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Kindergartens: inclusive spaces for all children?

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ABSTRACT

Norwegian Kindergartens are seen as one of the most important social infrastructures for all children below five years. Kindergarten attendance is a legal right for children from the age of one year in Norway, and consequently 97 per cent of children aged four to five years attend these institutions. However, we still have little knowledge to what extent children regardless of abilities can develop social capital and experience inclusion in Kindergarten. Our point of departure is a human rights perspective on children and a relational perspective on disability and materiality. Through a cross sectional multi-method study design, based on gualitative methods, we, in collaboration with children with and without disabilities identified which places indoors and outdoors these children defined to be comfortable and inclusive spaces, and what characterise them. All children preferred stable organisational structure, physically small places equipped with different types of construction materials and available and reliable staff. Children showed that (dis)abilities are a spatial phenomenon and thereby guide inclusive pedagogy closer to the dynamic between children, place, and space. Children's preferences and meaning-making contrasts the pedagogical epistemology which manifests itself as fluid and flexible organisation, based on children's 'free choice'.

KEYWORDS

Kindergarten; inclusion; disabled children; pedagogical epistemology; place and space

Introduction

This article aims to illustrate where and how children with and without disabilities construct inclusive spaces for all within a variety of physical places in kindergartens. These are spaces where they feel safe and confident.

In addition to the family and the local neighbourhood, kindergartens are seen as the most important social infrastructure in early childhood (Klinenberg 2019). Kindergartens must establish pedagogical programmes for children with varying socio-economic backgrounds, ethnicities and abilities. With an exponential rise in the number of kindergartens and consequently an increase in the varieties in abilities among the children attending them, our aim has been to pay special attention to children defined as

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having disabilities. This article places its researcher's gaze on the space constructions in everyday life in peer groups in Norwegian kindergartens, i.e. the horizontal relations.

The responsibility for Norwegian kindergartens was transferred from the Ministry of Children and Family Affairs to the Ministry of Education in 2005, and with this came a political shift in focus from caregiving to education. In 2006, all children were given the legal right to attend kindergarten from the age of one year (Ministry of Education 2006). Following this political shift and satisfying this right there has been an enormous expansion in the number of kindergartens, and today 97 per cent of Norwegian children between four and five years of age are attending kindergarten (Statistics Norway 2020). Consequently, the life and activities in these institutions are crucial not only for the individual child today, but for tomorrow's society. We know that the quality of the first living environment and these environments' social relationships are extremely important for the children's learning (Poikolainen and Honkanen 2019), health and wellbeing, both in the 'here and now' and later in life, which means that it is important to understand what is taking place in these institutions.

Social infrastructure, social capital and social inclusion

The sociologist Eric Klinenberg (2019, 5) defined social infrastructure as 'the physical conditions that determine whether social capital develops'. Public places accessible to all where people gather without any specific competency claims are defined as social infrastructures, e.g. libraries, public schools and public gardens. Since almost all young children in Norway attend kindergartens and they are regulated by the same national legislation (Kindergarten Act 2006; Framework Plan for Kindergartens 2017), these institutions are one of our society's most important social infrastructures in early childhood. Social capital 'refers to connections among individuals - social networks and the norms of reciprocity and trustworthiness that arise from them' (Smith 2001). Social infrastructures and social capital at an aggregate level are well-illustrated in Putnam's (1994) work on how democracy works. He claimed that social capital in horizontal group relations in local communities comprises the building blocks of well-functioning democracies, and consequently is important for civic order, inclusion and stability in everyday life. This article pays special attention to social inclusion, employing Qvortrup and Qvortrup's (2018) definition of this concept: inclusion means (i) physical inclusion (being physically present in the peer community), (ii) social inclusion (participating in peer-group activities) and (iii) psychological inclusion (the child perceiving itself as a recognised part of the peer-group community). Physical inclusion is regulated in Norwegian kindergartens (Ministry of Education 2006; Ministry of Culture 2017). The National Equality and Anti-discrimination Act (2017, Chapter 3) has a strong focus on universal design in childhood. Paragraph 20 establishes that children with disabilities have the right to individual adaptation in all public services and equal opportunities to participation in activities.

However, the experience of participation with and recognition from peers cannot be regulated by legislation. These are processes that take place in everyday life, and which we have studied empirically together with the children through their construction of inclusive spaces for all.

What does current research tell us about place and space in kindergartens?

Place, space and materiality have a long history in early childhood education and care (Kampmann 2006; Løkken and Moser 2012), and in recent years, also in relation to educational processes (Granly and Maagerø 2012; Duhn 2012; Poikolainen and Honkanen 2019; Olsen et al. 2019). Granly and Maagerø (2012) illustrate the importance of studying kindergartens as social and cultural institutions promoting the pedagogical potential in social and textual understanding of the kindergarten rooms. Duhn (2012) identifies transformative and healing associations, as well as destructive and repressive associations, in pedagogy, and claims that pedagogy must be aware of the interaction between human beings, place and materials and treat the tensions between them seriously. Sherfinski, Weekley, and Mathew (2015) extend this line and describe the importance of including knowledge of the horizontal context in kindergartens in teacher education in the US. Poikolainen and Honkanen (2019, 91) emphasise the emotional aspects and claim that 'place often refers to a certain familiar physical place, such as home or school' and 'space refers to a mental state, meaning emotions and senses, for example, feeling good or experiences of well-being in a certain place'. However, Duhn (2012) claims that place and space have only recently appeared in wider discussions as relevant to pedagogy and there is still a need to elaborate and develop this concept within the pedagogical discipline. In our attempt to elaborate these concepts, we went to the classic discipline of place and space, that is, architecture (Rapoport 1982) with its emphasis on how places and materials are decoded as an aspect of people's organisation of meaning. 'Intuitively, however, space is the three-dimensional extension of the world around us, the intervals, distances, and relationships between people and people, people and things, things and things' (Rapoport 1982, 179).

Currently, we have identified only a few publications that examine children with disabilities, place and space (Boys 2017a; White 2017; Holt 2003; Holt and Costello 2011; Olsen et al. 2019). Olsen et al. (2019) placed a psychological gaze at an autistic child and argue that more predictable frameworks and teacher support promote inclusion. The geographer Louise Holt (2003) argues that the external social and spatial sources of disablement remain under-explored by the social sciences and that limited consideration is given to how the socio-spatial regimes of schools and the wider educational institution can serve disabled children.

However, we still do not know to what extent children with huge variation in abilities are able to develop their social capital as building blocks of inclusion in horizontal relations in the social infrastructure Norwegian kindergartens have been turned into. As adult researchers we address the following research questions:

- Which indoor and outdoor places in kindergarten are defined by children with and without disabilities as comfortable and inclusive spaces?
- What characterises these places?

Social participation in peer-group activities and perceived inclusion are closely connected to children's participation, which for more than 30 years has been defined in the UN Convention on the Rights of the Child (UNCRC) (United Nations 1989) as a basic human right for every child.

Children, childhood and disability: a human rights perspective

The UN Convention on the Rights of the Child (UNCRC) (United Nations 1989) points out the importance of children's rights to participate, to be provided for and protected. In article 28, the right to education is underlined establishing that children with disabilities have the right to special education and care. However, the United Nations realised that persons with disabilities needed a convention of their own because their human rights were not sufficiently satisfied by the UN Declaration of Human Rights (1948) and the UNCRC (1989). Consequently, The UN Convention on the Rights of Persons with Disabilities (UNCRPD) (United Nations 2006) was adopted. The UNCRDP defines disabilities as a relational phenomenon in Article 1: 'Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.' The convention underlines in Article 7.3 on the educational rights for disabled children that:

... children with disabilities have the right to express their views freely on all matters affecting them, their views being given due weight in accordance with their age and maturity, on an equal basis with other children, and to be provided with disability and age-appropriate assistance to realize that right.

Our starting point is in line with these conventions (UNCRC 1989; UNCRPD 2006). The children are social actors and active participants in their own lives and simultaneously as vulnerable human beings in need of protection (UNCRC 1989). However, as Hammers-ley (2017) states, giving a 'voice' to children with and without disabilities does not mean that we find their perspectives more valid than those of the staff or parents. They are equal and complementarily valid. But children's narratives that emerge from the large variety of research methods help us to understand their preferences and meaning-making across abilities.

Before we introduce the findings, we will describe the variety of methods, our data and analysis process.

Methods

Design

As recommended in research with minors (Gulløv 2003; Christensen and James 2017) we have used a qualitative cross-sectional multi-method study design. In our first meeting, we aim to establish trust with the minors, using the recommendations developed by the Children's Ombudsman in Norway (2018) on child-participation. The choice of qualitative multi-method-design was done by the authors, because it gave us a flexible repertoire adaptable to the individuals' abilities when negotiating with the children on how to proceed within an acceptable child-friendly and scientific frame. The study is based on a strategic sample of 24 children (aged 4–5 years) from six kindergartens in rural and urban areas in Norway, using the classification of Vassenden et al. (2011) we have data from one small (<45 children), four medium-sized (46–79 children) and one large (>80 children) institutions. Regarding the physical size of kindergartens, the Norwegian standard is four square metres per full-time equivalent for children from three to

five years of age (The Ministry of Education and Research 2012). Statistics from 2018 indicate that 3 per cent of the children below school age are entitled to special-needs education (Directorate of Education 2019), which at this young age usually refers to children with congenital impairments.

Sample and recruitment

The children in the study were recruited stepwise: (i) Children diagnosed with disabilities that potentially led to social difficulties/children with no diagnosis but with the basic understanding of parents and staff that they have special-education needs; (ii) Children without disability/special-education needs. In both groups, we chose children with enough verbal language to enter a group dialogue, and when possible, we matched the children with and without disabilities according to age and gender.

The criteria for including children with disabilities were:

- Either: The child has physical, cognitive, or multiple disabilities.
- Or: The child behaves in a manner that worries both parents and kindergarten staff and/or the child is receiving special-education services/a diagnosis process is ongoing
- The child has enough verbal language to be understood by a non-familiar individual.

We ended up with eight children with disabilities, including one with multiple disabilities, including mild cognitive impairments, four had socio-emotional (SE) acting-out behaviour, two experienced linguistic disabilities and one was deaf in one ear. Additionally, we recruited a sample of children without known disabilities (nine girls/seven boys). The recruitment criteria were:

- The child has no known disabilities or socio-emotional difficulties
- The child has enough verbal language to be understood by a non-familiar individual
- The child is not receiving special-education service and if possible is matched with one child with disabilities according to gender and age within the natural group.

All these children followed the general curriculum and attended six different departments, divided over five kindergartens: three in urban areas (>150,000 inhabitants) and two in rural areas (<7000 inhabitants). There were 118 full-time equivalents in these departments and in total 405 in these kindergartens. We registered personal data on in total 24 children (11 girls and 13 boys).

Organisation in research groups

There is a huge amount of research literature on school-age children participating in research and knowledge production (Christensen and James 2017; Kellett 2010a; Wilks and Rudner 2013; Palaiologou 2014), but disabled children's participation in research groups are less documented (Kellett 2010b). We have not been able to identify published research literature documenting children with and without disabilities participating together in the same research groups and wanted to try that out in our research project (Ytterhus and Åmot 2019). We established research groups consisting of the

two of us and on average four children with and without disabilities; totalling six groups. Together with the children in the research groups we carried out:

- · Individual drawings of activities and playful materials in kindergarten
- Group drawings of their kindergarten
- Individual guided outdoor and indoor tours, including digital photos of the best, the most boring and the scariest places. During these tours our role as researchers was to act as participant observers who did not initiate any activities, only responded to the children's initiatives, questions and comments in a field-work manner.
- Duplo[®] tableau combined with Individual-Play Based (Åmot 2014) and Life-form Interviews (IPBLI) (Andenæs 1991)
- Group dialogues based on the children's own questions

These research methods were introduced by us as researchers based on recommendations in literature on doing research with children (Christensen and James 2017; Kellett 2010a) and years of own experiences as researchers doing research with children. Details in how the methods were carried out, ethical aspects and dilemmas in children's participation are published elsewhere (Ytterhus and Åmot 2019). Additionally, we had short structured dialogues with one of the educators at each department to obtain some background information on pedagogical and organisational aspects.

Analysis

Methodologically, we carried out a Constructivist Grounded Theory analysis (CGT) (Charmaz 2014) and focused on the children's activities, discussions and narratives. In line with CGT, we used memo writing from all the visits in the kindergartens concurrently with our coding. We used the initial codes to build focused codes and sub-categories. The core category has been used as this article's storyline (Table 1).

We used similar procedures throughout the data analysis. The initial and focused coding were carried out separately before we compared and discussed our focused codes to validate them, but also to ensure that we had included nuances, clustered similar codes and identified variations and patterns. We shifted our attention between the codes and data and developed four subcategories that all the included children, independently of their abilities, described as attractive and playable, ambivalent or not comfortable/places they avoid. These categories were (i) Fixed small places with non-organised materials are group-inclusive, (ii) Fixed building-block rooms are attractive and open to playing (iii) Large places with non-organised materials are ambivalent, and (iv) in Kindergartens with fluid group organisation and innovative room organisation, the children felt marginalised.

Ethical considerations

The research project is approved by the Norwegian Social Science Data Service (NSD, ref. nr. 44076) and carried out following the Norwegian national guidelines for research ethics in social sciences, law, and humanities. Written informed consent is obtained from the participating children's parents and staff in the kindergartens. The parents

Initial codes	Focused codes	Sub-categories
A1 says she plays under the stairs indoors A1 says she must compete for the place under the stairs indoors A2 says she is disappointed if the place under the stairs is occupied A2 says she will wait until the place under the stairs is unoccupied A2 says she loves to play under the tower outdoors (small place unreachable to the staff) A2 says she loves to be alone under the front deck of a boat outdoors. A3 says she likes to play in the small loft indoors G1 and G2 say they occupy the storeroom crib G1 says he plays NinjaGo in the cramped storeroom G2 says that the storeroom crib is great! A1 says they read books under the staircase G3 says she likes to rest in the storeroom crib And so on.	Girls and boys find small unorganised places attractive The children compete for the small places All the children find small and unorganised places attractive regardless of their abilities Small places with non-organised materials stimulate/invite all children's creativity, meaning-construction and imagination in groups	Fixed small places with nor organised materials are groupwise inclusive.

Table 1. One example of the CGT coding process, clustered together.

signed on the consent sheet that they had informed their child about our request based on their acquaintance to their child's assumptions. Additionally, we informed all the participating children verbally at our first research-group-meeting, practised 'get-to-know' each other games recommended by the Ombudsperson for Children (2013). Nonparticipating children's parents in the kindergartens were informed that the research was taking place and that no personal information was registered about their children. All children and kindergartens are given fictive names. The project posed several ethical and methodological challenges related to aspects of situational ethics and power-balance within the research-groups (Ytterhus and Åmot 2019).

Findings

We introduce our findings in accordance with the four sub-categories. This will be followed by a discussion on the core contribution. It is important to note that the concept 'social inclusion' belongs to adults' vocabulary. When we asked children about the best places to stay, they all responded on our request by talking, drawing and taking photos of what they named the attractive places they felt safe, nice, or could practice funny peeractivities.

Fixed small places with non-organised materials are group inclusive

Most of the children tell us on their guided tours and through their drawings that small indoor and outdoor places are attractive to them. These can be small areas not designed for any special activity (under the stairs, the loft, in a storage room), or outdoor play

apparatuses (under a large slide, climbing frame, or a boat), or behind a corner or in the nooks and crannies of the kindergarten building (Figure 1).

Children asked the adult researcher to draw the loft-room as an example of a fun and safe place to stay. They draw fun activities on post-it-notes they stick on the drawing. Here is fun activities made by girls with and without disabilities: Clay, Kapla-bricks, large dolls, and an illustration of a Halloween-march. Beside the loft they stick currant buns as something they wish to have.

We see that the common characteristic of all these small places is that they are visible but not very accessible to staff due to their size (height/width). Consequently, the children can be there alone or in groups without any disturbances, fully aware that the staff are close by if needed. Rarely do these indoor places have windows, and often they are dimly lit. These places are not equipped with any of the usual toys, but very often there are physical materials, like pillows, shelves and building blocks.

During our observations, we see that the children occupy the small places whenever they have 'free' play, which means that no staff-organised activities or meals are taking place. This could be early in the mornings, in the afternoon just before the children are leaving, during scheduled 'free-play', and could be both indoors and outdoors. The children compete to get to these areas, and often make arrangements with each other so that one of their peers will run to occupy the place. Some of the children find it hard to articulate what characterises the places they love so much:

Interviewer 2 (I-2):	What makes it so nice to be there (under the stairs)?	
Anita (5-years-old without disabilities):	I can climb, I can and so yes	
I-2:	Yes. It's just nice to be there?	
Anita:	Mm m	

At these small places, the children will exchange ideas and decide what they want to do. In one loft there are two mattresses and many wooden building blocks. There are different parallel group-based role plays in the lofts: some of the children build huts, others use



Figure 1. Common drawing of the loft [hemsen].

the blocks as roads and some crawl around and made bodily movements on the mattresses. The physical facilities are fixed, but the children interact with the materials in very different ways, create different parallel socially inclusive spaces and are not affected by the parallel play. The children can also bring other materials to these small places and use them in creative ways:

I pretend I'm a reader when I'm under the stairs (Anita, 5-years-old without disabilities).

The boys role-play NinjaGo, which is a rich story universe where Ninjas confront evil forces, and they use the pillows in the room as weapons and as a defence wall. At other times, they use the pillows in this room to take a nap.

We prefer to play NinjaGo in the storeroom crib (Geir, 5-years-old without disabilities and Gunnar, 5-years-old, with SE-difficulties at the same time).

We can sleep on the pillows in the storeroom crib if we get tired (Gunnar, 5-years-old with SE-difficulties).

The children here illustrate how the physical materials and peers interact with each other and create different imaginations of universes adapted to the people and materials found at the place. They make their universe inclusive for those present. Sometimes there are boys, sometimes girls, sometimes both genders. As far as we can observe, this seems to take place independently of abilities, if those present accept the fictional grounds of the role-play.

Fixed building-block rooms are found attractive by all the children

On the guided indoor tours we observe that all the included kindergartens had one fixed building-blocks room equipped with: DUPLO- and/or LEGO blocks, KAPLA wooden blocks, large foam-rubber blocks and Plus-Plus blocks and various types of other plastic building blocks. Children with and without disabilities expressed enthusiasm and interest in these construction materials. When the children draw individually, some of them spontaneously draw Kapla and Lego blocks when they are asked to draw the play, they find to be the most fun in kindergarten, while others draw activities during the organised group drawings. In our findings, the children spontaneously express their enthusiasm verbally:

I love to play with Lego! Emmy said, while she was on her guided indoor tour with us. (Girl, 4-and-a-half-years old without disabilities)

Harald (5-years-old, with language disabilities) proudly illustrates his building skills by building a sword with adhesive plastic blocks! (Figure 2).

A soft plastic-brick sword has an inherent contradiction. It symbolises an instrument for fight but is made of soft materials. Such incongruence between the choice of material and the functional use was accepted by peers in their imaginative word. Some of the blocks are soft, light and large, like the foam-rubber blocks, while others, made of wood, are heavy and of different sizes. Some children build houses and gardens, others make swords, pistols and fences for war games. The interesting aspect with these types of material is that they seem to activate the children's imaginative skills. They construct meaning in the 'hereand-now' and play through their interaction with the material. The exact same material can change meaning according to which group of children is using it during the day, depending on what type of situational-based play the children have chosen.



Figure 2. A sword constructed of soft plastic-bricks by one of the boys with disabilities.

Large places with non-organised materials involve ambivalence

Here we will introduce findings from outdoor and indoor activities separately. We start outdoors.

Large outdoor places

This includes woods and trees in the kindergarten yards. Since pre-schoolers are outdoors on daily basis in Norway, (Moser and Martinsen 2010) the areas close to the buildings where the children play outside have natural vegetation. These areas may be hilly and steep or flat. Some woods have conifers while others have hardwood trees. On the guided tours the children at two of the kindergartens tell us that they like to feed birds in the woods while some feed bumblebees and others just like being in the free areas. In the woods at kindergarten H and kindergarten E, some boys play war games, while both boys and girls have secret clubs and want to hide from the rest of the children or keep 'secrets'. Climbing in the trees, jumping from one tuft of grass to another are described as fun.

We (some boys) like to play in the woods (Harald, 5-years-old, with language disabilities)

During the guided tours in these large outdoor environments, we observe that many different types of activity proceeding in parallel. In these woods or yards, a 'war' could be taking place at the same time as a 'secret-hunt', or a group of girls could be picking flowers or watching an earthworm. If you belong to the 'war group' you cannot suddenly start to watch the earthworm in the middle of the game or vice-versa (Figure 3).

Some children also use the woods for recreation and a place where they can be on their own for a moment. During an outdoor guided tour Hibak (5-years-old, without disabilities) gets our attention:

'Look at me; I'm balancing on this plank across this ditch'.

We realise while we are being guided by the children that they frame and create play independently of their abilities, except for two of the boys with SE-difficulties. They



Figure 3. Large out-door places where parallel ongoing activities found place. Both boys and girls made photos of woods.

struggle to concentrate long enough to keep up in role-play and follow their peers' script. Both Benny (5-years-old, with SE-difficulties and acting-out behaviour) and Henrik (5years-old, with SE-difficulties) find such play demanding. Benny gets lost and disturbs his peers or tries to scare them, which tires them or even makes them afraid of him. Henrik gets so emotionally involved that he overwhelms himself and his peers. In a run-andcatch game with the boys, he suddenly catches one peer by throwing a rope around his neck, a potentially dangerous situation, which ends with adult intervention and temporary exclusion from his peers. These examples illustrate that the big woods became inclusive social spaces for those who could stay within the child-negotiated fictive narrative, or for those children who could maintain their attention on flowers or 'creepy crawlers'. The balance between confidence and freedom is difficult for the staff to handle, and in some situations children with low awareness might make trouble, and even be in danger of hurting their peers.

Large indoor places

These can be the nearby sports -hall or a multi-use game area (MUGA), as well as a large family room. Such areas are very popular with the children who love physical activities and/or rough motor-skills play.

I love to run or play football in the hall (Astrid Irene, 5-years-old, without disabilities)

Other kindergartens have Mini-Gym, a Nordic physical educational programme run by adults for pre-schoolers where they move their bodies to music. When using the Mini-Gym, all the children participate together with staff members. Children in need of support receive individual assistance adjusted to their abilities. Where the movements are guided but not fixed seems to fascinate all the children, regardless of their abilities. However, while most children love these large indoor places, the child with multiple disabilities, including mild cognitive difficulties, told us that she found them noisy and did not like to be there. Fluid-Group Organisation and Innovation-Organised Rooms Made the Children Feel Marginalised or Excluded

According to the children's narratives, fluid-group organisation and fluid-room organisation marginalise or exclude disabled children/children with socio-emotional problems, children fond of gross-motor-skills play and children actively searching for confidence and safety. In two of the medium-sized kindergartens the children are organised differently on different weekdays by the staff, and sometimes across departments. For example, the children can be organised across departments into one tour group, one outdoor group and one indoor group, while they still sit in their base department for their meals. These kindergartens have many indoor rooms. This could include a role-play room, family room, outer-space room, building-blocks room and so on. During a structured dialogue, one of the educators tells us that today's 'family room' had been organised as a 'hospital' some months ago. Two more rooms change on a regular basis and are defined as 'innovation rooms' by the staff. Once a week they hold 'open day', which means the children can move freely across departments indoors and outdoors and have free choice to play with whom and what kind of material they like. Only the dining room and the workshop room (arts and craft, drawing and fine motor skills) are permanent. The staff move with the activities, and consequently they often encounter children from different departments. When we ask an educator about the thinking behind this type of fluid organisation, she answers:

Educator:	The children guide, participate in and decide the flexibility.
Interviewer:	Do all the children know each other (when the organisation of everyday life
	changes)?
Educator:	No, probably not. But for the eldest, especially, this makes it possible for them
	to choose playmates across the departments.

What we have realised from our observations in these kindergartens is that with these changes, the staff do not always know the names of the children and the children do not know the names of the staff. Both children with and without disabilities in our research group seemed to be searching for confidence and safety, but only the ones without disabilities can articulate this need verbally. On his guided indoor tour, Franz Fredrik (5-years-old, without disabilities) showed us where he liked to be when he wanted to rest and feel confident and safe: a small corner in a corridor close to the wardrobe.

The child with SE-difficulties in the same research group did not tell us anything verbally, but we observed him keeping physically close to the special educator most of the days when we were busy with individual activities with the other research-group members.

Additionally, we observe signs that regulate the children's behaviour to maintain social order. For example, in one long corridor we observed the safety sign: 'Pedestrian area' and the household rules sign: 'No ball playing here'. The research-group children in this kindergarten told us that if a child breaks these rules, it is placed in the 'chair of shame' in the middle of the room for a few minutes.

Discussion: spaces the children love for safety, fun and recognition

Children who were four to five years of age, with and without disabilities, have clear preferences about which indoor and outdoor places in kindergarten are inclusive and comfortable spaces regardless their abilities, and most of them were able to articulate why, either verbally, through narratives, or through pictures, drawings and behaviour.

Size, organisational structure and horizontal relations with peers and materials

In our study, the children actively create social inclusive spaces in physical places where they can explore and expand their social interaction and skills with their peers. They build social capital. Their behaviour and narratives illustrate Putnam's (1994) argument that reciprocal horizontal relations are the building blocks of social inclusion and stability in these children's everyday lives. Small, narrow indoor and outdoor places where children can stay alone or play in small groups are preferred by all and in line with Olsen et al. (2019) knowing that a staff-member can step in supportively when needed. The overall size of the kindergarten does not seem to influence the children's possibility to construct inclusive spaces, have fun, feel safe and comfortable. But each department in Kindergarten must be organised in a predictable manner and equipped with materials usable for children's imagination and fantasy regardless of ability level. In inclusive places, the children's bodies intertwine with the available physical materials in different ways according to, and guided by, the children that are present in the 'here and now'. Consequently, the children present in various situations define the same blocks or pillows differently. These places illustrate 'how' we must be aware that (dis)abilities are shaped by relational, spatial and social practices in line with Boys (2017b) argumentation. Our children's activities differ and change according to the physical places, materials and equipment in the surroundings. Consequently, our data extend the Qvortrup and Qvortrup (2018) definition of social and psychological inclusion into a dynamic phenomenon in interaction with the places and materials available. Our findings support White's (2017) claim that children become what the staff's organisational practices allow them to be through exploration and expansion of their interaction skills, not according to how much they correspond to some existing and pre-defined normality standards.

The children's narratives on comfortable, safe and fun spaces for all contrast with those kindergartens that have a flexible organisation, with rotating adults and free choice as their superior value.

Children's free choice a denial of (dis)ability as a spatial phenomenon and false premises for social inclusion

All the children in our research groups played, drew and took photos of either small, narrow places indoors or outdoors when asked for the best places to stay and participate in peer-play. However, the large indoor areas and the woods split the children's preferences. Children with cognitive and/or SE-difficulties found large areas difficult to practice peer-play while most of the other children loved these places. Large indoor areas turned out to be scary for children with SE-difficulties and they kept physically close to the staff.

Outdoor in the woods some of them were able to participate with peers for a short time, some became so emotionally engaged that their peers felt scared and rejected, while some had problems to differentiate between the parallel ongoing activities. Children with cognitive and/or SE-difficulties sometimes strolled around alone in the woods. Did they stroll around because they felt lonely, felt stressed or exhausted as the child in Olsen et al. (2019) we do not know. To walk alone in nature could as well be relaxing and a way of recharging their body and mind (Baklien, Ytterhus, and Bongaardt 2015). Withdrawal does not necessarily indicate social exclusion. Children with SE-difficulties seemed to have most fun together with peers in small well-arranged-places, with supportive staff available. It might be hard to support children you do not know well enough to remember their names. In flexibly organised kindergartens where activities rotated across places the staff's focus was put on functionality, flexibility and children's competencies to make free choices. This finding has led us to question if they were exempting themselves from liability of inclusion. These findings are associated with Bauman's descriptions of a missing community without questioning the basic premise that social processes must be led and value-anchored (Bauman 2000, 73). They cannot be left to their own driving force. Unfortunately, the flexible organisation makes the individual child responsible for initiating its participation. This finding is in line with Skalickà et al. (2015) on the fact that flexibly organised places with a focus on functionality and flexibility seem to overshadow the children's need to feel safe and recognised. Additionally, Skalickà et al. (2015) found that pre-schoolers in open organised centres experienced less teacher-child closeness. We did not study vertical relations.

Conclusion

Through the collaboration with children with and without disabilities, small places equipped with non-predefined materials and places equipped with building-block materials appear to be socially inclusive spaces for all the children. We find that the issue of social participation and inclusive spaces is; (i) a question of how the whole subject of pedagogy and architecture/materials is discussed and framed, as place and space are much more than universal design, residential areas and individual adaptations for children diagnosed with disabilities and special-education needs; (ii) it is also a question of which values the up-bringing of children should be based on in our kindergartens. If a rights-based minimum standard for available places is defined according to the number of staff members in attendance, children will lose the possibility to take part in gross-motor-skills activities indoors. Additionally, they are prohibited from choosing place and space they define as safe and fun. If the staff operationalise children's participation as free choices of place and space, fluid organisation will simplify the complexity of the concept 'participation' (UNCRC 1989; UNCRDP 2006) and 'inclusion' (Qvortrup and Qvortrup 2018). To become inclusive spaces for all children regardless of their abilties, the variety of children's own preferences, space construction and meaning-making must be taken seriously. Our study has shown that there is still a discrepancy between ideology, children's preferences and pedagogical practices. Children's voices told that (dis)ability is a spatial phenomenon and guides the inclusive pedagogy closer to the dynamic between children, place and space.

Possible limitations

This is a small qualitative study, and the children included represent only a few of the many varieties defined within the concept of (dis)ability. The sample excluded children without enough verbal language to participate in group dialogues, which was a consequence of the resources available in the study. However, our sample includes those disabilities that are most frequently found in Norwegian kindergartens, and we may argue that impediments for these children will be even more severe for children with severe disabilities.

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