UPPER ELEMENTARY STUDENTS' MOTIVATION TO READ FICTION AND NONFICTION

ABSTRACT

This research explores upper elementary students' motivation to read fiction and nonfiction. Using expectancyvalue theory, the researchers developed separate surveys to measure motivation to read fiction and nonfiction. Researchers administered surveys to 1,104 upper elementary students (grades 3-6) in multiple locations across the United States and found the instruments to be psychometrically sound. Results corroborate previous research demonstrating students' declining motivation to read across grade levels; in particular, students' value for reading was declining. This research also corroborates previous research findings that girls are more motivated than boys to read fiction. Researchers found insignificant gender differences between girls' and boys' motivations to read nonfiction, indicating a need to further investigate students' motivation to read nonfiction. Implications for classroom application of survey results and the need to enhance students' value for reading are discussed.

Allison Ward Parsons
Seth A. Parsons
GEORGE MASON
UNIVERSITY

Jacquelynn A. Malloy
CLEMSON UNIVERSITY

Barbara A. Marinak MOUNT ST. MARY'S UNIVERSITY

D. Ray Reutzel
UNIVERSITY OF WYOMING

Mary D. Applegate SAINT JOSEPH'S UNIVERSITY

Anthony J. Applegate HOLY FAMILY UNIVERSITY

Parker C. Fawson
UTAH VALLEY UNIVERSITY

Linda B. Gambrell

otivation Notes to read is strongly predictive of elementary students' reading success and reading achievement (Baker & Wigfield, 1999; Gambrell, 2011; Guthrie & Wigfield, 1999; Guthrie et al., 2006; Miller & Meece, 1999; Schiefele, Schaffner, Möller, & Wigfield, 2012; Schiefele, Stutz, & Schaffner, 2016). Unfortunately, research has also demonstrated that students' motivation to read decreases across grade levels (Eccles, Wigfield, Harold, & Blumenfeld, 1993; McKenna, Kear, & Ellsworth, 1995; Wigfield & Guthrie, 1997). Young students enter school confident and motivated to learn to read, yet as early as second and third grades, research for decades has shown that students' motivation to read drops substantially (Mazzoni, Gambrell & Korkeamaki, 1999; Parker & Paradis, 1986; Pressley & Allington, 2015; Wigfield et al., 1997) and continues to do so throughout the later school years. National Assessment of Educational Progress data indicate that 73% of fourth-grade students do not frequently read for enjoyment (Perie, Grigg, & Donahue, 2005). Indeed, Guthrie (2004, p. 2) concluded, "The crisis of our schools today is that too many children are disengaged from literacy."

Most research in elementary literacy, however, has measured students' general motivation to read or their motivation to read fiction, but little research has investigated elementary students' motivation to read nonfiction. At the same time, policy initiatives (e.g., Council of Chief State School Officers & National Governors Association, 2010) and leading researchers (e.g., Duke, 2000; Frey & Fisher, 2007; Moss, 2005) are encouraging the use of more nonfiction in reading instruction, especially during the elementary grades. Varied text types have long raised gender differences associated with reading motivation because previous research has demonstrated that girls are more motivated to read than boys (Baker & Wigfield, 1999; Marinak & Gambrell, 2010; McKenna et al., 1995; Wigfield & Guthrie, 1997). Researchers have hypothesized that boys' reading motivation may lag behind girls' reading motivation because of the dominance of fiction read and taught in elementary school literacy instruction (Davila & Patrick, 2010; Gee, 2001; Hall, 1998; Millard, 1997). The hypothesis is that boys are likely to be more motivated by nonfiction than by fiction texts (Asseline, 2003; Boltz, 2007). However, as noted, the field has lacked psychometrically sound measures that can distinguish elementary students' motivation to read nonfiction texts from their motivation to read fiction.

For these reasons, the research reported in this article describes the development and validation of two measures of upper elementary students' motivation to read: one for motivation to read fiction and one for motivation to read nonfiction. This study investigated the following research questions: (a) Do upper elementary students differ in their motivation to read fiction versus nonfiction? (b) Do upper elementary girls and boys differ in their motivation to read fiction and nonfiction? (c) Do upper elementary students differ across grade levels in their motivation to read fiction versus nonfiction?

Background

Motivation is a central consideration for educators and researchers because it is strongly related to student performance and achievement (Alderman, 2008; Gottfried, 1990; Parsons, Malloy, Parsons, Peters-Burton, & Burrowbridge, 2018; Pintrich, 2003).

For the purposes of this research, motivation is conceptualized as a constellation of factors that influence the likelihood of engaging in an activity and the degree to which this engagement is maintained even when the task becomes challenging (Malloy, 2015). These factors can emanate from within the individual (intrinsic motivators; e.g., interest, curiosity) or from outside consequences of behaviors (extrinsic motivators; e.g., rewards, grades). However, as Ryan and Deci (2000, p. 55) explained, "Intrinsic motivation has emerged as an important phenomena for educators—a nat-

ural wellspring of learning and achievement that can be systematically catalyzed or

undermined by parent and teacher practices."

Motivation to read is likewise associated with enhanced achievement. That is, students who are motivated to read consistently demonstrate higher reading achievement than students who are less motivated to read (Baker & Wigfield, 1999; Guthrie & Wigfield, 1999; Guthrie et al., 2006; Parsons, Malloy, Parsons, & Burrowbridge, 2015; Schiefele et al., 2012, 2016). This research has a robust history. Guthrie and colleagues, for example, have conducted an ongoing line of research on Concept-Oriented Reading Instruction (CORI)—integrated science and reading instruction. Students who participate in CORI have demonstrated statistically significant increases in reading motivation, reading engagement, and reading comprehension across various study groups and conditions (Guthrie, Anderson, Alao, & Rinehart, 1999; Guthrie et al., 1996, 2004, 2007, 2009).

Guthrie and colleagues' reading motivation research agenda began at the National Reading Research Center (NRRC), which was a federally funded center housed jointly at the University of Georgia and the University of Maryland from 1992 to 1997. The focus of the NRRC was to support the development of "engaged readers"—that is, "motivated and strategic readers who use literacy for pleasure and learning" (Baumann & Duffy, 1997, p. 5). Linda Gambrell, an NRRC senior researcher, worked with colleagues to develop a student motivation assessment to inform classroom teachers' instructional practices. The result was the Motivation to Read Profile (Gambrell, Palmer, Codling, & Mazzoni, 1996). The Motivation to Read Profile was recently revised and field tested (Malloy, Marinak, Gambrell, & Mazzoni, 2013) and serves as the basis for the development of three other instruments: the Me and My Reading Profile (Marinak, Malloy, Gambrell, & Mazzoni, 2015), for kindergarten through second-grade classrooms, and the Motivation to Read Profile-Fiction (MRP-F) and the Motivation to Read Profile-Nonfiction (MRP-NF; Malloy et al., 2017).

Motivation to Read and Grade Level

Researchers have found for many years that general achievement motivation declines as students move through the grade levels (Harter, 1981; Lepper, Corpus, & Iyengar, 2005; Ryan & Deci, 2000). For example, in a review of students' motivation from a developmental perspective, Wigfield (1994, p. 60) concluded, "In summary, children's achievement beliefs become more negative in many ways as they get older, at least through the early adolescence time period. Children believe they are less competent in many activities, and often value those activities less."

Researchers have also found that this declining motivation trend exists for reading as well (Eccles et al., 1993; Mazzoni et al., 1999; McKenna et al., 1995; Pressley & Allington, 2015; Wigfield et al., 1997; Wigfield & Guthrie, 1997). The study by McKenna

et al. (1995) poignantly illustrated this finding. In their study of 18,185 U.S. students in grades 1–6, they found that attitudes toward reading become gradually but steadily more negative throughout the grade levels: attitudes toward reading were positive in first grade but disinterested in sixth grade. Morgan and Fuchs (2007) discussed a bidirectional relationship between reading motivation and achievement, such that students who did not achieve as expected were also more likely to show less motivation to read. Given the strong and consistent relationship between motivation and achievement (Baker & Wigfield, 1999; Guthrie & Wigfield, 1999; Guthrie et al., 2006; Morgan & Fuchs, 2007; Schiefele et al., 2012, 2016), this declining trend across grade levels is reason for concern among practitioners and researchers.

Motivation to Read and Gender

An important and consistent finding of research on students' motivation to read is that gender differences exist. Specifically, research has found that at the elementary level, girls are generally more motivated to read than boys (Baker & Wigfield, 1999; Kush & Watkins, 1996; Marinak & Gambrell, 2010; McKenna et al., 1995; Wigfield & Guthrie, 1997). Results are mixed regarding gender differences in reading motivation in primary grades: some studies found no difference between boys' and girls' motivation (Kush & Watkins, 1996), whereas others found that as early as first grade, girls were more motivated than boys to read (Lepola, 2004; McKenna et al., 1995). A consistent finding, though, is that by third grade, girls demonstrate higher reading motivation than boys (Kush & Watkins, 1996; Marinak & Gambrell, 2010; McKenna et al., 1995; Merisuo-Storm, 2006; Pečjak & Peklaj, 2006; Wigfield & Guthrie, 1997).

Marinak and Gambrell (2010) found an interesting result in their study of 288 third-grade average readers: there were statistically significant differences between boys' and girls' overall motivation and on the value subscale but no statistically significant differences between boys and girls on the self-concept subscale. That is, boys felt equally confident as girls in their reading ability, but boys in this study did not value reading as much as did the girls. Applegate and Applegate (2010) found similar results in their study with 443 elementary students. Again, boys in this study felt that they could read; they just did not value it as a personally gratifying activity.

Motivation to Read and Fiction versus Nonfiction

As noted, the field lacks a psychometrically sound measure of students' motivation to read fiction versus nonfiction. Unsurprisingly, then, our literature search revealed no research specifically measuring students' motivation to read nonfiction. However, extant literature examining students' reading preferences indicates that, typically, girls show more of a preference for fiction than boys do, and boys choose nonfiction more frequently than girls do (Boltz, 2007; Boraks, Hoffman, & Bauer, 1997; Davila & Patrick, 2010; Nippold, Duthie, & Larsen, 2005). Chapman, Filipenko, McTavish, and Shapiro (2007) conducted an interesting study. With 40 first-grade students, they individually asked students to select a book for themselves, for a boy, and for a girl. They found that boys and girls chose fiction and nonfiction at similar

rates for themselves. However, when choosing books for others, their choices reflected traditional gender stereotypes: fiction for girls and nonfiction for boys.

Mohr's (2006) study likewise contradicted the traditional finding that girls prefer fiction and boys prefer nonfiction. When Mohr invited nearly 200 first-grade students to select their favorite book from among nine choices, a large majority of students preferred nonfiction texts, particularly animal books. Although a larger percentage of boys (96%) than girls selected nonfiction over fiction, it is noteworthy that 69% of girls also chose nonfiction over fiction.

The study reported in this article builds on the literature reviewed above. Our research team developed and validated two measures: one to assess elementary students' motivation to read fiction and one to assess elementary students' motivation to read nonfiction. We administered these instruments to students in grades 3–6 and analyzed the data by grade level, by gender, and by text type (i.e., fiction versus nonfiction).

Theoretical Framework

This study is guided by the expectancy-value theory of motivation (Eccles et al., 1983). This theory suggests that one's motivation to engage in a task is determined by (a) the expectancy of success ("Can I do this task?") and (b) the value the individual places on completing the task ("Do I want to do this task?"; Miller & Faircloth, 2009). Researchers have found that individuals' expectancy and value beliefs are directly related to their performance and persistence in most learning tasks (Wigfield, 1994). Expectancy-value theory has been shown to be domain-specific (Wigfield, Tonks, & Klauda, 2016), so students' expectancies and values are different for science and math tasks, for example. Our study specifically focuses on students' motivation to read. Moreover, it conceptualizes expectancy as self-concept (Anderman, Gray, & Chang, 2013). That is, students' expectancy of success in reading determines their self-concept as a reader. If they expect to succeed in reading, they have a high self-concept; if they do not expect to succeed in reading, they have a low self-concept.

Current Study

For this study, our research team developed and administered two motivation instruments: the MRP-F and the MRP-NF. We administered the surveys to upper elementary students (grades 3–6) in seven locations across the United States. We analyzed the survey results to answer the following research questions: (a) Do upper elementary students differ in their motivation to read fiction versus nonfiction? (b) Do upper elementary girls and boys differ in their motivation to read fiction and nonfiction? (c) Do upper elementary students differ across grade levels in their motivation to read fiction versus nonfiction?

Method

To answer our research questions, we used a descriptive quantitative design (Borg & Gall, 1989). The purpose of descriptive research is to portray what is already occur-

ring in an identified context (Borg & Gall, 1989). To plan the implementation of the study, the research team engaged in consistent digital communication and face-to-face planning meetings at literacy research conferences.

Participants

To address our three research questions, we used convenience sampling to survey a broad range of upper elementary students (Johnson & Christensen, 2017). Investigators on the research team invited one or two schools in their regions where they had established a research partnership. Researchers sought and gained permission to complete the study from their institutions as well as the schools' governing bodies along with the school administrator. Key personnel in the schools supported the researchers in inviting teachers to participate and administering and collecting the surveys. Key school personnel (e.g., a reading specialist or an assistant principal) worked with the researchers and the classroom teachers to obtain parental consent and student assent, as required by the different institutional review boards.

Our sample included 1,104 students in seven schools across five different states: Maryland, Pennsylvania, South Carolina, Utah, and Virginia. The schools were in predominantly suburban areas, with one urban school, and included public, private, and charter schools. Some of the elementary schools in these regions housed kindergarten through fifth-grade students, and others had students in kindergarten through sixth grade. Because we were interested in describing motivation to read in the upper elementary grades, all classrooms in grades 3–6 that wished to participate were included in the study. Table 1 provides details of the seven participating schools, and Table 2 displays the grade-level and gender breakdown of the participating students.

Measures

The Motivation to Read Profile (Gambrell et al., 1996), the Motivation to Read Profile-Revised (Malloy et al., 2013), and the Me and My Reading Profile (Marinak et al., 2015) served as foundations in designing the MRP-F and the MRP-NF. All five motivation instruments are based on the expectancy-value theory of motivation (Eccles et al., 1983; Wigfield et al., 2016), which guided the writing of items. Eleven to 12 items were written for each of two subscales (self-concept and value), and then

Table 1. Overview of Participating Schools

	Number of Teachers (Students)				School Characteristics		
State	Grade 3	Grade 4	Grade 5	Grade 6	Location	Poverty (%)	Туре
Maryland	2 (54)	1 (42)	2 (68)	1 (38)	Suburban	N/A	Private
Pennsylvania	2 (107)	2 (89)	2 (98)	2 (85)	Urban	100	Charter
South Carolina 1	5 (189)	5 (201)	5 (216)	o (o)	Suburban	69	Public
South Carolina 2	3 (116)	3 (94)	3 (122)	3 (163)	Suburban	40	Public
Utah 1	1 (51)	2 (67)	2 (48)	o (o)	Suburban	43	Charter
Utah 2	2 (102)	2 (65)	2 (83)	2 (74)	Suburban	36	Public
Virginia	2 (88)	3 (121)	1 (64)	o (o)	Suburban	20	Public
Total	17 (707)	18 (679)	17 (699)	8 (360)			

588

1,104

Grade Male Female Total 169 154 323 4 139 164 303 139 170 309 69 100 169

516

Total

Table 2. Distribution of Male and Female Students across Grade Levels

numbered alternately to construct the profiles. Odd-numbered items measured self-concept as a reader, and even-numbered items assessed value for reading. The MRP-F and MRP-NF each used a 4-point ordinal rating scale; that is, responses were ranked to demonstrate a continuum of least to most motivated. To ensure valid results, some responses were ordered from most to least motivated, and others were listed from least to most motivated.

In determining the response scale, we attended to research such as that of Eiser, Mohay, and Morse (2000), who suggested that response scales developed for use with children need to be based on a clear understanding of developmental appropriateness; that is, they should have a limited number of response options, simple language, no complex grammar or vocabulary, and short sentences. Other research indicates that children tend to respond in an extreme manner (choosing options at either end of the response continuum) when asked to use rating scales (Chambers & Craig, 1998). Based on these criteria and response-pattern concerns, a 4-point ordinal scale was developed that would include a high and a low response at either end and two ranked responses in the middle. In so doing, a linguistically neutral response (e.g., "okay to do") occurred in either the second or third position; however, because the scale was based on response ranking and not numeric interval, no conflict of measurement was foreseen.

Following the creation of items, the instruments were evaluated using the "Rule of 10": the sample contained at least 10 participants for each item on the instruments at the appropriate grade levels (Harrell, Lee, & Mark, 1996). After viewing the internal consistencies of items based on multiple factor analyses, we removed the least reliable items from each subscale. On the MRP-F and MRP-NF, two items were removed from each instrument, one value and one self-concept. Specifically, the value item that appeared to contribute least to overall reliability was, "My friends think reading fiction/nonfiction is (really fun, fun, OK to do, no fun at all)" and the self-concept item appearing to contribute minimally was, "For me, reading fiction/nonfiction is (much easier than last year, easier than last year, harder than last year, much harder than last year)."

Following final factor analyses conducted on both the MRP-F and the MRP-NF, the result was a 20-item profile with strong internal reliability using standardized Cronbach's (1951) alphas. The alphas ranged from .82 to .91 across both scales. Reliability values for each profile and both subscales are presented in Table 3.

More specifically, reliability testing using Cronbach's (1951) alpha for the MRP-F revealed $\alpha=.91$ for the full scale, $\alpha=.87$ for the value subscale, and $\alpha=.84$ for the self-concept scale. Because the scale for the survey items was ordinal, a nonparametric analysis was used to determine validity using a root mean square error of ap-

Table 3. Reliability for both Profiles and the Subscales

	Self-Concept	Value	Total Motivation ^a
MRP-F	.84	.87	.91
MRP-NF	.82	.89	.90

^a Self-concept plus motivation.

proximation (RMSEA). An RMSEA estimate of .090 was revealed, 95% CI [.081, .093]. The probability of RMSEA \leq .05 was p < .001.

Reliability testing using Cronbach's (1951) alpha for the MRP-NF revealed $\alpha = .90$ for the full scale, $\alpha = .89$ for the value subscale, and $\alpha = .82$ for the self-concept scale. Because the scale for the survey items was ordinal, a nonparametric analysis was used to determine validity using RMSEA. An RMSEA estimate of .090 was revealed, 95% CI [.081, .096]. The probability of RMSEA \leq .05 was p < .001. Considering the ordinal nature of the survey scale, reliability and validity estimates are judged to be well within acceptable ranges for both classroom use and research purposes.

Experienced classroom teachers, reading specialists, and graduate education students critiqued the items on both profiles for construct validity. They were asked to sort the items into three categories: (*a*) self-concept as a reader, (*b*) value of reading, and (*c*) not sure or questionable. All items received 100% trait agreement and were included in the final instruments.

Data Collection

The MRP-F and MRP-NF were administered as paper-and-pencil assessments in the participating schools in spring 2015. To encourage consistent administration across classrooms and locations, the instruments included directions for administration, including instructions that proctoring teachers were directed to read verbatim. During administration, teachers read aloud each profile item to the students to ensure that reading ability was not a factor in responding. After listening to each item stem and response set, students were asked to listen again before circling the response that was the best choice for them. The administration of each profile required 20 to 30 minutes to complete. The MRP-F and MRP-NF were administered at least 1 month apart. Classrooms counterbalanced the profile administration order, meaning that some classrooms administered the MRP-F first and others administered the MRP-NF first.

Data Analysis

Data were tabulated by hand and entered into Microsoft Excel so they could be easily imported into a statistical data analysis program. Data were analyzed using two-way analyses of variance (ANOVAs) for grade level and gender for (a) both the MRP-F and the MRP-NF overall (20 items on each that includes both self-concept and value) and (b) self-concept and value items separately for both the MRP-F and the MRP-NF. Therefore, for each measure (MRP-F and MRP-NF), we analyzed the data for grade-level effects and gender effects on the 10 self-concept items, on the 10 value items, and on the total 20 items.

The unit of analysis for the study was the students versus intact groups (schools or classrooms). Given that the participants were nested in classrooms, conventional statistical methods, such as an ANOVA, may fail to take dependency into account, resulting in a threat to the validity of the statistical inference. In other words, the probability of incorrectly concluding that an effect is statistically significant (i.e., Type I error rate) might be far higher than the nominal level expressed by α (usually $\alpha=.05$). To control for Type I error, Bonferroni adjustments were conducted for the student-level data.

Results

In this section, we present the results by measure. We describe the results for the MRP-F, and then we describe the results for the MRP-NF. Both measures used a 4-point rating or response scale ranging from 1 (*least motivated*) to 4 (*most motivated*). All effect sizes were evaluated using the guidelines presented by Cohen (1977).

Motivation to Read Profile-Fiction

The data collected in this study revealed statistically significant grade-level and gender effects on the MRP-F overall and separately for self-concept and value items. The main effect for grade level on the MRP-F yielded an F ratio of F(3, 1104) = 6.32, p < .001, indicating significant differences among students in grades 3–6 in their motivation to read fiction. The effect size of this difference was $\eta^2 = .029$, indicating a small effect size. The main effect for gender on the MRP-F produced an F ratio of F(1, 1104) = 25.22, p < .001, indicating significant differences between girls and boys in their motivation to read fiction. The effect size of this difference was d = 0.44, indicating a moderate effect size. Displayed in Figure 1, students

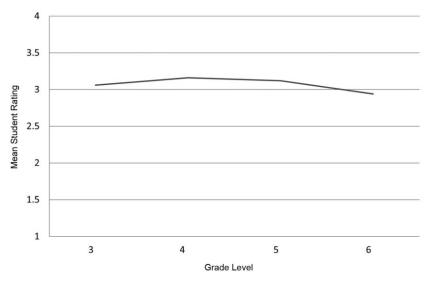


Figure 1. Motivation to read fiction (boys and girls) across grade levels. All data points represent statistically significant results unless otherwise noted.

demonstrated a slight rise in motivation to read fiction from third to fourth grade (d = 0.08, negligible effect size) but then a clear decline from fourth to fifth grade (d = 0.40, moderate effect size) and from fifth to sixth grade (d = 0.90, large effect size).

Statistically significant effects were found for grade level and gender on the self-concept items on the MRP-F. The main effect of grade level yielded an F ratio of F(3, 1104) = 5.78, p < .001, indicating a significance difference in self-concept for reading fiction among students in different grade levels. The effect sizes of the relationships between self-concept and grade level for reading fiction are as follows: grades 3–4, d = 0.90 (large); grades 4–5, d = 0.40 (moderate); grades 5–6, d = 0.80 (large). The main effect of gender produced an F ratio of F(1, 1104) = 25.33, p < .001, indicating significant differences in self-concept for reading fiction between girls and boys. The effect size for the relationship between gender and self-concept to read fiction is d = 0.94, a large effect size.

Statistically significant effects were also found for grade level and gender on the value items on the MRP-F. The main effect of grade level yielded an F ratio of F(3,1104)=19.27, p<.001, indicating a significance difference in value for reading fiction among students in different grade levels. The effect sizes of the relationships between value and grade level for reading fiction are as follows: grades 3–4, d=0.60 (moderate); grades 4–5, d=0.60 (moderate); grades 5–6, d=0.90 (large). The main effect of gender produced an F ratio of F(1,1104)=31.76, p<.001, indicating significant differences in value for reading fiction between girls and boys. The effect size for the relationship between gender and value for reading fiction is d=0.96, a large effect size. Therefore, a trend of general decline from fourth through sixth grades emerged for both self-concept and value among boys and girls (see Figs. 2 and 3). There were significant gender differences for reading fiction, with girls reporting higher self-concept and higher value than boys.

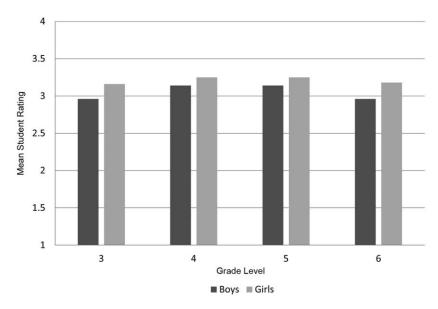


Figure 2. Self-concept for reading fiction by grade level and gender.

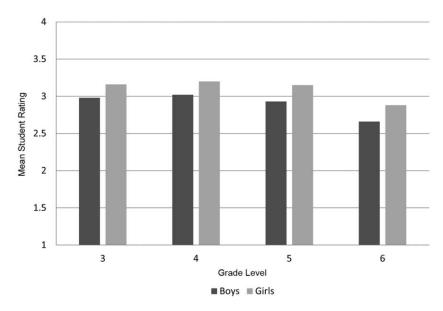


Figure 3. Value for reading fiction by grade level and gender.

Motivation to Read Profile-Nonfiction

The data collected in this study revealed statistically significant grade-level effects on the MRP-NF overall and for self-concept and value items separately. However, no statistically significant gender effects were found for the MRP-NF, either overall or in separately analyzed self-concept or value items. The main effect for grade level on the MRP-NF yielded an F ratio of F(3, 1103) = 31.08, p < .001, indicating significant differences among grades 3–6 in their motivation to read nonfiction. The effect size was $\eta^2 = .079$, indicating a moderate effect size. The main effect for gender on the MRP-NF produced an F ratio of F(1, 1103) = 3.55, p = .06, indicating no significant differences between girls and boys in their motivation to read nonfiction. As displayed in Figure 4, students' motivation to read nonfiction declines steadily from third through sixth grades. Students demonstrated a decline in motivation to read nonfiction from third to sixth grade (large effect sizes, V = .70-.90). Although this figure displays genders separately, the common pattern of the results reflects the insignificant gender differences.

Statistically significant effects were found for grade level, but not gender, on the self-concept items on the MRP-NF. The main effect of grade level yielded an F ratio of F(3,1103)=12.53, p<.001, indicating a significance difference in self-concept for reading nonfiction among students in different grade levels. Students' self-concept to read nonfiction declined from third to fourth grade (small effect size, d=0.30), from fourth to fifth grade (moderate effect size, d=0.40), and from fifth to sixth grade (large effect size, d=0.90). The main effect of gender produced an F ratio of F(1,1103)=2.67, p=.10, indicating that there were no significant differences in self-concept for reading nonfiction between girls and boys.

Statistically significant effects were also found for grade level, but not gender, on the value items on the MRP-NF. The main effect of grade level yielded an F ratio of F(3, 1103) = 41.42, p < .001, indicating a significance difference in value for reading nonfiction among students in different grade levels. Students' value for reading

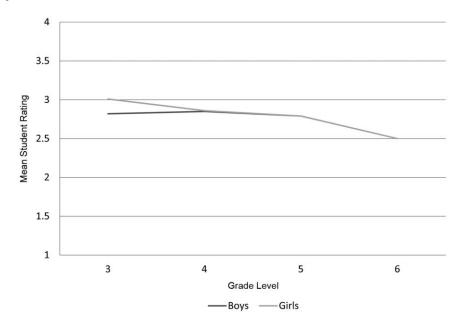


Figure 4. Students' motivation to read nonfiction by grade level (significant effects) and gender (no significant differences).

nonfiction declined from third to fourth grade (large effect size, d=0.80), from fourth to fifth grade (large effect size, d=0.80) and from fifth to sixth grade (large effect size, d=0.90). The main effect of gender produced an F ratio of F(1,1103)=3.11, p=.08, indicating that there were no significant differences in value for reading nonfiction between girls and boys.

As shown in Figures 5 and 6, students' self-concept and value for reading non-fiction decline across grade levels. Students' self-concepts decline most noticeably

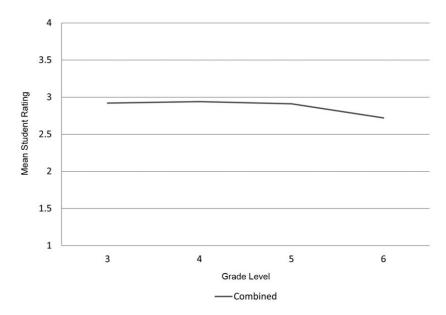


Figure 5. Self-concept for reading nonfiction across grade levels (combined boys and girls).

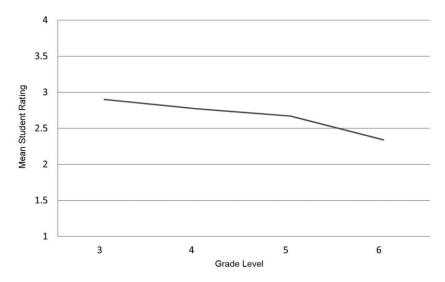


Figure 6. Value for reading nonfiction across grade levels (combined boys and girls).

at grade 6, whereas their value for reading nonfiction displays a consistent decline from grades 3 to 6.

Discussion

Given the important role of motivation in students' reading success and development (Baker & Wigfield, 1999; Guthrie & Wigfield, 1999; Guthrie et al., 2006; Miller & Meece, 1999; Parsons et al., 2018; Schiefele et al., 2012, 2016), the field of literacy research has provided much insight into students' reading motivation (Guthrie et al., 1996, 2004, 2007, 2009; Guthrie & Wigfield, 1999; Miller & Faircloth, 2009; Miller & Meece, 1999; Parsons et al., 2015). However, lacking from this extensive body of research is a valid and reliable measure of students' motivation to read fiction versus nonfiction. The study reported strove to address this gap in the literature, which is especially timely, given the current national emphasis on incorporating nonfiction texts more frequently and earlier in children's schooling (Council of Chief State School Officers & National Governors Association, 2010; Duke, 2000; Frey & Fisher, 2007; Moss, 2005).

The instruments created and validated in this research are psychometrically sound. Each adjusted instrument contains 20-item profiles to probe upper elementary students' motivation to read fiction and nonfiction. Each instrument has strong internal reliability, as measured with Cronbach's (1951) alpha. With strong discriminate validity for both subscales, each instrument anticipates a student's self-concept as a reader and a student's value of reading.

Motivation to Read Fiction and Nonfiction

Given previous research suggesting that students were more motivated to read fiction than nonfiction, perhaps because of the dominance of fiction texts in elementary classrooms (Davila & Patrick, 2010; Gee, 2001; Hall, 1998; Millard, 1997),

our first research question investigated differences in upper elementary students' motivation to read fiction versus nonfiction. We compared results for both profiles and subscales of self-concept and value and found that students were slightly more motivated to read fiction than nonfiction, which adds some support to existing research. However, our results indicate new and significant gender and grade-level effects, which will be discussed next.

Gender Effects

Addressing our second question, "Do upper elementary girls and boys differ in their motivation to read fiction and nonfiction?" we noted the presence and absence of gender effects in the results. A consistent finding in the extant literature on reading motivation is that girls are more motivated to read than boys (Baker & Wigfield, 1999; Kush & Watkins, 1996; Marinak & Gambrell, 2010; McKenna et al., 1995; Merisuo-Storm, 2006; Pečjak & Peklaj, 2006; Wigfield & Guthrie, 1997). The data collected in the current study supported this finding for motivation to read fiction: girls were statistically significantly more motivated to read fiction than boys were, including higher self-concept and value for reading fiction.

Of particular interest, we did not find statistically significant differences in girls' and boys' motivation to read nonfiction. This finding is important because researchers and educators have hypothesized that elementary-aged boys are more motivated than girls to read nonfiction than fiction (Boltz, 2007; Boraks et al., 1997; Davila & Patrick, 2010; Mohr, 2006; Nippold et al., 2005). However, our research did not support these claims. Perhaps the traditional assumption that boys are more drawn to nonfiction than girls are is unfounded or is rooted in stereotypes rather than actuality. Indeed, Chapman et al. (2007) found that both boys and girls preferred nonfiction to fiction and indicated gender stereotypes, even in elementary students.

Grade-Level Effects

Our third research question investigated differences across grade levels in students' motivation to read fiction versus nonfiction. Previous research has demonstrated that students' motivation to read declines across the grade levels (Eccles et al., 1993; Mazzoni et al., 1999; McKenna et al., 1995; Morgan & Fuchs, 2007; Pressley & Allington, 2015; Wigfield et al., 1997; Wigfield & Guthrie, 1997). Unfortunately, our research provides evidence in line with these previous findings. We found statistically significant declines in students' reading motivation for both fiction and nonfiction as well as for both self-concept and value for reading both text types. In our study, students' selfconcept for reading both fiction and nonfiction declined from grades 3 to 6, most noticeably from grade 5 to 6. Students' value for reading both fiction and nonfiction, however, demonstrated a much more consistent and striking decline than the drop in self-concept. This result is alarming because it suggests that students feel confident in their reading—they just do not value it. Scholars and educators must work to reverse this trend. Future research should investigate what we can do in elementary schools to support students' value of reading. Such learning would help us better address the crisis of students' disengagement from literacy (Guthrie, 2004). It is important to note that the sixth graders in this study were in elementary schools, not middle schools. Four of the seven participating elementary schools included sixth grades; participation among sixth-grade teachers was about half of the other grades (see Table 1).

Implications for Practice

Knowing the motivational profiles of students can support teachers in developing practices that are fine-tuned to the students in their classrooms. An educator who is aware of what motivates and demotivates students provides much needed information for personalizing instruction. Morgan and Fuchs (2007) urge educators to examine student motivation to read as an indicator or corroborating factor of reading achievement: a student who is less motivated to read may also need additional and/or different instruction to achieve. Researchers such as McCombs (2003) suggest that making motivation an aspect of awareness for students is important; educators should involve students in their own motivation to read. Instruments such as the MRP-F and MRP-NF allow teachers and their students to make changes in instructional practices that create value for reading, support for developing self-concepts as a reader, or adjustments in the literate climate of the classroom. In this way, motivation can be seen as a dynamic and malleable aspect of reading that can be influenced to enhance confidence, enjoyment, and achievement.

Limitations

Limitations of this research are related to convenience sampling procedures. Because students were not randomly sampled, it is arguable that our results may not be generalized to the broader population (Johnson & Christensen, 2017). However, the size and diversity of our research team ameliorates the concerns typically associated with convenience sampling in that our sampling covered eight unique school locations across five states. Another limitation of our study was the lack of multilevel analyses for nested data. Additional limitations include that we did not collect race/ethnicity data, socioeconomic information, or student achievement data from individual students. Therefore, our results cannot be analyzed in light of this demographic information or in relation to achievement.

Conclusion

This research explored upper elementary students' motivation to read fiction and nonfiction using expectancy-value theory (Anderman et al., 2013; Eccles et al., 1983; Wigfield et al., 2016). This research corroborates previous research, demonstrating upper students' declining motivation to read, especially their declining value for reading. This research also corroborates previous research findings that girls are more motivated than boys to read fiction. The insignificant differences between girls' and boys' motivation to read nonfiction was surprising and highlights the need for further investigation of students' motivation to read nonfiction. Moreover, the field needs additional research exploring how to enhance students' value for reading.

Note

Allison Ward Parsons is an assistant professor in the College of Education and Human Development at George Mason University; Seth A. Parsons is an associate professor in the College of Education and Human Development at George Mason University; Jacquelynn A. Malloy is an assistant professor in the College of Education at Clemson University; Barbara A. Marinak is professor of reading and the dean of the Division of Education at Mount St. Mary's University; D. Ray Reutzel is the dean of the College of Education at the University of Wyoming; Mary D. Applegate is a professor emerita in the Graduate School of Education at Saint Joseph's University; Anthony J. Applegate is a retired professor from the School of Education at Holy Family University; Parker C. Fawson is the dean of the School of Education at Utah Valley University; Linda B. Gambrell is a professor emerita in the Department of Education and Human Development at Clemson University. Correspondence may be sent to Seth A. Parsons at sparson5@gmu.edu.

References

- Alderman, M. K. (2008). *Motivation for achievement: Possibilities for teaching and learning* (3rd ed.). New York: Routledge.
- Anderman, E. M., Gray, D. L., & Chang, Y. (2013). Motivation and classroom learning. In W. M. Reynolds, G. E. Miller, & I. B. Weiner (Eds.), *Handbook of psychology: Educational psychology* (Vol. 7, 2nd ed., pp. 99–116). Hoboken, NJ: Wiley.
- Applegate, A. J., & Applegate, M. D. (2010). A study of thoughtful literacy and the motivation to read. *Reading Teacher*, **64**, 226–234. doi:10.1598/RT.64.4.1
- Asseline, M. (2003). Bridging the gap between learning to be male and learning to read. *Teacher Librarian*, **30**, 53–54.
- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34, 452–477. doi:10.1598/RRQ.34.4.4
- Baumann, J., & Duffy, A. (1997). Engaged reading for pleasure and learning: A report from the National Reading Research Center. Retrieved from ERIC database. (ED 413579)
- Boltz, R. H. (2007). What we want: Boys and girls talk about reading. School Media Library Research, 10, 1–21.
- Boraks, N., Hoffman, A., & Bauer, D. (1997). Children's book preferences: Patterns, particulars, and possible implications. *Reading Psychology*, **18**, 309–341.
- Borg, W. R., & Gall, M. D. (1989). Educational research: An introduction (5th ed.). New York: Longman.
- Chambers, C. T., & Craig, K. D. (1998). An intrusive impact of anchors in children's faces pain scales. *Pain*, **78**, 27–37.
- Chapman, M., Filipenko, M., McTavish, M., & Shapiro, J. (2007). First graders' preferences for narrative and/or information books and perceptions of other boys' and girls' book preferences. *Canadian Journal of Education*, **30**, 531–553.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences (Rev. ed.). New York: Academic.
- Council of Chief State School Officers & National Governors Association. (2010). *Common Core State Standards for English language arts & literacy in history/social studies, science, and technical subjects.*Retrieved from http://www.corestandards.org/wp-content/uploads/ELA_Standards1.pdf
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, **16**(3), 297–334.
- Davila, D., & Patrick, L. (2010). Asking the experts: What children have to say about their reading preferences. *Language Arts*, **87**, 199–210.
- Duke, N. K. (2000). 3.6 minutes per day: The scarcity of informational texts in first grade. *Reading Research Quarterly*, **35**(2), 202–224. doi:10.1598/RRQ.35.2.1

- Eccles, J., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Age and gender differences in children's self- and task perceptions during elementary school. *Child Development*, **64**, 830–843. doi:10.1111/j.1467-8624.1993.tb02946.x
- Eccles, J. S., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., . . . Midgley, C. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75–146). San Francisco: Freeman.
- Eiser, C., Mohay, H., & Morse, R. (2000). The measurement of quality of life in young children. *Child Care Health Development*, **26**(5), 401–414.
- Frey, N., & Fisher, D. (2007). Reading for information in elementary school: Content literacy strategies to build comprehension. Upper Saddle River, NJ: Pearson.
- Gambrell, L. B. (2011). Seven rules of engagement: What's most important to know about motivation to read. *Reading Teacher*, **65**, 172–178. doi:10.1002/TRTR.01024
- Gambrell, L. B., Palmer, B., Codling, R., & Mazzoni, S. (1996). Assessing motivation to read. Reading Teacher, 49, 518–533.
- Gee, J. (2001). Reading, language abilities, and semiotic resources: Beyond limited perspectives on reading. In J. Larson (Ed.), *Literacy as snake oil: Beyond the quick fix* (pp. 7–26). New York: Peter Lang.
- Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology*, **82**, 525–538. doi:10.1037/0022-0663.82.3.525
- Guthrie, J. T. (2004). Teaching for literacy engagement. Journal of Literacy Research, 36, 1–30.
- Guthrie, J. T., Anderson, E., Alao, S., & Rinehart, J. (1999). Influence of concept-oriented reading instruction on strategy use and conceptual learning from text. *Elementary School Journal*, **99**(4), 343–366. doi:10.1086/461929
- Guthrie, J. T., Hoa, L. W., Wigfield, A., Tonks, S. M., Humenick, N. M., & Littles, E. (2007). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology*, 32, 282–313.
- Guthrie, J. T., McRae, A., Coddington, C. S., Klauda, S. L., Wigfield, A., & Barbosa, P. (2009). Impacts of comprehensive reading instruction on diverse outcomes of low-achieving and high-achieving readers. *Journal of Learning Disabilities*, 42, 195–214. doi:10.1177/0022219408331039
- Guthrie, J. T., Van Meter, P., McCann, A. D., Wigfield, A., Bennett, L., Poundstone, C. C., . . . Mitchell, A. M. (1996). Growth of literacy engagement: Changes in motivations and strategies during concept-oriented reading instruction. *Reading Research Quarterly*, 31, 306–332. doi:10.1598/rrq.31.3.5
- Guthrie, J. T., & Wigfield, A. (1999). How motivation fits into a science of reading. *Scientific Studies of Reading*, 3, 199–205. doi:10.1207/s1532799xssr0303_1
- Guthrie, J. T., Wigfield, A., Barbosa, P., Perencevich, K. C., Tabaoda, A., Davis, M. H., . . . Tonks, S. (2004). Increasing reading comprehension and engagement through concept-oriented reading instruction. *Journal of Educational Psychology*, **96**, 403–423.
- Guthrie, J. T., Wigfield, A., Humenick, N. M., Perencevich, K. C., Tabaoda, A., & Barbosa, P. (2006). Influences of stimulating tasks on reading motivation and comprehension. *Journal of Educational Research*, **99**, 232–246. doi:10.3200.JOER.99.4.232-246
- Hall, N. (1998). Real literacy in a school setting: Five-year-olds take on the world. *Reading Teacher*, **52**, 8–17.
- Harrell, F. E., Lee, K. L., & Mark, D. B. (1996). Multivariate prognosis models: Issues in developing models, evaluating assumptions and adequacy, and measuring and reducing errors. *Statistics in Medicine*, **15**, 361–387.
- Harter, S. (1981). A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology*, 17(3), 300–312.
- Johnson, R. B., & Christensen. L. (2017). Educational research: Quantitative, qualitative, and mixed approaches. Thousand Oaks, CA: Sage.
- Kush, J., & Watkins, M. (1996). Long-term stability of children's attitudes toward reading. *Journal of Educational Research*, **89**, 315–320.
- Lepola, J. (2004). The role of gender and reading competence in the development of motivational orientations from kindergarten to grade 1. *Early Education and Development*, **15**, 215–240.

- Lepper, M. R., Corpus, J. H., & Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlates. Journal of Educational Psychology, 97(2), 184-196.
- Malloy, J. A. (2015). New insights on motivation in the literacy classroom. In S. Parris & K. Headley (Eds.), Comprehension instruction: Research-based best practices (3rd ed., pp. 147-161). New York: Guilford.
- Malloy, J. A., Marinak, B. A., Gambrell, L. B., & Mazzoni, S. A. (2013). Assessing motivation to read: The Motivation to Read Profile-Revised. Reading Teacher, 67, 273-282. doi:10.1002 /TRTR.1215
- Malloy, J. A., Parsons, A. W., Marinak, B. A., Applegate, A. J., Applegate, M. D., Reutzel, D. R., . . . Gambrell, L. B. (2017). Assessing (and addressing!) motivation to read fiction and nonfiction. Reading Teacher, 71, 309-325. doi:10.1002/trtr.1633
- Marinak, B. A., & Gambrell, L. B. (2010). Reading motivation: Exploring the elementary gender gap. Literacy Research and Instruction, 49, 129-141. doi:10.1080/19388070902803795
- Marinak, B. A., Malloy, J. A., Gambrell, L. B., & Mazzoni, S. A. (2015). Me and My Reading Profile: A tool for assessing early reading motivation. Reading Teacher, 69, 51-62. doi:10.1002 /TRTR.1362
- Mazzoni, S. A., Gambrell, L. B., & Korkeamaki, R. L. (1999). A cross-cultural perspective of early literacy motivation. Reading Psychology, 20, 237-253. doi:10.1080/027027199278411
- McCombs, B. L. (2003). A framework for the redesign of K-12 education in the context of current educational reform. Theory into Practice, 42(2), 93-102.
- McKenna, M., Kear, D., & Ellsworth, R. (1995). Children's attitudes toward reading: A national survey. Reading Research Quarterly, 30, 934-956.
- Merisuo-Storm, T. (2006). Girls and boys like to read and write different texts. Scandinavian Journal of Educational Research, 50, 111-125.
- Millard, E. (1997). Differently literate: Boys, girls, and the schooling of literacy. London: Falmer. Miller, S. D., & Faircloth, B. (2009). Motivation and reading comprehension. In S. Israel & G. Duffy (Eds.), Handbook of research on reading comprehension (pp. 307–322). New York: Routledge.
- Miller, S. D., & Meece, J. L. (1999). Third-graders' motivational preferences for reading and writing tasks. Elementary School Journal, 100(1), 19-35. doi:10.1086/461941
- Mohr, K. A. J. (2006). Children's choices for recreational reading: A three-part investigation of selection preferences, rationales, and processes. Journal of Literacy Research, 38, 81-104.
- Morgan, P. L., & Fuchs, D. (2007). Is there a bidirectional relationship between children's reading skills and reading motivation? Exceptional Children, 73, 165-183. doi:10.1177/001440290707300203
- Moss, B. (2005). Making a case and a place for effective content area literacy instruction in the elementary grades. Reading Teacher, 59(1), 46-55. doi:10.1598/RT.59.1.5
- Nippold, M., Duthie, J., & Larsen, J. (2005). Literacy as a leisure activity: Free-time preferences of older children and young adolescents. Language, Speech, and Hearing Services in School, 36, 93-102.
- Parker, A., & Paradis, E. (1986). Attitude development toward reading in grades one through six. Journal of Educational Research, 79, 313-315.
- Parsons, S. A., Malloy, J. A., Parsons, A. W., & Burrowbridge, S. C. (2015). Students' engagement in literacy tasks. Reading Teacher, 69, 223-231. doi:10.1002.trtr.1378
- Parsons, S. A., Malloy, J. A., Parsons, A. W., Peters-Burton, E., & Burrowbridge, S. C. (2018). Sixth-grade students' engagement in academic tasks. Journal of Educational Research, 111(2), 232-245. doi:10/1080.00220671.2016.1246408
- Pečjak, S., & Peklaj, C. (2006). Dimensions of reading motivation and reading achievement in 3rd grade and 7th grade students. Studia Psychologica, 48, 11-29.
- Perie, M., Grigg, W., & Donahue, P. (2005). The nation's report card: Reading 2005 (NCES 2006-451). Washington, DC: U.S. Department of Education.
- Pintrich, P. R. (2003). A motivation science perspective of student motivation in learning and teaching contexts. Journal of Educational Psychology, 95, 667-686. doi:10.1037/0022-0663.95 .4.667

- Pressley, M., & Allington, R. L. (2015). Reading instruction that works: The case for balanced teaching (4th ed.). New York: Guilford.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, **25**(1), 54–67.
- Schiefele, U., Schaffner, E., Möller, J., & Wigfield, A. (2012). Dimensions of reading motivation and their relation to reading behavior and competence. *Reading Research Quarterly*, **47**, 427–463. doi:10.1002/RRQ.030
- Schiefele, U., Stutz, F., & Schaffner, E. (2016). Longitudinal relations between reading motivation and reading comprehension in the early elementary grades. *Learning and Individual Differences*, **51**, 49–58. doi:10.1016/j.lindif.2016.08.031
- Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental perspective. *Educational Psychology Review*, **6**, 49–78.
- Wigfield, A., Eccles, J. S., Yoon, K. S., Harold, R. D., Arbreton, A. J. A., Freedman-Doan, C., . . . Blumenfeld, P. C. (1997). Change in children's competence beliefs and subjective task values across the elementary years: A 3-year study. *Journal of Educational Psychology*, **89**, 451–469.
- Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology*, **89**, 420–432. doi:10.1037/0022 -0663.89.3.420
- Wigfield, A., Tonks, S. M., & Klauda, S. L. (2016). Expectancy-value theory. In K. R. Wentezel & D. B. Miele (Eds.), *Handbook of motivation at school* (2nd ed., pp. 55–74). New York: Routledge.