, commitment, resilience, motivation, and perseverance (Bandura, 1993). As supported by the results of this study, children's academic self-concept beliefs are then significantly associated with their academic achievement (Bandura et al., 1996). This study also helped establish a clear link between the competency beliefs held by students and those held by teachers, as well as how each related to actual academic achievement. By studying the perceptions of students, as well as those of their teachers, educators can better understand the mechanisms behind student achievement.

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# Appendix A

## Student Reading Questionnaire (SRQ)

1. Do you read better now than at the beginning of the year?

| 1 | 2 | 3 |
|---|---|---|
| No | Maybe | Yes |

2. Do you think you read as well as other kids in your class?

| 1 | 2 | 3 |
|---|---|---|
| No | Maybe | Yes |

3. Do you like reading in school?

| 1 | 2 | 3 |
|---|---|---|
| No | Maybe | Yes |

4. Can you do the reading work in your classroom?

| 1 | 2 | 3 |
|---|---|---|
| No | Maybe | Yes |

5. Do you think you are a good reader?

| 1 | 2 | 3 |
|---|---|---|
| No | Maybe | Yes |

# Appendix B

## Sample 1st Grade R-CBM Passage

The black and white dog was very smart. He hid his bones all over his hard. He hid his bones in the shadows of the trees. He hid his bones under the swing set. He even hid his bones in the sand of the sandbox.

The dog was always happy. He was never without a bone. The dog's teeth were very sharp and white, but he never bit anyone. He only chewed on bones.

One day the dog was sleeping. A rat came into his yard.

"I will take this dog's bones," said the rat. "He is sleeping. He will never know that I have taken them."

So the sneaky rat snuck around the yard and stole every bone. Then he slipped under the fence and climbed up a tree. He had all the bones with him in a bag.

"I will watch the dog from this branch. I will see what he does when he opens his eyes."

The dog opened his eyes. He was hungry. He got up to dig up a bone. He dug. The hole was empty.

"I am sure that I hid a bone here. I hid it right in the shadow of this tree." He looked around.

Then he heard the rat laughing. He looked up and saw the rat on the branch.

"I took your bones!" the rat yelled.

Just then, the bones fell out of the tree. The dog ran under the fence and got them all. He chased the rat away.

Appendix C

Sample 5th Grade Maze Passage

Brandon is an outer space expert. If you ever want information about **(sister, and, the)** sun, planets, sky, or stars, Brandon **(has, completed, is)** the boy to ask. He knows **(it, more, every)** about the solar system than anyone **(I, newest, he)** have ever met. He's a walking, **(painting, talking, sky)**, breathing outer space computer.

Brandon reads **(the, right, every)** book and article about space that **(sister, he, newest)** can find. He says that he **(wants, has, out)** read eighty books, and he has **(very, just, now)** gotten started! He enjoys reading both **(fiction, people, any)** and non-fiction stories. Brandon's sister just **(even, makes, bought)** him the newest magazine on rocket **(travel, about, movie)**, and he is very excited to **(dreams, when, read)** it.

Brandon is a great space **(planet, excited, artist)**. He recently completed a picture of **(the, he's, and)** night sky using blue, black, silver, **(sleeping, gold, newest)**, and white glitter. He makes models **(of, from, find)** the planets out of clay. Right **(someday, now, expert)** he is painting a huge poster **(setting, depicting, sounds)** the Big Dipper and the Little **(when, he, Dipper)**.

Brandon talks about outer space. He **(plants, creates, stories)** songs about outer space. He will **(watch, great, know)** any show or movie about outer **(is, space, sky)**. I bet he even dreams about **(blue, life, outer)** space when he's sleeping!

Someday Brandon **(truly, wants, would)** like to be an astronaut. He **(wants, believes, red)** to blast off in a space **(shuttle, of, planet)** that lands on the moon or **(see, for, on)** Mars. He would like to walk **(to, in, is)** space. He imagines floating and being **(space, weightless, he)**

in the air. He thinks somewhere **(on, a, in)** the solar system aliens truly exist. **(He, People, Invite)** wants to explore Mars and hunt **(for, design, if)** water. He wants to see what **(space, him, kind)** of life might live there. He **(would, doesn't, over)** know if he would find plants **(new, or, to)** animals or learn why it is **(colony, completed, called)** a red planet.

If Brandon could **(live, people, bet)** out his greatest fantasy, he would **(help, explore, wonderful)** design, build, and live in a **(Brandon, silver, giant)** space colony. He'd invite people from **(outer, that, different)** countries all over the world to **(poster, join, bought)** him in settling a new frontier. **(Througout, Why, For)** the galaxy, there would be peace, **(shuttle, harmony, about)**, and people jetting around in flying **(reading, people, saucers)**. Brandon believes that outer space is **(water, full, kind)** of wonderful sights, sounds, and life.

Appendix D

Teacher Ranking Form

Teacher Name _____ Date _____

Alternate Ranking

Directions: Please choose the highest-achieving reading student in your class and list the name on the top line, then choose the lowest-achieving student and list their name on the bottom line. Next, choose the second highest and second lowest. Continue on through your class list until all names have been ranked. Do your best to estimate ranks when you get to the more difficult middle names. Please rank based on daily reading performance in the classroom.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____