CHAPTER 2

Teacher perceptions affect boys' and girls' reading motivation differently

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Published as: Boerma, I. E., Mol, S. E., & Jolles, J. (2016). Teacher perceptions affect boys' and girls' reading motivation differently. *Reading Psychology, 37*(4), 547-569. doi:10.1080/02702711.2015.1072608

ABSTRACT

The aim of this study was to examine the relationship between teacher perceptions and children's reading motivation, with specific attention to gender differences. The reading self-concept, task value, and attitude of 160 fifth and sixth graders were measured. Teachers rated each student's reading comprehension. Results showed that for boys, teacher expectations had no influence on the three constructs of reading motivation measured, whereas for girls, teacher expectations did predict reading self-concept and value of reading. The results provide evidence that the relationship between motivational factors and teacher perceptions is different for boys and girls. The implications for educational practice are addressed.

INTRODUCTION

Teachers' beliefs influence their perceptions of and their behavior towards their students. They also display their perceptions to the children, but most teachers are unaware of doing this (Babad, Bernieri, & Rosenthal, 1991). Interestingly, it seems that children actually meet up to their teachers' perceptions (Dusek & Joseph, 1983; Hoge & Coladarci, 1989; McKown & Weinstein, 2002; Pajares, 1992). This powerful influence of teacher perceptions was first shown in the Pygmalion study by Rosenthal and Jacobson (1968), in which teacher perceptions of intelligence were shown to act as a self-fulfilling prophecy: children randomly earmarked as being more intelligent actually performed better than control children on an IQ test two years later. In reading comprehension the relation between teacher perceptions and children's performance has been examined as well (e.g., Bates & Nettlebeck, 2001; Feinberg & Shapiro, 2009; Hecht & Greenfield, 2002; Hoge & Coladarci, 1989). It is not known, however, whether reading motivation is also affected by teacher perceptions, and whether this is different for boys and girls. The current study aims to examine the unique role played by teachers' perceptions about reading comprehension in the reading motivation of fifth and sixth grade students, with specific attention to gender differences.

So far, most research on teacher perceptions has focused on the relation with children's actual reading performance instead of their reading motivation. In a recent meta-analysis, in which teacher perceptions were related to students' overall academic achievement, including language arts, a mean effect of r = .63 was found (Südkamp et al., 2012). In the domain of reading, a review of ten studies found a similar median effect size of r = .62, with a range of r = .28 to r = .86 (Hoge & Coladarci, 1989). This shows that teachers' general judgments of reading ability were positively related to students' reading scores on a standardized achievement test. Although these reviews suggest that teacher perceptions are quite accurate reflections of students' (reading) performance, correlation coefficients in fact only reflect relative judgments. A general tendency of teachers to systematically over- or underestimate students is not accounted for (Südkamp et al., 2012). It has indeed been shown that teachers' absolute judgments were less accurate, as they tended to overestimate the reading performance of especially low achieving students (Bates & Nettelbeck, 2001; Feinberg & Shapiro, 2009). In this study, we do not relate teacher perceptions to children's actual performance, but only to their motivation. After

all, even if teacher perceptions are inaccurate, they may still affect children's reading motivation.

Another line of research has focused on the link between children's actual reading performance and motivational concepts like reading self-concept (Chapman & Tunmer, 1995; Retelsdorf et al., 2011; Sundström, 2006), reading task value (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002), and reading attitude (Kush, Watkins, & Brookhart, 2005; McKenna, Kear, & Ellsworth, 1995). Children who are motivated to read, tend to read increasingly diverse materials, are more engaged in reading, and feel more competent about their reading skills (e.g., Guthrie, Coddington, & Wigfield, 2009; Guthrie & Wigfield, 1999; Guthrie, Wigfield, Metsala, & Cox, 1999; Morgan & Fuchs, 2007; Schiefele et al., 2012; Wang & Guthrie, 2004; Wigfield, Guthrie, Tonks, & Perencevich, 2004). Such positive reading behaviors positively affect children's reading performance (Mol & Bus, 2011), overall school performance, and career prospects (Taylor, 2011).

Few studies (e.g., Kaiser, Retelsdorf, Südkamp, & Möller, 2013), however, have simultaneously examined teacher perceptions and children's reading motivation, and their interrelations. It can be hypothesized that when children feel that they are perceived as a poor reader by the teacher, their reading motivation might be negatively affected. This has been shown in previous research in other school domains than reading (i.e., mathematics and English language). It was found that students who were overestimated by their teachers showed higher motivation (e.g., self-concept) than students who were underestimated, even when their performance levels were similar (Jussim, 1989; Urhahne, 2015; Urhahne, Chao, Florineth, Luttenberger, & Paechter, 2011). The current study will look into the domain of reading to examine whether teacher perceptions of reading comprehension predict three dimensions of reading motivation: reading self-concept, reading task value, and reading attitude.

There is some evidence that teacher perceptions might be influenced by students' gender (Bennett, Gottesman, Rock, & Cerullo, 1993), but the findings are not yet clear. Südkamp and colleagues (2012), for example, decided that the findings on teacher perceptions and gender were too inconsistent to include gender as a factor in their meta-analysis. Some studies seem to suggest that the relation between teacher perceptions and gender is mediated by classroom behavior. Since teachers more often disapprove of boys' classroom behavior than girls', boys are generally perceived as academically poorer students (Bennett et al., 1993; Harlen, 2005; Hecht & Greenfield, 2002; Kenney-Benson, Pomerantz,

Ryan, & Patrick, 2006). In the field of reading motivation, in contrast, clear gender differences have been found. In general, girls seem to hold more positive opinions about reading than boys (e.g., Jacobs et al., 2002; Kush & Watkins, 1996). In the present study, we therefore examine the relation between teacher perceptions and reading motivation for boys and girls separately.

In the following section, we introduce three different dimensions of reading motivation, which are commonly differentiated in current research: reading self-concept, reading task value, and reading attitude. Previous research has provided evidence for this multi-faceted character of reading motivation (Baker & Scher, 2002; Chapman & Tunmer, 1995; Conradi et al., 2014; Gambrell, Palmer, Codling, & Mazzoni, 1996; Sundström, 2006). For each dimension we describe the development in primary school with a focus on gender differences, and review relationships to reading performance and behavior.

Motivational Aspects of Reading

Reading self-concept

Self-concept is usually defined as a person's self-perceptions formed through experience with their environment. These perceptions are influenced by environmental reinforcements and the responses of significant others. Self-concepts are domain-specific (Shavelson, Hubner, & Stanton, 1976; Sundström, 2006; Schiefele et al., 2012).

Children's reading self-concept decreases throughout primary school (Chapman & Tunmer, 1995; Eccles, Wigfield, Harold, & Blumenfeld, 1993; Jacobs et al., 2002; Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2005; Wigfield et al., 1997). This may be due to an overestimation of reading self-concept in the case of the youngest children (Nicholls, 1979). Another possibility is that, as children get older, teachers focus more on achievement and evaluation, thereby increasing social comparison and competition and decreasing their students' self-concept (Eccles et al., 1993). Interestingly, it is only by the age of ten that children seem to link their perceptions of competence to their actual performance (Chapman & Tunmer, 1995). The same pattern was found for the relation between reading self-concept and teacher-perceived reading scores: these correlations were moderate to strong only in the case of twelve-year-olds (Nicholls, 1979). In our study with ten-to-twelve-year-olds, we therefore expected to find some moderate correlations between reading self-concept and teacher perceptions.

Gender-stereotyped differences in self-concept are found even among the youngest children, which implies that children probably pick up these stereotyped gender roles from a very early age: boys generally have more positive self-concepts in the domains of sports and math, while girls have more positive self-concepts for reading and music activities (Eccles et al., 1993; Jacobs et al., 2002; Wigfield et al., 1997). Interestingly, the gap between boys and girls for reading self-concept only seems to widen as children get older (Jacobs et al., 2002). However, other research has indicated that gender differences in academic self-concept only begin to emerge in fifth and sixth grade (Cole, Martin, Peeke, Seroczynski, & Fier, 1999), a finding that is supported by Jacobs et al. (2002). These researchers even noted a "dramatic gender difference by grade 6" (p. 518). In our study, the participants are children from both Grade 5 and 6, who are tested at the start of the school year, so it might be expected that gender differences in reading self-concept are not entirely clear yet.

Reading task value

Children's preference for reading activities is determined both by their reading self-concept and their subjective reading task value (Eccles et al., 1993), so these two dimensions of reading motivation are somewhat intertwined. Subjective task value consists of two constructs: (a) intrinsic value, which refers to children's opinion of whether or not a task is in itself enjoyable and involving; and (b) importance of the task, which includes both the practical significance of a task and the subjective importance of fulfilling a task successfully (Durik, Vida, & Eccles, 2006; Wigfield & Cambria, 2010; Wigfield & Eccles, 2002). Since self-concept and task value show a positive relation, children tend to positively value tasks which they believe they can perform well. These positive relations are stronger for older children than for younger children (Eccles & Wigfield, 1995; Wigfield et al., 1997; Jacobs et al., 2002). For reading, a strong decrease in task value was shown across development, with boys having a lower reading task value than girls (Wigfield et al., 1997). Consequently, we expected to find clear gender differences in reading task value in our study.

The decline in subjective task value seems to be largely explained by changes in self-concept (Jacobs et al., 2002). One possible reason for these changes is that children acquire a better understanding of the feedback they receive on their task performance. As a result, they become more critical of their own abilities. Another possible explanation is that school environments where competition between

students is emphasized make students more aware of teacher perceptions. They might adjust their task value accordingly (Wang & Eccles, 2013; Wigfield & Eccles, 2000, 2002). The role of teacher perceptions in reading task value has, however, hardly been studied.

Reading attitude

Children who enjoy recreational reading are shown to read more, which enhances their language and reading performance. Their positive experiences when reading books stimulate them to continue reading (Mol & Bus, 2011). On the other hand, readers with a negative reading attitude do not engage in reading activities frequently and therefore have fewer opportunities to improve their performance (Kush & Watkins, 1996; Kush et al., 2005; McKenna et al., 1995a; Mol & Bus, 2011; Urhahne, 2015). A meta-analysis of 32 studies (Petscher, 2010) showed a positive relation between reading attitude and reading achievement for elementary school students ($Z_r = .44$).

The reading attitude of children in primary schools seems to decline between first and sixth grade (McKenna et al., 1995b; Petscher, 2010). This decline corresponds to a shift in the curriculum from "learning to read" to "reading to learn" (Chall, 1983; Katzir et al., 2009), which takes place in the higher grades of elementary school (Kush et al., 2005). Furthermore, boys have more negative reading attitudes toward recreational reading than girls, and this gap widens with age (Kush & Watkins, 1996). This gender difference cannot be explained by differences in ability between boys and girls (McKenna et al., 1995a; Kush & Watkins, 1996).

According to the integrated model proposed by McKenna and colleagues (1995b), reading attitude is more complex than just someone's positive or negative feelings towards reading. Reading attitude is assumed to be the result of (a) specific reading experiences, (b) the reader's beliefs about the outcomes of reading, and (c) the expectations of significant others (Kush et al., 2005). Teachers and parents can influence all three factors of reading attitude, thus improving the reading attitude of children by, for example, creating positive reading experiences, choosing interesting texts, or expressing positive expectations when children read (Guthrie, McRae, & Klauda, 2007). In line with this model, we expected that teacher perceptions may exert an important influence on children's reading attitude.

This Study

To date, most studies have focused only on ways through which cognitive and linguistic factors contribute to successful reading comprehension, such as word recognition, letter naming, and phonological processing. Since these factors only explain part of the variance in reading comprehension (between 15% and 70%), other factors, such as motivational dimensions and gender, are probably involved as well (Baker & Scher, 2002; Katzir et al., 2009; Petscher, 2010). Reading motivation and gender differences were therefore the focus of our study on teacher-perceived reading comprehension.

The following issues are addressed in this paper:

(1) We examined possible gender differences in primary school children's reading self-concept, task value and attitude, and teacher-perceived reading comprehension.

(2) We focused on how teacher perceptions of reading comprehension contribute to children's reading self-concept, task value and attitude, and, since research has shown that teacher perceptions might be affected by gender, we differentiated between boys and girls in our analyses.

METHOD

Participants

In this study, 160 Dutch elementary school children (56.9% girls) participated. Among these, there were 46 fifth graders (28.7%) and 114 sixth graders (71.3%). The data were collected at six mainstream elementary schools, in the Amsterdam area, the Netherlands.

Materials

Reading self-concept

We used the group-administered Reading Survey from the "Motivation to Read Profile" (MRP; Gambrell et al., 1996). This Reading Survey consisted of twenty items, of which ten items tapped into children's self-concept as a reader (e.g., I am a poor reader / an OK reader / a good reader / a very good reader). Children responded on a four-point response scale and items were recoded according to the instructions of Gambrell and colleagues (1996), so that 1 reported a negative self-concept

and 4 a positive self-concept. Reliability analyses showed an acceptable internal consistency with a Cronbach's alpha of $\alpha = .73$.

Reading task value

To measure children's reading task value, we used the other ten items of the Reading Survey from the MRP (Gambrell et al., 1996) that focused on the value that children attached to different reading activities (e.g., Knowing how to read well is not very important / sort of important / important / very important). Children responded to each item on a four-point response scale and items were recoded as described above. Cronbach's alpha for this scale was $\alpha = .76$.

Reading attitude

The "Elementary Reading Attitude Survey" (ERAS; McKenna & Kear, 1990) was used to determine children's reading attitude. We only used the ten questions about recreational reading (e.g., "How do you feel when you read a book on a rainy Saturday?") and excluded their scale of academic reading. Each question was followed by four smileys, ranging from very negative (= 1) to very positive (= 4), accompanied by an explanation in words (e.g., 4 = like it a lot!). Children had to circle the smiley that was most in line with their feelings about the reading statement. Reliability analyses showed a good internal consistency in our study: $\alpha = .84$.

Teacher-perceived reading comprehension

Children's daily teachers estimated the reading comprehension level of the children in their classroom. Teachers were asked to rate each child as either a poor (= 1), an average (= 2), or a good (= 3) reader. Overall, 20% of the children were classified as poor readers (53.1% boys), 40.6% as average readers (47.7% boys), and 38.8% as good readers (33.9% boys). One child was not evaluated by her teacher.

Procedure

The data were collected by six trainee teachers who were enrolled in a University education program and were assisting the daily teachers for one day a week during a six-month internship in one elementary classroom. The teacher education program in the Netherlands is a study at the vocational level (tertiary education). The trainee teachers in this study combined their teacher education with pursuing a Bachelor's degree in Education and Child Studies.

Both the MRP and the ERAS were translated into Dutch and then translated back into English by a bilingual colleague. The trainee teachers and the experimenter collaborated to improve the wording of the questionnaire so that each item was comprehensible for fifth and sixth graders. Data were collected about one month after the start of the new school year. In each classroom, all children received a booklet with the questionnaires. Each question was read aloud by the trainee teachers to make sure that poor readers would also be able to understand. The ERAS was administered first to the children, and the full MRP one week later.

Statistical Analyses

To analyze the data, we used the statistical package SPSS (version 20). We checked the data on missing values and decided that a maximum of three missing values on one scale (consisting of ten items) was allowed for an average scale score. Full data were available for 157 children.

Since we had children from the fifth and sixth grade participating in the study, we used an independent samples *t*-test to determine possible grade differences on reading self-concept, value of reading, reading attitude, and teacher-perceived reading comprehension. No differences were found between children attending fifth and sixth grade ($-1.59 < ts > .56$, $ps > .12$), so the analyses were carried out with the entire group of participants.

RESULTS

Gender Differences

An independent samples *t*-test showed that there were no gender differences in reading self-concept ($t(155) = .92$, $p = .359$), but there were gender differences in children's reading task value ($t(156) = -3.08$, $p = .002$), and reading attitude ($t(155) = -2.72$, $p = .007$), with girls scoring higher than boys on both scales (see Table 2.1). Teacher-perceived reading comprehension was marginally significant at the $p = .05$ level, implying that teachers tended to perceive girls as better at reading comprehension than boys ($t(157) = -1.95$, $p = .053$).

These results suggested that there might be gender differences in the relations between children's reading motivation and the role of teacher perceptions, as we had expected. In the next set of analyses we therefore examined boys' and girls' scores separately.

Table 2.1 *Descriptives and gender differences on the subscales measuring reading motivation and teacher-perceived reading comprehension*

	All			Boys			Girls			*t*-value gender differences
	n	Mean (*SD*)	Range	*n*	Mean (*SD*)	Range	*n*	Mean (*SD*)	Range	
Reading self-concept	157	2.86 (.39)	1.90 – 3.70	67	2.89 (.43)	1.90 – 3.70	90	2.83 (.37)	2.00 – 3.63	.92
Reading task value	158	2.73 (.48)	1.30 – 3.80	67	2.60 (.43)	1.70 – 3.80	91	2.83 (.49)	1.30 – 3.80	-3.08**
Reading attitude	157	2.61 (.58)	1.10 – 4.00	67	2.46 (.55)	1.40 – 3.90	90	2.71 (.57)	1.10 – 4.00	-2.72**
Teacher-perceived reading comprehension	159	2.19 (.75)	1.00 – 3.00	69	2.06 (.75)	1.00 – 3.00	90	2.29 (.74)	1.00 – 3.00	-1.95

**$p < .01$

The Role of Teacher-Perceived Reading Comprehension

Correlational analyses (see Table 2.2) showed that reading self-concept, reading task value, and reading attitude were interrelated for both boys and girls ($.30 < rs > .77$). Teacher-perceived reading comprehension did not significantly correlate with boys' variables ($rs \leq .17$), but did relate to girls' reading self-concept ($r = .33$, $p = .001$) and reading task value ($r = .26$, $p = .013$).

Table 2.2 *Correlations between teacher-perceived reading comprehension, reading self-concept, reading task value, and reading attitude for boys (upper diagonal) and girls (lower diagonal)*

		Boys			
		Teacher-perceived reading comprehension	Reading self-concept	Reading task value	Reading attitude
Girls	Teacher-perceived reading comprehension	-	.17	.07	.06
	Reading self-concept	.33**	-	.30*	.41**
	Reading task value	.26*	.36**	-	.69**
	Reading attitude	.16	.51**	.77**	-

*$p < .05$, **$p < .01$

To examine the unique role played by teachers' perceptions of boys and girls separately, three hierarchical, step-wise regression analyses were conducted, with the other motivation factors (i.e., reading self-concept, task value, and attitude) controlled for (see Table 2.3). For example, when predicting reading self-concept (as the dependent variable), reading attitude and reading task value were entered in the first step, and teacher-perceived reading comprehension was entered in the second step.

Reading self-concept

For boys, reading attitude was the only significant predictor of reading self-concept ($\beta = .37$, $R^2_{adj} = .14$, $p = .003$). Adding teacher-perceived reading comprehension in a second step did not significantly improve the model ($\Delta R^2 = .02$, $p = .206$), though the overall model remained significant ($F(3,62) = 4.75$, $p = .005$). For girls, however, teacher-perceived reading comprehension did contribute significantly ($\Delta R^2 = .07$, $p = .004$) to their self-concept as a reader, $F(3,84) = 14.22$, $p < .001$. In this model, reading attitude and teacher perceptions explained 32% of the total variance in self-concept. In sum, the results show that for boys reading attitude was the only significant contributor to explaining variance in reading self-concept, while for girls both reading attitude and teacher perceptions significantly contributed to their reading self-concept.

Reading task value

For boys, the only significant predictor of reading task value was reading attitude ($\beta = .68$, $R^2_{adj} = .47$, $p < .001$). Again, adding teacher-perceived reading comprehension did not contribute to an improvement of the model for boys ($\Delta R^2 = .00$, $p = .643$), but the overall model remained significant ($F(3,62) = 19.34$, $p < .001$). For girls, on the other hand, teacher perceptions explained an additional 3% of variance ($p = .020$), next to 59% already explained by child-factors ($F(3,84) = 46.65$, $p < .001$). Reading attitude ($\beta = .79$, $p < .001$) and teacher-perceived reading comprehension ($\beta = .17$, $p = .020$) both significantly predicted reading task value for girls, whereas for boys only reading attitude played a part in explaining differences in reading task value.

Reading attitude

For boys, both reading self-concept ($\beta = .21$) and reading task value ($\beta = .63$) significantly predicted reading attitude ($R^2_{adj} = .51$, $p < .001$). Also for girls, both motivation variables were significant, with task value ($\beta = .68$) being a bigger contributor to reading attitude than self-concept ($\beta = .26$). Both variables explained 65% of total variance for girls ($p < .001$). In neither the case of boys ($F(3,62) = 22.66$, $p < .001$), nor girls ($F(3,84) = 56.30$, $p < .001$) did teacher perceptions significantly contribute to explaining differences in reading attitude (for boys: $\Delta R^2 = .001$, $p = .692$); for girls: $\Delta R^2 = .01$, $p = .075$).

Table 2.3 *Multiple regression of reading self-concept, reading task value, reading attitude, and teacher-perceived reading comprehension*

Dependent variable	Predictors	Boys		Girls	
		ΔR^2	β	ΔR^2	β
Reading self-concept	Step 1:	.14**		.25***	
	Reading task value		.05		-.03
	Reading attitude		.37*		.54***
	Step 2:	.02		.07**	
	Reading task value		.04		-.13
	Reading attitude		.37*		.58***
	Teacher-perceived reading comprehension		.15		.27**
Reading task value	Step 1:	.47***		.59***	
	Reading self-concept		.03		-.02
	Reading attitude		.68***		.78***
	Step 2:	.00		.03*	
	Reading self-concept		.02		-.08
	Reading attitude		.68***		.79***
	Teacher-perceived reading comprehension		.04		.17*
Reading attitude	Step 1:	.51***		.65***	
	Reading self-concept		.21*		.26***
	Reading task value		.63***		.68***
	Step 2:	.00		.01	
	Reading self-concept		.22*		.29***
	Reading task value		.63***		.70***
	Teacher-perceived reading comprehension		-.04		-.12
n		66		88	

*$p < .05$, **$p < .01$, ***$p < .001$

DISCUSSION

The aim of this study was to investigate the unique role played by teacher perceptions of reading comprehension in children's reading motivation, with attention to possible gender differences. First, this study found significant relations between reading self-concept, reading task value, and reading attitude as our three dimensions of reading motivation, for both boys and girls. Second, girls scored higher than boys on reading task value and attitude, which confirms previous research (e.g., McKenna et al., 1995a; Kush & Watkins, 1996; Wigfield et al., 1997). We did not find gender differences in self-concept, which may be explained by the fact that we tested fifth and sixth graders at the start of the school year, whereas previous studies have shown that these differences only start

to become noticeable by then (Cole et al., 1999; Jacobs et al., 2002). Perhaps in an older age group gender differences in reading self-concept would have been found. In addition, there was a marginally significant difference between teachers' perceptions of boys' and girls' reading comprehension, with a trend towards girls being perceived as better at reading comprehension than boys. Third, an important finding in our study was that clear gender-typed patterns appeared in the relation between teacher-perceived reading comprehension and children's reading motivation. In the case of boys, teacher perceptions had no influence on their reading motivation, whereas in the case of girls, teacher perceptions did predict their reading self-concept and their reading task value, along with reading attitude.

One reason why teacher perceptions only play a part in girls' reading motivation might be that, in general, girls appear to be more susceptible to the opinions of significant others than boys (Dweck & Bush, 1976; Stipek & Hoffman, 1980). An explanation offered for this is that boys develop an internal standard for self-evaluation, which makes them more or less independent from the opinions of others, whereas girls rely much more on external feedback to judge their performance (Correll, 2001; Daniels, Creese, Hey, Leonard, & Smith, 2001; Dweck & Bush, 1976; Lee et al., 2013; McClure et al., 2004; Stipek & Hoffman, 1980). Furthermore, among girls there is a tendency to have lower self-expectations than their abilities justify and task success is not translated automatically into higher confidence. This is not the case for boys, who tend to overestimate themselves (Cole et al., 1999; Durik et al., 2006; Stipek & Hoffman, 1980).

Although our findings show that both reading self-concept and reading task value for girls are predicted by teacher-perceived reading comprehension, we did not find the same relationship for reading attitude. For boys, there was no relationship between reading attitude and teacher perceptions either. This suggests that whether children like reading or not may not be directly affected by their teachers' perceptions of their reading skills. It should be noted that, in our study, we used the recreational reading scale from the Elementary Reading Attitude Survey (McKenna & Kear, 1990), which is linked to reading at home, as opposed to the academic reading scale, which focuses on reading at school. Using the academic reading scale might have led to different results, even though the two scales have moderate correlations ($r = .62$ according to Kush & Watkins, 1996; and $r = .64$ according to McKenna & Kear (1990). Another possible explanation is that reading attitude, at least recreational reading attitude, is less likely to be

influenced by classroom practices and more by the home literacy environment. Relations between a stimulating home literacy environment and a positive reading attitude have indeed been shown in numerous studies, although it is not yet clear whether there is a difference between academic and recreational reading (Baker, Scher, & Mackler, 1997; Baker & Scher, 2002; Katzir et al., 2009). However, since recreational reading is related to reading performance (Mol & Bus, 2011), we chose to include only this scale of the ERAS.

Furthermore, we did find an indirect relation between teacher perceptions and reading attitude, since reading attitude was found to be the strongest predictor of both reading self-concept and reading task value. Our findings are supported by the integrated model of reading attitude (McKenna et al., 1995b), which assumes that specific reading experiences and the expectations of significant others affect reading attitude. This emphasizes the importance of a stimulating home literacy environment, in which children are encouraged to read by their parents and siblings, and a positive reading environment at school, where they can enjoy reading books that match their personal interest. This may positively affect their attitude towards reading, and consequently, their self-concept and reading task value (Guthrie & Davis, 2003; Guthrie et al., 2007b). Since students with high reading motivation are more likely to read more recreationally, they will create more opportunities for themselves to improve their reading performance as well (Mol & Bus, 2011).

The mechanism through which teacher perceptions may affect children's reading motivation is not quite clear yet, but there might be an effect of teaching style. Teacher behavior, such as their availability to the students, seems to mediate the relation between teacher perceptions and student motivation (Urhahne, 2015). Children considered to be low achievers have been shown to receive different opportunities to acquire reading skills, for example by being placed in a separate group with other low achievers to receive instruction (Harris & Rosenthal, 1985; Jussim, 1989). Children's interpretations of differential treatments may affect their self-concept, and, consequently, they may adjust their own expectations to that of their teacher (Kuklinski & Weinstein, 2001; Stipek & Daniels, 1988). This seems to be especially the case in classrooms where feedback about children's performance is salient, and to begin in Grade 5 (Kuklinski & Weinstein, 2001). Although we did find a relation between teacher perceptions and reading self-concept in our study of children in Grades 5 and 6, we did not distinguish between teaching styles. Future research should evaluate whether the relation between children's

reading comprehension skills, as perceived by their teacher, and children's reading motivation is indeed affected by classroom practices.

The findings of this study are important to keep in mind in educational practice. Since girls' reading self-concept and task value are predicted by teacher perceptions, teachers should beware of displaying negative perceptions towards poor readers in their classrooms, as (female) students might develop a negative reading motivation in response, which will probably lead to less frequent reading and therefore fewer opportunities to practice and improve reading skills (Kush & Watkins, 1996; Kush et al., 2005; McKenna et al., 1995a; Mol & Bus, 2011; Urhahne, 2015). The significance of expressing high reading expectations towards all students must therefore be emphasized, for example, by encouraging children to read a difficult book of their choice.

There are some issues that could be addressed in future research. First, we used the teacher-perceived reading comprehension scores as a proxy for teacher perceptions, but these two concepts might not be completely interchangeable. Second, there may have been rating differences between the teachers of the six participating schools. Since we did not have access to children's actual reading achievement scores, an evaluation of the accuracy of teacher ratings was not possible. However, even if teacher perceptions do not match performance, these may still exert an influence on children's reading motivation, for example when children feel they are perceived as a poor reader and therefore become less interested in reading. Interestingly, it has been shown that children from fourth grade onward were able to perceive teacher perceptions, even when only nonverbal information was available (Babad & Taylor, 1992). While watching a ten-seconds video clip, children were able to tell when teachers were interacting with a student for whom they had high expectations versus a low expectation student. This seems to show that teachers may, sometimes unintentionally, transmit their perceptions of their students' skills to their nonverbal and verbal interactions with these students, and students actually pick up these signals and incorporate these perceptions into their self-concept (Babad et al., 1991; Gill & Reynolds, 1999; Harris & Rosenthal, 1985; Kuklinski & Weinstein, 2001; Rubie-Davies, 2006; Urhahne, 2015). Finally, we did not address children's actual reading behavior in this study. It can be expected, however, that children with high reading motivation read more recreationally (e.g., Guthrie et al., 1999; Morgan & Fuchs, 2007), so that teacher perceptions may also affect children's actual reading behavior. Future studies might examine the relations between teacher perceptions and both children's

actual reading performance and reading behavior to learn more about the mechanisms at play.

In conclusion, we found a relation between three dimensions of boys' and girls' reading motivation and teacher perceptions of their reading comprehension skills. It is therefore in line with the multi-dimensional approach to reading comprehension that is found increasingly in current reading research. According to this approach, children's reading behavior and reading comprehension is influenced not only by cognitive and linguistic factors. Motivational factors, like reading attitude, reading self-concept, and reading task value appear to be important as well. Furthermore, this study has shown the relevance of another construct, teacher perceptions, which seems to play a unique role in girls' reading motivation. Finally, considering the gender differences we found, this study might have some educational implications, for example by making teachers aware of the influence that their perceptions can have on their students and of the importance of creating a supportive classroom. Our findings contribute to the ongoing search for an explanation for the gender differences in reading performance that are often shown, and could thus help to develop and evaluate new reading interventions which take these differences into account.

ACKNOWLEDGMENTS

We would like to thank Regina Baas, Chris van de Geer, Jeroen Immink, Nina Jaasma, Milou Overtoom, and Toeschka Schoots for their help in collecting the data.