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Teacher and Student Perceptions of Boys' and Girls' Reading Motivation

Cassandra S. Coddington and John T. Guthrie

University of Maryland

Abstract

The purpose of this study was to compare teacher and student perceptions of motivation for reading. Motivational constructs were theoretically derived from previous work on efficacy and task-orientation. First grade students and teachers were asked to complete parallel reading motivation questionnaires. Results suggest both first grade teachers and students perceive distinctions among students' efficacy, reading orientation, and perceived difficulty for reading. Teachers' perceptions were more consistent and had higher associations with word identification outcomes than students' perceptions.

Introduction

The empirical research of the effect of motivation on various academic tasks has grown over the past decade to include both qualitative and quantitative studies, which underscore the significant impact that motivation can have on academic performance (Chapman & Tunmer, 1995, 2003; Wigfield, & Guthrie, 1997). In addition to research on the effect of student motivation on overall academic performance, subject specific research (i.e., reading and math) has also increased. This research includes extensive longitudinal studies of the effect of student motivation on reading comprehension measures (Chapman & Tunmer, 1995, 2003; Chapman, Tunmer, & Prochnow, 2000; Meece & Miller, 2001).

The majority of the research conducted on reading motivation has been conducted with upper elementary students (Cunningham & Stanovich, 1997; Gottfried, 1990; Stanovich, 1986). This research has revealed a great deal about the association of student motivation and reading achievement in older students (Grades 3-5). Until recently, limited research had been conducted on the effect of student motivation on emergent literacy skills (Chapman, Tunmer, & Prochnow, 2000; Poskiparta, Niemi, Lepola, Ahtola, & Laine, 2003). More recent research on the motivation of young, emergent readers has diverged in methodology. Some researchers have chosen to assess student self-reports of perceptions of motivation, while other researchers feel that teachers can provide more valid assessments of student motivation.

In addition to concerns about methodology, a review of the literature reveals the need for a closer look at the effect of gender on motivation and connections to reading achievement. Those studies that report gender findings are not usually explicitly examining them as a research question and any number of studies may not report findings related to gender because they are

not a primary research question. It seems necessary in order to fully understand the relationship between motivation and achievement to also examine the effect of gender.

Teacher Ratings

Researchers studying younger students often choose to measure teacher or researcher observations of student motivation (Graham & Golan, 1991; Lepola, Salonen, & Vauras, 2000). These researchers claim that when students are too young to make accurate assessments of their motivation, teacher ratings are often more valid (Lepola, Poskiparta, Laakkonen, & Niemi, 2005; Onatsu-Arvilommi, & Nurmi, 2000; Poskiparta, et al., 2003). In a study using teacher perceptions of student motivation, Poskiparta, et al. (2003), administered three different reading ability measures in the second grade: story-reading speed (decoding), errors (accuracy), sentence-spelling ability, and reading comprehension. Based on these scores, students were grouped into three different reading groups using a cluster analysis: good readers, good decoders, and poor readers. Good readers were those students who had the capabilities to decode the words, but also demonstrated the ability to comprehend. Good decoders were those students who had mastered the skills necessary to complete the task of reading (letter sound recognition, blending, phonemes), but were not yet accomplished readers in terms of comprehension (Poskiparta et al, 2003). Motivation orientations were determined by experimenter ratings and teacher ratings. The students were evaluated on the number of behaviors they exhibited from each of the following orientations: ego defensive, task orientation, or social dependence. The students were assessed on their motivation orientation in both a free play and a pressure situation induced experimentally. Researchers gave the students an impossible Lego task in order to induce the pressure situation.

In preschool the three reading-level groups were almost identical in terms of their motivation orientation for reading in both free play and pressure situations. However, by first and second grade, teachers rated students classified to the poor readers group as less task-oriented and more ego-defensive and socially dependent compared to good decoders and good readers (Poskiparta et al., 2003). The teacher ratings were supported by experimenter ratings of the children in the pressure situations. Interestingly, teacher orientation ratings were correlated to decoding and spelling skills, indicating that teachers' perceptions of emotional-motivational behaviors were closely associated with student performance on reading tasks. Although, Poskiparta et al (2003) used the term "task orientation" to describe student's ability to focus on a given task, for the purposes of this investigation, task orientation will be referred to as reading orientation, as the items refer specifically to the student's orientation to reading tasks.

Student Self-Reports

Student's self reports have also been used to obtain reliable results of student motivation, even from emergent readers (Chapman & Tunmer, 1995; Chapman, Tunmer, & Prochnow, 2000). Utilizing a specific assessment protocol with researchers recording student responses, Chapman, Tunmer, and Prochnow (2000) were able to assess first, second and third graders' motivation for reading.

These researchers found evidence that children with negative academic self-concepts in the second year have significantly poorer phonological sensitivity skills and letter-name knowledge at the beginning of schooling than those with positive academic self-concepts (Chapman, Tunmer, & Prochnow, 2000). Chapman and colleagues conducted a study on first, second and third graders' reading self-concept, development of academic self-concept and early reading-related skills and performance. Chapman et al. (2000) used the Perception of Ability

Scale for Students to assess academic self-concept in the students. The scores on this measure from the end of the second year were used to assign children to either the positive, negative, or typical academic self-concept group. The researchers grouped the children based on their academic self-concepts in the middle of the three-year longitudinal study. Reading self-concepts for children with negative academic self-concepts were already more pessimistic toward reading than the attitudes of the positive and typical self-concept groups at 6 to 8 weeks into the first semester of school (Chapman et al., 2000).

Previous investigators have concluded that children begin school with a positive self concept of ability that remains until two or three years into the schooling process when inflated self-perceptions more accurately begin to reflect real academic performance (Chapman et al., 2000). Because reading self-concepts in this study appeared so rapidly in conjunction with reading difficulties, Chapman and colleagues concluded that domain-specific self-concepts may develop sooner than more general academic self-concept.

Children who are emergent readers seem able to distinguish between their perceptions of the difficulty of reading, while at the same time holding self-efficacy beliefs about their ability as readers. The evidence suggests that even at an early age, readers are able to say, “I believe that I can read this book” (a statement of self-efficacy) as well as, “I believe that this book will be difficult for me to read” (a statement of perceived difficulty). There is a small distinction between these two perspectives and it is intriguing that the research indicates that students can hold both perspectives at such a young age. Traditionally, when discussing efficacy beliefs researchers have focused on students either holding self-efficacy beliefs that contribute to their reading, or not holding them at all. Chapman, Tunmer, and Prochnow (2000) extend that discussion to include students who may hold efficacy beliefs, while also perceiving difficulty

about reading. This addition presents a more complex view of motivation, which includes both self-efficacy and perceptions of difficulty, than can be discussed from the traditional self-efficacy model.

Self-report Versus Teacher Ratings

The literature on motivation in young children cited in this paper reveals a discrepancy where certain methodologies are associated with different outcomes. The motivational constructs of self-efficacy and perceived difficulty have been examined using a self-report measure (Chapman & Tunmer, 1995, 2003), whereas reading orientation has only been assessed using teacher ratings (Lepola, 2004; Lepola, Salonen, & Vauras, 2000; Lepola, Poskiparta, Laakkonen, & Niemi, 2005). It is necessary to examine whether self-efficacy and perceived difficulty can also be accurately assessed using teacher ratings and whether reading orientation can be assessed using student self-reports. In addition, it would be interesting to examine whether the teacher or student reports within each of these constructs is more effective at predicting reading achievement outcomes.

Role of gender

In addition to the previous findings, there is some empirical evidence to suggest that gender has an effect on the level of motivation and correlation to achievement at a young age. In a recent review, Meece, Glienke, and Burg (2006) investigated the role of gender in psychological and educational research on motivation in middle school students. They concluded that, in general, girls' and boys' continue to uphold stereotypical gender roles in the classroom. Boys in general report higher levels of competence and ability in science and math, while girls tend to have more efficacy in language arts and writing (Meece, Glienke, & Burg, 2006). In addition to reviewing gender effects in the literature by theory, the authors also discussed the

impact of schooling influences. One interesting finding was that when gender differences in ability were found, generally they represented actual differences in performance instead of teacher biases towards one gender or another (Meece, Glienke, & Burg). They cited one exception, which was that teachers tend to overestimate girls' effort in mathematics (Meece, Glienke, & Burg). This finding is particularly relevant for this study, which aims to discuss teacher and student perceptions of student motivation. The finding that teachers tend to overestimate girls' effort has not been thoroughly investigated in reading, and we investigate it here.

Some of the research that has been conducted on reading motivation with emergent readers has revealed some interesting gender findings. Lepola (2004) found that boys with low levels of initial reading skills (phonemic awareness and language comprehension) experienced negative levels of motivational change compared to girls with similar pre-reading deficits. Onatsu-Arvilommi & Nurmi (2000) found that boys displayed higher levels of task-avoidance than girls across the first grade. These gender findings exist in the literature and are particularly relevant to the present investigation. In particular, investigating gender differences in both student and teacher perceptions will contribute new information to the field about the impact of gender on motivation at a very early age.

Summary and Research Questions

The present study extends the motivation research of emergent readers by assessing both student and teacher perceptions of motivation. In this way, this study attempts to extend the previous research on emergent readers which analyzed early reading motivation from only one rater, either students (Chapman, Tunmer, & Prochnow, 2000) or teachers (Lepola, Salonen, & Vauras, 2000). Furthermore, this study assesses self-efficacy beliefs and reading orientation,

providing a multidimensional view of motivation, which has not been previously investigated with emergent readers. Additionally, in the present study, gender differences are examined from both the student and teacher perspective, which presents a more complex picture than has previously been available on the affect of gender differences in early reading motivation (Lepola, 2004). In the present study, we will address each of these points guided by the following research questions:

1. To what extent do student and teacher perceptions of students' reading efficacy, perceived difficulty and reading orientation differ?
2. To what extent does students' gender relate to student and teacher reports of students' reading efficacy, perceived difficulty and reading orientation?
3. To what extent do student and teacher perceptions illustrate different levels of motivation and are these levels related to gender?
4. To what extent do teachers' perceptions of students' reading efficacy, perceived difficulty, and reading orientation independently correlate to students' word-identification ability?
5. To what extent do students' perceptions of reading efficacy, perceived difficulty and reading orientation independently correlate to students' word-identification ability?

Method

Participants

The study was conducted with 84 first grade students (40 boys – 39 Caucasian, 1 African-American and 44 girls – 42 Caucasian, 2 African-Americans; Total sample was 96% Caucasian, 3% African-American) in eight classrooms at two elementary schools in a mid-Atlantic county school system. The population of this county ranges widely across the socioeconomic and

educational scales and is predominately Caucasian; approximately 6% of the population is African-American. Parent permission was obtained for all participants and students assented to participation in the study. Eight female first grade teachers participated in the study.

Measures

Student motivation. Student reading motivation was assessed using the Young Reader Motivation Questionnaire (YRMQ). The YRMQ contains 12 items, all worded in question format (e.g. Are you good at remembering words?) instead of the more typical declarative format (e.g. I am good at remembering words). This wording was chosen based on research that has revealed declarative items orally administered to younger students can be confusing. However, items worded in question format are less complex for younger students to comprehend (Chapman & Tunmer, 1995). The full scale Cronbach's alpha reliability for all 12 items was .70. The Difficulty items were reversed for the reliability calculations in order to maintain consistency with the other two constructs in the scale. A complete list of the items can be found in Appendix A. Children responded to each item on a 4-point scale (1 = *No, Never*; 2 = *No, Not Usually*; 3 = *Yes, Usually*; 4 = *Yes, Always*), but were orally talked through the scale in two sections. The YRMQ is composed of three subscales: Reading Self-Efficacy (4 items), Reading Orientation (3 items), and Reading Difficulty (5 items). Validity of the items on each subscale was determined through an expert in the field of motivation who served as an outside evaluator for this study.

Reading self-concept (self-efficacy) was empirically defined as "beliefs regarding ability and proficiency in reading tasks" (Chapman & Tunmer, 1995). The reading self-efficacy subscale of the YRMQ included 4 items (e.g., "Do you think you read well?" "Are you good at

remembering words?”). The reliability of the 4 items in the reading self-efficacy subscale was .64.

Student reading orientation items addressed “concentration on task, verbal behavior indicating task-involvement, and willingness to think and experiment in play and problem-solving situations” (Lepola, et al., 2000, p. 158). The reading orientation subscale of the YRMQ included 3 items (e.g., “Is it fun for you to read books?” “Do you look forward to reading?”). The reliability of the 3 items in the reading orientation subscale was .60.

Student difficulty items referred to the belief that “reading activities are hard or problematic” (Chapman & Tunmer, 1995). The reading difficulty subscale of the YRMQ included 5 items (e.g., “Are the books you read in class too hard?” “Do you need extra help in reading?”). The reliability of the 5 items in the difficulty subscale was .67.

Teacher ratings of motivation. The teacher ratings form was designed to parallel the student form. Questions were worded to reflect the teacher’s perception of their students’ motivation for reading. Student reading motivation was assessed using the Teacher Form of the Young Reader Motivation Questionnaire. The T-YRMQ contains 15 items, all worded in declarative format (e.g. “This student thinks he/she is good at remembering words”). The full scale reliability for all 15 items was .93. A complete list of all items can be found in Appendix B. Teachers responded to each item on a 4-point scale (1 = *No, Never*; 2 = *No, Not Usually*; 3 = *Yes, Usually*; 4 = *Yes, Always*). The T-YRMQ is composed of three subscales: Reading Self-Efficacy (5 items), Reading Orientation (5 items), and Reading Difficulty (5 items).

Teachers were told that reading self-concept (self-efficacy) was empirically defined as “beliefs regarding ability and proficiency in reading tasks” (Chapman & Tunmer, 1995). The reading self-efficacy subscale of the T-YRMQ included 5 items (e.g., “This student thinks that

he/she can read well” “This student thinks he/she is good at remembering words”). The reliability of the 5 items in the reading self-efficacy subscale was .94.

Student reading orientation was defined for the teachers as “concentration on task, verbal behavior indicating task-involvement, and willingness to think and experiment in play and problem-solving situations” (Lepola, et al., 2000, p. 158). The reading orientation subscale of the T-YRMQ included 5 items (e.g., “This student looks forward to reading” “This student thinks it is fun to read books”). The reliability of the 5 items in the reading orientation subscale was .91.

Student difficulty was defined for the teachers as the belief that “reading activities are hard or problematic” for this child (Chapman & Tunmer, 1995). The reading difficulty subscale of the T-YRMQ included 5 items (e.g., “This student thinks the books he/she reads in class are too hard” “This student needs extra help in reading”). The reliability of the 5 items in the difficulty subscale was .95.

Achievement measures. The Woodcock-Johnson Letter-Word Identification subtest (Woodcock, Mather, & Schrank, 2004) was used to assess the students’ word identification skills. Basals and ceilings were established based on 6 consecutive items correct or incorrect. The Letter-Word Identification subtest has a median reliability of .91 in the age 5 to 19 range (Schrank et al., 2004).

Procedure

Student procedure. Students were assessed individually in the middle of the school year outside of their classrooms but in their own school building. The researcher and the student sat on opposite sides of a small desk in a quiet alcove in the hallway or in the school library during the entire assessment procedure. The location was secluded such that there were no interruptions by other students passing by. Student confidentiality and privacy was protected at all times. All

students in the study with parent permission were assessed on two days by the same researcher. Testing began at 8:00 am in the morning and lasted until noon when the students went to lunch. The researcher resumed testing at 1:00 pm and ended for the day at 2:30 pm. In an effort to reduce the children's fears and increase their willingness to participate, time was spent building rapport before any assessments began. Students were assured that their answers were confidential and that their teachers and parents would not see their answers. Students were then asked if they wanted to participate in the study.

Order of testing. Measures were counterbalanced so that half of the students received the Woodcock-Johnson first and half received the YRMQ. Students who were randomly selected to Group 1 received the Woodcock-Johnson Word Identification subtest first and the YRMQ second. Students who were randomly selected to Group 2 received the YRMQ first and the Woodcock-Johnson Word Identification second. We chose to counterbalance the measures in order to evaluate the effect that each measure had on the other as well as any fatigue effects that students might experience. We expected that the order that the measures were administered would not affect performance. Counterbalancing did not effect the administration time for each measure.

Student measures. The Woodcock-Johnson Letter-Word Identification subtest was administered to each student beginning with the appropriate item (Item 7) for first graders suggested in the Woodcock-Johnson manual. Basal was established when students answered 6 consecutive items correctly. Time spent taking the Woodcock-Johnson Letter-Word Identification subtest varied from 4 to 7 minutes depending on the student's reading abilities.

The Young Reading Motivation Questionnaire (YRMQ) was administered orally to students by the same researcher. Students were again assured that their responses on the

questionnaire were confidential. They were also told that the questionnaire had to do with their interest and enjoyment in reading and that their answers would help people to better understand what first graders think about reading.

Students were then read the following directions, "Please answer the following question on reading. For each question think about whether you would answer "Yes" or "No." The first question was then read to the student, "Can you work out hard words by yourself when you read?" The student was given time to think about the question and was prompted by the researcher to choose either, "Yes" or "No." If the student responded "Yes" then the researcher further prompted the student by asking, "Can you work out hard words by yourself *Always* or *Usually*?" If the student responded "No" then the researcher further prompted the student by asking, "Can you *Not Usually* work out hard words by yourself or *Never*?" Student responses were recorded by the administrator and the next question was read to students. The answer response prompting was continued for all 12 items. Students were given as much time as necessary to answer each question. If the student required it, the questions were read again until the student was ready to respond. Administration of the YRMQ took approximately 3 to 5 minutes.

At the conclusion of the testing, students were reassured that their answers were very helpful and that they would remain confidential. Total administration time for both measures was approximately 10 to 12 minutes. Students were given a small reward and then returned to the classroom.

Teacher measures. Teachers were given a copy of the Teacher – Young Reader Motivation Questionnaire (T-YRMQ) for each student in their class participating in the study. The purpose of the questionnaire was explained by the researcher to each teacher. Any additional

questions were answered by the researcher. The teachers completed the forms for their students on their own and returned them to the researcher two days later. Completing the T-YRMQ required approximately 3 minutes per student with 10 students for each teacher for a total of 30 minutes.

Results

Question One: To what extent do student and teacher perceptions of students' reading efficacy, perceived difficulty and reading orientation differ?

This question was addressed using descriptive statistics (Table 1) and correlation coefficients (Table 2). Correlation coefficients between students' and teachers' perceptions confirm convergent validity for all three motivational constructs: efficacy, $r(70) = .37, p < .01$; perceived difficulty, $r(69) = .27, p < .05$; and reading orientation, $r(70) = .26, p < .05$. In addition, students' self-reports indicated convergent validity. Students' perceptions of efficacy and difficulty were significantly correlated, $r(71) = -.50, p < .001$; as well as students' perceptions of difficulty and reading orientation, $r(67) = -.36, p < .01$.

Statistically significant correlation coefficients of teachers' perceptions of students' reading motivation also indicated convergent validity: teachers' perceptions of students' efficacy and difficulty, $r(71) = -.82, p < .001$; teachers' perceptions of students' efficacy and reading orientation, $r(73) = .73, p < .001$; and teachers' perceptions of students' difficulty and reading orientation, $r(77) = -.78, p < .001$. These findings indicate students and teachers' overall associate the three motivational constructs in a similar way.

Mean differences between student and teacher perceptions of motivation were tested using three paired samples t-tests with a Bonferroni correction of $p < .01$ as our criterion for significance. The t-tests revealed that student responses were significantly higher than teacher

responses on the reading-orientation items, $t(48) = 3.17, p < .01$, with an effect size of $ES = .53$.

There were no significant differences in student and teacher perceptions of efficacy and perceived difficulty for reading.

Question Two: To what extent does students' gender relate to student and teacher reports of students' reading efficacy, perceived difficulty and reading orientation?

Statistically significant correlation coefficients by gender revealed convergent validity for teachers' perceptions of boys (Table 3). For boys, correlation coefficients of teachers' perceptions confirm convergent validity for all three motivational constructs: efficacy, $r(32) = .42, p < .05$; perceived difficulty, $r(33) = .35, p < .05$; and reading orientation, $r(31) = .38, p < .05$. For girls, correlation coefficients of teachers' perceptions did not correlate statistically significantly: efficacy, $r(38) = .26, p > .05$; perceived difficulty, $r(36) = .19, p > .05$; and reading orientation, $r(39) = .08, p > .05$.

In addition, for boys correlation coefficients indicated convergent validity. Boys' perceptions of efficacy and difficulty were significantly correlated, $r(34) = -.68, p < .001$; as well as boys' perceptions of difficulty and reading orientation, $r(31) = -.54, p < .001$.

Correlation coefficients for girls did not indicate convergent validity. Girls' perceptions of efficacy and difficulty were not statistically significantly correlated, $r(37) = -.69, p > .05$; as well as girls' perceptions of difficulty and reading orientation, $r(36) = -.03, p > .05$ and girls' perceptions of reading orientation and efficacy, $r(38) = .21, p > .05$.

Question Three: To what extent do student and teacher perceptions illustrate different levels of motivation and are these levels related to gender?

This question was addressed by a two-way multivariate analysis of variance (MANOVA). The two-way MANOVA had two within-subjects and one between subjects variable of 2(rater) x 3(motivation) x 2(gender) (Table 4).

The two-way MANOVA revealed a significant main effect for gender, $F(1, 77) = 9.38, p < .01$, with girls ($M = 2.87$) perceiving themselves overall more motivated than boys ($M = 2.74$). In addition there was a significant main effect for motivation, $F(2, 76) = 91.64, p < .001$, with higher ratings for reading orientation ($M = 3.31$) than efficacy ($M = 2.92$) and perceived difficulty ($M = 2.19$).

There was a significant rater main effect, $F(1, 77) = 5.97, p < .01$, with teachers ($M = 2.85$) reporting higher ratings than students ($M = 2.76$) reported. There was, however, a statistically significant Motivation x Rater interaction, $F(2, 76) = 11.21, p < .001$, (Figure 1). Post hoc analyses using paired-sample t-tests with a Bonferonni correction, revealed statistically significant differences for reading orientation. Teachers' perceived their students as more reading oriented than students' perceived themselves to be, $t(78) = 3.88, p < .03$. There were no statistically significant differences between student and teacher ratings of efficacy, $t(79) = -1.59, p > .05$ and difficulty, $t(79) = 1.15, p > .05$.

Question Four: To what extent do teachers' perceptions of students' reading efficacy, perceived difficulty, and reading orientation account for independent variance to students' word-identification ability?

Multiple regressions were conducted using teachers' perceptions of students' motivation for reading to predict word identification scores on the Woodcock-Johnson Word-Identification subtest (Table 5). In the first regression with the full sample, teachers' perceptions of students' reading orientation were entered first, followed by teachers' perceptions of students' efficacy and

then teachers' perceptions of students' difficulty with reading. This order was chosen based on the strength of the correlations between teachers' perceptions and word-identification scores in Table 2. Teachers' perceptions of students' reading motivation for all three constructs were statistically significant: reading orientation, $\Delta R^2 = .27, p < .001$; efficacy, $\Delta R^2 = .23, p < .001$, and difficulty, $\Delta R^2 = .03, p < .05$. The beta weights for teachers' perceptions of student efficacy, $\beta = .49, p < .01$, and difficulty, $\beta = -.32, p < .05$ were statistically significant. Results from regressions for teachers' perceptions of boys and girls separately revealed similar findings to the sample as a whole. For boys, teachers' perceptions of student reading orientation, $\Delta R^2 = .39, p < .001$, and efficacy, $\Delta R^2 = .22, p < .001$ were significant predictors of word identification. For girls, teachers' perceptions of students' reading orientation, $\Delta R^2 = .16, p < .05$, and efficacy, $\Delta R^2 = .20, p < .01$, were significant predictors of word identification. Teacher perceptions of difficulty did not contribute significantly to explain variance in word identification after the effect of reading orientation and efficacy were accounted for, for boys, $\Delta R^2 = .05, p > .05$, and girls, $\Delta R^2 = .04, p > .05$.

Question 5: To what extent do students' perceptions of reading efficacy, perceived difficulty and reading orientation independently correlate to students' word-identification ability?

Multiple regressions were conducted using students' perceptions of motivation for reading to predict word identification scores on the Woodcock-Johnson Word-Identification subtest (Table 6). In the first regression with the full sample, students' perceptions of reading orientation were entered first, followed by students' perceptions of efficacy and then students' perceptions of difficulty with reading. The order was the same as the order used for the analysis of teachers' perceptions. For the total group, students' perceptions of efficacy, $\Delta R^2 = .07, p < .01$, and difficulty in reading, $\Delta R^2 = .06, p < .01$ were statistically significant predictors of word-

identification scores after student reading orientation was statistically controlled. Multiple regressions for students' perceptions of boys and girls were run separately. Boys' perceptions of efficacy, $\Delta R^2 = .17, p < .05$, contributed significantly to word identification when reading orientation was controlled. Girls' perceptions of reading orientation, efficacy and difficulty did not contribute significantly to explain variance in word identification after the effects of reading orientation and efficacy were accounted for.

Discussion

Associations Between Teacher and Student Perceptions of Motivation

Teachers and students perceived student motivation at similar levels for efficacy and difficulty with reading. However, student and teacher perceptions of reading-orientation were statistically significantly different. In addition, students' perceptions of reading-orientation, perceived difficulty and efficacy were moderately correlated. This finding is not unexpected as the constructs are components of the students' larger perception of their motivation for reading. Teachers' perceptions of student reading-orientation, perceived difficulty and efficacy were also highly correlated, suggesting convergent validity for the three constructs of reading motivation for teachers. Overall, the results suggest that both student and teacher perceptions of reading motivation are moderately correlated.

Relationship to Existing Literature

There are three major contributions which this study provides to the field at large. First, this study confirms the work of researchers who view motivation as a multidimensional phenomenon, composed of multiple constructs (Wigfield & Guthrie, 1997; Chapman & Tunmer, 1995). These findings indicate that regardless of the source of the motivation (student or teacher); raters are able to distinguish between multiple constructs of motivation at the same

time. This study extends this line of work, by illustrating this phenomenon with both student and teacher perceptions.

Second, this study extends our current understanding of the similarity of perceptions of difficulty and efficacy between student and teacher perceptions of motivation in emergent readers. This supports the findings of Guthrie et al. (2007) which found that fourth grade students and teachers share similar perceptions of student motivation. Guthrie et al. (2007) found that teacher and student motivation may share moderate associations, but that teacher ratings had the highest predictive ability with reading achievement. However, for reading-orientation, teachers' and students' perceptions of motivation were very different. This may be due to the fact that teachers and students have different reference groups for answering the questions. For example, one of the questions asked, "Is it fun for you to read books?" The teacher is referencing student's behavior and choices within the academic setting. Essentially, the teacher is comparing the student's enjoyment of reading in comparison to other classroom activities. The student has a larger reference group from which to make this evaluation. The student may respond differently if they were asked, "Is reading books more fun than riding your bike?" versus "Is reading books more fun than working math problems?" This discrepancy in reference group may be partially responsible in the divergent perceptions of reading orientation for teachers and students.

Finally, this study adds additional complexity to the discussion of the effect of gender on motivation and achievement outcomes. While teachers' perceptions of boys and girls' motivation were associated with word identification, the perceptions of boys and girls differed in their associations with word identification scores. Boys' perceptions of motivation were statistically, significantly associated with word identification scores. However, girls' perceptions were not statistically significantly associated with word identification scores. The findings here indicate

that girls' perceptions of their abilities are not as highly associated with achievement outcomes as boys' or teachers' perceptions. This finding requires further exploration and additional research, but it does extend the existing literature on the topic. In particular, longitudinal examinations of the relationship between gender and motivation and achievement outcomes are necessary. These would provide more evidence for the impact gender may be having early on in the educational process.

Teachers' Perceptions of Student Motivation as Predictors

Teachers' perceptions of student efficacy and difficulty were uniquely associated with word identification. In addition, teacher perception of student efficacy and perceived difficulty were statistically significant predictors of student word-identification when controlling for reading orientation. This finding presents a valuable contribution to the field, which indicates teachers' perceptions of student reading motivation are multifaceted. Teachers' perceptions of student efficacy uniquely contributed to predicting word-identification scores, after taking into account teachers' perceptions of reading-orientation and difficulty. Similarly, teachers' perceptions of student difficulty with reading uniquely contributed to predicting word-identification scores when teachers' perceptions of reading orientation and efficacy were taken into account.

This finding both confirms and extends the existing literature. Chapman, Tunmer and Prochnow (2000) found that perceived difficulty was a significant unique predictor of reading achievement, but they recorded student self-reports instead of teacher ratings. These findings confirm the predictive power of perceived difficulty regardless of the source (student or teacher).

Students' Perceptions of Motivation as Predictors

For students, perceptions of efficacy and difficulty were unique predictors of word identification scores. However, similar to the findings of Chapman, Tunmer, and Prochnow (2000), student perceived difficulty was a significant predictor of word-identification scores when the influence of reading-orientation and efficacy were statistically controlled. This finding confirms the studies of Chapman and colleagues, which indicates that student perceived difficulty is the strongest motivational predictor, among self-report measures, of reading achievement. In addition, these findings provide convergent validity for a multidimensional model of reading motivation from both the student and teacher perspective. Both students and teachers distinguished between perceptions of efficacy and difficulty, which extends our current understanding of reading motivation from both perspectives.

Gender Differences in Both Teacher and Student Perceptions of Motivation

When examining the sample by gender, discrepancies emerged between student and teacher perceptions of student motivation. The results revealed convergent validity for teachers' perceptions of boys. Teachers' perceptions of boys' efficacy, perceived difficulty and reading orientation were correlated with boys' perceptions of their own motivation. In addition, boys' perceptions of reading efficacy, perceived difficulty and reading orientation were statistically significantly correlated.

Teachers' perceptions of the three motivation constructs were not statistically significantly correlated with girls' perceptions of motivation. In addition, girls' perceptions of reading efficacy, perceived difficulty and reading orientation were not statistically significantly correlated to each other. Teachers' perceptions for girls' reading efficacy, perceived difficulty and reading orientation were statistically significantly correlated. These findings suggest a

disconnection between teachers and girls' perceptions of reading motivation. They also suggest that girls' perceptions may not be as valid as teachers' perceptions in the first grade.

These gender findings confirm similar findings in the literature of reading motivation in emergent readers. Lepola (2004) found that phonemic and language comprehension differences early on were associated with later poor phonemic and language comprehension skills and that students differed on these measures by gender. In that study, boys were found to be at specific risk of negative motivational changes if beginning with low phonemic skills. The results presented here do not provide directionality, but they do suggest a unique difference between teacher and student perceptions, which is influenced by the gender of the child.

In line with the findings of Lepola (2004), girls overall perceived themselves as more motivated than boys. This finding confirms previous studies, which have found that overall girls perceive themselves as more efficacious for reading than boys perceive themselves to be. In addition, extending the discussion of Question Two, teachers overall perceived students as more motivated than students reported, but this result was only statistically significant for reading orientation. Teachers perceived students as more reading oriented than the students perceived themselves to be.

Limitations

The current study has some limitations that should be mentioned. First, the reliability of the student responses on the YRMQ are relatively low when compared to the reliability of the teacher responses on the T-YRMQ. This may be partly due to the age of the children and perhaps a less fully formed understanding of their own motivation. In any case, further research is necessary to determine the reliability of the YRMQ with younger children. In addition, the sample size was relatively small. This was partially due to the desire to keep the responsibilities

of the teachers to a minimum. Each teacher was only asked to complete questionnaires on ten of their students. Future studies should increase the number of teacher and student responses.

Future studies should also consider additional measures of reading achievement. The current investigation used a standardized measure of reading ability appropriate for young students, but additional measures should also be explored. Finally, the current sample was primarily

Caucasian, which limits the generalizability of the findings. Future studies should investigate a more ethnically diverse sample.

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Table 1

Means and Standard Deviations

Measures		Source					
		Teacher			Student		
		Boys	Girls	Total	Boys	Girls	Total
Efficacy	<i>Mean</i>	2.88	3.10	3.00	2.73	2.98	2.86
	<i>SD</i>	.76	.68	.72	.75	.56	.67
Reading-Orientation	<i>Mean</i>	3.08	3.24	3.16	3.39	3.54	3.47
	<i>SD</i>	.53	.56	.55	.71	.43	.58
Difficulty	<i>Mean</i>	2.16	2.09	2.13	2.19	2.28	2.24
	<i>SD</i>	.75	.75	.75	.76	.61	.68
Woodcock-Johnson WID	<i>Mean</i>				23.65	24.57	24.57
	<i>SD</i>				8.22	7.92	8.06

Table 2

Correlations of Motivation Subscales and Word Identification

Subscale	1	2	3	4	5	6	7
1. SE	—	-.50**	.22	.36**	-.35**	.33**	.28*
2. SPD		—	-.36**	-.19	.27*	-.30*	-.31**
3. SRO			—	.11	-.08	.26*	.11
4. TSE				—	-.82**	.73**	.71**
5. TSD					—	-.78**	-.72**
6. TRO						—	.60**
7. WJ-WID							

Note: SE = Student Perceptions of Efficacy, SPD = Student Perceptions of Difficulty, SRO = Student Perceptions of Reading Orientation, TSE = Teacher Perceptions of Student Self-Efficacy, TSD = Teacher Perceptions of Student Difficulty, TRO = Teacher Perceptions of Student Reading Orientation, WJ-WID = Woodcock-Johnson Word Identification; * $p < .05$. ** $p < .01$.

Table 3

Correlations of Motivation Subscales and Word Identification by Gender

Subscale	1	2	3	4	5	6	7
1. SE	—	-.68**	.21	.42*	-.35*	.37*	.41*
2. SPD	-.29	—	-.54*	-.30	.35*	-.40*	-.39*
3. SRO	.21	-.03	—	.24	-.18	.38*	-.20
4. TSE	.26	-.11	-.14	—	-.84**	.77**	.79**
5. TPD	-.37*	.19	.10	-.83**	—	-.73**	-.78**
6. TRO	.25	-.24	.10	.70**	-.82**	—	.66**
7. WJ-WID	.10	-.24	-.05	.60**	-.68**	.53**	—

Note: SE = Student Perceptions of Efficacy, SPD = Student Perceptions of Difficulty, SRO = Student Perceptions of Reading Orientation, TE = Teacher Perceptions of Student Self-Efficacy, TPD = Teacher Perceptions of Student Difficulty, TRO = Teacher Perceptions of Student Reading Orientation, WJ-WID = Woodcock-Johnson Word Identification; * $p < .05$. ** $p < .01$. * $p < .05$. ** $p < .01$; Boys' correlations above diagonal, girls' correlations below.

Table 4

Analysis of Variance of Efficacy, Reading Orientation and Perceived Difficulty by Source and Gender

Effect	<i>df1 / df2</i>	<i>F</i>	—
Between Subjects			
Gender	1 / 77	9.38**	
Within Subjects			
Motivation	2 / 76	91.64***	.29
Motivation * Gender	2 / 76	.39	.99
Source	1 / 77	5.97**	.93
Source * Gender	1 / 77	.48	.99
Motivation * Source	2 / 76	11.21***	.77
Motivation * Source * Gender	2 / 76	.17	.99

** $p < .01$, *** $p < .001$

Table 5

Multiple Regressions of Teacher Perception of Student Motivation on Woodcock-Johnson Word-Identification

Independent Variables	<i>R</i>	<i>R</i> ²	<i>_R</i> ²	<i>F</i> Δ	<i>df</i> 1 / <i>df</i> 2	<i>Final Beta</i>
<i>Total</i>						
TRO	.52	.27	.27	24.84***	1 / 68	-.07
TSE	.70	.49	.23	29.71***	1 / 67	.49**
TPD	.72	.52	.03	4.02*	1 / 66	-.32*
<i>Boys</i>						
TRO	.63	.39	.39	19.19***	1 / 30	.05
TSE	.78	.61	.22	16.18***	1 / 29	.41
TPD	.81	.65	.05	3.63	1 / 28	-.40
<i>Girls</i>						
TRO	.40	.16	.16	6.93*	1 / 36	-.19
TSE	.64	.37	.20	11.25**	2 / 35	.41
TPD	.76	.40	.04	2.17	3 / 34	-.39

Note. Dependent variable is the Woodcock-Johnson Word-Identification subtest. TE = Teacher Perceptions of Student Self-Efficacy, TPD = Teacher Perceptions of Student Difficulty, TRO = Teacher Perceptions of Student Reading Orientation; * *p* < .05. ** *p* < .01.

Table 6

Multiple Regressions of Student Perception of Motivation on Woodcock-Johnson Word-Identification

Independent Variables	<i>R</i>	<i>R</i> ²	<u><i>R</i>²</u>	<i>F</i> Δ	<i>df</i> 1 / <i>df</i> 2	<i>Final</i> <u> </u>
<u><i>Total</i></u>						
SRO	.09	.01	.01	.55	1 / 61	-.02
SE	.29	.08	.07	4.84**	1 / 60	.16
SPD	.38	.14	.06	3.30**	1 / 59	-.29*
<u><i>Boys</i></u>						
SRO	.17	.03	.03	.75	1 / 27	.06
SE	.44	.20	.17	5.41*	1 / 26	-.20
SPD	.49	.23	.04	1.21	1 / 25	.17
<u><i>Girls</i></u>						
SRO	.06	.00	.00	.11	1 / 32	-.03
SE	.08	.01	.00	.09	1 / 31	.01
SPD	.25	.06	.06	1.82	1 / 30	-.25

Note. Dependent variable is the Woodcock-Johnson Word-Identification subtest. SE = Student Perceptions of Efficacy, SPD = Student Perceptions of Difficulty, SRO = Student Perceptions of Reading Orientation; * *p* < .05. ** *p* < .01.

Appendix A

Young Reader Motivation Questionnaire (YRMQ) – Student Form

Efficacy for Reading

1. Can you work out hard words by yourself when you read?
2. Are you good at remembering words?
3. Do you think you read well?
4. Can you work out hard words in a story even if there are no pictures?

Reading Orientation

1. Is it fun for you to read books?
2. Do you look forward to reading?
3. Do you like reading at home?

Perceptions of Difficulty in Reading

1. Is reading to the class hard for you?
2. Are the books you read in class too hard?
3. Do you make lots of mistakes in reading?
4. Do you need extra help in reading?
5. Is it hard for you to understand the stories you have to read in class?

Appendix B

Young Reader Motivation Questionnaire – Teacher Form

Perceptions of Student Efficacy for Reading

1. This student thinks he/she can work out hard words by himself/herself when he/she reads.
2. This student thinks he/she is good at remembering words.
3. This student thinks he/she can work out sounds in words.
4. This student thinks he/she can read well.
5. This student thinks he/she can work out hard words in a story even if there are no pictures.

Perceptions of Student Reading-Orientation

1. This student likes word games in class.
2. This student thinks it is fun to read books.
3. This student looks forward to reading.
4. This student likes reading to himself/herself.
5. This student likes reading at home.

Perceptions of Student Difficulty in Reading

1. This student finds reading to the class hard.
2. This student thinks the books he/she reads in class are too hard.
3. This student makes lots of mistakes in reading.
4. This student needs extra help in reading.
5. This student finds it hard to understand the stories he/she has to read in class.