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Parents' perceptions of parent-teacher relationship practices in Dutch primary schools – an exploratory pilot study

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ABSTRACT

This paper shows how parents' perceptions of parent-teacher relationship practices differ between different types of schools with respect to children's special needs and the socio-economic status of these children. Using a questionnaire, we compare parents' views from two special education schools, two at-risk schools serving low SES-children, and two mainstream primary education schools in the southern part of the Netherlands. The theoretical framework is based on Epstein's Model of Parental Involvement. The results illustrate that parents and teachers in special education and at-risk schools are very much accustomed to 'two-way communication', in contrast to mainstream schools, and that this is valued highly by these parents. Furthermore, teachers in special and at-risk schools are more familiar with interacting with parents, involve them more in decision-making and more often co-ordinate homework practice with parents.

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Primary school teachers; educational practices; social class: Netherlands

Parental involvement in a child's school career is extremely important for children's development, especially in primary school (Desforges & Abouchaar, 2003). It is considered as an effective strategy to ensure children's academic and social–emotional success, and to increase academic performance (Lee & Bowen, 2006). A strong parent–teacher relationship is a prerequisite for parental involvement (Hill et al., 2004). Together, in mutual trust and understanding, and in searching for agreement, parents and teachers create the ideal circumstances for learning and development of children, where parents see themselves as co-educators (Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011).

Additionally, parental involvement is particularly important for the educational development of students from lower SES-families as they benefit even more from a stable school home environment that is interconnected by a good parent—teacher relationship (Fantuzzo, MacWayne, & Perry, 2004). For parents of children with special needs, strong teacher—parent relationships may be even more important. Whereas, these parents usually are aware of their children's needs and difficulties, and are willing to support their development, they often

lack knowledge about the special educational system and therefore leave decision-making about the best education for the child to the school (Turnbull et al., 2011).

The Organisation for Economic Co-operation and Development (OECD) and the European Commission also stress the importance of school and family partnerships to fight inequalities of educational opportunities for children, for example, with a lower socio-economic background (Heckman, 2008; Organisation for Economic Co-operation & Development [OECD], 2012). This is underlined by the Dutch Governmental policy on investing in educational partnerships in schools.

In the southern part of the Netherlands, the region where this study was carried out, over 20% of the children come from low-income and lower educated families and are considered low SES, compared to 9% state-wide (Statistics Netherlands, 2015). In this former mine district, there is a persistent achievement gap. The academic outcomes of smart children from low-SES homes in this region are similar to average-intelligent children from high-SES homes (Jungbluth, 2014).

Despite the widely recognised importance of investing in home-school relationships, parental involvement in primary education in the Netherlands is stagnating. The bi-annual Monitor Report Parental Involvement shows that in 2014, 15% of the primary school teachers estimated that parents are not yet sufficiently involved in school. About one-third of them, mostly teachers with only a few years of experience, indicated that they feel insecure about their ability to build strong relationships with parents, especially with parents from ethnic and cultural backgrounds that are different from their own (Bokdam, Tom, Berger, Smit, & van Rens, 2014).

However, it is unclear if these generalised results hold for all types of schools and parents. Previous national and international studies have pointed at strong impacts of schools' contexts and their relations with various groups of parents (Tett, 2004). Furthermore, research has shown that parents with different ethnic and cultural backgrounds appear to differ with regard to types and levels of involvement (López, Scribner, & Mahitivanichcha, 2001). Studies of parent/teacher relationships often show higher quality relationships between parents and teachers with shared ethnicity and/or socio-economic background (Gwernan-Jones et al., 2015; Thijs & Eilbracht, 2012; Waanders, Mendez, & Downer, 2007).

For the population of children with special needs, parental involvement is obviously considered important, but only few studies address how parent advocacy and home-school collaboration in special education can be improved (Moriwaka, 2012). Research involving a comparison of the levels of parental involvement of children in the general population and of special education children is limited, even more so within families of special education children from diverse backgrounds (Peetsma, Vergeer, Roeleveld, & Karsten, 2001).

Therefore, this exploratory pilot study analyses parents' perceptions on parental involvement and parental-teacher relationships. The research question, addressed in this study is: 'How do parents' perceptions on parental involvement vary across different types of schools?'. Three different school types are distinguished: at-risk schools with a large share of low-SES children, special education schools and mainstream schools. The theoretical framework is based on the Epstein Model of Parental Involvement (Epstein, 2011). The contribution of this study is that we uncover both differences and similar patterns of parents' perceptions on parental involvement and parent-teacher relationships in different school types.

In the remainder of this paper, we first discuss the theoretical framework and the related literature. This is followed by the data and methods. Here, we discuss the research setting, the participants, the questionnaire and methods. We then present the results, according to the five main themes identified in the theoretical framework. The last section discusses the findings.

Literature and theoretical framework

For the theoretical framework we use the Epstein Model of Parental Involvement (Epstein, 2011). Epstein's model defines six types of involvement by parents, that are the key to successful school-family-community partnerships. These six types of involvement are (1) parenting, (2) communicating, (3) volunteering, (4) learning at home, (5) decision-making and (6) collaborating with the community. As in this study we focus on the teacher-parent relationships in a school setting, the first and sixth types are left aside in our theoretical framework. Based on the work of Iruka et al. (2011) and Lasky and Dunnick Karge (2011), instead we focus on conditional aspects for building strong parent-teacher relationships such as searching for agreement and trust. This gives us five main themes as a theoretical framework for this study.

(1) Searching for agreement and trust. Building relationships is crucial for parental involvement. Teachers play a key role in increasing parental involvement in school and at home (Hill et al., 2004; Lee & Bowen, 2006). Teachers need to search agreement as to how they share their respective tasks and responsibilities with parents, and strive for shared expectations about how parents can effectively support their children at home (Iruka et al., 2011). Children have the ability to learn more, when parents understand both school culture and the school's expectations regarding home learning activities. As a result, parents can support their children in an effective way. This leads to better learning outcomes (Henderson & Mapp, 2002).

Related literature shows that an open, helpful and friendly school environment is conditional for building relationships (Lasky & Dunnick Karge, 2011). For example, when teachers are responsive towards home language, respectful towards parents' role conceptions and parents feel that they have a genuine interest in the child this contributes to a trustful parent-teacher relationship (Denessen, Bakker, & Gierveld, 2007).

- (2) Communicating. Epstein's communicating type of involvement concerns communication-oriented practices that bridge the gap between home and school. From the literature, we know that parents are more likely to participate if frequent, clear, two-way communication is present (Bakker, Denessen, & Brus-Laeven, 2007).
- (3) Volunteering. The volunteering type of involvement is focused on involving parents as volunteers and/or audiences at the school. This does not only include stimulating parents to do so, but also preparing teachers to work with this group of parents. Patrikakou and Weissberg (2000), for example, have shown that when parents are asked to assist in learning activities at school, this affects their sense of competency in a positive way.
- (4) Learning at home. The learning at home type of involvement means that teachers should design home tasks such that parents are able to help with and talk about these tasks with their children. It also means that parents should be involved in academic learning of the children at home. Teachers are expected to inform parents of effective strategies in the home environment (Epstein, 2011), to talk to parents about how they can assist their

children, and to give them specific tasks to do with their children at home (Denessen et al., 2007). If parents and teachers work well together and parents read to their children at home and help with their homework, it has a positive effect on children's development (Desforges & Abouchaar, 2003; Fan & Chen, 2001).

(5) Decision-making. The decision-making type of involvement deals with decisions made about children's learning, school activities and school decisions. At the school level, parents should be included in for example school councils and parent organisations. At the individual level, parents should be involved in decisions made by teachers about the learning path for their child, not only informed about all decisions. This is also emphasised by the Dutch Ministry of Education, who considers schools and parents to be partners (Ministry of Education [MoE], 2014).

Literature shows that teachers need to inform parents about the academic and social development of their child, and invite them explicitly and directly to school meetings (Bakker et al., 2007). Also, we know that the teacher's information about school tasks and school development of the student leads to an increasing sense of efficacy for parents, which in turn is positively related to parent involvement (Waanders et al., 2007).

Data and methods

Research setting and participating schools

The study took place among six primary schools in the southern part of the Netherlands. The schools were selected during the winter of 2014, based on school population and school size. A distinction was made between at-risk schools, mainstream schools and special education schools. For all three school types, one small (less than 180 pupils) and one medium-sized school (between 180 and 300 pupils) was selected.

The two schools with a high level of low-SES children (children from lower educated families) are considered at-risk schools in our study. In these schools 20-40% of the children come from lower educated families. Almost 50% of the children have learning and/ or behavioural difficulties and 20% of these children receive home support as well. The two mainstream schools serve average to high educated families and have less than 20% children with learning and/or behavioural difficulties. The two special education schools serve children with learning disabilities,² who often have behavioural problems as well. The parent population of these schools is mixed.

Data: parental questionnaire

The parental questionnaire was based on the Parental Involvement Questionnaire, which was developed on behalf of the Dutch Ministry of Education. Unfortunately, there are no known psychometric specifications for this questionnaire and there is no information on validity and reliability of this questionnaire. Therefore, we analysed the reliability of the five themes using Cronbach's alpha, on which we will report below.³ Data were collected in the second semester of the school year 2014/15. The questionnaire included 34 items in total, of which 20 items were on the five main themes of this study:

(1) Searching for agreement and trust. The questionnaire contained a set of three questions about parents' role perceptions, whether the parent feels he/she can influence the child's performance, whether school and parents should work together to improve the performance and if parents feel responsible for this (agreement). Furthermore, the questionnaire asked which aspects and acts in the school show whether parental involvement is important for the school and shows the schools' hospitality. This question had check boxes for the answer options, such as friendliness of the teachers, genuine interest in the child, people greeting each other, and having a little chat with the teacher (trust).

- (2) Communication. Another set of three questions was about how the school communicates with the parents, and whether the parents appreciate these ways of communication or would rather like to see other ways of communication. One of the questions was, for example, in what way parents prefer to be informed, with check boxes for the answer options, like by e-mail or newsletter, and what kinds of meetings they prefer, like parent-teacher meetings, walk-ins before or after school and home visits. Other questions were whether the school guide is clear enough and whether teachers use understandable language.
- (3) *Volunteering*. The questionnaire contained four questions about which volunteering activities in the classroom and in school parents want to be involved in.
- (4) Learning at home. A set of six questions was about the parents helping the child at home, and in which way the school supervises and supports this process (for example, by providing parents with small homework assignments that they can do with their child), and whether the parent feels the school supervises sufficiently in this.
- (5) Decision-making. The questionnaire contained one question about decision-making, whether the parent feels is his/her input is taken into account when discussing the child's performance.

The remaining 14 questions do not fit in our theoretical framework and are left aside in this paper. All questions were closed (often yes/no, in some cases a list of options of which all that were applicable could be checked), although there was room to add additional information. Parents needed about 20 min to fill out this questionnaire. As for our reliability check, themes 1b, 2 and 4 (trust, communication and learning at home) showed to be reliable with Cronbach's alphas between .65 and .7. Themes 1a and 3 (agreement and volunteering) showed to be less reliable (alphas of .33 and .13, respectively), and for the last theme on decision-making we cannot calculate an alpha as this only consists of one question. This implies that we have to keep in mind that some themes as less reliable when we discuss the results later on.

In addition to the (anonymous) questionnaire, 27 parent interviews were carried out. The goal of these interviews is to gain deeper insight into how parents perceive parent-teacher relationship practices. Parents were carefully selected for the interviews, to make sure that they represent the parent population of each school, based on education level.⁴ Occasionally, we used the information from the interviews to be able to interpret our findings.

Response analysis

In spring 2015, the paper–pencil questionnaire was handed over to the oldest child of every family to take home to their parents. Note that parents are accustomed to filling in this anonymous questionnaire every two years, as it is a regular practice at these schools. This

makes the unit of observation for the questionnaires the family, and the response analysis is also based on this. Unfortunately, the questionnaire was focused on the content, and only few contextual characteristics were asked. As the questionnaire was anonymous, there is only one contextual characteristic that we can use for the response analysis, namely which language is spoken at home (Dutch or other).

In total, 319 parents (families) filled in the questionnaire; 125 parents from mainstream primary schools, 111 from at-risk schools and 83 from special education schools. The total response rate was 50%. The response rate per school varies between 29 and 62%. Mainstream schools on average have the highest response, and special education schools have the lowest response rate. However, there are large differences between schools. Furthermore, the share of families speaking Dutch at home also varies, between less than 15 and almost 75%. These numbers are comparable to the averages of each school, so the sample seems to be representative at least at this aspect.

Data analysis

To analyse the questionnaire data we use a categorical variable that indicates to which of the three school groups the parent belongs. We first present descriptive statistics per theme, of the answers to the questionnaire for each group separately. Next, we apply a multinomial logit regression per theme. This is a regression method where the outcome variable has multiple nominal categories. In our case, this is the variable type of school to which a parent belongs (at-risk, special education or mainstream). We estimate the probability that a parent who gives a certain answer to a certain question belongs to, for example, the group of at-risk parents, instead of to one of the other two types. This type of regression allows us to simultaneously enter all the variables that belong to a theme from our theoretical framework in one analysis. We cannot only analyse the difference between one variable for two groups, but we analyse the differences between the answers on all variables belonging to that theme at once, for all three groups at the same time.

The technical interpretation of the multinomial regression and the numerical results are presented in Appendix A. In the paper itself we simply describe whether certain variables are significantly different at the 5% level between the types of schools.⁵

Results

Below we describe the results for the five main themes of this study. For each theme, we first describe the answers of the parents of the different types of schools for each of the questions from the questionnaire that belong to this theme. Next, we discuss whether the answers to these questions were significantly different between the three different types of schools, using a multinomial logit regression analysis. The full results to the multinomial logit regression are discussed into detail in Appendix A.

Searching for agreement and trust

Table 1 shows the descriptive statistics on the questionnaire items that are linked to the conditional aspects for searching for agreement and trust. Table 1 shows that almost all (97%) of the parents agree that they are co-responsible for the school success of their child,

(<u>-</u>

 Table 1. Results searching for agreement and trust.^a

	Total	At-risk schools	Mainstream primary schools	Special education schools	Sign dif between	Sign dif between	Sign dif between
	Percentage	Percentage	Percentage	Percentage	stream	education	special education
Agreement							
Parent influences perfor- mance child?	26	66	100	86	No	ON	No
Should schools and	86	26	86	94	No	No	No
parents cooperate to improve performance child?							
Parent co-responsible for performance child?	66	86	86	96	No	No	No
Trust							
School hospitality characteristics							
Friendliness of the	85	80	83	94	No	No	No
teachers	ŀ	C	ç	ŗ	ž	Ž	1
good organisation at school	CC	00	7	0/	ON	ON.	ON
Genuine interest of	28	45	55	80	No	Yes	Yes
the teacher in my child School does as prom-	39	38	27	57	Yes	8	Yes
ised in school guide							
Teachers, parents and	61	56	63	63	No	No	No
children greet each other							
Openness of the	92	52	99	79	Yes	Yes	No
school							
Parents feel at home	20	11	25	24	Yes	No	No
among each other	S	Q	9	Ç	,	,	Z N
with the teacher	000	00	0	0	<u>6</u>	S D	Σ
Maximim M	317	110	124	83			
	5	2	-	1			

Por all tables, it holds that significant differences are at the 5% level from multinomial logit regression, standard deviations for the three different schooltypes are included in Appendix B. All variables are considered at the same time in one regression. Separate regressions for agreement and trust.

that they as parents can influence their children's learning performance (99%), and that school and parents need to cooperate, in order to facilitate children's learning process as much as possible (98%).

Parents were also asked whether certain school hospitality characteristics are present. The majority of parents agreed that school hospitality showed from the friendliness of the teachers (85%), a genuine interest of the teacher in the child (58%), whether teachers and parents greet each other (61%) and the openness of the school (65%).

The second half of Table 1, from a vertical point of view, shows which of these differences are significant in the regression analysis. The analysis shows that none of the agreement variables are significantly different between the three groups. As for the trust variables, we see that the genuine interest of the teacher in the child is significantly higher for special education schools than for either of the others. Also special education parents believe that the school does as promised in the school guide significantly more than mainstream parents. Furthermore, there are significant differences between all three groups with respect to having a little chat with the teacher. This happens significantly more often in at-risk schools, followed by mainstream schools and lastly, special education schools. On the other hand, at-risk school parents significantly less often indicate that the school is open, compared to either one of the other parents. This suggests that for at-risk school parents the school's openness needs to be extensive.

Communicating

Table 2 shows that the most important source of information for all parents is e-mail (65%), followed by the parent-teacher meetings (61%), flexible meetings whenever they are needed (52%) and paper information letters (44%). Hardly any parent prefers communication via Facebook (3%), coffee mornings (5%), home visits (6%) or walk in moments before school starts (8%). Almost all parents believe that the information in the school guide is clear enough. However, there are differences between schools. Parents from mainstream schools rank website communication, general information evenings, fixed yearly meetings, flexible meetings, theme meetings for parents and walk-in meetings after school a lot higher than parents from the other two types of schools. Parents from at-risk and special education schools score higher than parents from mainstream schools that they value receiving a paper information letter. At-risk schools score extremely low in the preference for e-mails, and higher in their preference for paper letters and coffee mornings, compared with the other two school types. The preference for coffee mornings from at-risk parents can possibly be explained by differences in employment and related availability.

The second half (vertically seen) of Table 2 shows which of these differences are significant in the regression analysis. The analysis shows that mainstream parents significantly more often prefer communication via the website, while at-risk and special education parents prefer communication via e-mail. Special education parents also prefer e-mail more than at-risk school parents, and Facebook more than mainstream school parents. At-risk school parents prefer fixed yearly parent-teacher meetings significantly less than parents from mainstream schools, but prefer coffee mornings significantly more. On the other hand, special education parents prefer home visits significantly more than at-risk parents. Walk in moments before the school starts are preferred significantly more by at-risk and mainstream parents, compared to special education. This finding can be explained by the

 Table 2. Results on communicating.

	Total	At-risk schools	Mainstream primary schools	Special education schools	Sign dif between	Sign dif between	Sign dif between
	Percentage	Percentage	Percentage	Percentage	stream	education	special education
How preferably informed by school?							
, Digital: website	27	15	41	22	Yes	No	Yes
Digital: e-mail	65	37	84	77	Yes	Yes	No
Digital: Facebook	٣	3	-	6	No	No	Yes
On paper: e.g. news-	44	58	27	51	Yes	No	Yes
General parent infor-	27	21	37	20	ON	No	No
Fixed yearly moments	61	53	73	54	Yes	No	No
for parent teacher							
Coffee mornings for	5	∞	2	4	Yes	ON.	oN N
Theme meetings	21	15	32	11	N	8 N	8
Flexible meetings	52	42	62	49	No	No	No
when needed Teacher visiting at	9	4	2	10	No	Yes	N N
home Walk in 15 min hoforn	0	Ç	Ç	C	Q	>	>
school starts	Ø	2	2	7	000	res Les	Tes
Walk-in 15 min after school ends	14	12	19	6	No	No	No
Text in school guide clear	91	91	87	86	No	No	Yes
Teachers use under- standable language	61	55	62	29	o N	ON.	ON.
parents							
Maximum N	315	111	123	81			

fact that children in special education schools often come to school by school bus instead of being brought to school by their parents. Therefore, special education parents have less opportunities to walk in before school starts. This may be counterbalanced by home visits, which is a strong involvement strategy. Lastly, special education parents find the text in the school guide significantly more often clear enough than mainstream parents do.

Volunteering

Table 3 shows that around 50% of the parents would like to volunteer at activities at school. Only a little more than 10% would like to volunteer in class or help children with homework in the school environment. These numbers are a lot lower for special education schools, except for helping other parents, here special education parents score higher than mainstream parents, but not than at-risk parents. Apart from volunteering at activities, at-risk parents are most willing to help at school.

The second part of Table 3 shows that special education parents significantly less often would like to volunteer at school activities, compared with mainstream parents, and significantly less often want to help with homework at school, compared with at-risk parents.

Learning at home

Table 4 shows that almost all parents indicated that they help their child with its homework (97%). However, only just over 50% of the mainstream and at-risk school parents believe that the school is aware of what parents can and are willing to do at home, as opposed to 70% of the special education school parents. Only 55% of the mainstream school parents are satisfied about school support for home learning activities, as opposed to 75% of the at-risk school parents and 69% of the special education parents. Additionally, 71, 82 and 78% of the parents from mainstream, at-risk and special education schools, respectively, indicate that they do get suggestions for home learning activities. From the parents of the special education schools in are study 89% answered yes to the question, whether school gives the children small projects and practice booklets to take home, as opposed to 83% for both other types of parents.

The right-hand part of Table 4 shows the significant differences between the variables. Here, we see that special education parents feel that the school knows what they can and cannot do at home significantly more, compared with both other types of parents. This could be explained by the fact that in special education there is a greater need to discuss the development of the child. On the other hand, at-risk parents get significantly more often suggestions for home learning activities, again compared with both other groups.

Decision-making

The parent questionnaire contained only one question with respect to this theme ('Do you feel like you are taken seriously by the teacher?"). Table 5 shows that almost all parents (96%) from all three school types feel they are taken seriously, with a bit lower number of parents from at-risk schools feeling that way. The right-hand part of Table 5 shows that these differences are not significant.

Table 3. Results on volunteering.

	Total	At-risk schools	Mainstream primary schools	Special education schools	Sign dif between	Sign dif between	Sign dif between
	Percentage	Percentage Percentage	Percentage	Percentage	stream	education	special education
What more would you							
Volunteering at	90	51	57	40	ON	No	Yes
Volunteering in class	12	15	12	9	No	No	N
Helping with home- work at school	13	20	10	7	ON.	Yes	No
Helping other parents	7	10	٣	7	No	No	No
Maximum N	319	111	125	83			

Table 4. Results on learning at home.

	Total	At-risk schools	Mainstream primary Special education schools	Special education schools	Sign dif between	Sign dif between	Sign dif between
	Percentage	Percentage	Percentage	Percentage	stream	education	special education
Do you help child at	97	86	96	66	No	No	No
home practice for school?							
Does school know about	09	53	54	79	No	Yes	Yes
what you can and							
Is teacher support for	65	55	55	69	No	No	No
parents sufficient?							
Do you get suggestions	77	71	71	78	Yes	Yes	No
from teacher for home							
learning activities?							
Does your child get small	84	83	83	68	No	No	No
projects and booklets							
to take home?							
Does the school expect	84	79	79	68	No	No	No
you to help your child							
at home?							
Maximum <i>N</i>	312	110	125	83			

Table 5. Results on decision-making.

	Total	At-risk schools	Mainstream primary schools	Special education schools	Sign dif between	Sign dif between	Sign dif between
	Percentage Perc	Percentage	Percentage	Percentage	stream	education	special education
Is parental input taken seriously when discuss- ing child's perfor-	96	92	86	86	No	ON	No
mance <i>:</i> Maximum <i>N</i>	306	101	124	81			



Discussion

The study at hand examined parents' perceptions of parental involvement and parent-teacher relationships in three different types of primary schools with respect to children's special needs and socio-economic status, by making use of a parent questionnaire. Additional interviews were conducted in order to gain deeper insight into parent-teacher relationship practices which also helps to interpret the findings from the questionnaire.

Almost all parents in this study recognise the need to cooperate with school, whereas research shows that 15% of the primary school teachers state-wide consider parents to be not yet sufficiently involved in school (Bokdam et al., 2014). Apparently, the view between teachers and parents on this is not the same. This finding confirms the tendency, known from the literature, that teachers underestimate the level of commitment of parents (e.g. Bakker, Denessen, Dennissen, & Oolbekkink-Marchand, 2013; Barnyak & McNelly, 2009).

Also, parents consider themselves co-responsible for their child's school success and are convinced that they can influence its learning performance. However, we know from the interviews that it is not a common practice for teachers and parents in the mainstream primary schools in this study to talk about their ambitions and their respective role conceptions. As a contrast, the parents from the special education and at-risk schools seem to be used to talking about their ambitions and those of the teacher of their child, on a regular basis.

Although the conditional characteristics for trust are generally adequate in all three types of schools, both mainstream schools and at-risk schools can learn from special education schools where genuine interest in the child and openness of the school are applied best. These characteristics are not only conditional for parental involvement (Lasky & Dunnick Karge, 2011), but they are also conducive to building connectedness between parents and teachers. Informal conversations and unscheduled contact moments are important parent involvement practices in this matter, and these practices are specifically recommended for lower SES-parents in international research (Trumbull et al., 2003). Our study shows that regular informal contact between parents and teachers, such as the possibility to have a little chat with the teacher, is already part of the everyday practice in the at-risk schools, which was also shown in previous research in the Netherlands (Smit, Driessen, Sluiter, & Brus, 2007). Additional interviews show that parents from mainstream and special education schools, on the other hand, would like to have more opportunities to meet the teacher in an informal way than they have now.

Communication by e-mail is mostly deemed important by mainstream parents, whereas at-risk parents prefer information on paper, and special education parents prefer both email and information on paper. Parent-teacher meetings are considered important by all parents. Primary education parents indicate that in these meetings, teachers communicate mostly about academic achievement and social development of the child, but not so much about learning and behavioural issues, or problems (Iruka, Winn, Kingsley, & Orthodoxou, 2011). We can only confirm this pattern that is found in the literature for the mainstream schools, not in the at-risk and special education schools of our study. From the interviews we know that in these schools, parents and teachers appear to speak about problems and concerns, even conflicts. This is in contrast with Broomhead's findings (Broomhead, 2014) who observed rather a conflict avoidance strategy used by educational practitioners when confronted with low-SES parents who have children with learning and behavioural problems. Furthermore, in the at-risk and special education schools in our study, parents and teachers are very much accustomed to two-way communication, in which teachers ask input from parents and take their opinion into account.

On top of that, strong involvement practices like visiting classrooms and asking parents to assist in learning activities are very common in the at-risk schools in our study. Consequently, these parents are also the most willing to help with homework at school. Both involvement strategies are known to affect the parents' sense of competency (Patrikakou & Weissberg, 2000) and are purposefully deployed by the schools in our study.

Almost all parents help their children with homework tasks, in all three types of schools, but they all need the teacher to ensure that they feel supported in assisting their children in their homework. In all three school types, parents feel the need to align their home-based learning activities with the foci of the school programme.

National and international research findings on inclusive education practices suggest that it is a greater challenge for parents with children that need special support to establish a working relationship with the school, than for mainstream parents (Elkins, Kraayenoord, & Jobling, 2003; Peetsma et al., 2001). Our study illustrates that parents in all three types of school feel like they are taken seriously by the teacher. These results are based on the themes from which the reliability was confirmed with Cronbach's alpha (the themes trust, communication and learning at home), which strengthens our confidence in these results. The themes that have shown less reliability also do not show any result.

All in all, this study underlines the need for schools to choose parent involvement strategies that work with the population of their school, considering differences in cultural norms by socio-economic status of their school population. In order for teachers to be better able to involve parents, and to build a stable relationship with parents, a first step for future research is to investigate how teachers consider the relationship with parents and how this relates to the teacher body of the school, the type of school, type of children and type of parents. Also deeper insight is needed into how parent-teacher relationship practices which lead to co-ordinated home and school efforts, are applied in schools.

Notes

- The low-SES children in this region are mostly ethnic Dutch children, not ethnic minority children. Here, language issues are often related to speaking a local dialect, not a foreign
- 2. In the Dutch school system, children with minor learning or behavioural difficulties are included in mainstream primary schools, whereas children with learning disabilities (IQ rate 50-90) or behavioural disorders attend special education schools.
- 3. Note that we also performed factor analysis, but that this gave us 13 factors that were in no way justifiable from the Epstein framework point of view. We therefore opt to group the questions based on content and check this with Cronbach's alpha. Low alphas also indicate we should be careful in interpreting the results of that specific theme.
- 4. Semi-structured in depth interviews were carried out with a total of 22 mothers and 5 fathers, 8 with parents from at-risk schools (3 low and 5 with a medium education level), 11 with parents from mainstream schools (6 medium and 5 with a high education level) and 8 with parents from special education schools (3 low, 3 medium and 3 with a high education level). In this study, we consider parents with a low education level when they the highest educated parent has a maximum of pre-vocational secondary education. Parents are considered medium educated when the highest educated parent has a least secondary vocational, senior general secondary or pre-university education. Finally, parents are considered high educated when at least one parent has a minimum of higher professional or university education.
- Note that we do not perform T-tests per question in the questionnaire, but one simultaneous analysis per theme, of which we present the significance levels. Using this method implies that the problem of multiple comparisons to is reduced to a large extent.



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Appendix A. **Multinomial logit regression**

Tables A1-A6 shows the results of the multinomial logit regression. In Tables A1-A6, the at-risk schools are the reference category. We only discuss the significant differences in this discussion. The multinomial logit regression shows whether the parents' perceptions are significantly different from one another for each question, while controlling for the answers of the other questions. The odds ratio describes the chance that a parent that gives a certain answer to a question belongs to the at-risk group or not. If the coefficient is positive, the special education or mainstream parents are more likely to give this answer. This results in an odds ratio above one. If the coefficient is negative, special education and mainstream parents are less likely to give this answer, and the odds ratio will be below one.

Searching for agreement and trust

In Table A1, we see that parents from special education schools are more than 6 times more likely than parents from at risk schools to mention that genuine interest of the teacher in their child, 2 times more likely to mention the openness of the school and 5 times less likely to have a little chat with the teacher.

Table A1 also shows that parents from mainstream schools are 1.5 times less likely to mention doing as promised in the school guide, compared with at-risk parents. Furthermore, at risk parents are less likely to rate the openness of the school, and are more likely to feel at home among other parents. At-risk parents are also more likely to have a little chat with the teacher compared with mainstream parents.

Table A2 shows no significant difference for agreement

Table A1. Regression results on questionnaire items on searching for agreement and trust.

	Spec	ial educat	ion	M	ainstream	
Variable	Coefficient	Odds ratio	<i>p</i> -Value	Coefficient	Odds ratio	<i>p</i> -Value
Constant	737		.064	794		.033
Friendliness of the teachers	.876	2.401	.122	.118	1.126	.748
Good organisation at school	.033	1.033	.933	126	.882	.000
Genuine interest of the teacher in my child	1.797	6.031	.000	.399	1.490	.224
School does as promised in school guide	.607	1.836	.125	915	.401	.011
Teachers, parents and children greet each other	475	.622	.228	.162	1.176	.609
Openness of the school	.789	2.201	.041	.614	1.847	.042
Parents feel at home among each other	.868	935	.069	1.470	430	.001
Having a little chat with the teacher	-1.691	.184	.000	845	.430	.008



Table A2. Regression results on guestionnaire items on searching for agreement and trust.

	Special edu	cation		Mainstream		
Variable	Coefficient	Odds ratio	p-value	Coefficient	Odds ratio	p-value
Constant	.390		.010	097		.468
Parent influences performance child?	-1.141	.319	.188	347	.707	.708
Should schools and parents cooperate to improve performance child?	-1.200	.301	.319	675	.509	.586
Parent co-responsible for performance child?	543	.581	.686	18.673	.000	1.000

At-at risk parents are the reference group

Communicating

In Table A3, we see that parents from special education schools are about five times more likely to prefer e-mail, compared with parents from at-risk schools. Furthermore, they are significantly more likely to prefer the teacher visiting home, while they are 10 times less likely to prefer the walk-in 15 min before schools starts, again compared with at risk schools.

Parents from mainstream schools are significantly more likely to prefer e-mail and website, compared with at risk schools, but are three times less likely to prefer paper communication. Furthermore, mainstream parents are 10 times less likely to prefer coffee mornings for parents, compared with at-risk parents.

Table A3. Regression results on questionnaire items on communicating.

	Spe	cial educatio	n		Mainstream	
Variable	Coefficient	Odds ratio	<i>p</i> -Value	Coeffi- cient	Odds ratio	<i>p</i> -Value
Constant	614		.629	1.663		.314
Text in school guide clear enough?	1.906	6.729	.111	-1.196	.302	.057
Digital: website	.224	1.251	.598	1.333	3.791	.001
Digital: e-mail	1.687	5.404	.000	1.965	7.137	.000
Digital: Facebook	1.593	4.917	.064	-2.367	.094	.082
On paper: e.g. newsletters	.214	1.238	.550	-1.112	.329	.002
General parent information evenings	.136	1.146	.778	.761	2.140	.083
Fixed yearly moments for parent–teacher meetings	089	465	.796	.548	-1.730	.120
Coffee mornings for parents	918	.399	.374	-2.363	.094	.018
Theme meetings	794	.452	.146	.019	1.019	.967
Flexible meetings when needed	.175	1.191	.614	.374	1.453	.280
Teachers use understandable language to communicate with parents	.442	1.556	.204	.005	1.005	.987
Teacher visiting at home	1.752	5.765	.027	.686	1.986	.417
Walk-in 15 min before school starts	-2.351	010	.042	.235	1.265	.759
Walk-in 15 min after school ends	.198	1.218	.757	.183	1.200	.748

At-at risk parents are the reference group



Volunteering

In Table A4, we see that parents from special education schools are almost three times less likely than at risk parents to help with homework activities at school. There are no significant differences between mainstream parents and at risk parents.

Table A4. Regression results on questionnaire items on volunteering.

	Spe	cial education	1	ı	Mainstream	
Variable	Coefficient	Odds ratio	<i>p</i> -Value	Coefficient	Odds ratio	<i>p</i> -Value
Constant	2.297		.005	1.376		.056
Volunteering at activities	482	.617	.109	.174	1.190	.516
Volunteering in class	701	.496	.204	017	.983	.967
Helping with homework at school Helping other parents	-1.041 226	.353 .797	.038 .685	728 -1.005	.483 .366	.071 .101

At-at risk parents are the reference group

Learning at home

In Table A5, we see that parents from special education schools are almost 12 times less likely than special education parents to get suggestions from the teacher for home learning activities. Furthermore, special education parents say significantly more often that the school knows about what the parents can and want to do at home. Also, mainstream parents are almost four times less likely than at-risk parents to get suggestions for home learning activities.

Table A5. Regression results on questionnaire items on learning at home.

	Spec	ial educati	ion	M	ainstream	
Variable	Coefficient	Odds ratio	<i>p</i> -Value	Coefficient	Odds ratio	<i>p</i> -Value
Constant	181		.397	010		.963
Do you help child at home practice for school?	533	.587	.432	640	.527	.273
Does school know about what you can and want to do at home?	088	.915	.889	587	.556	.273
Is teacher support for parents sufficient?	-2.480	.084	.001	-1.360	.257	.025
Do you get suggestions from teacher for home learning activities?	.822	2.276	.127	140	.869	.725
Does your child get small projects and booklets to take home?	1.705	5.503	.232	.783	2.189	.457
Does the school expect you to help your child at home?	1.455	4.286	.000	.245	1.278	.432

At-at risk parents are the reference group

Decision-making

In Table A6, we see that there are no significant differences at the 5% level.

Table A6. Regression results on questionnaire items on decision-making.

	Spe	ecial educatio	n	М	ainstream	
Variable	Coefficient	Odds ratio	<i>p</i> -Value	Coefficient	Odds ratio	<i>p</i> -Value
Constant	.163		.286	263		.056
Is parental input taken seriously when discussing child's performance?	1.223	3.398	.129	1.244	3.470	.072

At-at risk parents are the reference group



Appendix B. Mean scores and standard deviations

 Table B1. Results searching for agreement and trust.

	At	t-risk scl	hools	Mair	schoo	primary ols	Spo	ecial edu schoo		- Sign dif	Sign dif	Sign dif between main-
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	between	between at-risk and special	stream and special education
Agreement Parent influences performance child?	110	.99	.10	124	1.00	.00	81	.98	.16	No	No	No
Should schools and parents cooperate to improve performance child?	111	.97	.16	124	.98	.15	80	.94	.24	No	No	No
Parent co-re- sponsible for per- formance child? <i>Trust</i> School hos- pitality charac-	111	.98	.13	124	.98	.13	82	.96	.19	No	No	No
teristics Friend- liness of the teachers	110	.80	.40	124	.83	.38	82	.94	.24	No	No	No
Good organi- sation at school	110	.50	.50	124	.49	.50	82	.70	.46	No	No	No
Genuine interest of the teacher in my child		.45	.50	124	.55	.50	82	.80	.40	No	Yes	Yes
School does as promised in school quide	110	.38	.49	124	.27	.45	82	.57	.50	Yes	No	Yes
Teachers, parents and children greet each other	110	.56	.50	124	.63	.49	82	.63	.48	No	No	No

Table B1. (Continued).

	At	risk scl	hools	Mair	stream schoo	primary Is	Spe	ecial edu schoo				special
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	Sign dif between at-risk and main- stream	Sign dif between at-risk and special education	
Open- ness of the school	110	.52	.50	124	.66	.48	82	.79	.41	Yes	Yes	No
Parents feel at home among each other	110	.11	.31	124	.25	.43	82	.24	.43	Yes	No	No
Having a little chat with the teacher	110	.60	.49	124	.48	.50	82	.40	.49	Yes	Yes	Yes

For all tables, it holds that significant differences are at the 5% level from multinomial logit regression. All variables considered at the same time in one regression. Separate regressions for *agreement* and *trust*.

Table B2. Results on communicating.

	A	t-risk scł	nools	Main	istream schoo	primary Is	Spe	ecial edu schoo			C:	Sign dif between
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	Sign dif between at-risk and main- stream	Sign dif between at-risk and special education	main- stream and special education
How preferably informed by school?												
Digital: website	111	.15	.36	123	.41	.49	81	.22	.42	Yes	No	Yes
Digital: e-mail	111	.37	.48	123	.84	.37	81	.77	.43	Yes	Yes	No
Digital: Face- book	111	.03	.16	123	.01	.09	81	.09	.28	No	No	Yes
On pa- per: e.g. newslet- ters	111	.58	.50	123	.27	.44	81	.51	.50	Yes	No	Yes
General parent infor- mation	111	.21	.41	123	.37	.48	81	.20	.40	No	No	No
evenings Fixed yearly mo- ments for parent teacher meet- ings	111	.53	.50	123	.73	.44	81	.54	.50	Yes	No	No



Table B2. (Continued).

	A	t-risk scł	nools	Main	stream schoo	primary Is	Spe	ecial edu schoo				Sign dif between
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	Sign dif between at-risk and main- stream	Sign dif between at-risk and special education	main- stream and special education
Coffee morn- ings for parents	111	.08	.27	123	.02	.15	81	.04	.19	Yes	No	No
Theme meet- ings	111	.15	.36	123	.32	.47	81	.11	.32	No	No	No
Flexible meet- ings when needed	111	.42	.50	123	.62	.49	81	.49	.50	No	No	No
Teacher visiting at home	111	.04	.19	123	.05	.22	81	.10	.30	No	Yes	No
Walk-in 15 min before school starts	111	.10	.30	123	.10	.30	81	.02	.16	No	Yes	Yes
Walk-in 15 min after school ends	111	.12	.32	123	.19	.39	81	.09	.28	No	No	No
Text in school guide clear enough?	111	.91	.29	121	.87	.34	82	.98	.16	No	No	Yes
Teachers use under- standa- ble lan- guage to commu- nicate with parents	110	.55	.50	124	.62	.49	82	.67	.47	No	No	No

Table B3. Results on volunteering.

	At-	risk sch	ools		nstream ary scho	•	Sp	ecial ed schoo		Sign dif between	Sign dif between at-risk and	Sign dif between
	n	Mean	St. dev	n	Mean	St. dev	n	Mean	St.dev	at-risk and main- stream	special edu- cation	mainstream and special education
What more would you like to do at school												
	110	.51	.50	125	.57	.50	83	.40	.49	No	No	Yes
Volun- teering in class	111	.15	.36	125	.12	.33	83	.06	.24	No	No	No
Help- ing with home- work at school	111	.20	.40	125	.10	.30	83	.07	.26	No	Yes	No
Help- ing other parents	111	.10	.30	125	.03	.18	83	.07	.26	No	No	No

Table B4. Results on learning at home.

	A	t-risk sch	nools	Mainstream primary schools				ecial edu schoo				Sign dif between
										Sign dif between at-risk and main-	Sign dif between at-risk and special	main- stream and special
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	stream	education	education
Do you help child at home practice for school?	110	.98	.13	120	.96	.20	81	.99	.11	No	No	No
Does school know about what you can and want to do at home?	110	.53	.50	117	.54	.50	80	.79	.41	No	Yes	Yes
Is teacher support for parents suffi- cient?	93	.75	.43	125	.55	.50	83	.69	.47	No	No	No

Table B4. (Continued).

	A	t-risk sch	nools	Mair	stream schoo	primary Is	Sp	ecial edu schoo				Sign dif between
	n	Mean	St.dev	n	Mean	St.dev	n	Mean	St.dev	Sign dif between at-risk and main- stream	Sign dif between at-risk and special education	main- stream and special education
Do you get suggestions from teacher for home learning activities?	106	.82	.39	120	.71	.46	79	.78	.41	Yes	Yes	No
Does your child get small projects and book- lets to take home?	109	.83	.38	123	.83	.38	80	.89	.32	No	No	No
Does the school expect you to help your child at home?	109	.86	.35	117	.79	.41	80	.89	.32	No	No	No

Table B5. Results on decision-making.

	A	t-risk sch	nools	Mainstream primary schools			Special education schools					Sign dif between
	N	Mean	St.dev	N	Mean	St.dev	N	Mean	St.dev	Sign dif between at-risk and main- stream	Sign dif between I at-risk and special education	main- stream and special education
Is parental input taken serious-ly when discussing child's performance?	101	.92	.27	124	.98	.15	81	.98	.16	No	No	No