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Anke de Boer^a; Sip Jan Pijl^a; Alexander Minnaert^a

^a Department of Special Education, University of Groningen, Groningen, The Netherlands

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Attitudes of parents towards inclusive education: a review of the literature

Anke de Boer*, Sip Jan Pijl and Alexander Minnaert

Department of Special Education, University of Groningen, Groningen, The Netherlands

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The aim of this study is to review literature about parents' attitudes towards inclusive education. Special attention is paid to parents' attitudes and to the effect of these on the social participation of children with special needs in regular schools. A review of the literature resulted in 10 studies showing that the majority of parents hold positive attitudes. However, parents of children with special needs reported various concerns, including the availability of services in regular schools and individualised instruction. Several variables were found which relate to parents' attitudes, such as social-economic status, education level, experience with inclusion and type of disability. No studies examined the effects of parental attitudes on the social participation of children with special needs. The importance of positive parental attitudes is elaborated in the discussion.

Keywords: parents; attitudes; inclusive education; special needs students

Introduction

The education of children with special needs in regular education has become an important matter for debate worldwide in recent decades. Previously, it was assumed as unrealistic to place children with special educational needs in regular schools (Pijl 1997). However, children with various types of special needs can actually attend regular education in many countries nowadays (Nakken and Pijl 2002). The development to include children with special needs in regular education settings is generally described by the term 'inclusion', which refers to 'the process of educating children with disabilities in the regular education classrooms of their neighbourhood schools – the schools they would attend if they did not have a disability – and providing them with the necessary services and support' (Rafferty, Boettcher, and Griffin 2001, 266).

In various countries, inclusive education was initiated by parents of children with disabilities. Although parents' motives to place their disabled child in a regular school might vary, they mainly choose a regular education setting because of the possibilities for their child to participate socially in the peer group. Parents hope and expect that physical integration – 'being there' – will lead to their child participating socially with the peer group (Scheepstra, Nakken, and Pijl 1999). The social dimension of inclusive education covers various aspects. According to Koster, Nakken, Pijl and Van Houten (2009), social participation consists of four key elements, namely:

*Corresponding author. Email: anke.de.boer@rug.nl

- (1) the presence of positive contact/interaction between children with special needs and their classmates,
- (2) acceptance of them by their classmates,
- (3) social relationships/friendships between children with special needs and their classmates, and
- (4) the pupils' perception they are accepted by their classmates.

However, children with special needs in regular schools have relatively more difficulty in participating socially in regular education. Research showed that these children are less accepted by their peers, have fewer friendships and are less part of a network in class compared to their typically developing peers (Bramston, Bruggerman, and Pretty 2002; Kuhne and Wiener 2000; Mare and Ronde 2000; Pijl, Frostad, and Flem 2008; Soresi and Nota 2000).

Why these students experience difficulties in their relationships with peers without disabilities is not quite clear. It seems likely that acceptance aspects, such as the attitudes of parents of typically developing students, play a key role here. Children develop attitudes by being exposed to and adopting the attitudes of their parents (Katz and Chamiel 1989). Parents' attitudes and behaviour influence those of their children, which is then carried over into later life (Holden 1995). This theory indicates that parents who do not support inclusive education might negatively influence the formation of their child's attitudes and behaviour.

Parental support and involvement, moreover, is regarded as being greatly important in facilitating inclusive education (Palmer, Fuller, Arora, and Nelson 2001). It seems reasonable that when both groups of parents – those of children with special needs and those without – are positive towards inclusive education, teachers and support staff will be more inclined to realise inclusion. Hence, acquiring knowledge about parents' attitudes towards inclusive education and variables relating to their attitude could be useful in developing interventions to create positive ones.

Research on the subject has shown that parents seem to hold predominantly positive attitudes towards inclusive education (Miller and Phillips 1992). For example, parents of typically developing children report that inclusive education helps their offspring to learn about and accept individual differences (Gallagher et al. 2000; Miller and Phillips 1992).

Besides the benefits of inclusive education, both groups of parents show concerns about inclusive practices. Some parents of children with special needs argue that a regular classroom is not an option for their child (Green and Shinn 1994, 1995). They have concerns about the social impacts on their child, such as social isolation, rejection and bullying (Bailey and Winton 1987; Leyser and Kirk 2004; Salisbury 1992). Moreover, they are apprehensive that regular teachers are not trained well enough, have insufficient teaching time, and lack appropriate support and resources to educate their children properly (Bennett and Deluca 1997; Fox and Ysseldyke 1997; Grove and Fisher 1999). Parents of typically developing children, on the other hand, are concerned that their child might develop inappropriate behaviour (Reichart et al. 1989).

Additionally, research has found several variables that relate to the attitudes of parents, including the fact that those who have experience of there being a disabled child in their child's classroom hold more positive attitudes than parents without this experience (Innes and Diamond 1999). Furthermore, the type of disability seems

related to parents' attitudes: they are most positive towards the inclusion of children with mild disabilities.

Due to the increasing interest of researchers in aspects relating to successful inclusive education, knowledge about attitudes has increased over the last decades. However, to the best of our knowledge, a systematic review performed to gather insight into parents' attitudes towards inclusive education was lacking. Thus, a review study was set up to examine:

- (1) what attitudes parents hold towards inclusive education and if attitudes of parents of children with and without disabilities differ,
- (2) which variables relate to their attitude, and
- (3) the effects of parents' attitudes on the social participation of children with disabilities.

In this study, the following broad definition of attitude will be used: 'an attitude is an individual's viewpoint or disposition toward a particular "object" (a person, a thing, an idea, etc.)' (Gall, Borg, and Gall 1996, 273).

Method

A review study was set up in order to present a complete and recent overview of empirical studies that assessed parents' attitudes towards inclusive education. The procedure to search for references, select and analyse studies is described below.

Procedure

A comprehensive search was performed using 'EBSCOhost Complete' to search for relevant articles. The search was conducted in February 2009. This browser includes many databases, among which are ERIC, MEDLINE, PsycARTICLES, PsychINFO and SocINDEX. To search for potential references, the term 'parent attitudes' was combined each time with the following terms: 'inclusive education', 'mainstreaming', 'inclusion', 'special needs students', 'special educational needs', 'impairment', 'impaired', 'disorders', 'handicapped', 'disabled' and 'disabilities'.

Moreover, a double check for references was made by hand searching seven journals. Those journals (*International Journal of Inclusive Education*, *European Journal of Special Needs Education*, *British Journal of Special Education*, *Exceptional Children*, *Development and Education* and *International Journal of Special Education*) were selected because they particularly focus on special needs education. The selection criteria used is described below and applies to the electronic search as well as to the hand search.

Selection of studies

The combination of the term 'parent attitudes' with the additional search term resulted in 346 references. The search in the seven journals, however, did not yield any new references. To select relevant studies for this review, a study had to:

- contain empirical data;
- include a standardised measurement to examine parents' attitudes;

- take a publication lag of four to five years into account: we wanted to describe recent studies in this review, so articles published between 1998 and 2008 were selected;
- feature parents of children with and without special needs;
- provide convincing empirical evidence regarding factors related to parents' attitudes;
- be aimed at attitudes of parents towards inclusive education and more specifically towards the social participation of special needs students;
- focus on children with one of the following types of disabilities: communication motor skills, sensory, learning and behavioural disorders (including autistic spectrum syndromes), mental retardation and chronic diseases.

By means of the above selection criteria and reading the title and/or abstract carefully, 308 references were deleted from the database, which resulted in 38 remaining articles. A primary reason for rejection was that many studies (256) did not focus on parents' attitudes towards inclusive education. Moreover, various studies did not contain empirical data (38), and some studies did not only include parents as participants, but also other caregivers (14). This first filtering resulted in 38 studies that had to be assessed. However, four studies were untraceable, resulting in a database of 34 articles. After reading those articles in depth, 23 studies had to be deleted because they did not fully satisfy the selection criteria. Various studies did not focus specifically on attitudes of parents towards inclusive education (15), but on community inclusion, for instance. Furthermore, some studies did not include empirical data (eight) and one study did not use a standardised instrument to measure attitudes. This last filtering resulted in a final database of 11 articles.

Applying the selection criteria, 11 studies were selected for this review. However, two of the selected studies contained the same empirical data of parents' attitudes towards inclusive education. One of the studies, however, also presented data regarding variables related to parents' attitudes. This made us decide to present the results of the study that included data about parents' attitudes and data about relating variables. Consequently, the final database included 10 different entries.

Analysis of studies

Regarding the first research question, we established if the results of the studies showed positive, neutral or negative attitudes. The majority of the studies used a five-point Likert scale and reported their findings in terms of percentages, or in terms of mean scores and standard deviations. Mean scores and percentages on five-point Likert scales can not be transformed linearly to one another. It is of course likely that a higher positive percentage goes along with a mean score clearly above scale midpoint.

Since most studies reported limited empirical data, it was not possible to calculate a common criterion applicable to all studies. Therefore, we developed a rule of thumb in order to evaluate the outcomes of the studies. Study outcomes counted as positive when the percentage of positive scores was above 70% or when the mean score was above 3.5 (on a five-point Likert scale). The reverse held for negative scores. Scores were counted as neutral if the percentage was between 30 and 70, or if the mean scores were between 2.5 and 3.5. For questionnaires not using a five-point Likert scale, their boundaries would be adjusted. The percentages of respondents who chose a neutral/

undecided response were equally divided and added to the percentages of positive and negative responses.

Results

Table 1 gives an overview of the selected studies that investigated:

- (1) parents' attitudes towards inclusive education,
- (2) relating variables, and
- (3) the effects of parents' attitudes on the social participation of children with special needs.

The crosses in the columns show the main aspects of the studies. After summarising the results in Table 1, the study results are described in more detail.

The last column of Table 1 is striking because no marks were made in this column. This indicates that none of the selected studies examined the effects of parents' attitudes on the social participation of special needs students. As there are no studies found, no further attention to this aspect will be given in the description of the results in the following pages.

Results 1: attitudes of parents towards inclusive education

The main topics of the selected studies about parents' attitudes toward inclusive education are presented below. These results are divided into three groups, namely those:

- (1) describing attitudes of parents of children with special needs,
- (2) describing attitudes of parents of typically developing children (also referring to children without special needs), and
- (3) comparing attitudes of parents of children with and without special needs.

Table 1. Summarising overview of the studies included (N=10).

Author(s)	Country	Attitudes of parents of ¹			Relating variables	Effects of attitudes on social participation
		CSN	TDC	Both		
Balboni and Padrabissi (2000)	Italy		X		X	
Elkins et al. (2003)	Australia	X				
Kalyva et al. (2007)	Greece		X		X	
Kelly (2001)	USA			X		
Leyser and Kirk (2004)	USA	X			X	
Palmer et al. (1998)	USA	X			X	
Peck et al. (2004)	USA		X			
Rafferty et al. (2001)	USA			X	X	
Stoiber et al. (1998)	USA			X	X	
Tafa and Manolitsis (2003)	Greece		X		X	

Notes:

1. CSN=children with special needs; TDC=typically developing children; Both=children with special needs and typically developing children.

Attitudes of parents of children with special needs towards inclusive education

Three of the 10 studies examined what attitudes parents of children with special needs held towards inclusive education (see first column, Table 1). Elkins, van Kraayenoord and Jobling (2003) assessed parents' attitudes by means of the Survey of parents' attitudes and opinions about their children with special needs and their support (N=354). Parents could indicate their level of agreement on 25 statements about aspects of their child's education, such as 'regular class teachers have sufficient training to teach children with special needs'. The results of the study showed that the mean percentage of parents who responded with 'strongly agree' and 'agree' was 53.2%. Negative attitudes ('disagree' or 'strongly disagree') were found among 30.7% of parents. The other 16.2% of parents showed neutral attitudes. Although a small majority of parents recognised the benefits of inclusion, parents expressed more concerns regarding inclusion for their own child. When parents were asked about inclusion for their own child, 50% reported that they favoured special classes instead of regular schools.

The attitude toward inclusion/mainstreaming scale (adapted from the Opinions relative to mainstreaming scale, developed by Antonak and Larrivee 1995) was used by Leyser and Kirk (2004) to evaluate attitudes of parents of children with special needs (N=437). The questionnaire included statements such as 'inclusion is more likely to prepare children with disabilities for the real world'. Parents rated their extent of agreement on the statements using a five-point Likert scale (1=strongly agree, 5=strongly disagree), in which a lower score can be interpreted as a positive attitude. The mean score of 2.56 (SD=1.03) on the total scale showed that parents were undecided in their attitude. However, variance in attitudes was found on item level. More than 85% of parents showed strong support for the item that referred to the general concept of inclusion ('special needs students should be given every opportunity to function in the regular classroom setting where possible'). On the other hand, 53.6% of parents reported that inclusion is likely to hurt the emotional development of children with special needs. Furthermore, parents had concerns about individualised instruction and available services in regular schools.

The study of Palmer, Borthwick-Duffy, Widaman and Best (1998) presented a situation of inclusive education to parents and asked them:

- (1) if they agreed with inclusion in general (according to the situation) and
- (2) if inclusion would be good for their child with disabilities (N= 408).

The study revealed that 46.6% of the participating parents agreed with the statement that inclusion was good in general. When parents were asked if inclusion would be a good idea for their child, more than half the participants (54.1%) responded negatively. According to rule of thumb, the results can be interpreted as neutral attitudes.

Attitudes of parents of typically developing children towards inclusive education

Attitudes of parents of children without special needs were examined in four studies (see TDC column, Table 1). The study of Balboni and Pedrabissi (2000) investigated the attitudes parents held toward the inclusion of children with cognitive disabilities in regular education (N=647). Through the Mental retardation and inclusion questionnaire, parents indicated their agreement or disagreement on 26 statements about

inclusive education, such as 'the only advantage of including students with mental retardation in ordinary classes concerns their socialisation'. Using a four-point Likert scale, parents rated their agreement or disagreement (ranging from a score of 1 (total disagreement) to 4 refers (total agreement)), in which a higher score shows more positive attitudes. The mean item score was 2.66 (SD=0.37), which indicates that parents held neutral attitudes.

By means of the my thinking about inclusion (MTAI) questionnaire, parents' agreement with inclusive education was assessed in a study by Kalyva, Georgiadi and Tsakiris (2007). Through this 12-item questionnaire, parents were asked to indicate what attitudes they held on the inclusion of children with special needs in regular education (N=338). The possible range of scores for the total scale was 12 to 60, in which a higher score indicated negative attitudes. The mean score of 25.49 (SD=3.79) for the whole scale showed that parents held positive attitudes towards inclusive education. Besides the MTAI questionnaire, parents were also asked to complete a questionnaire to evaluate their personal involvement and the involvement of their child with a special needs child (questionnaire devised by Besevegis, Kalatzi-Azizi and Zoniou-Sideri 1997). The items of this questionnaire corresponded with the behavioural component of attitude. Parents were asked to respond with a 'yes' or a 'no' to eight statements. The majority of parents responded positively to the statements (72%), which indicated positive attitudes. However, on item level there was some variance in attitude towards certain statements. A large group of parents was not willing to invite a child with special needs to spend a night at their house (68.3%). Furthermore, 38.3% of parents would not invite a child with special educational needs to their home.

Positive attitudes of parents were found by Peck, Staub, Gallucci and Schwartz (2004). In this study, parents were asked to indicate:

- (1) their general attitude toward inclusion before their child enrolled in an inclusive classroom,
- (2) their attitude after enrolling their child in an inclusive classroom, and
- (3) if they would re-enrol their child in an inclusive class.

Almost half the parents (47%) held a positive attitude toward inclusion before their child enrolled in an inclusive classroom, and 46% a neutral one. After their children enrolled in an inclusive classroom, 64% of parents still held a positive attitude. Regarding the third question, the results of the study showed that 73% of parents would re-enrol their child in an inclusive classroom. Based on rule of thumb, the results are interpreted as positive attitudes. Besides the results on the three questions, parents frequently described the social benefits of inclusive education, such as 'our daughter has become more accepting of other children', or 'they are all learning that you do not have to be perfect to be valuable'.

The study of Tafa and Manolitsis (2003) showed that parents hold undecided attitudes toward kindergarten inclusion (N=290). Attitudes of parents were assessed according to the Parental attitudes towards kindergarten inclusion scale (PATKIS), which includes statements such as 'I prefer my child to participate in a classroom with children who do not have special educational needs'. Parents were asked to indicate their degree of agreement by means of a five-point Likert scale (1=strongly disagree, 5=strongly agree), in which a higher score reflects more positive attitudes. The mean score on the questionnaire was 2.61 (SD=0.73). This score is ranged between response 2 (disagree) and 3 (undecided), which indicated that parents held undecided attitudes.

Based on our rule of thumb, this score indicates neutral attitudes. However, the authors of the study concluded that parents held positive attitudes.

Comparing attitudes of parents of children with and without special needs

Attitudes of parents of children with and without special needs were examined by Kelly (2001) (N=370). Parents rated their degree of agreement by means of a five-point Likert scale (1=strongly disagree, 5=strongly agree) on six items. Parents of children with disabilities showed a mean score of 4.03 (SD=1.03), and parents of children without disabilities a mean score of 3.78 (SD=1.05). These scores indicated that both groups of parents held positive attitudes towards inclusive education.

Rafferty, Boettcher and Griffin (2001) examined parents' attitudes towards inclusive education of preschoolers (N=244). Attitudes of both groups of parents towards inclusion were assessed with 13 situations selected from the 'attitudes about integration opportunities for children with special needs questionnaire' (developed by Miller and Phillips 1992). Parents reported the extent to which they agreed or disagreed with a statement by means of a five-point Likert scale (1=strongly disagree, 5=strongly agree). The possible range of the scores was 13–65, with a higher score reflecting more positive attitudes. The mean score of all parents was 52.91 (SD=8.64), which indicates positive attitudes. No statistical difference was found on the entire scale between the attitudes of parents of typically developing children and parents of children with special needs. Next to attitudes of parents, the authors asked parents to indicate potential benefits and risks of inclusion for children with and without disabilities. An analysis of items revealed that the majority of parents agreed that inclusive education has benefits for typically developing children, such as 'accepting differences in people' (87%) and 'developing sensitivity to others' (91%). Regarding benefits for children with disabilities, most parents indicated benefits such as 'more chances to participate in activities' (82%) or 'functioning effectively in the real world' (82%). Additionally, several potential risks were mentioned by parents, such as that typically developing children might be frightened by unusual behaviour (59%). Parents also commented that teachers may not be qualified or trained for children with special needs (36%), and that these pupils are less likely to receive enough specialist help/individual instruction from teachers (36%).

Finally, attitudes of parents of children with and without special needs were compared in the study of Stoiber, Gettinger and Goetz (1998) (N=415). The My thinking about inclusion questionnaire was developed for this study. Parents indicated their degree of agreement on 12 statements about aspects of inclusive education by means of a five-point Likert scale (1=strongly accept, 5=strongly reject). The mean score on the scale was 2.08, which indicated positive parental attitudes. Although the authors did not present results indicating how positive each group of parents were, the study revealed that parents of children with special needs were significantly more positive in their beliefs than those of children without special needs on the total scale, $t(404)=2.79, p<.01$.

Summary of results 1: attitudes of parents towards inclusive education

The overall picture of parents' attitudes towards inclusive education is positive. None of the studies showed negative outcomes (see Table 2). Of the 10 selected studies, five

Table 2. Overview of studies which examined parents' attitudes toward inclusive education, including study outcomes (N=10).

Author(s)	Parents of ¹		Age children	N	Measurement	Outcomes ²
	CSN	TDC				
Balboni and Padrabissi (2000)	X	X	2-16 years	647	Mental retardation and inclusion questionnaire	+/-
Elkins et al. (2003)	X		2-16 years	354	Survey of parents' attitudes and opinions about their children with special needs	+/-
Kalyva et al. (2007)	X	X	4-12 years	338	My thinking about inclusion questionnaire	+
Kelly (2001)			4-16 years	435	Questionnaire	+
Leyser and Kirk (2004)	X		2-18 years	437	Parent opinion about inclusion/mainstreaming questionnaire	+/-
Palmer et al. (1998)	X		3-23 years	408	Parent attitudes toward inclusion scale	+/-
Peck et al. (2004)	X	X	5-12 years	389	Attitude questionnaire	+
Rafferty et al. (2001)		X	0-5 years	244	Attitudes about integration opportunities for children with special needs scale	+
Stoiber et al. (1998)		X	3-5 years	415	My thinking about inclusion questionnaire	+
Tafa and Manolitsis (2003)	X		4-6 years	290	Parental attitudes towards kindergarten inclusion scale	+/-

Notes:

1. CSN=children with special needs; TDC=typically developing children.

2. Study outcomes are counted as positive when the percentage of positive scores is above 70% or when the mean score is above 3.5 (the reverse holds for negative scores). Scores are counted as neutral if the % is between 30 and 70 or if the mean scores is between 2.5 and 3.5.

revealed neutral attitudes of parents towards inclusive education, while the other five reported positive parental attitudes.

Parents of children with special needs did not show clear positive attitudes. They were undecided in their attitude towards inclusive education and were not in favour when it concerned inclusion for their own child.

Parents of typically developing children on the other hand held more positive attitudes towards inclusive education. The results revealed that parents indicated that typically developing children might experience social benefits from inclusive education.

Studies comparing both groups of parents showed that all parents held positive attitudes towards inclusive education. Both groups of parents agreed that inclusive education has benefits for typically developing children as well as for children with special needs. Nevertheless, parents also indicated that inclusive education has risks for both groups of children.

Results 2: variables related to parents' attitudes

The second research question of this study concerned variables which relate to parents' attitudes. The results of these studies are presented below.

Age

With regard to the age of parents, Balboni and Padrabissi (2000) showed that younger parents do not hold different attitudes than older ones. Comparable results were found by Kalyva et al. (2007), who also established that the age of parents was not related to their attitudes.

Gender

Balboni and Padrabissi (2000) found contradictory results. Their study established that Italian mothers held an attitude significantly more positive than the attitude of fathers. However, the study of Kalyva et al. (2007) determined that Greek fathers held more positive attitudes towards the inclusion of children with special needs than mothers. Fathers held significantly more positive attitudes on the subscale 'core perspectives' of the MTAI questionnaire.

Social-economic status

Balboni and Padrabissi (2000) reported that parents with a high and average social-economic status (SES) level were significantly more favourable towards inclusion than parents with a low SES level: $F(2, 644)=8.48, p<.001$. Also, high SES parents agreed more than low- and average-level parents on the need for greater collaboration between general and special teachers. The results of Stoiber et al. (1998) showed that parents with higher or middle incomes held more positive – although not significant – attitudes toward inclusive education than parents with low incomes. However, the differences were not significant.

Education level

Several studies concluded that the education level of parents is related to their attitudes. Leyser and Kirk (2004) found that parents with college education were

significantly more positive towards the benefits of inclusion than parents who had only finished high school: $t(403)=3.26, p=.013$. Comparable results were reported by Tafa and Manolitsis (2003). They established that mothers with the highest education level held more positive attitudes towards the inclusion of children with physical disabilities or blind children compared to mothers with a lower education level. Stoiber et al. (1998) and Palmer et al. (1998) also reported that parents with a higher educational level (college) held more positive beliefs towards inclusive education compared to parents with a high school education or lower. Nevertheless, Kalyva et al. (2007) established that the educational level did not relate to attitudes of parents of children without special needs.

Experience with inclusive education

Research showed that both groups of parents – with and without a child with special needs – became more positive when they had more experience with inclusive education. Balboni and Padrabissi (2000) revealed that experience with inclusive education is related to the attitudes of parents of children with and without disabilities: $F(1, 645)=4.83, p=.05$. Parents whose children have a classmate with mental retardation were significantly more positive towards inclusion than those who did not have such experience. Tafa and Manolitsis (2003) found differences between parents who had experience with children with special needs and inexperienced parents on the factor ‘classroom practices’ of the PATKIS questionnaire: $t(288)=2.20, p<.03$.

Palmer et al. (1998) showed a significant negative correlation between years pupils spent in a special class and parents’ general attitudes about full inclusion ($r=-.21, p<.001$) and full inclusion for their own child ($r=-.28, p<.001$). This indicates that the more years a child spent in special class, the more negative parents were about inclusive education. Furthermore, a significant positive correlation was found between the inclusion history of the child and parents’ attitude towards full inclusion in general ($r=.17, p<.001$) and full inclusion for their own child ($r=.23, p<.001$). These results indicated that an inclusion history is positive related to parents’ attitudes.

Child’s type of disability

Several studies showed that the type of disability is related to parents’ attitudes. Leyser and Kirk (2004) compared attitudes of parents of children with special needs according to three levels of severity of disability (mild, moderate and severe). Their questionnaire consisted of four factors, including ‘benefits’ and ‘teacher ability and inclusion support’. Parents of children with mild disabilities were significantly more positive about both factors – ‘benefits’ ($t(412)=-2.93, p=.004$) and ‘teacher ability’ etc. ($t(412)=-5.80, p=.001$) compared with parents of children with moderate and severe disabilities.

Rafferty et al. (2001) investigated the impact of the type and severity of disability on parents’ attitudes towards inclusion. The study determined that parents of children with and without disabilities were least positive about the inclusion of children with emotional problems, cognitive impairment or autism. Parents were most positive about the inclusion of children with physical disabilities and sensory disabilities. In addition, the study established that parents of children with mild disabilities were slightly more positive than parents of typically developing children. Similar findings

were reported by Tafa and Manolitsis (2003), who established that parents of typically developing children were more concerned about the inclusion of children with behaviour problems or severe cognitive disabilities than about including children with moderate or mild cognitive disabilities, physical disabilities, blindness or deafness.

Summary of results 2: variables related to parents' attitudes

The results of the studies showed that there were several variables that related to parents' attitudes towards inclusive education. With regard to parent characteristics, no clear results are shown: neither age nor gender seemed consistently related to attitude.

The socio-economic level of parents, education level, experience with inclusion and type of disability all relate to parents' attitudes. Parents with a higher SES, higher education level and more experience of inclusion hold more positive attitudes compared to parents with a low SES, lower education level and less experience with inclusion. With regard to the child's type of disability, the results showed that parents are the least positive about the inclusion of children with behavioural problems and severe cognitive disabilities. In contrast, they hold the most positive attitudes towards the inclusion of children with physical disabilities and sensory disabilities.

Conclusion

This review revealed that parents hold positive or neutral attitudes towards the inclusion of children with disabilities in regular education. Based on our rule of thumb, five studies revealed positive, parental attitudes. The other five studies showed that parents were neutral.

With regard to parents of children with disabilities, it can be concluded that this group holds more neutral attitudes than parents of typically developing children. The majority of the studies that examined attitudes of parents of disabled children did not show clear positive attitudes. Parents were neutral and often indicated that inclusion was not a good option for their child. Furthermore, this group indicated to have concerns about their child's emotional development, individual instruction and available services in regular schools. Parents of typically developing children, on the other hand, showed more positive attitudes towards inclusive education. Those parents recognised that their children might experience benefits from inclusive education, such as accepting differences in people and developing sensitivity to others. However, parents also indicated that inclusive education has potential risks for both groups of children.

This review further showed that parents' attitudes are related to several variables, such as socio-economic status, type of disability, education level and experience with inclusive education. Parents with a higher SES, higher education level and experience with inclusive education held more positive attitudes than those with a low SES, lower education level and less experience. In addition, it can be concluded that parents were the least positive about the inclusion of children with behaviour problems and cognitive disabilities.

Furthermore, no studies showed what effects parental attitudes have on the social participation of students with special needs. Consequently, the conclusion can be drawn that there is no evidence that attitudes of parents directly relate to this aspect of inclusive education.

Discussion

Parallel to the development in making schools more inclusive, research aimed to develop knowledge regarding the factors playing a significant role in this process. In many studies, policy papers and historical accounts, the position of parents of children with special needs has been highlighted (Pijl, Meijer, and Hegarty 1997). Parents of children with special needs have been described as one of the main factors behind the push towards inclusive education in many countries. It is therefore not surprising that several studies investigated the attitudes held by parents of children with and without disabilities towards inclusive education, and the general aim of this review was to present a recent overview of these attitudes.

The aim of this study initially was to classify the results of the studies selected for this review into three groups using the three component theory of Eagly and Chaiken (1993). According to this theory, attitudes are considered to have three components, namely a cognitive, an affective and a behavioural. On a theoretical level, the three component theory seemed a useful framework to present the results of the studies. However, on an empirical level it was not possible to classify the studies according to the cognitive, affective and behavioural component. Even though only high quality studies were selected for this review, barely any of these defined the concept 'attitude' on a component level, and analyses of content and types of items in the studies' questionnaires showed that none of those selected had concentrated specifically on one of the components. The conclusions of this review are therefore based on a rather general concept of attitude and could not be specific in terms of components of attitude. This limitation needs to be considered in interpreting the results of this review.

The results show that parents in general hold neutral to positive attitudes towards the inclusion of children with disabilities in regular education. Parents of children with disabilities score lower compared to those of typically developing children. Parents of children with disabilities often indicate that inclusion is not a good option for their child and have concerns about their child's emotional development, the quality of instruction and the available services in regular schools. Parents of typically developing children, on the other hand, are more positive towards inclusive education and see it as an opportunity for their children to experience social benefits, such as accepting differences in people and developing sensitivity to others.

These results do not concur with the image parents of children with special needs have as being the main driving factor behind inclusive education. This group, known for their willingness to go court, form lobby groups, push regular schools and seek publicity (Melnick 1995) in order to make inclusion happen for their own and other children with special needs, must have high expectations and positive attitudes towards inclusion. The parents of typically developing children in regular schools were alleged to hold more reservations as to the effects of inclusion on their education. They were said to be afraid that the order and atmosphere in class would be disrupted and that the teacher would have to spend much attention on the student with special needs at the expense of their child. Results of this review show the opposite: it is the parents of children with special needs that are hesitant, while the parents of typically developing children are positive. The explanation for this unexpected finding might have to do with two different generations of parents (Itkonen 2007). The studies reviewed here were published in or after 1998 and the data collection for them most likely carried out in the period from 1995 to 2006. In countries such as the United States, the United Kingdom and the Scandinavian countries, the parent movement for

inclusion had already succeeded in changing laws, regulations and funding systems before 1995 and was largely able to include their children in regular school settings. The group of parents participating in the studies under review here were never required to fight for these rights, but could use the work of their predecessors. The ideology-driven parents have to some degree been replaced by parents 'consuming' the attainments of the inclusive education movement. This new generation of parents is more critical towards inclusive education as it functions in practice, and the results of this review show that they are not always pleased with what they find. This concurs with the critical reviews of the state of affairs of inclusive education of Vislie (2006) and Ferguson (2008). Both clearly describe their worries about the practice of inclusive education, and this review shows that at least some of the parents of children with special needs seem to endorse these worries. This is problematical, as in practice this seems not only to slow down the development of inclusive education but the important driving factor is omitted.

All this does not explain why the parents of typically developing children are quite positive about inclusive education. A possible explanation is that the number of children with special needs who are full time in regular classes is still rather limited and that these pupils belong to the relatively easy-to-include subgroups of children with special needs. The parents of typically developing children then experience relatively few problems, resulting in a growing acceptance and a positive attitude. It is however also possible that these parents by now know which answers are socially and politically correct and then their attitude only reflects an overall sympathy in society towards inclusive education. The studies analysed in this review do not allow for any firm statement about the mechanisms at stake here.

This review further showed that parents who have experience with inclusive education hold more positive attitudes compared to parents who do not. It is unsurprising that experience is related to parents' attitudes, as theory on the formation of attitudes also states that these are formed by direct and indirect experience (Eagly and Chaiken 1993). Although this review did not reveal studies that reported training about special needs education as a related variable, another review study on teachers' attitudes showed that experience with inclusive education and training in special needs education positively influences attitudes towards inclusive education (de Boer, Pijl, and Minnaert in press). Considering the effect of information on attitudes, we emphasise the importance of collaboration between parents and schools.

Besides experience, the results also showed that the child's type of disability relates to parents' attitudes. They hold the most negative attitude towards the inclusion of children with behavioural problems and cognitive disabilities. However, the studies that investigated the relation between the type of disability and parents' attitudes only asked parents to indicate which types of disabilities concerned them most. These studies, however, did not use a statistical analysis to relate attitudes with types of disability, so it is impossible to conclude on the extent to which parents' attitudes are actually related to this.

Although one of the aims of this review was to examine the effects of parents' attitudes on the social participation of children with special needs in regular school, none of the selected studies examined this aspect. Regardless of this disappointing result, we still argue that attitudes of parents towards inclusive education might play a considerable role in the implementation and sustainability of this educational change for several reasons. Firstly, it seems reasonable to assume that in a positive environment, the implementation of inclusion is easier to accommodate. Teachers and support

staff may be influenced by positive parental attitudes, which might result in an environment that supports the inclusion of children with special needs in regular schools. Secondly, parents of children with special in particular might push policymakers to implement inclusive education. Thirdly, positive attitudes of parents are important because they influence the formation of their children's attitudes towards peers with disabilities. Hence, we underline that parents play an important role in their children's ideas about disabled peers and their interaction with them. Dunn (1993) proposed that parents may directly influence children's peer relationships through modelling or teaching about relationships. It is furthermore suggested that transferral of attitudes by parents about children with disabilities to their own children occurs when they respond to their children's questions (Stoneman, Rugg, and Rivers 1996). These authors state that parents are the child's primary teachers about pro-social behaviour. From this point of view, it seems likely that parents who are positive about inclusive education transfer positive attitudes to their children. Consequently, these children might become more accepting to the inclusion of peers with special needs in their regular classrooms. However, no research is yet available establishing the effects of parents' attitudes on their children's attitudes towards disabled peers. Based on the aforementioned theories, we emphasise the importance of future research focusing precisely on this aspect.

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