1

Participation, involvement and peer relationships in children with special educational needs in early childhood education

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The aim of this study was to obtain new information about the diversity of everyday activities and social relations among children with special education needs (N=145) in Finnish early childhood education and care (ECEC) units. In this research children´s daily activities, involvement, target of attention and social relations during play and other social activities in different groups formed according to children's special education needs are investigated. Results revealed that children with problems in self-regulation and children with major disabilities spent less time with peers and in various social activities than children with developmental language disorder and children without special education needs. The results suggest that inclusive practices are still only under development within the Finnish ECEC units. Practical implications of the results concerning ways to support children's equal participation in daily activities in early childhood education and in building peer relationships, regardless of the amount of needed support are discussed.

Keywords: Support in early childhood education, participation, involvement, peer relationship, Early Childhood Education, inclusion

Introduction

Inclusion in early childhood education is currently a globally preferred policy. According to the Convention on the Rights of the Child, children have the right to active participation, care, protection and peer relationships, regardless of their need for special education (UN Convention on the Rights of the Child 1989, Article 23). High-quality ECE inclusion means that all children participate with involvement in various activities and social relations throughout the whole day (Buyesse et al., 2002; Guralnik & Bruder, 2016; Vakil et al., 2009). Involvement can be recognized by monitoring a child's concentration and persistence when participating in activities alone or together with adults or peers. Involvement is characterized by intrinsic motivation, fascination, openness to stimuli, and an intensity of experience at both the physical, social and cognitive level, and it has strong effect on children's learning (Laevers, 2000; Pascal et al., 1998). High involvement is also an indicator of deep processing of the zone of proximal development (Vygotsky, 1978).

According to previous research, inclusion effects positively on children´s development, regardless of the need for support (Hollingsworth & Buyesse, 2009; Justice et.al, 2014; Kwon et al., 2011; Rafferty et al., 2003). Despite positive outcomes, some researches have highlighted that children with disabilities have difficulties in forming social relations and be involved (de Boer et al., 2013; Chen et al., 2018). ECEC professionals have an important role in supporting and developing effective practices that promote inclusion and support involvement in every child during various activities (Brodzeller et al., 2018; Mackenzie et al., 2016; Pelatti et al., 2016; Vakil et al., 2009). Additional research is needed for developing best practices that guarantee equal possibilities for participation and involvement to every child in inclusive settings.

Participation in children with SEN

Defining whether a child has special educational needs or not is usually not simple. Instead of defining special educational needs based on different kind of impairment the focus is moving towards teachers' views and professional judgements (Bruggink et al., 2013; Wilson, 2002). In this research project special educational need (SEN) is defined as a need for more than regular support to attain set educational goals and further, SEN in this context refers to children who have diversity of needs caused by variety of restrictions in communication, peer relationships, group activities and concentration. In Finnish ECEC children with special education needs are mainly mainstreamed in ECEC groups. A typical day in a Finnish ECEC centre consists of play, guided group activities and basic activities such as eating, sleeping and dressing. Children should have equal opportunities to participate in various activities with involvement throughout the day in their own group, regardless of possible individual, functional constraints.

Being accepted as a fully member of a group regardless of any individual characteristics is experienced as a sense of belonging (Baumeister & Leary, 1995; Hall, 2009;). It is centered on gaining acceptance, attention, and support from members of the group as well as providing the same attention to other members (La Guardia et al., 2000; Lambert et al., 2013). Peer relationships and having possibilities to participate are essential to every child (Chen et al., 2017; Chen et al., 2018; Foley et al., 2012; Moore-Dean et al., 2016). Social isolation is a serious risk for wellbeing, learning and development (e.g. Bennett, 2014; Gerber & Wheeler, 2017). Lack of approving relationships harms socio-emotional development and increases risks for behavioural problems (Baumeister & Leary, 1995; Foley et al., 2012; Ladd & Troop-Gordon, 2003; Sandseter & Seland, 2018;). Numerous studies have revealed that continuous peer neglect in childhood causes long-lasting social, cognitive and health-related problems (Copeland et al., 2013; Du Plessis et al., 2019; Jarcho et al., 2019; Ladd et al., 2014: Will et al., 2016). Beyond any doubt, social relationships are

the basis for well-being.   In an optimal ECEC environment, professionals should recognize need of communicative and social support and scaffold every child when necessary (Syrjämäki et al., 2018; Pursi & Lipponen, 2018) Without adequate scaffolding, some children might be silently excluded from group.

For children peer relationships may be the most important part of the day in ECEC. Children themselves perceive peer relationships as a fundamental part of everyday life in ECEC centres (Kyrönlampi-Kylmänen & Määttä, 2012; Puroila et al., 2012; Sandseter & Seland, 2018; Thoilliez, 2011). Peer relationships and the possibility to participate in meaningful actions is important to every child, regardless of possible physical, socio-emotional, verbal or cognitive dysfunctions (Chen et al., 2017; Chen et al., 2018; Foley et al., 2012; Moore-Dean et al., 2016). Children with special educational needs are known to be left outside in play situations in numerous studies (e.g. Hart-Barnett, 2018; Papacek, 2015; Wong & Kasari, 2012).   Children with compromised development have less possibilities for active participation and increased risk of social exclusion than typically developing children. (Chen et al., 2017; Hong et al., 2020; Ryalls et al., 2016; Suhonen et al., 2015).

Aims

In this work the aim was to untangle the diversity of everyday activities among children with or without special education needs (SEN) in Finnish ECEC centres. Participation in daily activities was investigated by paying attention to time spent in various activities and the level of involvement. Participation in social situations and peer relationships was considered through observing children's social relations and target of attention. Based on earlier research (Chen et al., 2017; Hart-Barnett, 2018; Hong et al., 2020; Papacek, 2015; Ryalls et al., 2016; Suhonen et al., 2015;Wong & Kasari, 2012) it was hypothesized that SEN children spend less time in social activities with peers and that they are less involved. The following research questions were examined.

1) In which types of activities do the children with or without SEN participate?

2) What is the level of involvement of children with or without SEN?

3) What kinds of targets of attention do children with or without SEN have?

4) What kinds of social relations do children with or without SEN have?

Context of the current study

Finnish children have a subjective right to participate in early childhood education. The importance of early childhood education is widely recognized, as research shows that high-quality ECEC promotes equality and lifelong learning (OECD, 2017). According to the National core curriculum for early childhood education and care and for pre-primary education, the support in development and learning should be organized as a part of daily activities in ECEC groups (National core curriculum for early childhood education and care, 2018; National core curriculum for pre-primary education, 2014).

Methods

Participants

For this study, 1623 children in ECEC centres in southern and eastern Finland participated in observations of Progressive feedback which is a research project that includes comparative research and learning-environment development based on the research results of ECEC. The sample included 13 cities, mainly situated in southern Finland. Altogether, 108 ECEC units were included in the observation. The units were mostly municipal units picked randomly from all the cities. The percentage of children with special needs in the different cities varied between 1.9 and 14.4 percent.

The observer randomly picked the group and the names of five children in the group for observation, without seeing the children in question. The children with SEN had the same probability to be observed as anybody else. The observer was unaware of the children's SEN or non-SEN status. The ECEC professionals sent information about children's special needs on a separate web-form and it was later possible to separate children with and without special needs for the purposes of comparison.

A specialist in neuropsychology classified the SEN children according to the most prevalent difficulty. The classification was based on previous clinical evaluations and descriptions written by early education teachers. Four groups were formed: *self-regulation difficulties* (91 children), *language problems* (39 children) children with *severe disabilities, such as ?* (15 children) and *no special education needs* (1 478 children).

The self-regulation difficulties group consisted of children who were described as having executive, attentional, emotional and/or social problems. Clinical evaluations were mainly related to impulsivity and hyperactivity. Self-regulation is a multidimensional concept (Veijalainen et al. 2017) and in this research self-regulation is defined according to Nigg (2017) as the capacity of a goal-directed behavior to regulate actions, emotions, and cognitions. Children in the *language problems* group had problems in verbal communication and delays in language development or their language background was not Finnish. Children in the *severe disabilities* group had major developmental disorders or other diverse difficulties in multiple areas of health and development such as severe developmental disabilities. Children's age varied between 48 and 92 months ($M = 67.5$, $SD = 11.13$). In some cases the compulsory education may be extended if the child has a need for special education. Then pre-primary education may last two years in stead of one which explains that some of the children were almost eight years old. The participants in this study are described in Table 1.

Observation procedure

The data collection was conducted between January 2018 and May 2019, with no data collection in June, July, and August. Observations were performed by early education professionals who were trained for the observation, first with one-day training practicing the coding with videos including children's activities, then practicing the coding in the observers' own groups and finally, after practice, in the second meeting the coding reliability was checked with coding videos. During the actual data collection, the observers did not observe their own groups.

The research observation took place in a random ECEC unit where the observer did not know the children or the educators. Each randomly chosen observer went to each unit for two days. Using systematic sampling, the observers picked each child for observation at four-minute intervals following a list that was repeated every 16 minutes. The observers used tablets for coding, and the observations were uploaded to the online server. If a child was missing, the next child on the list was chosen for observation. One observation session lasted four hours, either 8:00-12:00 or 12:00-16:00. The observation included all activities, for example, eating, teaching, play, care, and outdoors. Rest and sleep sessions were omitted from the analysis. The total number of observations was 34 789; *self-regulation difficulties* 1 872 observations, *language problems* 840 observations, *severe disabilities* 236 observations, and *no needs for special education* 31 841 observations. In the observation, there was no stratified sample, which means that the number of observation in different SEN categories describe the distribution of these children in the population.

The observed children were not aware that they were being observed. The observer did not seek contact with the children but answered their questions if necessary. The observer could move around as needed but he or she did not interfere with the normal activities. The staff was not informed of the exact days for observation, which means that the staff did not know the date during

which the observer would arrive to avoid unconscious observer impact. However, it is possible that the actual presence of the observer has more impact than the knowledge of the day. The observation instrument was independent of other measures, the observers had no access to the evaluations written by class educators and they did not discuss them with the class educators.

Statistical analysis

In the preliminary study, it was found that the children with special needs were older than the other children in their group. To prevent age being an intermediated variable, 1-3-year-olds were omitted from the analysis. Data was analyzed with SPSS 25. For the analysis, frequencies and cross-tabulation were used. To confirm statistical significance, the column proportions were checked with z-tests, adjusting p-values with the Bonferroni method. The level used for statistical significance was $p < .05$.

Measures

The observed items in this research included children's activities, involvement, children's target of attention, and social relations. Classifications in this instrument except for levels of involvement are based on research work in Progressive feedback project. Categories are mutually exclusive. To increase reliability, a handbook for observers has been written. In the book, every item is described, based on the reliability analysis of the most difficult items. The reliability is measured constantly with paired observations and continuing training is provided for the observers.

Table 2

Classification and descriptions of activities

ACTIVITY	DESCRIPTION

General activity	Basic activities e.g. eating, dressing
Physical activity	e.g. running, swinging, jumping, climbing
Task or seatwork	e.g. pen and paper exercise
Role play	Building shared playworlds with other children, the child or the toy is having a role to play
Material play	The child is playing with toys or other materials, e.g. sandbox
No focus	No contact to others, walking around, waiting
Spending time with others with no other activity	E.g. chatting or/ and walking with others
Rule play	e.g. board games, games with fixed rules, competition
Reading	The child listens or reads/looks books
Forbidden activity	E.g. not following orders, bullying, misbehaving, disturbing others
Other activity	Activity that does not fit in the other categories

Note. The reliability of the observation was checked with paired comparison. Nineteen pairs of observers were randomly chosen to make the same (random) observations without knowing each other's classifications, totalling 736 observations. The reliability of the paired observation (Cohen's kappa) was 66.7 percent (CI 62.9 percent, 70.5 percent).

Table 3.

Levels of involvement

LEVEL OF INVOLVEMENT (Laevers, 1994)	DESCRIPTION
1	simple, stereotypic activity
2	frequently interrupted activity
3	Mainly continuous activity
4	Continuous activity with intense moments
5	Sustained intense activity

Note. The reliability of the paired observation (intraclass correlation coefficient, one-way random) for involvement was .756 (CI 719, 789, $p < .0005$).

Table 4.

Classification and descriptions of the target of attention

TARGET OF ATTENTION	DESCRIPTION
Non-social object	e.g. toys, sand, blocks, water or oneself
Adult	e.g. follows adult's narrative, discusses with adults, can include teaching material
Another child	Child's attention is focused on another child. The focus can include toys or other objects.
A group of children	Attention is focused on two or more children. The focus can include toys or other objects.
The whole situation	One object of attention can not be defined.

Note. The Kappa for target of attention was 54.7 percent (CI 54.2 percent, 55.2 percent, p < .0005).

Table 5.

Classification and descriptions of social relations

SOCIAL RELATION	DESCRIPTION
Accommodates	Child is adapting, accepts and acknowledges
Participates	Child is participating, interactive and cooperative
Dominates	Child is self-centered and insistent, pushy and dominant
Non-social or withdrawn	Child is withdrawn from the social situation, may be non-social and non-interactive
Other role	Other role that does not fit in the categories

Note. The Kappa for the social relations was 40.5 percent (CI 38.1 percent, 45.3 percent, p < .0005).

Ethics

The study was approved by Ethical Review Board in the Humanities and Social and Behavioural

Sciences at the University of Helsinki. The participating municipalities agreed to allow the data to

be collected for the research. The names or addresses of the units or groups (classes), where the

children were observed, were not collected, securing the full anonymity. The children participating in the research had a signed consent from their guardians. The approval of the children themselves was not collected, because it would have been difficult for children to understand the meaning and content of participating in the research. The research procedures did not affect the children's everyday activities. The children's names, birthdays, social security numbers, addresses were not collected. Personal information of the parents and teachers was not collected. Instead, each child and child group received a number that was used to merge the observation data and children's special needs. The data collection was conducted as part of the everyday activities. The observers' training emphasized respecting the children's own feelings and rights. For example, the observer was instructed not to initiate active contact with children, but if the child initiated contact, friendly and responsive reactions were discussed.

Results

First the results of four groups are presented separately in relation to research questions and thereafter a comparison between the four groups is provided.

Children with self-regulation difficulties

For children with self-regulation difficulties the most typical activities after general activities were physical activity, material play, task and no focus and high involvement was observed for 48.9% of the time. It was common to children with self-regulation difficulties to have a non-social object or an adult as a target of their attention. When social relations were observed it was noticed that they mostly participated or adapted.

Children with language problems

For children with language problems the most typical activities after general activities were physical activity, task, role play and material play and high involvement was observed for 50% of the time. They mostly had another child or a group of children as a target of their attention. When observing their role in the group it was noticed that they mostly participated or adapted.

Children with severe disabilities

Excluding general activities children with severe disabilities spent their time typically with material play, no focus, physical activity and task and high involvement was observed for 87,3% of the time. They had mostly an adult or non-social object as target of their attention. In group they mostly participated or adapted.

Children without SEN

For children without SEN the most common activities after general activities were physical activity, task, role play and material play and high involvement was observed for 52.9% of the time. They had more often another child or a group of children than an adult or a non-social object as a target of their attention. In their group they mostly participated or adapted.

Comparison between groups

Observed activities

The differences in relative amounts of time spent in different activities are presented in Table 6. In comparison to children without SEN children with self-regulation difficulties spent statistically significantly more time in *physical activities***.** They participated in *role play* statistically significantly less than children without SEN and *spent time others with no other activity like playing or tasks* statistically significantly less than children with language problems or children

without SEN. *Forbidden action* was statistically significantly more common for children with self-regulation difficulties than for children with language problems or children without SEN.

Spending time with others with no other activity like playing or tasks was statistically significantly more often observed with children with language problems in comparison to all other children. Children with language problems played statistically significantly less *rule games* in comparison to children with self-regulation difficulties or children without SEN. Children with language problems took part statistically significantly less in *forbidden activities* in comparison to other children. It is noteworthy that children with language problems *attended reading sessions* statistically significantly less in comparison to children without SEN.

Children with severe disabilities spent statistically significantly less time with *role play* compared to other children. They had statistically significantly more *material play* than children without SEN. In addition, children with severe disabilities were statistically significantly more often observed to have *no focus* or contact with others than children without SEN. Children with severe disabilities participated in *forbidden activity* statistically significantly more often than children with language problems or children without SEN.

Children without SEN participated in *role-play* statistically significantly more than children with self-regulation difficulties or children with severe disabilities. Children without SEN had statistically significantly less *physical activity*, less *material play,* and fewer *forbidden activities* than children with self-regulation and children with severe disabilities.

Involvement

The differences in relative amounts of time that children spent in high involvement are presented in Table 7. Children with self-regulation difficulties were observed to have statistically significantly *lower* compared to children without SEN. Children with language problems were observer to have high involvement for 50% of the time which did not differ statistically

significantly compared to children with self-regulation difficulties or children without SEN. Children with severe disabilities had statistically significantly lowest involvement compared to other children whereas children without SEN had statistically significantly highest involvement compared to other children.

Target of attention

Table 8 presents the differences in relative time in targeted attention. Children with language problems and children without SEN had *another child* as a target of their attention more often than children with self-regulation difficulties or severe disabilities. By contrast, children with self-regulation difficulties and severe disabilities had *an adult* as a target of attention statistically significantly more often than children with language problems or children without SEN. Children with severe disabilities had a group of children as their target of attention significantly less frequently compared to other children. Children without SEN had *a group of children* as their target of attention significantly more often than other children.

Social relations

The differences in relative amounts of time spent in different social relations are presented in Table 9. Children with self-regulation difficulties dominated and had a non-social role statistically significantly more often than children with language problems or children without SEN. Children with language problems dominated statistically significantly less than all the other children. Children with severe disabilities were non-social or withdrawed statistically significantly more often compared to children with language problems or children without SEN.

Discussion

Our study revealed that much more attention should be paid to supporting participation especially in children with self-regulation difficulties and severe disabilities. According to the results it seems that they participate in social activities less than their peers. Instead they spent their time with material play, tasks or with no focus. In order to take advantage of the benefits of inclusive environment all children should participate equally, regardless of their disabilities (Barton & Smith, 2015; Buyesse et al., 2002; Guralnik & Bruder, 2016). Additionally children with severe disabilities had the lowest involvement. It is essential that the level of involvement and the zone of proximal development is taken into account in order to support learning new skills in an effective way. It is noteworthy that among children with self-regulation difficulties or severe disabilities, the target of attention was usually an adult rather than other children. This might indicate that children are adjusted to interacting with adults instead of playing and interacting with peers. It is also possible that they rely on adults first when beginning to interact with peers.

Children with language problems were participating in different kinds of activities throughout the day quite equally and they were engaging in social relations with their peers. It is noteworthy that children with language problems attended reading sessions statistically significantly less than children without SEN. This is an alarming result, since reading would be essential for supporting the development of language skills.

Another noteworthy result is that spending time with no focus was relatively common for all children. It is important that ECEC professionals plan the schedule and activities of the day carefully to confirm children's involvement and engagement. Effective classroom management supports not only children's involvement and engagement but also behavior management and reduces misbehavior (Emmer & Stough, 2001; Vitiello et al., 2012).

In our research the most common reason why children had a need for support in ECEC was difficulties related to self-regulation. Effective self-regulation is fundamental to an individual's functioning and early childhood is an important period for the development of self-regulation (Becker et al., 2014; Montroy et al., 2016; Whitebread & Basilio, 2012). Professionals working in ECEC are responsible of supporting children in situations in which self-regulation skills are needed. Our results were in line with studies indicating that children with low SR-skills are at increased risk of being left outside joint play (Braza et al., 2007; Li et al., 2016). This result is worrying because joint play supports the development of SR-skills while solitary play does not have that effect (Elias & Berk, 2002; Vieillevoye & Nader-Grosbois, 2008). This means that the very children who need to practice their SR-skills are missing a potential opportunity to do that. Children prefer prosocial peers and neglect antisocial peers (Hamlin & Wynn, 2011), which makes establishing friendships even more difficult if the child already has difficulties in forming peer relationships and does not have the skills to act in situations that require social skills. Being left outside causes negative feelings towards peers and negative feelings may cause antisocial behaviour or vice versa. This may cause a vicious circle that is difficult to break. Therefore, early intervention is essential.

In future research it will be important to draw attention to effective ways to increase participation and engagement of all children, despite the level of support they need. By observing the strategies used by professionals in ECEC in varying situations in early childhood settings, it is possible to obtain knowledge of effective methods and practices. Additionally, more research is needed to acquire knowledge of the role of professionals working in the group, especially considering their verbal and non-verbal interaction. It is important to become aware of gestures and facial expressions that may in the worst scenario cause exclusion of children.

Limitations

There are some limitations of this study that must be considered when interpreting the results. First, the group of children who needed special support was relatively small. Because of that it is unreliable to make wide-reaching conclusions based on the results of our research. At the same time, we should not underestimate the significance of the results of these observations. Being approved by peers and feeling valued is crucial for children's well-being, and no child should feel rejected or left outside.

Another matter that must be remembered when interpreting the results is that differences between groups are volatile. Groups are formed based on the descriptions and the diagnoses written in the questionnaire. The descriptions written by the professionals in the ECEC group were subjective and related to the situations observed at that time. Despite these limitations, they provide important knowledge about children and their status in groups. These descriptions also provide important information about the support that children currently need in ECEC environments.

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Tables

Table 1.

Observations in this study

	Children with self-regulation difficulties n=91	Children with language disorder n=39	Children with several disabilities n=15	Children without SEN n=1478
	%	%	%	%
Girls	22.3	45.1	16.1	48.7
Boys	77.7	54.9	83.9	51.3
Total	100	100	100	100

Note. Children's age varied between 48 and 92 months ($M = 67.5$, $SD = 11.13$).

Table 2.

Observed percentages of time children spent across all activities

Type of activity	Children with self-regulation difficulties n=91	Children with language disorders n=39	Children with severe disabilities n=15	Children without SEN n=1478	Total
	%	%	%	%	%
General activity	27.8_a	28.8_a	31.8_a	29.1_a	29.1
Physical activity	13.6_a	$13.7_{a.\,b}$	$11.4_{a.\,b}$	12.0_b	12.2
Task or seatwork	11.1_a	11.9_a	11.0_a	11.7_a	11.7
Role play	9.5_a	$11.5_{a.\,b}$	3.0_c	11.6_b	11.4
Material play	$12.3_{a.\,b}$	$11.5_{a.\,b}$	16.1_b	11.0_a	11.1
No focus	$9.2_{a.\,b.\,c}$	8.0_c	12.7_b	$8.2_{a.\,c}$	8.2
Spending time with others with no other activity	4.3_a	7.6_b	$2.5_{a.\,c}$	5.4_c	5.4
Rule play	4.9_a	3.1_b	$2.5_{a.\,b}$	4.9_a	4.9
Reading	$3.1_{a.\,b}$	1.8_b	$2.5_{a.\,b}$	3.3_a	3.2
Forbidden activity	2.5_a	0.4_b	$2.5_{a.\,c}$	1.3_c	1.4
Other activity	1.7_a	1.7_a	3.8_b	1.5_a	1.6
Total	100.0	100.0	100.0	100.0	100.0

Each subscript letter denotes a subset of the variable special need, the proportions of which do not differ significantly from each other at the .05 level.

Table 3.

Observed percentages of children's high involvement

	Children with self-regulation difficulties n=91	Children with language disorders n=39	Children with severe disabilities n=15	Children without SEN n=1478
	%	%	%	%
High involvement	48.9$_a$	50.0$_{a. b}$	37.3$_c$	52.9$_b$

Each subscript letter denotes a subset of the variable special need, the proportions of which do not differ significantly from each other at the .05 level.

Table 4.

-Observed percentages of children's target of attention

Target of attention	Children with self-regulation difficulties n=91	Children with language disorders n=39	Children with severe disabilities n=15	Children without SEN n= 1478	Total
	%	%	%	%	%
Non-social object	22.2$_{a, b}$	18.9$_{b, c}$	25.0$_a$	17.7$_c$	18.0
Adult	18.3$_a$	16.3$_{a, b}$	36.9$_c$	15.2$_b$	15.5
Another child	16.2$_a$	20.7$_b$	7.6$_c$	20.0$_b$	19.7
A group of children	17.7$_a$	19.2$_a$	10.6$_b$	22.8$_c$	22.4
The whole situation	25.6$_a$	24.9$_a$	19.9$_a$	24.4$_a$	24.4
Total	100.0	100.0	100.0	100.0	100.0

Each subscript letter denotes a subset of the variable special need, the proportions of which do not differ significantly from each other at the .05 level.

Table 5.

Observed percentages of time children spent in different social relations in groups

Description of social relation in group	Children with self-regulation difficulties n=91	Children with language disorders n=39	Children with severe disabilities n=15	Children without SEN n=1478	Total
	%	%	%	%	%
Accommodates	29.4$_a$	32.7$_{a. b}$	31.8$_{a. b}$	31.9$_b$	31.7
Participates	45.1$_a$	52.4$_b$	36.9$_c$	49.0$_b$	48.8
Dominates	8.2$_a$	3.0$_b$	6.4$_{a. c}$	4.9$_c$	5.1
Non-social or withdrawn	14.5$_a$	11.0$_b$	17.4$_a$	11.9$_b$	12.1
Other role	2.9$_a$	1.0$_b$	7.6$_c$	2.3$_a$	2.3
Total	100.0	100.0	100.0	100.0	100.0

Each subscript letter denotes a subset of the variable special need, the proportions of which do not differ significantly from each other at the .05 level.