Chapter 6

Summary
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Introduction

The topic of the four studies, reported in this dissertation, concerned the alleged early emerging delays in language development of young children in the countryside of the northeast part of the Netherlands. This rural area has been linked to educational disadvantages for many decades. National and regional initiatives to combat the educational disadvantages in this area happened in succession. Studies about the number of children with language delays in this area and the magnitude of these delays, however, are contradictory and not clear-cut. Apparently, the assumption that in this area most children enter primary school with language delays, is generally shared by researchers and policymakers, though unequivocal evidence is lacking.

The first aim of this dissertation was to examine whether children in the northeast of the Netherlands indeed enter primary school with language delays, compared to national norms and to same-aged children in other parts of the country. The second aim was to examine the joint contributions of distal and proximal factors to the language development of young children in this area, in order to gain insight in the specific backgrounds of these differences.

This final chapter first summarizes and integrates the main findings of the four studies. Next, we integrate the findings and discuss the theoretical issues emerging from the studies. This chapter ends with suggestions for future research and implications for educational policy and practice.

Summary of the main findings

In our study, reported in Chapter 2, we compared the language development of two- and three-year-old toddlers in the northeast of the Netherlands with the language development of same-aged children in a national comparison group, using data on same-aged native Dutch children from the ongoing cohort study pre-COOL (Slot, 2014; Veen & Leseman, 2015). We focused on children’s receptive vocabulary and grammatical skills. We presupposed that in the northeastern part of the Netherlands, with an overrepresentation of lower and middle-educated families, children, on average, would have lower scores on vocabulary and grammar than children in areas, where highly educated parents are not underrepresented. The final sample in this study was not a fully accurate representation of the population, with the higher education levels over- and the lower education levels somewhat underrepresented. With regard to the degree of urbanization, the national comparison group was adjusted by sample weighting to the national urbanity proportions, in order to make a valid comparison between the
skills of the children in the northeast of the Netherlands and the national comparison group.

In contrast to our expectations, results of the current study revealed that the toddlers in our Northeast Netherlands sample, performed significantly better on the vocabulary and grammar tests than the same-aged children in the national comparison group. At age two, the difference was only significant for vocabulary, showing a small effect, whereas at age three, children in the northeast of the Netherlands performed better on both grammar and vocabulary, also showing small effects for both language measures. Next, by using Structural Equation Modeling (SEM), we estimated the unique contribution of maternal education to vocabulary and grammar. The findings revealed a small, but significant effect of maternal education on the development of children's vocabulary skill over one year, on top of a large effect of the preceding vocabulary skills. Maternal education had no additional effect on the development of children's grammar skill. Finally, findings of a multigroup analysis revealed that there was no differential effect for region concerning the role of maternal education in predicting children's vocabulary and grammar skills.

In the study reported in Chapter 3, first, socioeconomic and cultural factors that are regarded to be important for language development of young children, were described for our sample in the Delfzijl region. In line with findings reported in Chapter 2, the results revealed that almost half of the parents in this area were middle educated. In addition to the socioeconomic factors, we examined whether parental use of literacy, regarded as a cultural factor, could be considered as predominantly instrumental or recreational rather than informational. The findings revealed that, on average, parents in our sample reported to use books and magazines predominantly for recreational purposes. Furthermore, correlative analyses showed that parents’ literacy use at home was highly related to their literacy use at work, indicating that parents who have jobs with a high degree of symbolic job content, use literacy more for informational purposes at home, and vice versa: parents with jobs with a low degree of symbolic job content use literacy predominantly for recreational purposes at home.

Next, we focused on the language assessments by grade. The findings indicated that during children's first year at Kindergarten (K-1), in contrast to our expectations, the scores for the total sample on the receptive vocabulary tests were, on average, at the national average level, indicating no delay. The vocabulary scores in K-2 and Grade 1 confirmed these findings, showing no disadvantage. Further analyses on standardized scores revealed, however, that about a third of the sample in K-1 had vocabulary scores far below the national average level, indicating that a relatively large group did enter primary school with severe delays in their vocabulary skills. Although the productive vocabulary of these children increased substantially during the first two years at primary school (K-1 to K-2), the scores remained below the national average in Grade 1. The initial delay of this subgroup in code-related skills in K-1, however, disappeared once the children were in Grade 1.
The second aim of this study was to examine whether literacy use of parents, measured in K-1, predicted language proficiency in Grade 1, while controlling for general cognitive abilities and previous language skills. The results of the SEM analysis revealed a significant, though small effect of informational literacy at home on children’s code-related literacy skills during the first two years in kindergarten, but not on the other language measures, in particular vocabulary. In Grade 1, a small effect of informational literacy on code-related skills remained, but now a medium-sized effect of informational literacy on oral language skills became apparent, indicating an increasing influence of informational literacy at home on children’s oral language skills, on top of the effect of general cognitive abilities and previous language skills.

In addition to home literacy use as cultural factor in the language development of children, the study reported in Chapter 4 also focused on parental beliefs about child rearing and education, parents’ expectations regarding the academic achievement of their children and their views on the importance of home literacy for children’s development. The aim of this study was to examine the joint contribution of these environmental factors to the language development of young children at the beginning stage of formal education in the northeast of the Netherlands. The (descriptive) results revealed that a substantial group of parents in our sample did not have high expectations about their children’s school achievement. Furthermore, it appeared that, on average, parents judged activities, that are regarded supportive for early literacy development, as not important. The results of the SEM analysis revealed that parents’ literacy use mediated the relationship between maternal education, on the one hand, and the beliefs and expectations of the parents, on the other hand. Additionally, parental beliefs and expectations mediated the relationship between literacy use of parents and children’s language skills. Next, these beliefs and expectations mediated between aspects of home literacy and children’s language skills. In contrast to our expectations, however, home literacy did not mediate the relationship of background characteristics with language skills. As we found that the expectations of the parents regarding children’s achievement, in general, are low and their expectations influence the language skills of the children, these results confirm that low expectations of the parents in this area have a negative effect on the language skills of the children in the northeast of the Netherlands.

To further elucidate the role of parental beliefs and educational expectations, and how they relate to the socio-historical context of the northeast of the Netherlands, we conducted an in-depth interview study among 13 mothers from this region with children in the same age range as the children in the previous study. The study, reported in Chapter 5, specifically focused on maternal beliefs about child rearing and education in the family context and on maternal expectations regarding the academic achievement of their children. The analysis of the interviews yielded four profiles, based on two orthogonal dimensions. The first dimension reflected the degree in which mothers reported to continue the parenting and education they had experienced themselves, when they were young. The second continuum reflected the degree in which literacy
use at home was school-oriented, in particular to what extent language and literacy interactions at home involved decontextualized language and informational literacy. The qualitative analysis confirmed previous findings, as reported in Chapter 4, that beliefs and expectations of the mothers were strongly related to socioeconomic and cultural factors like maternal education, having a job, and characteristics of the home language and literacy use. Mothers with rural and collectivist lifestyles were low to middle educated, mostly had no paid jobs, and had their social networks predominantly in the immediate region. These mothers reported lower expectations regarding their children’s academic success than mothers who had their roots in small towns and were characterized by individualistic lifestyles. A peculiar remarkable finding was that mothers who were rooted in small village communities, appeared to be fully aware of the importance of informational literacy use and corresponding school-oriented values, but nonetheless reported to be reluctant to practice informational and educational literacy with their children. Instead, instrumental and recreational literacy use was predominant, according to mothers’ reports. The results in this study illustrated how cultural factors such as literacy use, home literacy, parental beliefs, and expectations mediated the relationship between socioeconomic factors, like parental education and language skills as was reported in Chapter 3 and Chapter 4.

Integration of the findings

The findings presented in this dissertation, summarized above, raise several topics for further discussion that will be taken up in this section.

Delay or no delay, that’s the question

The first research question of this dissertation was whether children in the northeastern part of the Netherlands indeed enter primary school with language delays, as has been contended for several decades. In general, the answer to this question must be negative, in contrast to our expectations. Two independent samples of children from the northeastern part of the Netherlands were compared to either children from the national pre-COOL sample (Chapter 2) or with age-referenced norms, based on a large national norm sample (Chapter 3 and Chapter 4). Both comparisons showed that, on average, children from the northeast of the Netherlands were not delayed in language skills. On the contrary: the three-year-old toddlers in our Northeast Netherlands sample performed significantly better on the language measures than same-aged Dutch children in the national comparison group.

There are at least two important caveats to this conclusion, that should be considered carefully. First, due to selection and response bias, the two Northeast Netherlands samples were a reasonably accurate but not an exact representation of the population in this region. In the first sample (Chapter 2), children from families with higher educated parents were overrepresented, whereas children from families with parents trained at
the lowest education level were underrepresented. Likewise, there was selective non-response in the sample, used in the second and third study, with lower educated parents being less willing to participate in the study than higher educated parents. Although we applied sample weighting to adjust for selection bias in the first study and could use test data of all children, also of children of non-responding parents, in the second study, it is a distinct possibility that the present findings do not hold for the whole population in the northeast of the Netherlands.

Second, average scores, as used in the comparisons with the national samples, may conceal the presence of particular subgroups for which the traditional image of severe educational delays in the northeast of the Netherlands may still hold. Indeed, in the study reported in Chapter 3, we found a relatively large subgroup of children with severe delays compared to national norms, next to a relatively large subgroup of children with clearly above average scores on the language measures and a relatively small group of children with average scores. Put differently, the distribution of scores revealed a bimodal pattern. This finding is in line with the findings of another recent study in the northeast of the Netherlands. In the evaluation study of Spraakmakend, a large-scale project to improve the language skills of young children in the northeast of the Netherlands, Beekhoven and colleagues (2011) also found large differences in standardized, norm-referenced Peabody Picture Vocabulary scores between subgroups of three-year-old children in three consecutive samples, suggesting a similar bimodality in the distribution of scores. To summarize the argument, although the language scores of children in the northeast of the Netherlands are on average at or above the national level, there likely exists a relatively large group of children in this region with severe and persistent delays. The notion of bimodality, that is, of the existence of a subgroup with severe and persistent delays in language skills, fits in with recent sociological and demographic analyses of the northeast of the Netherlands. Thissen (2013; 2015), for example described changes in the demographic composition of villages in the northern countryside as a transition from relatively autonomous villages towards more or less residential villages, which are occupied, not only by traditional rural-dwellers, but increasingly also by well-educated and prosperous residents, working in the nearby city, who are looking for space and peace in the village. This leads to a dichotomy between merely low and middle educated traditional residents on the one hand and merely high educated new-comers on the other hand, as we described in Chapter 5. We will return to this issue later on.

Another important finding, pertaining to the subgroup of severely delayed children, was that, despite initial delays in precursors of word reading, the average word reading score of this subsample was at the national level by the end of Grade 1. A likely explanation is that the emphasis in (pre)reading instruction in K-1 and K-2 on letter knowledge and phonemic awareness, regarded as the main prerequisites of word reading (Wentink et al., 2012), is effective and eliminated the initial differences in code-related skills.
In contrast, differences in receptive vocabulary skills between both groups, however, remained significant. We suggest there were three possible explanations for this finding.

First, despite the emphasis in the early years in Dutch primary schools on the prerequisites of word reading, little time and attention is spent to education in oral language skills, like vocabulary and listening comprehension. Second, oral language skills are regarded to be more complex than code-related skills (Cain et al., 2004; Gough, Hoover, & Peterson, 1996; Leseman & Hamers, 2007). Recently, Snow (2014) stressed the complexity of oral language skills for young children, by adding skills in academic language, perspective-taking, and reasoning as required skills for reading and reading-dependent subjects in school to the well-known Simple View of Reading model, which originally proposed only two types of skills as underlying reading comprehension: decoding skills and not further differentiated oral comprehension skills (Hoover & Gough, 1990). Being more complex and difficult to learn, it is paradoxical that support for the development of these skills in education seems limited. Third, the results in this dissertation indicate that parents’ literacy use at home, assessed when the children were in K-1, has a lasting effect on children’s oral language skills in Grade 1 and probably beyond, suggesting that the remaining differences in vocabulary are a consequence of persistent differences in home literacy. This finding points to the well-known Matthew-effect (Stanovich, 1986): children who grow up in favorable home literacy environments benefit more from education than their peers who grow up in less-favorable environments. Based on the present findings, we propose that the delays of children in the northeast of the Netherlands concern in particular these complex language skills and that delays in these skills become manifest with the increasing demands of reading in school (De Jong & Leseman, 2001).

To conclude, as an answer to the question ‘delay or no delay?’, we did not find an overall delay in language skills in children in the northeast of the Netherlands at the beginning primary school. The persistent image that children in this region, in general, have language delays, needs to be nuanced. We presuppose that demographic developments in rural areas in the northeastern countryside during the past decades led to changes in the demographic composition of these areas. Also at the family level, we did not find overall low literacy levels and negative attitudes towards education, as has been suggested by previous studies. However, we found indications that a particular subgroup of children and their families faces persistent disadvantages in these respects. These children and families suffer from an accumulation of a diversity of risks, partly related to the area and the social network, partly to socioeconomic factors (e.g., employment, income), and partly to parents’ idiosyncratic biographies and personalities. A possible implication is that education policy should not target the region as an undifferentiated sociological-geographical unit, but instead focus on specific subgroups and families within the region and target their more or less idiosyncratic risks ecologies. We will return to this point later.
Socioeconomic and cultural determinants of language development

With respect to the second research question, we examined the role of parental education, parental literacy use, aspects of home literacy, parental beliefs, and parental expectations regarding children’s academic achievement as environmental determinants of language development, while controlling for children’s general cognitive abilities, fluid intelligence, verbal memory, and selective attention. We expected that, due to selective migration and characteristics of the local labor market in the northeast of the Netherlands, lower- and middle-educated parents would be overrepresented and higher educated underrepresented in this region. Based on previous research (e.g., Leseman & Van Tuijl, 2006), we expected that, as a consequence of the demographic composition of the region, literacy use in families would be more often recreational, rather than informational. The findings in the quantitative studies as well as in the qualitative study confirmed the presupposed relationships of parents’ education and the contents of their jobs with the types of literacy use at home. We also could confirm the presupposed relationship of literacy use at home with children’s language development. Literacy use at home was found to mediate the relationship of the socioeconomic indicators with language development, especially with oral language skills underlying complex school skills as reading comprehension. The pattern of literacy use at home, therefore, can be a more sensitive indicator of pending delays in language development and later educational achievement than parental education, which is in current education policy the main criterion for allocating extra resources to schools and regions.

Recreational and instrumental literacy use appeared to be a persistent feature of families in two of the four profiles we identified in our final study, namely the Traditional rural-dwellers and the Dissociates. Persistent, because, the interviewed mothers reported to acknowledge school-oriented values and the role of school-oriented language and literacy use at home, yet admitted to use literacy merely for recreational and instrumental purposes. The school-oriented values the mothers mentioned in the interviews included the importance of having a broad and deep vocabulary (Proctor et al., 2011), which, together with world knowledge (Snow, 2014), and inferential reasoning skills (Oakhill & Cain, 2012), are regarded essential to cope with complex, formal, and informative texts (Leseman, 1994). Furthermore, these mothers showed to be able to act according the school-oriented values in their parenting, but, nonetheless, their daily literacy use remained merely recreational. According to their reports, the mothers did not feel ‘owner’ of these school-oriented values and, therefore, despite occasional attempts to do otherwise, returned their own practice of literacy use in an instrumental and recreational way.

School-oriented values, like having a broad and deep vocabulary, can be regarded part of the dominant literate culture (Collins & Blot, 2003; Leseman, 1994), or, as Heath (1982) called it, the mainstream culture, which encompasses dealing with written information, symbolic problem solving and communicating with symbol systems. This
literate culture contrasts sharply with the beliefs and child rearing practices of a number of mothers we interviewed in this study, in particular mothers who fitted the *Traditional country-dwellers* profile. These mothers represent, as Collins and Blott (2003) called it, a tradition of *vernacular literacy*, with values like reading only for leisure goals, talking predominantly about daily here-and-now events and communicating in short messages. From a *functional* point of view, however, vernacular literacy can perfectly fulfill the everyday needs for participating in the local community. Literacy needs are dependent upon the socio-cultural context, or put differently: “*Not everyone requires the same type of functional literacy and the same level of literacy skills everywhere in society*” (Leseman, 1994).

With regard to young children’s language development and educational achievement, two major objections can be raised against this relativistic functional view. *First*, young children will not only be members of the community of their parents, but will also be citizens of the world. Regardless of the community they will be living in, they have to be prepared to deal with written information in various (new) media and need to get access to knowledge and information at all levels of our globalizing society. Although the level of difficulty of the texts that children will encounter in the future will vary, the current information society requires a minimum level of skills to acquire, understand, and use information, either presented in oral, written, or digital form, in order to be able to autonomously make adequate choices and decisions, such as, for example, health-related decisions, career, and political choices (Fransen, Stronks, & Essink-Bot, 2011). In order to be able to meet these requirements as an adult, important prerequisite skills, such as, for example, *academic language skills*, which included broad and deep vocabulary, command of complex linguistic structures, and reasoning have to be learned early, even well before the child enters school, as many studies have demonstrated (e.g., Aarts, Demir, Henrichs, Kurvers, & Laghzaoui, 2006; Leseman et al., 2009; Schleppegrell, 2001). Thus, although academic and decontextualized language skills may not be essential skills in the *local* community, young children who lack experiences with decontextualized language on a regular base, are at risk for suboptimal development of skills to deal with the complex demands of the current information society (Neuman & Celano, 2012).

A *second* objection to the relativistic functional point of view relates to the expectations of parents, caregivers, and teachers. Ever since the controversial, but famous experiment by Rosenthal and Jacobson (1968), the power of expectations in education is widely acknowledged. Educational outcomes can be positively or negatively influenced by the expectations that exist on beforehand, based on information given by others. Applying the statement “*not everyone require the same type of functional literacy and the same level of literacy skills everywhere in society*” to children in the classroom, can easily lead to a self-fulfilling prophecy and risks to leave children behind on beforehand.
Making the value and nature of literacy use dependent upon what is needed in the immediate socio-cultural context, poses a dilemma. On the one hand, we regard the different literacies that emerge in different socio-cultural contexts of equal value (Barton, 1994; Street, 2003). On the other hand, we want to prepare children optimally for future functioning in school and society, which requires experience with one particular type of literacy.

To ‘solve’ this dilemma, Harkness and Super (1994) provide a useful framework by placing child development in a so called *developmental niche*. This developmental niche is conceptualized in terms of three basic components: (1) the physical and social settings of the child’s everyday life; (2) culturally regulated customs of child care and child rearing; and (3), the beliefs of the caretakers. Part of the framework is the concept of homeostasis, meaning that, normally, there is a balance between the three components: the customs of the community and the child-rearing beliefs of the parents are well-attuned to the physical, social, and economic circumstances under which the community lives. Changes in community’s customs and parental belief systems can be conceptualized as re-adaptations to changed circumstances, in order to restore equilibrium (Valsiner & Litvinovic, 1996). In this framework, the dilemma mentioned above, can be reframed as a problem of unbalance in the child’s developmental niche: the customs and beliefs of the parents fitting the two profiles are no longer well-adapted to the changes that have occurred in the wider societal context, in particular regarding the increased role of education, knowledge, and information. With regard to the beliefs of the parents, Harkness (2013) suggests that parents have to be ‘urged’ to value school more, in order to change the developmental niche at home. Urging a change in belief systems needs to start with making parents aware of the changed circumstances. Critical to this project is that parents become the ‘owner’ of these school- and informational literacy-oriented values. As we noticed in the interviews, the mothers had the knowledge, and even the skills, but did not feel ‘owner’ of these values. In order to create ‘ownership’, the first step is to make parents aware that change is necessary. Therefore the parents have to experience the changing circumstances themselves. The second step is ‘ownership’, meaning that parents have to experience that they have a choice in making changes. Falaf-Rafael (2001) calls this *informed-choices*, meaning that parents have to be provided with knowledge, in order to make a choice. As, in the end, they have made these choices themselves, they will feel themselves as the ‘owner’ of the change.

**Towards a new definition of indigenous rural parents?**

We started this dissertation by quoting the illustrative titles of a number of studies into the educational disadvantages of children in the northeast of the Netherlands. These studies can be placed in the tradition of the Dutch Educational Priority Policy (EPP), which aimed to reduce the educational disadvantages of children insofar as they were a consequence of social, economic, and cultural circumstances (Driessen & Mulder, 1999).
A particular target group of the EPP were the children of indigenous low educated parents ("1.25 children"), in particular low educated parents in rural areas. The report by Vogels and Bronneman-Helmers, published in 2003, has been widely received as a wake-up-call, bringing the disadvantaged position of indigenous rural children to the public attention (Vogels & Bronneman-Helmers, 2003). Almost ten years later, Driessen (2012) concluded that, despite several policy measures, the average language scores of indigenous children from low educated families (rural and non-rural) decreased by 4% in the period 2003-2011, whereas the results of their non-indigenous peers increased by 24%. Was the wake-up-call by Vogels and Bronneman-Helmers in vain? And how do the findings of Driessen fit in with our conclusion that, on average, the language skills of indigenous children in rural areas in the northeast of the Netherlands are at, and slightly above, the national average level?

One possible answer lies in a new, more precise definition of the target group. The target group of the EPP in the previous decades, perhaps quite sizeable once, seems similar to the group parents who we termed Traditional country-dwellers in this dissertation: parents who are strongly rooted in their northeastern village and feel familiar with living in this village as they themselves were raised in a such a village. However, this group seems to have become a minority group in rural areas nowadays. As Vogels and Bronneman-Helmers (2003) already suggested, “the image of the unprivileged is no longer the hard working labor man, but is associated with a minority of social security recipients (p.54).” This shift, from the Traditional country dweller to a new target group, can be seen as the consequence of the demographic developments in rural areas, we earlier described. As Thissen and Loopmans (2013) and Thissen (2015) described, many autonomous villages, in which residents were born, grew up, went to school, did their shopping, and had their jobs, changed into residential villages. As a consequence of these demographic changes, Thissen identified both ‘winners’ and ‘losers’. The ‘winners’ are the residents with a well-paid jobs, a driver’s license and a car, who have valuable competences, relative to demands of current society, and who have access to numerous resources to satisfy their needs and to cope with the demands of daily life. They are not dependent on services like shops, libraries, et cetera, that increasingly disappear from rural regions, as they have ample alternatives. Not everybody, however, is able to adapt to the changes in rural regions in this way, because of a lack of personal competences, mobility, and access to alternative resources. Certain groups of villagers are strongly tied to their village: the less mobile villagers with limited financial resources, the unemployed or low-paid employees, and the lower educated show a relatively high functional dependency on their village and, at the same time, they have fewer social contacts in the village and they feel less valued by the fellow villagers, the ‘new-comers’, who moved in for the pleasure of living in a rural area. The disadvantages of this low educated group seem to increase because the gap between the lower educated, on the one hand, and the middle and higher educated, on the other
hand, widens, as recent research has confirmed (CPB, 2015). We presuppose that his group of poor, low educated, relatively isolated parents is, or should be, the real target group of Educational Priority Policy. The contrast between the group prosperous ‘newcomers’ and the low educated group could be an explanation why we found the pattern of a bimodal distribution in the language skills of the children.

The interviews with mothers, reported in Chapter 5, gave a first insight in this group which we termed the Dissociates. The families within this profile have several features in common, like being low educated, but the most common characteristic is that several personal idiosyncratic factors play a role as well. The problems that these families encounter are rather psychological, than sociological by nature. Combatting these problems could therefore be a matter of care policy, rather than generic educational policy.

After redefining the target group in a psychological, sociological, social-geographical, and educational way, as was done in this dissertation, it seems obvious that the approach to tackle the issue of large differences in language development in the northeastern countryside requires a multi-disciplinary approach. Development of rural areas and local communities, development of resources for children (‘integrale kindvoorzieningen’), and economic initiatives to create employment in this region should hereby work together hand-in-hand. We will return to this point in the next section.

**Implications for policy and practice**

The findings of the studies, reported in this dissertation, can have implications for preschools, schools, schoolboards and policymakers.

The *first* implication concerns the identification of young children with language delays. As this dissertation has shown, relatively many children enter primary school with language delays. Therefore, it is important to identify these children early. For this purpose, we recommend not only to assess the children's language skills regularly, but also to evaluate their home language and literacy environment. In many municipalities, however, this is already the practice. In order to define the so-called target group, these municipalities assess the language and literacy environment of the preschool children, because of their execution of the ‘Wet OKE’ (policy for disadvantaged young children), so that they can allocate resources to preschools (Wet OKE, 2010). For this purpose, professionals use instruments like the ‘Omgevingsanalyse ter beoordeling van het taalaanbod in het Nederlands’ [Language input analysis instrument] (Postma, 2009). The instrument prescribes the decision processes but it does not offer items for a more detailed observation of the home environment. It would, for example, be useful to add an interview-guide to this instrument, in order to talk to parents about their beliefs about child rearing and literacy, their expectations about the future of their children, and their home literacy practices. In that case, the instrument could be used, not only for decisions about allocating resources, but particularly for making a real judgement
of the home literacy environment, that helps professionals to involve parents into early childhood education (Ledoux et al., 2015). This dissertation provided theories and instruments, to develop such a guideline.

The second implication concerns the nature of parental support. As the study, reported in Chapter 5 has shown, there is a close relationship between maternal education, having a job, having a social network, and having high expectations. Although the results of this study cannot be directly generalized to other populations, the findings support the proposals, defended by Schiller (2010), who argues that an effective way of supporting parents in rearing their children, is to educate them and provide them with jobs. He presupposed that there is an demonstrable relationship between having a job, a regular income, a social network, and educational achievement of their children (p.116). In order to improve the socioeconomic status and to increase the network of parents, providing adult education and suitable jobs can be an effective way of parental support. This approach fits in the tradition of the Family Learning Programs, like for instance in the United Kingdom (e.g., Haggart & Spacey, 2006). In these programs, literacy and numeracy skills of children are improved in three ways. First, children receive direct instruction in literacy and numeracy in preschool or school. Second, parental involvement - defined as informal or formal activities of parents with their children - is being supported, and third, adult learning is being propagated in order to improve the socioeconomic status of the parents. In order to implement this approach, cooperation between education, parental support, and adult learning is required. In rural areas, integrated child provisions [Integrale kind voorzieningen] (Doornenbal, 2012), provisions in which education and child care are integrated, and that have being effected the past five years (Reitsma, z.j.), can take the initiative in order to implement this approach.

As the Family Learning-like activities can be regarded as an outreaching task of the integrated child provisions, these provisions can also play a role in the internal organization of the school. This requires an explanation. As this dissertation has shown, schools in this area provide education to a relative large group of children with severe and persistent delays, but also to a group of children that are ahead. Receiving these children in traditional grade level groups, or even multigrade classrooms by one teacher is very demanding. This becomes even more complicated when differences between children within one grade level are large, as we have indicated in this research. Alternative grouping strategies should therefore be developed in these in order to meet the needs of all children. As many of these schools are small school, this is a challenging task and the issue of delivering quality in small schools was subject of debate recently (Onderwijsraad, 2013). In order to give an alternative to the recommendations by the Onderwijsraad, which was to reduce the amount of small schools, these alternative grouping strategies could be an answer to the quality issue of small schools. Promising examples of alternative grouping strategies (for example, working in units) in integrated child provisions in Amsterdam and Helmond (Doornenbal, 2012; KKNN, 2013) can
inspire the professionals in the northeast of the Netherlands in order to meet the challenges of a changing northern countryside. (For more information about Integrated Child Provisions and illustrative examples, see Doornenbal (2012)).

A final implication concerns the curriculum of the preschools and schools. The findings of the study reported in Chapter 3 suggests that schools are successful in reducing initial differences in word decoding and its precursor skills. Differences in vocabulary, however, remained. A shift in balance towards more emphasis on higher order language skills, such as vocabulary, grammatical skills, and language comprehension is needed in order to provide children-at-risk with the skills to acquire, understand, and use information, either presented in oral, written or digital form as an adult.

**Limitations and further directions**

There are a number of limitations that should be noted. **First**, this dissertation suffered from selective samples. Lower educated parents were underrepresented in this dissertation. This was the case in the quantitative studies as well as in the qualitative study. Although cooperation of the schools was part of our recruitment strategies, as teachers approached parents personally to participate in this research, mostly middle and higher educated parents consented to participate in this research. With regards to the quantitative studies, we already mentioned that the two samples from the northeastern part of the Netherlands were a reasonably accurate but not an exact representation of the population in this region. It is, therefore, a distinct possibility that the present findings do not hold for the whole population in the northeast of the Netherlands. With regard to the qualitative study, the selectivity of the sample was the cause that we did not get a full image of the beliefs and expectations of lower educated parents. To get a more detailed insight in the beliefs and expectations of this group, another kind of methodology is required. Participatory observation within the school or within the villages for a long time, will generate a more detailed picture of the population.

The findings, reported in this dissertation, suggest a number of directions for future research. **First**, this research could be extended to other areas within the northeast of the Netherlands, such as regions around Winschoten, Stadkanaal, Emmen, and Hoogeveen, as we suppose that the culture in these areas is slightly different from, for example, the Delfzijl region. Findings from similar analyses in these areas can corroborate, or nuance the present findings.

A **second** topic for future research could be to examine the role of schools in language skills of the children in this area. In this dissertation, for example, we presumed that the initial differences in K-1 on code-related skills diminished in Grade 1 as a consequence of adequate reading instruction by the schools. We could not confirm this hypotheses, however, as we did not have any information about, for example, the curriculum, ways of instruction, grouping strategies, or the teaching skills of the teachers. The ongoing
discussion between schools and the Dutch Inspectorate of Education about explanations about educational disadvantages in this region includes two positions, namely the (lacking) quality of small schools on the one hand and the composition of the school population on the other hand (Godlieb, 2008). In our dissertation, we did find effects of home related determinants on educational achievement, but we did not examine school related determinants, such as the factors named above.

A related topic for research concerned the beliefs and expectations of the teachers of the schools in the northeast of the Netherlands. We assume that many teachers in this area have their roots in the northeastern provinces themselves. As we found that many parents in this area have low expectations about the educational achievement of their children, it is imaginable that teachers have low expectations about the achievement of the children in their classroom as well. A study by De Boer (2009) about the expectations of teachers in Fryslân, a comparable region in the north of the Netherlands, showed lower expectations of the teachers in Fryslân towards expectations of their pupils for continuing education, compared to their colleagues in other parts of the country. In order to get a complete picture of the determinants that contribute to the language development of the children in the northeast of the Netherlands, it is advisable to examine not only socioeconomic and cultural determinants of the parents, but also the quality of the school and, as a part of it, the expectations of the teachers.

General conclusion
The findings presented in this dissertation have revealed that there are no overall language delays in young children at the beginning stage of primary education in the northeast of the Netherlands. The predominant image that children in this region have a language delay, should be adjusted. However, there are clear indications that within the general population in the northeast of the Netherlands, a relatively large group of children suffers from persistent language delays. It is suggested that changing demographic composition of the villages in the northeastern countryside is related to the differences in language skills that are indicated in this research. Evidence is found for this assumption as this research has revealed that the relationship of socioeconomic factors such as maternal education and having a job with language skills of young children is mediated by cultural factors such as the literacy use of parents, their beliefs about child rearing and education, and their expectations regarding children’s academic achievement. As structural features of the area seem to be related to determinants on the family level, actions to tackle the issue of large differences in language development should therefore not only be addressed to the direct environments of the families, but require a multidimensional approach.