

CHAPTER 4

Reading for active citizenship: Maternal beliefs mediate the relation between educational expectations and the home literacy environment of primary school children

Suzanne E. Mol, Inouk E. Boerma, & Jelle Jolles

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ABSTRACT

Some parents perceive reading as a means to develop the social and moral competences that their children need for active citizenship. The present study examined the reading beliefs of 389 mothers of children in the upper grades of primary school (aged 7 to 13 years). It was evaluated whether mothers with positive beliefs about reading for active citizenship had higher educational expectations and a higher quality home literacy environment. We showed that mothers with positive beliefs were more likely to expect their child to graduate from university and to offer their children a higher quality home literacy environment than mothers with negative beliefs. Furthermore, the relation between educational expectations and the home literacy environment was mediated by mothers' reading beliefs, after their highest level of education and family demographics were controlled for. Our findings imply that educating mothers to approach reading as a means to develop their children's active citizenship competences may positively affect the quality of their home literacy environment.

INTRODUCTION

A stimulating home literacy environment with many books and frequent reading experiences has repeatedly been shown to enhance children's success in school (e.g., Bus et al., 1995; Evans et al., 2010; Mol & Bus, 2011). When shaping the home literacy environment for their children, parents seem to be guided by their own educational expectations and beliefs (Davis-Kean, 2005; Goodnow, 2002; Harkness & Super, 1996; Sigel & McGillicuddy-De Lisi, 2002; Weigel et al., 2006). In the case of beliefs about reading for active citizenship parents perceive reading for pleasure as a means for their children to develop the social and moral skills necessary to become active citizens (Cullinan, 2000; Hoskins & Deakin Crick, 2010). Research examining parental beliefs about reading in relation to parents' educational expectations and the quality of the home literacy environment is scarce. This is especially the case for school children in the upper grades of primary school (i.e., 7-to-13-year-olds). Yet it is imperative to gain insight into the psychological factors that may affect the quality of the home literacy environment. These may yield insights that are not only relevant for the promotion of reading for pleasure but also for involving parents in their children's primary education.

Most educational research relates reading for pleasure to cognitive competences, such as vocabulary, technical reading, reading comprehension, and grade point average (Mol & Bus, 2011). However, to become active members of society children need to develop a broader set of competences. Active citizenship is thought to result from social and moral learning experiences that are in accordance with human rights and democratic values (Hoskins, 2009; Hoskins & Deakin Crick, 2010). Interestingly, reading literature seems to contribute to the development of these citizenship competences (Fleming, 2006; Kaufman & Libby, 2012; Nussbaum, 2006, 2010), and could therefore be considered an informal component of citizenship education. For example, reading about literary characters is shown to improve socio-emotional skills such as empathy (Mar, Djikic, & Oatley, 2008; Kaufman & Libby, 2012; Kidd & Castano, 2013). Stories could also help to promote moral learning. This is because story events and characters' actions can provide readers insight into values and the difference between right and wrong, inform them about societal problems, and help them learn consequences of behavior without actually engaging in the actions (Hakemulder, 2000; Nussbaum, 2002; Vitz, 1990).

Research is lacking about whether parents believe that their children are able to develop social and moral skills by engaging in reading practices. Existing parental reading-beliefs scales (e.g., Audet, Evans, Williamson, & Reynolds, 2008; Bingham, 2007; DeBaryshe & Binder, 1994) scarcely include items on the perceived role of (shared) book reading on children's socio-emotional and moral development. Studies that address the beliefs of parents with primary school children mainly focus on children's reading skills (e.g., Aunola, Nurmi, Niemi, Lerkkanen, & Rasku-Puttonen, 2002). Self-report measures for adults and adolescents that do include some items on readers' personal development mainly aim to assess reading attitude (e.g., Miesen, 2003; Stokmans, 1999; Lewis & Teale, 1982), reading motivation (Ziropada, 2009), or reasons for reading (Howard, 2011). There are no studies that exclusively focus on parental beliefs about the relation between reading and the development of their children as active citizens.

There also is a lack of studies that simultaneously examine parents' reading beliefs and the quality of the home literacy environment for primary school children beyond the first stages of reading instruction. In general, studies with parents of young children show that parents with positive reading beliefs offer a more stimulating home environment, including a larger number of books and more frequent shared book reading activities than parents with negative beliefs (Bingham, 2007; DeBaryshe, 1995; Dobbs-Oates et al., 2015; Lynch, Anderson, Anderson, & Shapiro, 2006; Rodríguez, Scheffner Hammer, & Lawrence, 2009; Sonnenschein et al., 1997; Weigel et al., 2006). It is not yet known whether the extent to which parents perceive reading as a means to develop their children's citizenship competences may also be related to a stimulating home literacy environment.

The first aim of this study, therefore, was to examine whether the quality of the home literacy environment of children in the upper grades of primary school differs between parents with positive versus negative beliefs about reading for active citizenship. The study was performed with parents of children attending third to sixth grade of the Dutch primary school system. However, the majority of the respondents were mothers (87%) and the relatively smaller group of fathers appeared to differ from mothers in their self-reported beliefs, educational expectations, home literacy environment, and highest level of education. We therefore decided to only focus on mothers' beliefs about reading for active citizenship in this study.

A second aim of this study was to examine whether these mothers' educational expectations for their children's future school careers (i.e., to graduate from university) were related to their beliefs about reading for active citizenship. Several review studies have shown a positive relation between such parental expectations and children's actual academic achievement (Fan & Chen, 2001; Hill & Tyson, 2009; Jeynes, 2005, 2007; Seginer, 1983; Taylor, Clayton, & Rowley, 2004; Yamamoto & Holloway, 2010). Parents with high educational expectations appear to engage in more educational activities with their children, including reading (Davis-Kean, 2005; Halle, Kurtz-Costes, & Mahoney, 1997; Sy & Schulenberg, 2005). Consequently, these parents may have more experience with the role that books play in their children's daily lives and in their personal development. In our study, we therefore expect to find that mothers with more positive beliefs about reading for active citizenship will also have higher educational expectations for their children.

The third aim of this study was to examine whether mothers' educational expectations predict the quality of the home literacy environment after controlling for their highest level of education and other demographics, such as family size and children's age and gender. In previous research, parents' education has been shown to indirectly influence the achievement of eight-to-twelve-year-olds through its impact on parents' educational expectations and the stimulation of reading at home (Davis-Kean, 2005). In addition, the association between educational expectations and academic achievement seems to be affected by the quality of the home literacy environment, regardless of parents' own level of education (Davis-Kean, 2005). In our study, we therefore proposed that maternal beliefs about reading for active citizenship may mediate the relationship between educational expectations and the home literacy environment. Finding such an underlying mechanism for this relationship could benefit interventions aimed at improving primary school children's home literacy environment, and hence, their academic and socio-emotional skills. That is because it may be easier to change parents' views on the importance of reading for pleasure for the development of children as active citizens than it may be to change their educational expectations.

In sum, our research focused on the following two specific questions:

- 1) How do the home literacy environment and the educational expectations of mothers with positive beliefs about reading for active citizenship differ from mothers with negative beliefs?
- 2) To what extent is the relation between educational expectations and the home literacy environment mediated by maternal beliefs about reading for active citizenship?

METHOD

Participants

A total of 389 mothers participated in this study. Their children (199 boys, 190 girls) attended Grade 3 ($n = 108$; 55 boys), Grade 4 ($n = 98$; 48 boys), Grade 5 ($n = 94$; 50 boys), or Grade 6 ($n = 89$; 46 boys) at five different mainstream primary schools in the south of the Netherlands. On average, children were 10.0 years old ($SD = 1.29$, range: 7-13 years). Most mothers were married (71.5%) or lived together with their partner (15.4%). The number of children in their families ranged between one and six, with the majority of mothers having two (35.6%) or three (45.4%) children. The mothers' highest level of completed education varied as follows: 16.4% had a relatively low level; 42.2% an intermediate level; and 41.4% a high level (in accordance with the classification of the Center for Statistics Netherlands, 2013).

Materials

Even though this study focuses on mothers only, our materials were developed to assess both mothers' and fathers' reading beliefs, educational expectations, home literacy environment, and demographics. Therefore, in our description of the materials we will use the word "parental" instead of "maternal".

Parental beliefs about reading for active citizenship

To measure whether parents believed that reading activities could affect non-academic skills related to their children's development as active members of society, we created a scale in which participants were presented with fifteen statements that each had three answer options: 0 = no; 1 = I do not know; 2 = yes. The statements were introduced by the following sentences: "Reading

could contribute to your child's development. What is your opinion on each of the following statements?" All statements started with the phrase: "Reading helps children to ...". The statements were designed to tap into the following domains: the socio-emotional domain (e.g., learn how to empathize with other persons; learn to respect the opinions and emotions of others); the moral domain (e.g., learn about norms and values; become actively involved in societal problems); and the personal domain (e.g., become curious about the world around them; enjoy going to school). In addition, there were two distractor items that focused on children's cognitive achievement (become smarter; get higher grades in secondary school).

To test whether our newly developed measure showed evidence of construct validity, we first checked the correlations between all items. Two items were not correlated with any other item ($r_s \leq .15$), so we decided to exclude these from the scale. Next, a Principal Component Analysis with oblique rotation (direct oblimin) confirmed that both distractor items loaded on a separate factor from the other items. The final one-component solution ($KMO = .90$) with eleven items explained 46.8% of the variance. Reliability analyses on these remaining items showed a good internal consistency of $\alpha = .86$.

To create a total score, we first counted all reading belief statements that parents (1) agreed with, and (2) disagreed with, resulting in two scores with a minimum of 0 and a maximum of 11. Secondly, we subtracted the number of statements that parents agreed with from the number of statements that they disagreed with, resulting in a relative, continuous score ranging from -11 to 11 ($M = 4.45$; $SD = 5.44$). Higher scores on this scale imply that parents were relatively more likely to agree with the statements on reading for active citizenship. The nine mothers in our sample without a sum score mostly skipped one question (78%; range: 1-4 missing items).

Educational expectations

Parents were asked whether they expected that their child would graduate from university. Answer possibilities ranged from 1 = not at all true, to 4 = completely true. In our analyses including educational expectations, we have a smaller sample size ($n = 305$), because 84 mothers (27.5%) refused to answer this question. They reported feeling uncomfortable with the question, or that they did not know what to answer. This subgroup did not significantly differ from the rest of the group on our outcome variables (i.e., beliefs and home literacy environment), but

appeared to be significantly higher educated ($t(382) = -2.30, p = .022$) and had significantly older children ($t(374) = 2.14, p = .033$) than mothers who did report their educational expectations.

Home literacy environment

This composite scale comprised the mean of the standardized z-scores of three scales that tapped into the quality of the home literacy environment (Cronbach's $\alpha = .76$). Higher scores on the composite scale reflect a higher quality home literacy environment.

Parents were asked to: (a) estimate the number of books in their household (1 = 0-10 books, 2 = 11-25 books, 3 = 26-100 books, 4 = 101-200 books, 5 = 201-500 books, and 6 = more than 500 books); (b) estimate the number of children's books at home (1 = 0-10 books, 2 = 11-25 books, 3 = 26-50 books, 4 = 51-100 books, 5 = more than 100 books); and (c) complete a print exposure checklist to assess their own familiarity with books, which is a proxy for their own reading behavior (West, Stanovich, & Mitchell, 1993). This Author Recognition Task (ART) consisted of 60 author names, including 20 foils. Parents were explicitly informed about the mix of real and fake author names to discourage guessing, and were asked to tick all author names they recognized. All of the real names in the ART were authors of books that had been in the weekly or yearly book charts of the Netherlands in the two years prior to the study. Care was taken to include different genres (e.g., literary fiction, thriller) and to include names of both Dutch and foreign writers. Foils were selected from the editorial board of an international psychology journal and a Dutch monthly journal. Final ART scores were calculated by subtracting the proportion of foils checked from the proportion of correctly identified author names.

Demographics

Parents reported their child's grade level, birth date, gender, and the name of their child's primary school. They further indicated their marital status (married, living together, divorced, single, widow), their family size (number of sons, number of daughters), and their highest level of completed education on a 10-point scale, ranging from 1 = no primary education, to 10 = a university degree. In accordance with the Center for Statistics Netherlands (2013), we recoded all responses into the following three levels of education: 1 = low (i.e., primary education or the lowest general educational track of secondary school); 2 = intermediate (i.e., completed

vocational education or the higher general educational tracks of secondary school); and 3 = high (i.e., higher professional education or university degree).

Procedure

A questionnaire, accompanied by an informative letter, was sent out on paper to all parents with a child in Grade 3 to 6 at five primary schools. Parents with more than one child in these grades were asked to answer the questions about their youngest child. Questionnaires were completed by mothers ($N = 400$) as well as fathers ($N = 58$). An envelope from the university was added to the questionnaire and informative letter. Parents were asked to put the questionnaire in this envelope after they had responded to all questions. The envelopes were collected by the teachers at school and then given to the researchers, who entered all responses into SPSS version 21.

We excluded eleven mothers due to missing values on both our scales “beliefs about reading for active citizenship” and “educational expectations”. Their demographics were comparable to those of the included sample. We further decided to exclude the relatively small subsample of 58 fathers (of 29 sons, 29 daughters), because they differed significantly from the larger group of participating mothers. Independent t -tests showed that participating fathers were significantly higher educated ($t(439) = -2.56, p = .011$) and held significantly higher educational expectations ($t(354) = -1.97, p = .049$) than mothers, yet scored significantly lower on our three indicators of the home literacy environment: Fathers estimated to have fewer books ($t(445) = 1.70, p = .089$); and fewer children’s books at home ($t(445) = 2.38, p = .018$); and recognized a lower number of authors compared to mothers ($t(85.82) = 2.63, p = .003$). Fathers further tended to hold more positive beliefs about reading for active citizenship ($t(85.58) = -1.70, p = .093$). Consequently, the final sample consisted of $N = 389$ mothers.

RESULTS

Zero-order correlations (see Table 4.1) revealed that maternal reading beliefs were related to their educational expectations ($r = .19, p = .001$), the quality of their home literacy environment ($r = .22, p < .001$), and children’s age ($r = -.10, p = .046$). Educational expectations were positively related to the quality of the home literacy environment ($r = .36, p < .001$), and mothers’ highest level of

education ($r = .35, p < .001$). The quality of the home literacy environment was positively related to mothers' highest level of education ($r = .48, p < .001$), and family size ($r = .13, p = .009$). In addition, independent t -tests revealed that mothers of girls had significantly more positive beliefs about reading for active citizenship ($M = 5.15, SD = 5.09$) than mothers of boys ($M = 3.79, SD = 5.69; t(376.19) = -2.45, p = .015$), whereas mothers' educational expectations were higher for boys ($M = 2.55, SD = .89$) than for girls ($M = 2.32, SD = .85; t(303) = 2.32, p = .021$). In subsequent analyses, we will include mothers' highest level of education, family size and children's school, age, and gender as covariates.

Table 4.1 Descriptives and correlations for the variables of interest, completed by 389 mothers of 7-to-13-year-old primary school children.

| | Group Means ^a | | | Correlations | | | | |
|--|--------------------------|------------------------|------------------------|-----------------------------|------------------------------|-------|-------------|-------------------------------|
| | Total sample M (SD) | Pos. beliefs M (SD) | Neg. beliefs M (SD) | Educational expectations | Home Literacy Environment | Age | Family size | Highest level of education |
| Maternal beliefs | 4.45 (5.44) | 6.83 (3.27) | -3.66 (2.95) | .19** | .22*** | -.10* | .02 | .05 |
| Educational expectations ^b | 2.44 (.88) | 2.52 (.88) | 2.18 (.85) | | .36*** | -.05 | -.04 | .35** |
| Home Literacy Environment | .00 (.82) | .10 (.81) | -.33 (.80) | | | -.04 | .13** | .48*** |
| Children's age | 10.0 (1.29) | 9.92 (1.23) | 10.30 (1.45) | | | | .02 | -.04 |
| Family size | 2.69 (.85) | 2.69 (.90) | 2.69 (.67) | | | | | .13* |
| Mothers' highest level of education | 2.25 (.72) | 2.27 (.73) | 2.15 (.70) | | | | | |

^aThe sample included 294 mothers with positive beliefs and 86 mothers with negative beliefs about reading for active citizenship ($n_{total} = 380$)

^bThe item on educational expectations was completed by 225 mothers with positive beliefs and 71 mothers with negative beliefs ($n_{total} = 296$)

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

Positive versus Negative Beliefs about Reading for Active Citizenship

To compare positive and negative beliefs about reading for active citizenship, we dichotomized the relative continuous score (i.e., in which the number of statements that mothers agreed with were subtracted from the statements that mothers disagreed with) to create a group of mothers who held relatively positive beliefs (i.e., a score of 1 or higher) and a group of mothers with relatively negative beliefs (i.e., or score of 0 or lower). In our sample, 294 mothers (77.4%)

held positive beliefs and 86 mothers (22.6%) held negative beliefs. Means and standard deviations of our study's variables in both groups are presented in Table 4.1.

To examine whether mothers with positive versus negative beliefs would significantly differ in their home literacy environment and educational expectations, we conducted two Univariate ANCOVA analyses (see Table 4.2). First, the model with home literacy environment as dependent variable explained 28% of the variance ($F(6,354) = 24.79, p < .001, \eta_p^2 = .30$). Mothers with positive beliefs offered their children significantly higher quality home literacy environments than mothers with negative beliefs ($F(1,354) = 18.78, p < .001, \eta_p^2 = .05$). Second, the model with educational expectations as dependent variable explained 18% of the variance ($F(6,276) = 11.60, p < .001, \eta_p^2 = .20$). Mothers with positive beliefs were more likely to expect that their children would graduate from university than mothers with negative beliefs about reading ($F(1,276) = 6.24, p = .013, \eta_p^2 = .02$).

Table 4.2 Results of the ANCOVA analyses examining differences between the home literacy environment and educational expectations of mothers with negative and positive beliefs about reading for active citizenship.

| | Home literacy environment ^a | | | | Educational expectations ^b | | | |
|-------------------------------------|--|-------|------|------------|---------------------------------------|-------|------|------------|
| | SS | F | p | η_p^2 | SS | F | p | η_p^2 |
| Intercept | 8.15 | 16.49 | .000 | .05 | 11.39 | 17.56 | .000 | .06 |
| Mothers' highest level of education | 36.17 | 73.16 | .000 | .17 | 16.48 | 25.42 | .000 | .08 |
| Family size | 1.52 | 3.06 | .081 | .01 | 1.44 | 2.22 | .137 | .01 |
| School | 2.69 | 5.44 | .020 | .02 | 4.45 | 6.86 | .009 | .02 |
| Children's age | .02 | .03 | .862 | .00 | .30 | .46 | .501 | .00 |
| Children's gender | .40 | .82 | .367 | .00 | 3.39 | 5.23 | .023 | .02 |
| Maternal beliefs (dichotomous) | 9.29 | 18.78 | .000 | .05 | 4.04 | 6.24 | .013 | .02 |

^a $F(6, 354) = 24.79, SS = 73.53, p < .001, \eta_p^2 = .30$; ^b $F(6,276) = 11.60, SS = 45.14, p < .001, \eta_p^2 = .20$

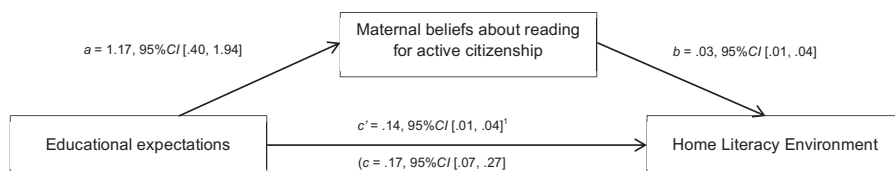
Mediation Model

The PROCESS macro (Hayes, 2013) was used to test the mediation model with covariates (model 4). Bootstrapping ($k = 1000$) is applied to obtain confidence intervals (95% BCaCI). Indirect or mediation effects are considered significant when the 95% BCaCI does not cross zero (Preacher & Hayes, 2008). In our model, we entered the educational expectations as our independent variable (X), home literacy environment as our outcome variable (Y), and maternal beliefs about reading for active citizenship (i.e., the relative continuous score) as our mediating

variable (M). Mothers' highest level of education (C1), family size (C2), and children's school (C3), age (C4), and gender (C5) were entered as covariates.

The total effect model was significant, $F(6, 276) = 18.14, p < .001, R^2 = .28$. Educational expectations were a significant predictor of the home literacy environment ($b = .17, SE = .05, p = .001, 95\%CI[.07, .27]$), as was mothers' highest level of education ($b_{C1} = .42, SE = .06, t = 6.53, p < .001, 95\%CI[.29, .54]$). Next, when predicting the mediator ($F(6, 276) = 3.43, p = .003, R^2 = .07$), mothers' educational expectations were significant as well ($b = 1.17, SE = .39, t = 2.99, p = .003, 95\%CI[.40, 1.94]$), as was gender ($b_{C5} = 1.61, SE = .64, t = 2.50, p = .013, 95\%CI[.34, 2.87]$).

When including the mediator in the total model, the model explained 31% of the variance: $F(7, 275) = 17.99, p < .001$ (see Figure 4.1). The direct effect of X on Y became $b = .14 (SE = .05, t = 2.72, p = .007, 95\%CI[.04, .24])$. The indirect effect of X on Y also was significant: $b = .03, SE = .01, t = 3.54, p = .001, 95\%CI[.01, .04]$. Mothers' highest level of education was the only significant covariate in this model ($b_{C1} = .41, SE = .06, t = 6.64, p < .001, 95\%CI[.29, .54]$). This implies that maternal beliefs about reading for active citizenship at least partially mediate the relation between mothers' educational expectations and the quality of the home literacy environment, even after mothers' educational level, family size and children's age, school and gender are taken into account.



¹ Covariates in this model are: mothers' highest level of education (C1 = .42, 95%CI [.29, .54], family size (C2 = .02, 95%CI [-.07, .11], school (C3 = .05, 95%CI [-.02, .12], children's age (C4 = .01, 95%CI [-.05, .07], and children's gender (C5 = -.08, 95%CI [-.24, .09]).

Figure 4.1 Mediation model in which maternal beliefs about reading for active citizenship partially mediate the relation between educational expectations and the home literacy environment ($N = 283$)

DISCUSSION

This study examined maternal beliefs about reading for active citizenship in relation to the mothers' educational expectations for their children on the one hand and the home literacy environment on the other hand. Our first research question aimed to understand the differences between mothers with positive and negative beliefs about reading for active citizenship. Findings showed that

mothers with positive beliefs were more likely to expect that their 7-to-13-year-old child would graduate from university, after their own level of education was controlled for. These mothers also offered their children a higher quality home literacy environment than mothers with negative beliefs. Moreover, the relation between mothers' educational expectations and the home literacy environment was mediated by mothers' beliefs about reading for active citizenship. Our study indicates that approaching reading as a means to develop children's social and moral skills may be a promising way to educate mothers about the importance of a high quality home literacy environment.

Our results are in line with theories on the role of beliefs and educational expectations for shaping the home literacy environment (Goodnow, 2002; Harkness & Super, 1996; Sigel & McGillicuddy-De Lisi, 2002). Regardless of the mothers' highest level of education, we showed that mothers who were familiar with reading themselves and reported having a large amount of books at home were more likely to hold positive beliefs about reading and to have higher expectations for their children's school success. Longitudinal studies have shown that growing up in a stimulating home literacy environment from an early age onward predicts children's cognitive (e.g., emergent literacy) and socio-emotional functioning (e.g., positive social interactions) at school (e.g., Baker, 2013; Foster, Lambert, Abbott-Shim, McCarty, & Franze, 2005).

One explanation for this relation is that these children's parents are positively involved in their education, for example by engaging in educational activities outside school (e.g., reading, visiting a museum) and by volunteering in their child's classroom at school (Hill & Taylor, 2004; Pomerantz, Kim, & Cheung, 2012; Pomerantz, Moorman, & Litwack, 2007; Seginer, 2006; Sy & Schulenberg, 2005). Importantly, parents' involvement is also affected by their children's performance, such as previous grades (e.g., Alexander, Entwisle, & Bedinger, 1994; Englund, Luckner, Whaley, & Egeland, 2004), by their competence beliefs (Grolnick & Slowiaczek, 1994), by frustration levels with their schoolwork (Pomerantz et al., 2012), and by parents' perception of their children's reading enjoyment (Boerma, Mol, & Jolles, 2016a). In future research, it would be interesting to study the reciprocity of parent-child interactions in shaping parents' beliefs, and expectations, as well as the home literacy practices that may affect children's academic and active citizenship competences.

About one in every four mothers in our sample believed that reading would play no or hardly any role in their children's active citizenship competences. In

line with our hypothesis, these mothers were less likely to expect that their children would graduate from university and offered a lower quality home literacy environment than parents with positive beliefs. This finding may reflect the underlying belief that children's school careers cannot be influenced by parental involvement or children's own effort (e.g., in reading, in doing homework), because school success depends on innate abilities (Dweck, 2007). If children do adopt such a fixed mindset (e.g., Blackwell, Trzesniewski, & Dweck, 2007), they might tend to be less motivated to learn, get lower grades, and probably live up to their parents' lower expectations. Future research should reveal whether this might indeed offer an explanation for the overall pattern of findings in this subgroup. We may already assume, however, that the children in this subgroup may be (at risk of becoming) reluctant readers or alliterates, because they are growing up in a home that does not provide a rich reading climate. According to the model of reciprocal causation (Stanovich, 1986), children who do not frequently read for pleasure enter a negative spiral, in which their lack of (successful) reading experiences not only makes it more difficult to train their skills, but also makes it less likely that they will enjoy reading. This results in further avoidance of leisure reading activities. Consequently, reluctant readers increasingly fall behind in school, compared to their peers who can be considered more enthusiastic readers (Mol & Bus, 2011).

Our second research question addressed a model in which we tested whether maternal beliefs about reading for active citizenship mediated the relation between educational expectations and the home literacy environment. Our findings showed that maternal beliefs function as a partial mediator. This may indicate that changing these beliefs could affect the quality of children's home literacy environment. A first step would be, therefore, to investigate further whether mothers (and fathers) with negative beliefs who receive factual or objective information about the effects of reading on citizenship competences (e.g., through attractive pamphlets or informative websites directed at parents as a target group) will indeed change their beliefs (see Southerland, Sinatra, & Matthews, 2001 for an interesting discussion on the distinction between knowledge and beliefs in education).

Studies seem to show that persuasive texts should be explicitly designed to refute misconceptions that affect knowledge and beliefs (Chambliss, 1994; Murphy & Alexander, 2004; Robinson, Funk, Beth, & Bush, 2005). We expect parents with more factual knowledge and positive beliefs about the importance of reading for their children's overall development to be more willing to increase their children's

access to books and to increase opportunities for their children to read outside school. Since there is scientific evidence for the statements in our beliefs scale and reading has indeed been shown to affect the included domains (e.g., Hakemulder, 2000; Kaufman & Libby, 2012; Kidd & Castano, 2013; Mar et al., 2008; Nussbaum, 2002; Vitz, 1990), we could also measure changes in parents' beliefs (or knowledge). Hence, contrary to those models that assume that the likelihood of change may depend on prior experiences and initial beliefs (Dole & Sinatra, 1998), we expect that even those parents who do not enjoy reading themselves will be willing to change their beliefs after receiving convincing information about ways to improve their child's active citizenship competences. In a recent study, we showed that when this latter subgroup of parents viewed their children as enthusiastic readers, the quality of their home literacy environment was significantly higher than that of those parents who did not enjoy reading and who also perceived their children as reluctant readers (Boerma, Mol, & Jolles, 2016a).

The current findings are limited to mothers of children in the highest grades of the Dutch primary school system. Replication is needed in a sample of fathers to examine the role of their beliefs about reading and educational expectations. It would also be interesting to have both fathers and mothers of the same family participate to examine whether couples who differ in their beliefs or expectations offer a different home literacy environment than couples who are more alike. This would also provide the opportunity to study family gender socialization patterns. For example, a same-sex bias may appear for mother-daughter and father-son dyads in that parents are more likely to attribute the outcomes of their own experiences to their same-sex child than to their opposite-sex child (McHale, Crouter, & Whiteman, 2003).

Interestingly, mothers of daughters were more likely than mothers of sons to believe that reading would benefit their child's active citizenship competences. Even though it was our intention that mothers would complete the beliefs scale for children in general, the mothers in our sample may have taken into account their personal experiences or their own child's competences when responding to the statements. For example, it may be that mothers who are enthusiastic readers have experienced themselves that reading affected their own social and moral development (e.g., Kaufmann & Libby, 2012; Kidd & Castano, 2013), which they might have generalized more to their daughters' responses to reading than to that of their sons. Another explanation for the gender differences we found may be that reading is among the "feminine-typed" activities (Love & Hamston, 2004).

Mothers may believe that their daughters will benefit more from reading, because girls generally read more and enjoy reading more than boys (Kush & Watkins, 1996; Logan & Johnston, 2009; Sainsbury & Schagen, 2004). It could also be that mothers considered their child's reading preferences when completing the beliefs scale. In general, girls seem more "socially oriented" in their reading preferences, whereas boys are more likely to read factual works and comics (Coles & Hall, 2002; Greany, 1980; Merisuo-Storm, 2006). In our study, mothers may have perceived that readers of fiction developed more active citizenship competences than non-fiction readers. In future research, it would be interesting to link maternal beliefs to their children's reading preferences in order to examine whether differences could be attributed more strongly to genre than to gender.

Conclusions

The most prevalent reason for involving parents in their children's education (e.g., by stimulating reading) currently seems to focus on enhancing children's academic success. A high-quality home literacy environment and children's willingness to read for pleasure are known to increase this success (Mol & Bus, 2011). However, there is more to reading – and to our ultimate goal that all children should be enabled to reach their full potential – than this rather exclusive focus on school-related competences. We propose to broaden the current perspective, by not only considering cognitive outcomes, but also children's development as active citizens when it comes to informing parents about the importance of reading. Moving away from the exclusive focus on school success by highlighting the effects of reading on children's development as active citizens may trigger the interest of parents who do not expect their children to perform well in school or academia. Parents who, for example, have negative personal reading experiences, and who may not consider themselves capable of being involved in their children's education (Hoover-Dempsey & Sandler, 1997) may also be attracted by this broader view on reading.

Strikingly, there is a rather limited research base on the relationship between primary school children's actual social and moral development and their parents' beliefs and educational expectations (Seginer, 2006; for an exception, see Reynolds & Gill, 1994). More research is clearly needed, in which the broader context of experiences that are relevant for children's non-academically oriented development are taken into account, including the long-term effects that books and parents' beliefs and expectations may play in affecting children's overall

development and success in various aspects of life. Further studies should of course be conducted to reveal whether the children of parents who hold positive beliefs about the relation between reading and active citizenship do indeed become active citizens.

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