Route to reading: Promoting reading through a school library: effects for non-Western migrant students
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Citation for published version (APA):
Kleijnen, E. (2016). Route to reading: Promoting reading through a school library: effects for non-Western migrant students
### APPENDIX II

#### TABLE B.1

**SCORES (MEANS AND SDs) ON READING ATTITUDE AND READING BEHAVIOR OF CHILDREN PERFORMING BELOW AND ABOVE AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>Vocabulary (n = 102)</th>
<th>Reading comprehension (n = 118)</th>
<th>Spelling (n = 123)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below average</td>
<td>Above average</td>
<td>Below average</td>
</tr>
<tr>
<td>Reading attitude (MQ)</td>
<td>3.31 (.64)</td>
<td>3.37 (.58)</td>
<td>3.19** (.65)</td>
</tr>
<tr>
<td>Reading attitude (AQ)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonic</td>
<td>3.09 (.50)</td>
<td>3.20 (.57)</td>
<td>3.00* (.59)</td>
</tr>
<tr>
<td>Utilitarian</td>
<td>3.28 (.47)</td>
<td>3.35 (.47)</td>
<td>3.23 (.53)</td>
</tr>
<tr>
<td>Reading frequency (MQ)</td>
<td>3.98 (1.04)</td>
<td>4.24 (.83)</td>
<td>3.96 (1.02)</td>
</tr>
<tr>
<td>Reading frequency (AQ)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storybooks</td>
<td>3.83 (1.05)</td>
<td>4.09 (.81)</td>
<td>3.75 (1.07)</td>
</tr>
<tr>
<td>Non-fiction books</td>
<td>3.03 (1.26)</td>
<td>2.91 (1.06)</td>
<td>2.91 (1.20)</td>
</tr>
<tr>
<td>Picture books</td>
<td>2.57 (1.47)</td>
<td>2.00 (1.35)</td>
<td>2.52 (1.42)</td>
</tr>
<tr>
<td>Magazines</td>
<td>3.06 (1.40)</td>
<td>2.74 (1.37)</td>
<td>3.10 (1.36)</td>
</tr>
<tr>
<td>Comics</td>
<td>3.54 (1.21)</td>
<td>3.50 (1.29)</td>
<td>3.53 (1.24)</td>
</tr>
<tr>
<td>Poems and verses</td>
<td>2.69** (1.44)</td>
<td>1.65 (1.11)</td>
<td>2.51 (1.43)</td>
</tr>
<tr>
<td>Reading duration</td>
<td>2.89 (1.02)</td>
<td>3.09 (1.02)</td>
<td>2.92 (1.09)</td>
</tr>
</tbody>
</table>

* *p < .05. **p < .01. ***p < .001.
This research aimed at providing insight into the effects of an integrated library facility in a Dutch primary school on the reading attitude, reading behavior, and reading and language skills in students with a non-Western migrant background, an educationally disadvantaged group in the Netherlands (Gijbers & Diederik, 2012). For this purpose, we conducted a literature review (Chapter 2), followed by three empirical studies (Chapters 3, 4, and 5). The literature review showed that ample studies have addressed the effectiveness of school libraries since the 1960s (Roberson, Schweinle, & Applin, 2003). A considerable body of research carried out outside the Netherlands has shown that school libraries are related to better school performance (e.g., Clark, 2010; Kachel, 2013; Lance, Welborn, & Hamilton-Pennell, 1993; Lonsdale, 2003; Scholastic, 2008; Williams & Wavell, 2001; Williams, Wavell, & Morison, 2013). Furthermore, it has been established that increased access to books, as provided by school libraries, is related to a higher frequency of reading (Krashen, 2004b; Krashen, Lee, & McQuillan, 2012) as well as to a higher reading enjoyment (Lindsay, 2010). In line with this, school library users have been found to hold a more positive attitude toward reading than non-users (Clark, 2010). The relatively limited amount of Dutch studies on school libraries has also yielded positive outcomes, such as a growth in book loans, more leisure reading, a more positive attitude toward books, and higher reading comprehension scores (e.g., Geurtsen, 2008; Nielen & Bus, 2015; Oberon, 2011).

Despite what we know from these previous studies on school populations in general, as yet little is known about the effects of school libraries’ reading promotion efforts on ethnic minority students in particular. Several American studies focusing on the impact of school library characteristics on student achievement have attempted to statistically adjust for school and student characteristics, including the students’ racial or ethnic background, and found that linkages between library characteristics and improved test scores appeared to persist after making such adjustments (Burgin & Bracy, 2003; Lance, Rodney, & Hamilton-Pennell, 2005; Michie & Chaney, 2009). Moreover, Lance and Schwarz (2012) indicated that Hispanic and African American students benefited proportionally more from strong school library programs (in Pennsylvania) than students in general. This suggests that adequate school library programs can play a role in helping to close the achievement gap between advantaged and disadvantaged students (Williams et al., 2013).

However, it is not self-evident that these findings apply across different cultural and educational contexts. For example, migrant groups in the Netherlands are not readily comparable with ethnic minority groups in a country like the United States, and the implementation of school library programs, including the role of the librarian, can differ across countries (Brabantse Netwerk Bibliotheek, 2013). In line with this, it has been argued that findings from studies conducted outside the Netherlands cannot necessarily be considered valid to the Dutch situation (Veenstra, 1999). Hitherto, though, no Dutch research on school libraries had explicitly addressed migrant students in particular, and literature on the role of the home environment, schools, and libraries—which can shed more light on the possible effects of school libraries for these children in the Netherlands—is ambiguous (Chapter 2). Moreover, literature has indicated that reading attitude, reading behavior, and reading and language proficiency—central factors when it comes to reading promotion through school libraries—are reciprocally related (e.g., Kortlever & Lemmens, 2012; Mol & Bus, 2011a, 2011b; Mullis, Martin, Foy, & Drucker, 2012; Stalpers, 2005). Strikingly, the language and reading skills of non-Western migrant children in the Netherlands clearly lag behind (Gijbers & Diederik, 2012), whereas these children do not have a less positive attitude toward reading than native Dutch students (Netten, 2014; Stokmans & Broeder, 2009; van Elsäcker-Bok, 2002) nor do they read less (Meelissen et al., 2012; Netten, 2014). Perhaps relationships between these factors are less evident for children with a migrant background (cf. van Elsäcker-Bok, 2002). Gaps in existing research need to be bridged in order to guide effective policies and practices around reading promotion. Therefore, the present research project focused on students with a non-Western migrant background in the Dutch context.

For the empirical part of this research, we conducted a longitudinal study with a quasi-experimental design, involving students with a non-Western background (grades 2 to 6) of two Dutch primary schools: one with an integrated library facility (i.e., the experimental school) and one without such a school library (i.e., the control school). Both schools had a multicultural population consisting of many non-Western migrant children with learning disadvantages, which is often observed in the Netherlands, in particular in highly urbanized areas. Data were gathered over three successive school years (2011/2012, 2012/2013, and 2013/2014), using both questionnaires (i.e., the national Monitor the Library at School and additional surveys) and tests (i.e., nationally standardized tests from the pupil monitoring system devised by Cito, the National Institute for Educational Measurement in the Netherlands).

Firstly, we investigated whether the school library had an effect on the reading attitude and reading behavior of the students (Chapter 3). Secondly, we analyzed whether the school library led to better reading and language skills (Chapter 4). Thirdly, we focused on the relationships between the students’ reading attitude, reading behavior, and reading and language skills (Chapter 5). When discussing the effectiveness of the school library, we basically refer to the school library concept as a whole, including the broad collection, library visits, the presence of a reading and media coach, reading promotion lessons, and reading logs (see Appendix A). The remainder of this chapter summarizes the main findings, elaborates on limitations of the research project, and discusses the scientific and societal contribution of this project, as well as implications for future research and practice.

**Main Findings**

**Effects on Reading Attitude and Behavior**

On average, the students of both the experimental and control school had a quite positive reading attitude and read fairly often in their leisure time, as assessed through student questionnaires, which is in agreement with the findings of the national Monitor the Library at School (Broekhof &
Broek, 2013). The reading attitude scores on the utilitarian subscale were somewhat higher than those on the hedonic subscale, meaning that the students considered reading somewhat more useful than enjoyable. With regard to reading frequency, the students read about a couple of times a week to a couple of times a month on average. In line with results from nationwide research (e.g., Broekhof & Broek, 2013), storybooks and comic books were the most popular reading materials at both schools, whereas picture books and poems and verses were least often read out of six different types of reading materials. Non-fiction (informative) books and magazines scored in between. With regard to reading duration and diversity in reading preferences, children of both schools reported reading on average approximately half an hour a day and they liked four to five different topics on average. Of the thirteen topics presented to them, the children most often preferred to read about sports, creepy things, friendship, animals, and humor.

Our study showed a positive effect of the school library on the utilitarian component of the students’ reading attitude: Over time, students attending the experimental school considered reading more useful than students visiting the control school. Although the experimental school students also considered reading more fun over time than the control school students, this difference was not statistically significant. We were not able to demonstrate an effect of the school library on the students’ reading frequency, nor with respect to their reading duration and diversity in reading preferences. A possible explanation may follow from the fact that the experimental school students were not allowed to take home the school library books they borrowed during school hours (a decision made by the school management).

With regard to the background characteristics of the children (i.e., gender, age, parental educational level, and reading climate at home), it was found that the effect of the school library on the students’ reading attitude did not depend on these factors. On the other hand, for the reading frequency of the six types of reading materials taken together, we did find that at the experimental school, the reading frequency of older children—who generally read less often than younger children (Huysmans, 2013)—increased more over time than that of younger children, whereas the opposite was true for the control school. Moreover, we also found several main effects of background factors on both the students’ reading attitude and reading behavior. In line with previous research (e.g., Clark & Foster, 2005; Meelissen et al., 2012; Witte & van Nood, 2012), younger children had a more positive reading attitude and girls scored higher on the hedonic aspect than boys. In general, boys more often preferred reading about sports, technology, and war, whereas topics typically preferred by girls were love, fairy tales, school, animals, and friendship. Girls reported reading verses and poems more often than boys, whereas the opposite was true for comics. Magazines were read more frequently by older students than by younger students. In correspondence with previous findings (e.g., Kraaykamp, 2002, 2003; Mol & Bus, 2011a; Notten, 2011; van Steensel, 2006; Verboord, 2003), the students’ reading climate at home was found to be a predictor of both their reading attitude and reading behavior, with children from families with a more reader-friendly climate reporting more reading and a more positive attitude.

**Effects on Reading and Language Skills**

In agreement with national research results for children with a migration background (e.g., Gijsberts & Iedema, 2012), the students of both the experimental school and the control school scored fairly low on nationally standardized tests assessing their reading and language skills. Compared to a national reference group, they scored substantially below average on the vocabulary and reading comprehension measurements, and just below to substantially below average on the spelling tests. We found a positive effect of the school library on the students’ vocabulary size, with a higher increase in vocabulary scores over time for the experimental school students than for the control school students. However, no effects of the school library were found with respect to the students’ reading comprehension level and spelling skills. This may be related to the earlier finding that the school library did not affect the students’ reading frequency. The positive effect on vocabulary scores may be a result of the reading promotion lessons that were part of the school library program, incorporating components that are suggested to be positively related to vocabulary size, such as reading aloud to the children and creating a word web together (Broekhof, 2011b; Vernooy, 2012). Moreover, when teaching world orientation subjects in class (e.g., history and geography), teachers of the experimental school—having access to the large collection of the school library—more often read a book aloud than control school teachers. Perhaps it may also be argued that free reading in class, which happened at both schools, was more strongly related with the students’ vocabulary size than with their reading comprehension level and spelling skills, as only their vocabulary scores increased over time regardless of the school—although the effect was significantly stronger at the experimental school where students spent slightly more time on free reading and selected books from a broader collection assisted by a reading and media coach.

The results also showed that as the students progressed through primary school, their performance in reading comprehension and spelling declined compared to the national reference group. Besides an effect of age on the students’ spelling scores, the language they spoke with their parents’ also had an effect: Students speaking Dutch at home, or Dutch together with another language, performed better on spelling than students only speaking in a non-Dutch language with their parents (cf. Herweijer, 2009; van Weerden & Hemker, 2012). Furthermore, the results showed that the reading comprehension skills of experimental school students growing up in lower educated families improved more over time than those of children from higher educated parents, whereas the opposite was found for control school students, suggesting that a school library may have the ability to counter a so-called Matthew effect (Cunningham & Stanovich, 1998), with increasing differences between disadvantaged and advantaged children over time. The effects of the school library on the students’ vocabulary level and spelling skills, though, did not differ for categories of parental educational level, nor for categories of gender, age, reading climate at home, and language spoken with parents.
RELATIONSHIPS BETWEEN READING ATTITUDE, READING BEHAVIOR, AND READING AND LANGUAGE SKILLS

Other research has shown that the central outcome variables discussed in our two previous studies are reciprocally related, suggesting an upward spiral of causality: Children who hold more positive attitudes toward reading will tend to read more, which translates to a higher reading and language ability (e.g., Kortlever & Lemmens, 2012; Mol & Bus, 2011a, 2011b; Mullis et al., 2012; Stalpers, 2005). However, in agreement with previous studies among migrant students (e.g., Gijbels & Iedema, 2012; Netten, 2014), the non-Western migrant students involved in our study reported a quite positive reading attitude and read fairly often, whereas they attained quite low scores on tests assessing their reading and language skills. This implies that relationships between these factors may be more complicated among children from non-Western migrant families and that an upward (or downward) spiral may not be present (cf. van Elsäcker-Bok, 2002). In our final empirical study, we examined whether there were reciprocal relationships between the students’ reading attitude, reading behavior, and reading and language proficiency.

Our results showed that the different measures of reading attitude were positively related to one another, with, for instance, a strong correlation between the hedonic and utilitarian dimension. This also applies to the different measures of reading behavior, with students reading more frequently also being more likely to read more minutes a day. Of the six types of reading materials, reading storybooks showed the strongest relationship with reading duration. The relationships between the different reading and language skills were also significant, with higher spelling test scores related to higher scores on vocabulary and reading comprehension tests. The students’ vocabulary size and reading comprehension level showed the strongest correlation.

In line with previous research (e.g., Broeder, Stokmans, & van Wijk, 2011; Broeder & Stokmans, 2013; Melnick, Henk, & Marinak, 2009; Stalpers, 2005; van Elsäcker-Bok, 2002) the analyses demonstrated a positive relationship between the students’ self-reported reading behavior and reading attitude: Students who thought reading is fun and important were more likely to read more frequently and to spend more leisure time on reading. This was especially true for the reading frequency of storybooks. These relationships remained significant after controlling for background characteristics (i.e., gender, age, parental educational level, and reading climate at home). As was found in other studies (Broeder et al., 2011; Broeder & Stokmans, 2013; Stalpers, 2005; Stokmans, 2006, 2009), the hedonic component of reading attitude was more important for the students’ reading behavior (and vice versa) than was the utilitarian aspect.

Our results indicate that the relationships between the students’ reading and language skills with their reading attitude and reading behavior are far less pronounced than the one between the children’s reading behavior and attitude (cf. Aarnoutse & van Leeuwe, 1998; Baker & Wigfield, 1999; Stokmans, 2006; van Elsäcker-Bok, 2002). With regard to the students’ reading attitude and reading and language skills, we found that children with a higher reading comprehension and spelling level were more likely to consider reading a fun activity. However, after controlling for background factors, most results were no longer significant, implying that these relationships could be explained by background variables related to the outcome factors. Furthermore, vocabulary scores were not found to be related to the students’ reading attitude. Thus, a high or low language and reading ability did not necessarily imply a particularly positive or negative attitude among the students. In line with this, in her dissertation van Elsäcker-Bok (2002, p. 197) indicated that “there is evidence that the relations between reading motivation and reading achievement are not consistent across cultural groups and that these relations are weaker for [ethnic] minority students than for mainstream students”.

Our findings with respect to the relationship between the students’ reading behavior and reading and language skills did not correspond with a bulk of research showing a clear positive relationship between these factors (e.g., Mol & Bus, 2011a, 2011b; Mullis et al., 2007; National Endowment for the Arts, 2007), although they were more in agreement with results reported by van Elsäcker-Bok (2002) and those of several other studies (Aarnoutse & van Leeuwe, 1998; Carver & Leibert, 1995; Otter, 1993; Taylor, Frye, & Maruyama, 1990). It was found that students with a larger vocabulary, and higher reading comprehension and spelling scores reported a higher reading frequency and duration, but most relationships were not statistically significant. We did find that better spellers tended to spend more time on leisure reading, and that students who read more minutes had larger vocabularies, although these significant relationships did not hold after taking into account several background factors. All in all, it was hard to explain variance in the students’ language and reading proficiency.

Several explanations may be put forward. For instance, in interpreting the findings, one should bear in mind that reading ability has a substantial genetic component (Davis et al., 2014), which implies that a relatively small proportion of the total variance in reading proficiency is accounted for by environmental factors. Furthermore, as indicated by van Elsäcker-Bok (2002), leisure reading may not be as effective for ethnic minority students, given that it may be hard to improve one’s reading comprehension skills by just reading individually at home without extra help when a child’s language proficiency is below a certain level. Poor readers and children with smaller vocabularies are more likely to have problems with learning word spelling and learning vocabulary from, and understanding, age-appropriate texts (Mol & Bus, 2011b). In addition, the children’s leisure reading environment at home may not have been ideal, for instance in terms of availability of a place where a child can completely engage in reading without disturbance, and the degree in which they read books matching their reading proficiency level (cf. Broeder et al., 2011; Otter, 1993; van Elsäcker-Bok, 2002).

LIMITATIONS

Several limitations should be considered when interpreting the results of this study. First of all, the number of participants was quite limited and we had to control for differences between the
CHAPTER 6

GENERAL DISCUSSION ROUTE TO READING

experimental and control school as they were not completely similar regarding the students’ background characteristics. More and/or stronger effects may have been found if a larger number of students could had been included. All students included in our sample had a non-Western background and due to the limited number of Western migrant students attending the two schools and the limited number of native Dutch students attending the experimental school, it was not possible to compare the non-Western migrant students with native Dutch and Western migrant students. It should also be kept in mind that the sample consisted of students whose parents had a very low educational level on average, and some ethnic backgrounds were overrepresented (e.g., Moroccan-Dutch) or underrepresented (e.g., Turkish-Dutch) compared to the total migrant population in the Netherlands. Because of the composition of the sample, it was not possible to compare students from different non-Western backgrounds. Furthermore, as in many Dutch schools, books were also present at the control school, although its collection was far smaller and less up-to-date and the school did not participate in a school library program (see Appendices A and C). Perhaps more effects of the school library could be discerned if there had been a larger difference in the presence of reading materials between the two schools.

Furthermore, self-reports were used in the present study and we cannot be sure that the students’ answers completely covered their actual reading behavior, attitude, and reading climate at home, nor that every parent filled in the questionnaire with a complete understanding, despite help offered to them (see Appendix B). For the students a bias may have occurred due to factors such as social desirability and insufficient understanding. However, this holds true for both schools and we have no reason to assume this applies more strongly to one of both schools. The reliability of the scales was also satisfactory, and literature on survey research with children suggests that generally from 7 years onward, children can complete a self-report (de Leeuw, 2011). The students’ scores on both reading frequency and reading attitude were quite high, leaving no much room for improvement (ceiling effect), although they were in line with national statistics (Broekhof & Broek, 2013; Witte & van Nood, 2012). Furthermore, at the experimental school most student questionnaires were filled in online, whereas at the control school most surveys were completed on paper, although the students of both schools completed the questionnaire at school under the guidance of a teacher, librarian, and/or researcher.

Lastly, it should be kept in mind that the school library program was not implemented in the most optimal form in the experimental school. The library books borrowed during school hours were not allowed to be taken home, while providing reading materials that can be taken home is an important aspect of the national the Library at School program (Bron & Langendonk, 2015). After all, access to reading materials is suggested to be of importance for more reading and a more positive reading attitude (Krashen, 2004b; Krashen et al., 2012; Lindsay, 2010). This is also supported by our own data: Students who reported having more books at home read more frequently, spent more time reading, and liked to read about a broader variety of topics than students with fewer books at home, and they enjoyed reading more as well. Also, the finding that the experimental school students had less books at home on average than the control school students makes it even more plausible that taking library books home could have resulted in stronger effects of the school library in the experimental group.

**SCIENTIFIC AND SOCIETAL CONTRIBUTION**

This research was the first to examine the effects of an integrated library facility in a Dutch primary school on the reading attitude, reading behavior, and reading and language skills in students with a non-Western migrant background in particular, hereby contributing to research in the field of library and information sciences. The results showed positive effects of the school library concept in terms of an increase in the students’ vocabulary size and the degree in which they considered reading useful. This suggests that an integrated library facility can contribute to narrow the achievement gap between advantaged and disadvantaged students. No effects, though, were found with respect to the students’ hedonic reading attitude (reading enjoyment), reading behavior, and reading comprehension level and spelling skills, in contrast to other studies (e.g., Boelens, 2010; Clark, 2010; Geurtsen, 2008; Hay, 2003; Krashen et al., 2012; Lindsay, 2010; Lonsdale, 2003; Nielen, 2016; Softlink, 2012; Williams et al., 2013). Our findings imply that effects found for students in general may not necessarily apply to non-Western migrant students in the Dutch context, which one should take into account in policies and practices targeted at this group. The rather modest effects found in this research could also be related to limitations, including shortcomings in the implementation of the school library program, and to the less evident relationships between the students’ reading attitude and reading behavior with their language and reading proficiency, calling for further research and modifications of the intervention. Despite its limitations and complex design, this research did show some encouraging effects, although, with the absence of several other effects, it also demonstrates that there is room for improvement in implementing a school library program.

Furthermore, we have contributed to the fields of reading research, educational research, and (behaviorist, developmental, and experimental) psychology, by investigating the relationships between the factors reading promotion through a school library aims to improve, that is, reading attitude, reading behavior, and reading and language skills, among non-Western migrant students in particular. Our results indicate that the relationships between these students’ reading attitude and behavior on the one hand, with their vocabulary size, reading comprehension level, and spelling skills on the other hand are far less evident than often indicated in the literature. Our research has made clear that what holds true for the general population of primary school students does not necessarily hold true for students with a migrant background (cf. van Elsäcker-Bok, 2002). This obviously implies that policy measures aimed at this group are well-advised not to be based solely on general student population studies.
Moreover, following earlier sociological studies (e.g., De Graaf, De Graaf, & Kraaykamp, 2000; Kraaykamp, 2002, 2003; Mol & Bus, 2011a, 2011b; Notten, 2011; van Steensel, 2006; Verboord, 2003), our study also underlines the importance of a strong reading climate at home for students from migrant families. From the literature and our research it appears that the availability of reading materials at home is important as well as parental behavior. Parents can stimulate their children more or less unconsciously, such as by reading themselves, and they can deliberately encourage their children's reading by, for example, reading books aloud to children, recommending and discussing books, and accompanying children to the library. This calls for further action to enhance the students’ home environment where necessary.

Overall, this research project has contributed to the research literature and it has provided implications for future research and practice (as outlined in the next sections), which can be used to implement more effective reading promotion efforts.

**FUTURE RESEARCH**

In order to get a better understanding of the effects of reading promotion through a school library, for migrant students and students in general, future research should focus on the effects of an optimally implemented school library program. In line with this, future research could examine which aspects of school library programs influence the reading attitude, reading behavior, and reading and language skills. Reviews of school library impact studies conducted abroad have identified library characteristics that contribute to higher student achievement, such as large and up-to-date collections, the presence of qualified, full-time school librarians, collaboration with teaching colleagues, and flexible library access (Kachel, 2013; Lonsdale, 2003; Scholastic, 2008; Williams & Wavell, 2001; Williams et al., 2013). Hitherto, there is a lack of clarity as to the “success factors” in the Dutch context. Future research could also involve larger and more comparable samples for experimental and control schools to enhance power. Moreover, it would be advisable to include native students in the sample as well to compare the effectiveness of a school library for non-Western migrant children and native Dutch children. Future research could also compare migrant students from different ethnic backgrounds.

The finding that there was hardly any relationship between leisure reading and the students’ language and reading skills also calls for more research. Besides including a larger number of participants to increase statistical power, other measurement instruments could be used, such as a print exposure checklist measuring familiarity with book titles and authors or magazines, which are likely to be less biased (Cunningham & Stanovich, 1998; Mol & Bus, 2011b). It is possible that reading frequency assessed through single items shows lower predictive power given that they are more likely to be positively skewed compared to a print exposure checklist (cf. Mol & Bus, 2011b). In constructing such a checklist, though, one should consider that preferences for leisure time reading materials may vary across ethnic groups and socioeconomic status groups (Mol & Bus, 2011b).

Moreover, it would be interesting to examine the leisure reading of non-Western migrant students in more depth. For instance, what reading materials do they read? Under what circumstances do they read at home? Do they need a threshold level of reading and language ability in order to benefit from independent reading? What kind of reading materials – including digital ones – would be most beneficial to them? To gain more insight into the relationships between reading for pleasure with language and reading skills and reading attitude, these relationships could also be explored in a more controlled setting (cf. Eley & Mangubhai, 1983), for instance at school or the (school) library, adjusting the reading materials and conditions more to the students’ needs.

**PRACTICAL IMPLICATIONS**

First, this research underlines the importance of implementing a strong school library program for students with a non-Western background. It is of utmost importance that children can bring the library books home in order to increase their access to (appropriate) reading materials. To meet the preferences of all age groups and both boys and girls, school libraries need to provide a wide range of reading materials covering a wide variety of topics. Ideally, students are provided with many opportunities to borrow books in the school library, preferably under the guidance of a qualified reading and media consultant. Also, our findings recognize enhancing the students’ reading attitude as an important element of the national Library at School program, given the clear positive relationship we found between the students’ reading behavior and reading attitude, particularly its hedonic component. As we only found a significant effect of the school library on the utilitarian component, ways should be found to also significantly increase the degree in which students think reading is fun. Our results seem to indicate that reading promotion activities provided by the reading and media coach contribute to a larger vocabulary size, but such activities are also intended to stimulate a positive reading attitude and more reading. Furthermore, research conducted outside the Netherlands points out the importance of the presence of qualified full time school library staff who collaborate with teachers (e.g., Kachel, 2013; Scholastic, 2008; Williams et al., 2013). With their skills and knowledge, and when being directed sufficient hours, Dutch reading media consultants are in the position to advise teachers and support the schools in optimally implementing the library program.

Furthermore, our findings suggest that independent leisure reading as assessed in our study is not sufficient to significantly improve the reading and language skills in non-Western migrant children. One should keep mind that these students may need a certain threshold vocabulary size and reading comprehension level in order for reading for pleasure to be effective. Extra attention for (the most) disadvantaged students in education, incorporating effective practices, is and remains therefore important, for instance through insertion classes (“schakelklassen”).

Additionally, attention should be paid to the ‘quality’ of the children’s leisure reading experiences. It is of importance that children can fully concentrate on reading and that they read materials that are compatible with their interests and abilities. Bilingual students and low-ability readers...
in particular may benefit from the provision of illustrations in support of the text, while making sure the level is challenging enough. One should consider that these students may need more contextual and teacher support than (monolingual) native Dutch students (Brabantse Netwerk Bibliotheek, 2013; Otter, 1993; van Elsäcker-Bok, 2002).

Finally, our research emphasizes the importance of a strong reading climate at home. Children with a non-Western background are more likely to grow up in less reader-friendly families than native Dutch children. Migrant children are less likely to be read to by their parents, have fewer reading materials at home, and their parents are less inclined to set an example by reading themselves (de Vries, 2007; Hermans, 2002; Scheele, 2010; van Steensel, 2006). Our study confirmed that the migrant students’ reading climate at home was not that favorable and we showed that this climate is an important predictor of both the students’ reading attitude and reading behavior: Children from families with a more reader-friendly climate reported more leisure reading and a more positive attitude. This stresses the importance of parents as partners for schools and libraries when it comes to reading promotion. Parents may influence their children either by setting an example or by actively stimulating children’s reading habits, also referred to as imitation and instruction (Bandura & Walters, 1963; De Graaf et al., 2000; Kraaykamp, 2002; Leseman & de Jong, 1998). Opportunities should be taken to strengthen the students’ reading climate at home and it is advisable to structurally incorporate this element in the school library program. Apart from providing families with books that can be read at home, their reading climate may be enhanced in other ways. For instance, in collaboration with the schools, libraries can inform migrant parents—in Dutch or another language—about the importance of a strong reading climate at home and advise them about ways to achieve this. One could also look for more personal or intensive methods to stimulate parental reading behavior and parental involvement with their child’s reading, such as letting parents actively participate in reading/book projects at school. Here, one has to keep in mind that differences exist between migrant group (e.g., Bakker, 2011; Scheele, 2010) and that (providing a rich language environment) using a non-Dutch language at home may be preferred over (poor use of) the Dutch language. Languages share a common underlying proficiency that can be transferred to a second language once acquired in one language (cf. Cummins, 1979, 2000). Furthermore, it has been suggested that parents with a non-Western migrant background often feel less responsible for actively stimulating their child’s cognitive development and that there often is a barrier between them and the school (Beks & de Natris, 2008). Increased efforts may be needed for schools and libraries to reach and work together with these parents to inform and support them.

CONCLUSIONS

The present research is, to our best knowledge, the first to provide more insight into the effectiveness of a school library on the students’ reading attitude and vocabulary level. Students attending the school with the library facility considered reading more useful and attained higher vocabulary test scores over time than the control school students. No effects were found with respect to their reading behavior and the degree in which they think reading is fun, nor with regard to their reading comprehension level and spelling skills. The children’s reading attitude was found to be positively related to their reading behavior: Students who liked to read and/or considered reading important tended to read more frequently in their leisure time and were more likely to spend more time reading. The relationships between the students’ reading attitude and behavior on the one hand with their vocabulary size, reading comprehension level, and spelling skills on the other, however, were far less evident. Of the background characteristics studied, especially the students’ reading climate at home proved to be an important factor for their reading attitude and behavior. A higher impact of the school library may be found in research involving, for instance, a greater difference in treatment between the control and experimental group, and an optimal implementation of the school library program. By providing wide access to appropriate reading materials that can also be taken home, as well as by providing stimulating reading promotion activities, and supporting parents and schools, school libraries may (further) enhance the reading attitude, reading behavior, and language and reading skills of non-Western migrant students and the relationships between these factors.