

# CHAPTER 3

## **Parents adjust the quality of their home literacy environment to the reading interest of their third to sixth graders**

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## **ABSTRACT**

This study examines the home literacy activities that parents of primary school children in third-to-sixth grade engage in, in relation to both parents' and children's reading interest. First, we found that our sample of 452 parents engaged in a number of home literacy activities (such as having their child tell about the stories he/she is reading), yet mostly not on a daily basis. In addition, the frequency of engaging in home literacy activities (e.g., reading to the child, engaging in book talk) declined from Grade 3 to Grade 6. Secondly, we found that parents adjusted the frequency of their home literacy activities to their perception of their child's reading interest, rather than to their own reading interest. That is, parents who noticed that their child was interested in reading engaged in many home literacy activities, even when they were not interested in reading themselves. Finally, our study on a subsample of 89 third and fourth graders showed that the frequency of home literacy activities predicted children's self-reported reading interest. Our study implies that engaging in home literacy activities can contribute to the reading interest of children in the higher grades of primary school. Reading campaigns should focus on making parents more aware of the benefits of home literacy activities after the pre- and early school years.

## INTRODUCTION

Children usually become familiar with reading and writing long before formal instruction starts. At home, parents can engage in different kinds of literacy activities with their children and surround them with books, which can be considered aspects of the home literacy environment (e.g., Burgess et al., 2002; Tichnor-Wagner et al., 2015; Van Steensel, 2006; Yeo et al., 2014). In addition, parents can serve as a positive source of identification to their children by reading books themselves (e.g., Gonzalez-DeHass, Willems, & Holbein, 2005; Notten & Kraaykamp, 2010; Yeo et al., 2014). Many previous studies have shown that children who develop in a rich home literacy environment perform better on language and reading tasks (e.g., Bus et al., 1995; Mol & Bus, 2011). Some other studies have related the home literacy environment to various aspects of children's reading habits and enjoyment (i.e., reading interest, see Dobbs-Oates, Pentimonti, Justice, & Kaderavek, 2015), and they have found positive results as well, both for preschoolers and for children in higher primary school grades (e.g., Baker & Scher, 2002; DeBaryshe, 1995; Yeo et al., 2014). However, most of the studies that have been performed thus far have only taken the home literacy environment during preschool years in account, instead of primary school children's current home literacy environment. In the study described in the current paper, we examine the home literacy environment of third to sixth graders to better understand how parents are involved in supporting upper primary school children's reading interest at present.

The home literacy environment is considered to be a multifaceted construct that consists of a variety of home literacy activities, resources and attitudes. First, it consists of the various home literacy activities that parents and children engage in together, such as shared reading, talking about books, and library visits. Second, parents' literacy resources, especially the amount of books at home, contribute to the quality of the home literacy environment. Finally, children's home literacy environment is determined by parental beliefs and attitudes about reading, and parental reading habits (e.g., Phillips & Lonigan, 2009; Tichnor-Wagner et al., 2015; Yeo et al., 2014). All three aspects of the home literacy environment are taken into account in the current study, yet our main focus is on the home literacy activities.

### **Three Aspects of the Home Literacy Environment**

The home literacy activity that has received the most attention in previous home literacy environment studies is shared reading. Most studies on parent-child book reading have found small to medium effect sizes for the relation between shared reading and a variety of language and (early) reading measures (Bus et al., 1995; Mol & Bus, 2011; Scarborough & Dobrich, 1994). More specifically, children who are exposed to home literacy activities that focus on the reading process itself (“high priority” activities, such as shared reading) and that require active participation of the child are more likely to have higher language and reading skills than children who are involved in “passive” activities that are less related to reading, such as storytelling without books (Burgess et al., 2002; Van Steensel, 2006). In the current study, parents are asked to report on a combination of active and passive home literacy activities they engage in with their third to sixth graders to find out which activities are part of the home literacy environment of children in the upper grades of primary school.

As children get older and start reading more independently, parental involvement in reading appears to decline (e.g., Hill & Taylor, 2004; Huysmans, 2013; Izzo, Weissberg, Kaspro, & Fendrich, 1999; Klauda, 2009). Due to information at schools, national reading campaigns, and family literacy programs, most parents are aware of the importance of reading with young children (e.g., Mol, Bus, De Jong, & Smeets, 2008). Yet there seems to be much less attention for the benefits of a rich home literacy environment for older children. However, it is likely that older children can be supported as well by their parents or siblings to become or remain enthusiastic readers, for example by talking about the books children are reading or providing help with selecting interesting reading material (Klauda, 2009). Not much is known, however, about which literacy activities parents of older children engage in. This is therefore the topic of the current study. Furthermore, we aim to investigate whether there are any differences between grades.

Parents’ literacy resources, such as the amount of books available at home, can be considered children’s “physical” home literacy environment (e.g., Burgess et al., 2002; Bus et al., 1995; De Jong & Leseman, 2001; Katzir et al., 2009; Leseman & De Jong, 1998; Scarborough & Dobrich, 1994). Children from families in which many books are available have more opportunities to experience and enjoy printed materials. These families provide a scholarly culture, which is related to: children’s reading comprehension (Park, 2008); mathematics and science performance (Wößmann, 2003); and to their educational attainment, such as graduating

from university (Evans et al., 2010, 2014). These relations were found even after controlling for parental education. In the current study, the amount of books that children have at home is therefore also taken into account. We examine whether grade differences in home literacy activities are present over and above the role of the physical home literacy environment.

Parents' reading attitude, beliefs, and habits contribute to children's home literacy environment as well. It has been shown that children whose parents are enthusiastic about reading are more interested in reading themselves and have a more positive reading self-concept (e.g., Baker & Scher, 2002; DeBaryshe, 1995; Weigel, Martin, & Bennett, 2006; Yeo et al., 2014). Parents who are interested in reading probably convey their reading enthusiasm to their children both by being a reading role model and by engaging in many literacy activities with their children (Baker & Scher, 2002). In addition, the social and emotional climate at home, such as having more positive interactions, can contribute to children's reading development (Britto & Brooks-Gunn, 2001; De Jong & Leseman, 2001). Parents who are more attentive to their children during shared reading are thought to create an affective atmosphere and this contributes to their children's reading interest, as well as their willingness to continue reading independently (Sonnenschein & Munsterman, 2002; Yeo et al., 2014).

### **The Relation between the Home Literacy Environment and Children's Reading Interest**

Individual differences in children's reading are likely to increase as children get older because of the process of reciprocal causation (Stanovich, 1986; Mol & Bus, 2011). According to this model, children who enjoy reading from an early age read more frequently and are more likely to continue their leisure reading routine. That is, children from rich home literacy environments start school with more language and literacy knowledge, which will make it easier for them to learn how to read. They will be more willing to engage in reading activities, so that they have more opportunities to improve their reading skills, which will contribute to their reading enjoyment and reading skills even more. In other words, they enter a positive reading spiral. Children from a less stimulating home literacy environment, on the other hand, might not read much, which will more likely lead to a negative reading spiral so that their reading skills and interest will decrease. Most longitudinal studies support the importance of a high-quality home literacy environment in early childhood. For example, children who are exposed to storybooks in

kindergarten are more likely to be frequent readers in Grade 4 (Sénéchal, 2006). Furthermore, the average time that parents spent reading to a young child (of between 15 and 60 months old) had a positive direct effect on reading motivation and achievement across childhood, and was related to educational success across the academic lifespan (Gottfried, Schlackman, Gottfried, & Boutin-Martinez, 2015). However, since most studies on this topic have been focusing on the home environment of younger children, it is not yet known what happens once older children are in this positive (or negative) reading spiral, and whether the quality of their current home literacy environment affects their reading interest at present.

The reciprocal model of causation suggests that children who enter a negative or positive reading spiral will stay there once they have learned to read independently. It seems more likely, though, that the quality of the home literacy environment remains important for continuing or increasing the reading interest of children in the upper grades of primary school (see Klauda, 2009 for an interesting review on this topic). One hypothesis is that parents will adjust their literacy activities in such a way that they match their children's (perceived) reading interest throughout childhood (Gonzalez-DeHass et al., 2005). For example, parents may engage in more literacy activities with their child when they observe that their child likes to read. This can enhance their child's reading interest even more (Gonzalez-DeHass et al., 2005). Studies among preschoolers have shown that children's interest in reading, as perceived by their parents, was indeed related to the frequency of home literacy activities (e.g., Bracken & Fischel, 2008; Lyytinen, Laakso, & Poikkeus, 1998; Weigel et al., 2006). In contrast, Frijters and colleagues (2000) found no relation between home literacy activities and children's self-reported reading interest in their study on kindergarten children. In addition, a recent cross-sectional study among third graders showed that both children's self-reported leisure time reading and home literacy environment (i.e., amount of books at home and parental reading to the child) were positively related to their reading motivation (Verhoeven & Van Elsäcker, 2016). In our study, in contrast, we combine parental and child reports to examine whether the frequency of the home literacy activities they currently engage in (according to their parents) may contribute to children's reading interest, as perceived by their parents as well as by asking children directly. In order to examine children's self-reported reading interest we select a representative subsample of third and fourth grade children whose parents have responded to the questionnaire. The selected children will participate in an individual interview.

Furthermore, we examine the relations between parents' and children's reading interest to the home literacy activities they engage in. Parents who are interested readers themselves may be better able to stimulate their child's reading interest, because they are more likely to be familiar with appropriate books and activities that match their child's reading level and (general) interests. In addition, when parents perceive an increased reading interest in their child, this might fuel their own willingness to engage in more home literacy activities (Gonzalez-DeHass et al., 2005). Not much is yet known, however, about the consequences of having parents who are not interested in reading themselves. It might be that these parents engage in fewer home literacy activities and are a negative reading role model to their children. This could be detrimental for children's reading interest. If it is indeed the case, however, that parents adjust their home literacy environment according to their children's reading interest, our study should show that parents engage in home literacy activities when they perceive that their child is interested in reading, regardless of their own reading interests. We will look into this interplay by examining both parents' perceptions of their children's reading interest, and their own reading interest in relation to the home literacy activities that they engage in.

### **Current Study**

In the study presented here, we examine the current home literacy environment of third to sixth graders. That is, we examine the home literacy activities that parents of children in the upper grades of primary school engage in and will also look at the amount of books at home and at parental reading interest. Furthermore, we examine whether parents adjust their home literacy activities to their perception of their child's reading interest and/or to their own reading interest. We hypothesize that parents will frequently engage in home literacy activities when they perceive that their children are interested readers, even when they are not interested in reading themselves.

Finally, we relate the home literacy activities to children's self-reported reading interest. For this part of the study, we select children from the two lowest grades in our sample, i.e., Grade 3 and 4, because we expect more variation in parental involvement for younger than for older children. It is generally believed that parents are more involved in the life of younger children, and younger children are more influenced by parental values than older children (Jeynes, 2007; Stevenson & Baker, 1987). Hence, we involve multiple respondents in our study,

as we combine parent reports with child reports to shed more light on children's home literacy environment in relation to both parents' and children's reading interest.

We seek to answer the following research questions:

1. Which home literacy activities do parents engage in with their third-to-sixth grade children and are there differences between grades?
2. How do parents' own and children's perceived reading interest contribute to the frequency of the home literacy activities?
3. What is the relation between the home literacy activities of third and fourth graders and children's self-reported reading interest?

## METHOD

### Procedure

This study consisted of two phases. In the first phase, all parents with a child in Grade 3 to 6 in the five participating schools received a questionnaire. Parents were free to decide whether or not to complete the questionnaire and to return it at school. Questionnaires were collected by the classroom teacher and then handed to the researchers. In the second phase, we selected children from Grade 3 and 4, whose parents had completed the parental questionnaire, to participate in an individual interview. The parents of these children received an information letter and a consent form to give active consent for participation of their child. We selected children from all five participating schools. Care was taken to select a sample that was representative of the full sample of participants. That is, the subsample had comparable distribution of child's age and gender, and of parental education as the third and fourth graders in the full data sample (see Phase 2 – Participants).

### Phase 1: Parental Questionnaires

#### *Participants*

In the first phase of the study, 452 parents participated. These parents were asked to complete a questionnaire about their son ( $n = 228$ ) or daughter ( $n = 224$ ). Their children attended one of the following grades: Grade 3 ( $n = 124$ ), Grade 4 ( $n = 119$ ), Grade 5 ( $n = 106$ ), or Grade 6 ( $n = 103$ ). Children were on average 10.49 years old ( $SD = 1.26$ ,  $range = 6.90 - 13.40$  years). The questionnaires were distributed



at five mainstream primary schools in the south of the Netherlands. Each school contributed between 8.6% and 40.7% to the total amount of participants. Differences in participation rate can be attributed to differences in school size, enthusiasm of the parents to respond to the questionnaire, and encouragement of the school teachers to hand in the questionnaires.

Most questionnaires were completed by the mothers ( $n = 386$ ) or fathers ( $n = 55$ ). The remaining questionnaires were completed by someone else ( $n = 9$ ), for example by a caregiver or by both parents together, and we had two missing values (.4%). In this paper, we will use both “respondent” and “parent” to refer to the respondent, even though not all respondents were the children’s (biological) parents.

### ***Demographics***

We asked for the highest educational level of the person who completed the questionnaire and we categorized the answers according to the classification of the Center for Statistics Netherlands (2013). In our sample, 14.6% ( $n = 66$ ) had a low educational level, 39.8% ( $n = 180$ ) had finished an education at intermediate level, and 41.6% ( $n = 188$ ) had a high educational level (4.0% missing values). To control for children’s socio-economic status, we treated the respondents’ education as a covariate in our analyses.

### ***Home literacy environment***

Parents responded to questions and statements on a questionnaire that tapped into three aspects of the home literacy environment, i.e., the literacy activities that they engaged in with their children, the amount of books they had at home, and their own reading interest.

### ***Home literacy activities***

The questionnaire included nine items (seven questions and two statements) that tapped into a variety of home literacy activities. All items were scored on a four-point Likert scale, ranging from “never” to “(almost) every day” for the questions, and from “strongly disagree” to “strongly agree” for the statements. The items are presented in Table 3.1. Item 2 and 3 were statements and the remaining items were questions.

For each parent a mean score was calculated based on these nine items (one missing value per parent was allowed), so that a higher score on this measure

reflected more frequent home literacy activities. The mean score was 2.43 ( $SD = .41$ ,  $range = 1.33 - 3.56$ ) and the data showed a normal distribution. Cronbach's alpha of this scale was calculated and proved to be acceptable ( $\alpha = .66$ ).

An independent samples  $t$ -test showed a marginally significant difference ( $t(450) = -1.95$ ,  $p = .052$ ) between home literacy activities reported by parents of boys ( $M = 2.39$ ,  $SD = .42$ ) and girls ( $M = 2.47$ ,  $SD = .40$ ). A marginally significant difference ( $t(439) = 1.96$ ,  $p = .051$ ) was also found between male ( $M = 2.33$ ,  $SD = .39$ ) and female ( $M = 2.44$ ,  $SD = .41$ ) respondents. Between schools no differences were found ( $F(4,447) = 1.01$ ,  $p = .399$ ). Therefore, child's gender and respondent's gender were included as covariates in our analyses.

### ***Amount of books at home***

Parents gave an indication of their physical home literacy environment. First they reported how many adult books they owned (newspapers and magazines excluded): (a) 0-10 books; (b) 11-25 books; (c) 26-100 books; (d) 101-200 books; (e) 201-500 books; (f) over 500 books. A second question focused on the amount of children's books at home: (a) 0-10 books; (b) 11-25 books; (c) 26-50 books; (d) 51-100 books; (e) over 100 books. A mean score was calculated for each parent ( $M = 3.12$ ,  $SD = 1.09$ ,  $range = 1.00 - 5.50$ ). No missing values were allowed. Cronbach's alpha showed that these two items formed a reliable scale ( $\alpha = .75$ ).

### ***Parents' reading interest***

Parents responded to five statements that tapped into their own reading habits and enjoyment on a four-point Likert scale: (a) I enjoy reading; (b) I exchange books with family and friends; (c) I always read before going to sleep; (d) I always put a book in my bag when I leave home; (e) I do not know how to find time to read (reverse coded). Throughout the rest of this paper, we will use the term "reading interest" to refer to reading habits and enjoyment.

A mean score was calculated for each parent, and a higher score reflected more positive reading habits. The mean score was 2.64 ( $SD = .70$ ,  $range = 1.00 - 4.00$ ). The scale had a good reliability ( $\alpha = .79$ ). No differences were found between schools ( $F(4,447) = 1.65$ ,  $p = .162$ ).

### ***Parents' perceptions of their children's reading interest***

Three items were used to assess children's reading habits and enjoyment, i.e., their reading interest, according to their parents. Two statements were presented on

a four-point Likert scale: (a) My child enjoys reading; (b) My child already reads so much at school that he/she does not want to read at home anymore (reverse coded). The third item was a question asking the parents how many books their child reads in a month (none / 1 or 2 / 3 or 4 / 5 or more). A mean score was calculated per parent, and a higher score reflected a more positive perception of their children's reading interest. No missing values were allowed. The mean score on this scale was 2.74 ( $SD = .68$ ,  $range = 1.00 - 4.00$ ). Cronbach's alpha ( $\alpha = .74$ ) showed a reliable scale. A Oneway ANOVA showed no school differences on this variable ( $F(4,447) = 1.33$ ,  $p = .256$ ).

## **Phase 2: Child Interviews**

### ***Participants***

The second phase of our study consisted of individual interviews with a selection of the respondents' children. A total of 89 children participated in this phase (46 boys; 43 girls). Only children from Grade 3 (55.1%) and Grade 4 (44.9%) were selected. Their mean age was 9.49 years ( $SD = .72$ ,  $range = 8.14 - 11.29$ ). We performed an independent samples *t*-test to examine whether the age of the children in the subset was different from the age of the third- and fourth-graders who were not selected, but this was not the case ( $t(235) = .74$ ,  $p = .461$ ). In the subset, 24.7% of the parents had a low educational level, 12.4% had an intermediate level, and 61.8% had a high educational level (1 missing value). An independent samples *t*-test showed no differences in parental education between the 89 selected children and the rest of the sample ( $t(114.97) = -1.19$ ,  $p = .235$ ), nor with their peers in third and fourth grade who were not included ( $t(144.82) = -1.86$ ,  $p = .065$ ). Therefore, we assumed that our subset was a representational sample for the whole group of third- and fourth-graders.

### ***Interview***

All children were interviewed individually by a research assistant. First, she asked them some background questions, and then she submitted a questionnaire to assess their reading enjoyment.

### ***Reading interest***

We used ten statements of the Elementary Reading Attitude Survey (ERAS; McKenna & Kear, 1990) to assess children's reading interest. We used the recreational subscale (e.g., "How do you feel when you read a book on a rainy

Saturday?”), because we were interested in recreational reading only and not in academic reading. Each statement was read to the children by the research assistant, but they could also read along on the paper in front of them. The statements were followed by four smileys, ranging from very negative (do not like it at all = 1) to very positive (like it a lot = 4). The children responded to each statement by choosing the smiley that best represented their feelings. Since the questionnaire was submitted in a one-on-one setting, we had no missing values.

A sum score was created so that a higher score reflects more reading enjoyment ( $M = 27.71$ ,  $SD = 4.54$ ,  $range = 18.00 - 38.00$ ). Reliability analyses showed that the ten statements in our sample formed a reliable scale ( $\alpha = .73$ ).

## RESULTS

### Home Literacy Activities

To answer our first research question, we first examined which home literacy activities parents actually engaged in. As covariates children's gender, respondents' gender and education, and amount of books at home were included. Repeated-measures ANCOVA with Greenhouse-Geisser correction showed significant differences in the frequency of literacy activities ( $F(5.96, 2473.72) = 12.47$ ,  $p < .001$ ,  $\eta_p^2 = .03$ ). In Table 3.1 the average score of each home literacy activity is listed. The three most frequently reported home literacy activities were (1) reading to the child in kindergarten; (2) being aware of the kind of reading material the child enjoys; and (3) having the child tell about the stories he/she is reading. Significant differences ( $ps < .001$ ) were found between the frequency of each of these home literacy activities. The four least reported home literacy activities were: (1) reading out loud at home by the child; (2) taking the child to a library/bookstore; (3) reading to the child at present; and (4) helping the child select a new book. These do not show significant differences in frequency between each other.

Next, we conducted a multivariate analysis of covariance (MANCOVA) to examine whether there were differences between grades in parents' self-reported home literacy activities, while taking into account children's gender, respondents' gender and parental education, and amount of books at home. Wilk's Lambda indeed showed an effect of grade on our nine home literacy activities together ( $\lambda = .735$ ,  $F(27, 1180.53) = 4.87$ ,  $p < .001$ ,  $\eta_p^2 = .10$ ). Univariate tests revealed that these grade differences were found in three home literacy activities in particular:

(1) reading to the child at present, which showed both a difference between Grade 3 and all other grades ( $ps < .001$ ), and between Grade 4 and Grade 6 ( $p = .003$ ); (2) reading out loud by the child, which showed both a difference between Grade 3 and all other grades ( $ps < .001$ ), and between Grade 6 and all other grades ( $ps \leq .008$ ); and (3) talking about books, which showed both a difference between Grade 3 on the one hand, and Grade 5 ( $p = .021$ ) and Grade 6 ( $p = .001$ ) on the other hand. In all these results the frequency of the home literacy activity was higher for the lower grades compared to the higher grades.

**Table 3.1** Mean scores and standard errors for the nine home literacy activities for the overall sample and per grade

	Overall <sup>a</sup>	Grade 3	Grade 4	Grade 5	Grade 6	Grade differences <sup>b</sup>
1. Reading to the child in kindergarten	3.66 (.03)	3.67 (.06)	3.57 (.06)	3.65 (.07)	3.75 (.07)	
2. No idea what kind of reading material my child enjoys (reverse coded)	3.35 (.03)	3.30 (.06)	3.31 (.06)	3.35 (.06)	3.44 (.07)	
3. Child tells about the stories he/she is reading.	2.96 (.04)	2.88 (.07)	2.96 (.07)	3.05 (.07)	2.93 (.07)	
4. Talking about the book the child is reading	2.35 (.04)	2.58 (.07)	2.36 (.07)	2.26 (.08)	2.15 (.08)	3>5,6
5. Reading a book in the presence of your child	2.31 (.05)	2.25 (.09)	2.24 (.09)	2.32 (.10)	2.45 (.10)	
6. Child reads out loud at home	2.01 (.05)	2.54 (.09)	2.00 (.09)	1.93 (.10)	1.48 (.10)	3>4,5,6 6<3,4,5
7. Taking the child to a library/ book store	1.86 (.03)	1.82 (.05)	1.93 (.05)	1.88 (.05)	1.82 (.05)	
8. Reading to the child at present	1.71 (.05)	2.26 (.08)	1.67 (.08)	1.57 (.09)	1.24 (.09)	3>4,5,6 4>6
9. Helping the child select a new book	1.67 (.03)	1.73 (.05)	1.75 (.05)	1.59 (.06)	1.59 (.06)	

Note. In the analyses children's gender, respondents' gender and education, and amount of books at home are included as covariates.

<sup>a</sup>Overall scores are based on ANCOVA analyses ( $N = 420$ ). Significant differences ( $p < .05$ ) in home literacy activities: 1 > 2 > 3 > 4, 5 > 6, 7, 8, 9

<sup>b</sup>Grade scores and grade differences are based on MANCOVA analyses. Grade 3,  $n = 112$ ; Grade 4,  $n = 114$ ; Grade 5,  $n = 99$ ; Grade 6,  $n = 95$ .

### Relation Between Parents' and Children's Reading Interest, and Home Literacy Activities

To answer our second research question, we examined whether the interaction between parents' own reading interest and children's perceived reading interest predicted the home literacy activities that they engaged in. We used the PROCESS

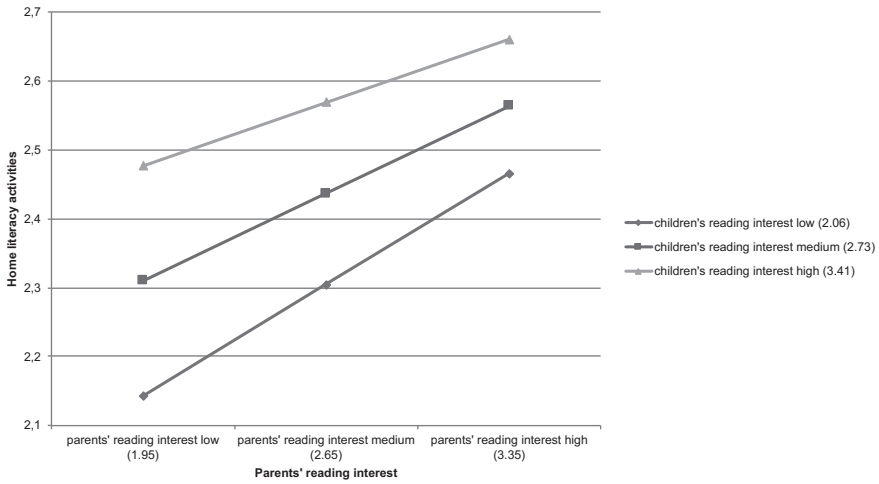
macro (Hayes, 2013), implemented in the statistical package SPSS (version 23). In the model, we included home literacy activities as the dependent variable, parents' reading interest as the independent variable, and children's reading interest as the moderator. Children's grade and gender, respondents' gender and parental education were added as covariates. We also included amount of books at home as a covariate to find out whether parents' and children's reading interest would explain unique variance over and above the physical literacy environment.

We found a significant interaction between parents' and children's reading interest in predicting the frequency of engaging in home literacy activities ( $b = -.07$ ,  $t(425) = -2.21$ ,  $p = .028$ ). The overall model explained 35.6% of variance in home literacy activities ( $R^2 = .36$ ,  $F(8,425) = 29.31$ ,  $p < .001$ ). Of our covariates, only grade was significant ( $b = -.09$ ,  $t(425) = -6.07$ ,  $p < .001$ ). Amount of books only tended to play a role ( $b = .03$ ,  $t(425) = 1.72$ ,  $p = .086$ ).

In Figure 3.1 the interaction is displayed. The three lines represent children's reading interest one standard deviation above the mean (upper line), on average (middle line), and one standard deviation below the mean (lower line). All three conditional effects were significant ( $ps < .001$ ). These effects reveal that parents who are interested in reading themselves and perceive that their children are also interested in reading, engage in home literacy activities most frequently. However, parents who are not interested in reading, yet perceive that their children are, engage in home literacy activities to the same extent as the reading-interested parents. Parents who are interested in reading, but whose children are not, engage in significantly fewer home literacy activities compared to families in which both parents and children are interested in reading. In homes where neither parents nor children are interested in reading, the fewest good literacy practices are reported.

### **Relation Between Home Literacy Activities and Children's Reading Interest**

For the next phase of the study, 89 children whose parents had completed the parental questionnaire, were selected to participate in an individual interview. First, we checked the relations between our variables of interest. Table 3.2 shows that the correlations between our variables of interest in our subsample ( $n = 89$ ) are largely comparable to the correlations for the full sample ( $N = 452$ ), so the subsample seems to be a representative subset of the full sample. In the subsample, moderate relations were found between children's self-reported reading interest (ERAS) and children's reading interest as perceived by their parents ( $r(87) = .43$ ,  $p < .001$ ).



**Figure 3.1** The frequency of home literacy activities (y-axis) in relation to both parents' reading interest (x-axis), and children's reading interest (separate lines). For both parents' and children's reading interest, the values of the mean and one standard deviation below and above the mean are displayed.

**Table 3.2** Correlations between home literacy activities, parental education, parents' and children's perceived reading interest, and children's self-reported reading interest

	Home literacy activities	Parental education	Parent's reading interest	Child's perceived reading interest	Amount of books at home	Child's self-reported reading interest
Home literacy activities	-	.16	.40***	.49***	.34***	.30**
Parental education	.08	-	.38***	.09	.73***	.06
Parent's reading interest	.39***	.20***	-	.21*	.48***	.19
Child's perceived reading interest	.45***	.13**	.22***	-	.15	.43***
Amount of books at home	.31***	.41***	.43***	.32***	-	.15

Note Lower half of the table – zero-order correlations for the full sample (N = 452); upper half of the table – zero-order correlations for the subset (n = 89).

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

We performed a multiple regression analysis to examine whether parents' home literacy activities predicted children's self-reported reading interest, while controlling for gender of the child, and their parents' gender and education (see Table 3.3).

We did not include grade as a control variable anymore, because only third- and fourth-graders were included, and we found no grade differences in their reading interest ( $t(87) = .39, p = .699$ ). After entering the covariates in the first step, the amount of books at home were added in a second step to examine if the mere presence of books would contribute to children's self-reported reading interest. In the final step, home literacy activities, as reported by the parents, were added.

The overall model ( $F(5,82) = 2.80, p = .022; R_{adj}^2 = .09$ ) showed that home literacy activities significantly predicted children's reading interest ( $\beta = .22, t(82) = 2.00, p = .049$ ). The amount of books at home was not a significant contributor in this model ( $\beta = .08, t(82) = .47, p = .640$ ).

**Table 3.3** Hierarchical multiple regression analysis predicting children's self-reported reading interest

	Reading interest		
	$\beta$ - Step 1 <sup>a</sup>	$\beta$ - Step 2 <sup>b</sup>	$\beta$ - Step 3 <sup>c</sup>
Child's Gender	.29**	.28*	.25*
Respondent's gender	-.02	-.01	-.01
Parental education	.12	-.01	.02
Amount of books at home		.18	.08
Home literacy activities			.22*

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

<sup>a</sup>  $\Delta R^2 = .09, p = .049$ ; <sup>b</sup>  $\Delta R^2 = .02, p = .232$ ; <sup>c</sup>  $\Delta R^2 = .04, p = .049$

## DISCUSSION

Children's home literacy environment is a well-studied topic, especially in the pre- and early school years. However, not many studies so far have examined the home literacy environment in the upper grades of primary school by means of a combination of parent and child report (see Klauda, 2009). Our study shows that parents of upper primary school children still engage in home literacy activities with their children, but the frequency declines between Grade 3 and 6. In addition, parents seem to let their third-to-sixth-graders' reading interest prevail over their own and adjust the frequency of their home literacy activities to their perception of their child's reading interest. That is, parents who perceived that their child was interested in reading, but who were not interested in reading themselves, still engaged in as many literacy activities at home as parents who were interested readers themselves. Finally, children whose parents engaged in many home literacy activities self-reported higher reading interest.



Our study shows that home literacy activities still take place when children are in the higher grades of primary school, yet parents do not engage in these activities on a daily basis. Shared book reading is commonly recognized as an important way to enhance young children's literacy development (e.g., Bus et al., 1995; Mol et al., 2008), and most parents in our sample indeed seemed to have engaged in this activity when their children were young. On average, 92.9% of the parents reported reading to their pre-school child a couple of times per week or even every day. At present, however, the majority of parents of these third to sixth graders (80.5%) reported hardly ever engaging in shared reading (i.e., "never", or "once or twice per month"). Other home literacy activities that hardly ever took place in our sample were: helping the child select a new book (94.9% scored "never" or "once or twice a month"); and taking the child to a book store or library (92.7% scored "never" or "once or twice a month"). This may imply that parents do not consider these home literacy activities a part of a stimulating home literacy environment. It might also be that parents, in general, do not know how to help their child with selecting a new book, because they have not much knowledge about recent children's literature. In addition, when they do not engage in shared reading with their third to sixth graders, they might not know enough about their child's book preferences to help them find their next book. Interestingly, most parents in our sample reported to be very much aware of their children's favorite reading materials (91.4% scored "agree" and "agree a lot").

Furthermore, we showed that there is a decline in the parent-reported frequency of home literacy activities as children get older: children in Grade 3 in our sample were more often being read to by their parent, read more often out loud at home, and engaged in book talk more frequently with their parents than children in higher grades. Interestingly, this decline in home literacy activities mirrors a decline in reading interest and enjoyment during primary school that has been shown by previous studies (McKenna et al., 1995a; Petscher, 2010). Hence, it could be that stimulating parents to engage in more home literacy activities might prevent children's reading interest to drop during primary school.

This assumption is confirmed by our analyses in the subsample of third and fourth graders, which showed that parent-reported home literacy activities predicted children's self-reported reading interest, over and above the amount of books at home. That is, children in Grade 3 and 4 from homes with more frequent home literacy activities were more interested in reading themselves. This is in line with a study among fourth to ninth graders that differentiated

between “readers” and “not-readers”. Both groups were read to when they were young, and were sometimes still encouraged to read, but the parents of the avid readers continued to be involved in their children’s reading by, for example, recommending books to them and engaging in book discussions (Strommen & Mates, 2004). In addition, an extensive review showed that parent involvement in children’s reading was more important than support from teachers or peers in enhancing adolescents’ reading interest (Klauda, 2009). This may imply that the reciprocal causation model (Stanovich, 1986; Mol & Bus, 2011) still is relevant for primary school children’s home experiences. Our results imply that children who are currently supported by their home environment not only enter the positive reading spiral, as predicted by the model, but also stay in the positive spiral when they are able to read independently. Encouraging parents to engage in many home literacy activities with their children in the upper grades of primary school might therefore have positive effects on the reading interest of this age group. It must however be noted that the current cross-sectional study cannot indicate any causal directions. To examine whether causal relations between parents’ and children’s reading interest can indeed be found, longitudinal or experimental studies are required. In addition, our subsample consisted of third and fourth graders only, so it would be interesting to see whether the same relations between home literacy activities and reading interest might be found for fifth and sixth graders or beyond.

Furthermore, our study with the third and fourth graders showed a moderate relation between parental reports of children’s reading interest and children’s self-reported reading interest. This implies that parents were capable of perceiving whether their child was an interested reader or not. Previous studies with younger children have questioned the positive relations between parental reports of children’s reading interest and the frequency of home literacy activities, claiming that these results might be due to inaccurate or biased parental reports (e.g., Frijters et al., 2000). Our study shows that, at least for our age group, parent reports of children’s reading interest are in line with children’s self-reported reading enjoyment. Future studies might, however, include both parents’ and children’s reports, as well as home observations to control for the social desirability bias that might be one of the pitfalls of using self-report measures. In addition, including both parents’ and children’s reports, and home observations would allow for testing the construct validity of the self-report questionnaires that were used in the current study.

Interestingly, our findings suggest that parents adjusted the frequency of their home literacy activities to their child's reading interest. They were able to set aside their own negative feelings toward reading if they perceived that their child was interested in reading. This seems to contradict the "Reading attitude acquisition model", which claims that children's reading interest is influenced by their perceptions of the beliefs of significant others, such as parents, about reading (McKenna et al., 1995a). This model claims that if parents are not very interested in reading it is likely that their children will not consider reading an important activity either. Our results suggest however that parents who are not interested in reading themselves can be very aware of the benefits of reading for their children, and therefore deliberately engage in frequent home literacy activities. For this age group, the activities that parents engage in with their children might be more important than their own reading interest or whether or not they show their children a good reading example. An increased reading interest of their child may further encourage parents to engage in literacy activities even more, leading to a positive spiral pathway (Dobbs-Oates et al., 2015; Gonzalez-DeHass et al., 2005; Grolnick & Slowiaczek, 1994). Put differently, our study showed that children's reading interest seemed to be of primary importance for parents in deciding whether or not to engage in home literacy activities. In contrast, a study among preschoolers showed that parents' own reading interest was a more important factor than children's reading interest in predicting print-concept knowledge (Dobbs-Oates et al., 2015). Perhaps parents of older children are more susceptible for the opinions and feelings of their children, because older children are better able to express their needs and act more independently.

The amount of books at home did not contribute independently to children's reading interest. This indicates that engaging in home literacy activities is more important than the mere presence of books at home with regard to enhancing children's reading interest, at least in our age group. This is contrary to research that focused on children's reading comprehension, which does seem to be related to the amount of books at home. An international comparative study showed a stronger effect of amount of books at home on fourth-graders' reading performance, compared to early home literacy activities and parental attitudes toward reading (Park, 2008). However, the amount of books at home is sometimes assumed to be a proxy for family SES (Park, 2008; Raudenbush, Cheong, & Fotiu, 1996), as is parents' highest educational level. In our study, we did not find any effects of parental education. Instead, we found that encouraging children to

develop an interest in reading requires activities from parents, such as reading to their children and talking about the stories they read, independent of SES.

It should be noted that it is important to consider the atmosphere or affective quality in which the home literacy activities take place when we aim to stimulate children's reading interest (e.g., Klauda, 2009; Sonnenschein & Munsterman, 2002). Parents who showed enjoyment and positive affect while reading to their child, and who engaged in high-quality book talk with their child had children who were more interested in reading (Yeo et al., 2014). In contrast, parents who are over-controlling or who focus too much on external rewards in their home literacy activities probably do not contribute to their children's reading interest (Ginsburg & Bronstein, 1993; Gonzalez-DeHass, 2005). In addition, children's reading interest will be negatively affected when their parents would force literacy activities on their child or persist in them when their child is clearly not enthusiastic about reading, because they believe it is "good for them"; an effect that has been referred to as the "broccoli effect" (Scarborough & Dobrich, 1994).

### **Implications**

Our study implies that parental involvement in the reading activities of children in the upper grades of primary school still plays a role in children's reading interest. Engaging in many home literacy activities might be a good approach to reinforcing the positive reading spiral in primary school and diminishing the decline in reading interest that often takes place over the course of primary school.

National reading campaigns should make parents aware of the importance and benefits of engaging in home literacy activities, such as sharing their own books and discussing about books or articles (Klauda, 2009), even when children are able to read independently. These activities should take place in a positive affective atmosphere as it has been shown that children whose parents consider reading a pleasurable activity have a more positive reading attitude and better reading skills than children whose parents focus on skills instruction (Baker et al., 1997; Britto & Brooks-Gunn, 2001; Sonnenschein & Munsterman, 2002). In addition, schools could also make parents aware of the importance of home literacy activities for children in the higher grades of primary school. Furthermore, they could try to make a connection between reading at school and at home. This way, parents can show that they are interested in what children are reading and learning. Rereading at home of books that were used in school appears

to contribute to children's reading motivation, next to increasing parental involvement (Gonzalez-DeHass, 2005; Koskinen et al., 2000).

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