Mapping inclusion of a child with autism in a mainstream kindergarten: How can we move towards more inclusive practices?

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Mapping inclusion of a child with autism in a mainstream kindergarten: How can we move towards more inclusive practices?

This study identify and reflect on barriers to inclusion that children with autism can meet in kindergarten. We use a single case study with participant- and video observation to map inclusion for a single 5-year-old boy with autism, in a mainstream kindergarten in Norway. Analysis identified three modes of inclusion; *distance-keeping, maintaining proximity* and *interacting*. The mapping procedure demonstrated that barriers to inclusion continue to operate. The extent of the child's participation seemed to relate to what he was doing and who he was with; overall, limited social inclusion amongst peers being achieved. Results indicated that predictable frameworks and teacher support increased participation. We discuss how participation for children with autism can be promoted. Our study points toward the need to extend current adaptations and support to children with autism within the educational settings, to enable a more inclusive practice.

Keywords; children; autism; inclusion; participation, mainstream kindergarten

Introduction

Individuals on the autism spectrum have pervasive challenges with language, communication and social interaction (American Psychiatric Association 2013; WHO 1993), which can affect the presence and quality of their engagement with peers and make participation in relationships challenging (Locke et al. 2015; Memari et al. 2015; WHO, 1993). Other features of autism include repetitive behaviors, special interests and a preference for predictability (WHO, 1993), with many individuals displaying a need to follow and repeat certain patterns of activities and/or behaviours. Successful inclusion for children with autism in educational settings, seems to depend largely upon how teachers structure the environment and how they monitor the child in the process (Symes and Humphrey 2012; Theodorou and Nind 2010; Frea et al. 1999; Reszka, Odom, and Hume 2012; Humphrey and Lewis 2008; Robertson, Chamberlain, and Kasari 2003). However, teachers have reported that autistic traits challenge

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their interaction with the children (Emam and Farrell 2009), and that they lack the training to support these children adequately (Robertson, Chamberlain, and Kasari 2003). The question of how to adjust conditions to include them in mainstream settings is considered an insufficiently understood area of education (Humphrey and Lewis 2008; Barnard et al. 2000; Jordan 2008).

Previous research indicate that children with autism tend to participate more in interaction with adults than with peers (Brown et al. 1999) and they are reported to be less socially involved with fewer reciprocal relations with peers than their typical developing classmates (Rotheram-Fuller et al. 2010). Furthermore, they are more likely to be bullied, receive less social support and are more likely to be rejected that their peers (Humphrey and Symes 2010, 2011). These experiences increase the risk of a poor social outcome (Humphrey and Symes 2013).

Although children with autism display different patterns of inclusion from their peers (Rotheram-Fuller et al. 2010), early experiences of inclusion are related to increased interaction with peers, which can lead to improvement of social skills and motivation for social interaction (Humphrey & Symes, 2010). Teaching practices and strategies to support the inclusion of children with autism are identified as a "key gap" in education (Humphrey and Parkinson 2006; Humphrey and Symes 2013). Evidence about the nature of these children's participation in the everyday routines and activities of mainstream educational settings, over a period of time, may inform educational practices to better support inclusion (Kemmis et al. 2014). However, this is a sparse area of research (Crosland and Dunlap 2012; Theodorou and Nind 2010). This paper aims to examine these conditions closely, within the context of a Norwegian mainstream kindergarten.

The Norwegian context for inclusion in education

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In Norway, as in most Western countries, educating children with autism separately to their non-autistic peers used to be more common than is the case today (Dybvik 2004; Mathieson 2015; Norwich 2008). The Blom committee (1970) concluded that all children, regardless of special needs, should be integrated into mainstream schools (Strømstad 2003). Following that report, changes to the legal and regulatory framework gradually enabled a more inclusive practice, as did the commitment to the Salamanca Declaration (UNESCO 1994). According to the Declaration, all pupils with special educational needs should have access to a mainstream school that facilitates learning and is pedagogically able to meet their needs (UNESCO 1994).

Inclusion can therefore be understood as a 'process intended to respond to students diversity by increasing their participation and reducing exclusion within and from education' (UNESCO 2009, 13). The process should include a focus on identifying and minimizing barriers for children's participation and learning (UNESCO 2009). Importantly, inclusion must also have an impact at the individual level, with a focus on creating an environment where individuals experience wellbeing and receive opportunities to participate as far as possible. This must be considered as "the gateway to full social inclusion" in which children can learn the values and skills that enable participation in community life (Jordan 2008, 11; Cohen 2006). The discourse surrounding inclusion has shifted from a focus on the setting in which learning takes place, to considering the quality of educational experiences. The modern term of inclusion essentially refers to the presence, participation, acceptance and achievement of all children in educational settings (Humphrey and Symes 2010; Ainscow 2007; Lister 2008). These elements are also recognized as important conditions for learning (Cohen 2006; Nolas 2015).

90% of all Norwegian children between 1 and 5 years (pre-school age) attend kindergarten (The Norwegian Directorate for Education and Training 2016). The content and organization of kindergartens in Norway are regulated by the mandatory Kindergarten act (Norwegian

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Ministry of Education and Research 2005) and the Norwegian "Framework Plan for the Content and Tasks of Kindergartens" (2011). The Norwegian Framework Plan builds on the UN Convention on the Rights of the Child (United Nations 1989), emphasizig that children should feel belonging and community, and influence aspects of their lives in kindergarten. Teachers should support the child towards active participation in peer groups. How the rights are put into practice must be adapted to age and level of function of the child (Norwegian Ministry of Education and Research 2011, 15).

Understanding how children with autism are included during the early years is critical for creating optimal conditions for participation and learning in education, and ultimately for enabling them to participate in their society to the greatest possible extent (Jordan 2008). The routines of everyday life provide children with various opportunities for participation (Leach & La Rocque, 2011), and for children with limited language and at an early developmental stage, paying attention to their everyday lives contributes to a greater understanding of the ways that they navigate contexts and situations that matter to them (Taguchi 2011; Nolas 2015). These factors underscore the need to investigate how inclusion takes place in a kindergarten setting.

The study

Drawing on the Norwegian Framework Plan (2011), this study focuses specifically on the *presence* and *participation* aspects of inclusion for one child with autism. These must be considered preconditions for the opportunity to feel belonging, to influence and to achieve social esteem (Fraser 2003). We aimed to consider how far the child was *present* with other kindergarten children and staff and how far he was *participating* in shared activities. The guiding question for the research was: What barriers to inclusion may be identified by mapping the patterns of presence and participation of a child with autism in the everyday routines and activities of a mainstream kindergarten setting? Finally, we discuss how

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identified barriers to inclusion might be addressed. To explore this question in detail over a period of time, a case study design was adopted (Creswell 2012; Stake 1995). We observed a boy with autism in one Norwegian kindergarten using participant- and video observation, which enabled us to elucidate the patterns of his presence and participation in the everyday settings of kindergarten.

Methodology

Participant

Following parental consent, one boy with an autism diagnosis, aged 5 years and 4 months old, participated in the study. He was identified as having an autism spectrum disorder by a licensed and trained psychologist in the Department of Children and Adolescent Psychiatry in a Norwegian Hospital, from where he was recruited via contacts, through a purposeful sampling procedure (Creswell 2012). The inclusion criteria were that he had no identifiable co-occurring medical cause for his neurodevelopmental condition (e.g., Fragile X Syndrome), no other co-occurring medical condition (e.g., epilepsy, ADHD). He had also been attending a regular, mainstream kindergarten for more than one year, enabling the kindergarten to develop knowledge about his needs and routines to accommodate them. Assessments by the Vineland Adaptive Behaviour Scale (Sparrow, Cicchetti, and Balla 2005), showed an everyday functioning age of 3 years at the chronological age of 5 years 4 months. On the Social Communication Questionnaire (Rutter, Bailey, Berument, Lord & Pickles, 2003), a screening tool for autism, he obtained a score of 19, above the cut-off score of 15 and suggesting clinically-significant features of autism, thus supporting his diagnosis of autism.

At the time of the study, Lars (a pseudonym to preserve anonymity) spoke in sentences of 8 or 9 words. He remembered sentences or words from films, and repeated these when doing certain activities. He loved to draw, and had excellent drawing skills. He liked music and singing, and was good with letters, which he often practiced with the teacher. He was usually

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in good spirits but could easily become distressed, perhaps because of his heightened sensitivity to certain sounds and lights. He often covered his ears and became very tense if the surroundings became too noisy.

Kindergarten context

The kindergarten is located close to a forest, on the outskirts of a city in Norway, and is organized as a 'Forest kindergarten', which is a provision focusing on outdoor activities, were children spend several hours of the day on tours of the woods, usually taking part in self-initiated play. The kindergarten educates 25 children, aged between 1 to 5 years old, in full time attendance (7:15am to 4:30pm). There are 8 staff, 5 of whom have bachelor's degrees in pre-school teaching. At the time of observation, no other children attending had special needs.

Lars had special educational assistance for 30 hours a week, provided by a pre-school teacher, which was provided in line with the right to special education, founded in the Kindergarten Act of 2005 (Norwegian Ministry of Education and Research 2005). Lars spent on average 2 hours per day in a training room, following an Early and Intensive Behavioral Intervention (EIBI) program (Lovaas 1987; Eikeseth et al. 2007), which is a highly structured and prescriptive educational intervention based on applied behavioral analysis (ABA) for young people with autism. The intervention was supervised by a special educator from a specialized team at a Child and Adolescent Psychiatry Department in a Norwegian Hospital.

Methods

Participant observation. In order to get a full picture of the child's everyday life, participant observations were carried out across 13 days, within a 5 week period, 3 hours each day, at varied times of the day but excluding the daily sessions of EIBI. The focus of observation was the participant's action and interaction (Creswell 2012). The researcher (first author) followed the child's activities but kept a non-intrusive distance (Walsh 2012). Bearing in mind that that the child was not considered able to give informed consent explicitly, the researcher paid

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particular attention to any verbal or non-verbal signals, which might be interpreted as unhappiness about the researcher's presence, and which should be respected (Taguchi 2011). Notes were taken both during the observations and subsequently. The data from the participant observation was used to inform analysis of the video observation.

Video observation. The purpose of the video observations was to gather verifiable information about the topic of investigation (Walsh 2012). The video recordings were conducted in informal situations for 30 minutes per day at random intervals (an average sequence length of 4-minutes). A total of 112 video clips were subjected to analysis.

Interviews and questionnaires. To attain background information about the child's early developmental history, semi-structured interviews with his parent and teacher were conducted (Kvale and Brinkmann 2009). The Vineland Adaptive Behaviour Scale interview (Sparrow, Cicchetti, and Balla 2005) and a Social Communication Questionnaire (Rutter, Bailey, Berument, Lord & Pickles, 2003) were completed with the parent to obtain information about the child's everyday functioning and the extent of autistic traits.

Ethical considerations

The research received ethical approval by the Norwegian social sciences data services. Ethical guidelines were followed throughout the research process. Informed consent was gained from the child's parents, kindergarten staff and parents of the other children in the kindergarten prior to participation.

Analytic strategy

The analysis of the 112 video observations was conducted following Braun and Clarke's (2006) guide for thematic analysis. The presence and participation of the child was mapped through a recursive process, in which video clips and notes from observation were triangulated in relation to the research question: What barriers to inclusion may be identified by mapping the patterns of presence and participation of a child with autism in the everyday

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routines and activities of a mainstream kindergarten setting? Patterns were analysed and overarching categories developed (Braun and Clarke 2006). Three different modes relating to the child's presence and participation ('modes of inclusion'), were identified: *i) Distance-keeping*; *ii) Maintaining proximity*, and *iii) Interacting*. Lars' behaviour was coded as 'distance keeping' when he was physically on the periphery of a situation or interaction. Behaviour was coded as *'Maintaining proximity'* when he was physically beside others, but was not focusing on the action taking place, and not interacting with others. When Lars was interacting with others verbally or non-verbally, this was coded as 'interacting'. The different modes will be explained in more detail in the results section. 25% of the 112 video clips were randomly selected to test interrater agreement for the three categories. This was conducted by the researcher and the second last author, resulting in a Kappa of 0.79. Repeated viewing of the clips showed that the modes of inclusion varied according to context and who was present, and the modes were further mapped in relation to: 1) Who was present in the situation, and 2) the activities that took place. Another relevant theme in relation to his presence and participation emerged, 3) Presence of teacher support. Verbal and non-verbal prompts given by teachers to help the child were coded. The results section initially presents a more detailed description of the modes of inclusion outlined here.

Results

After repeated viewing of the data, it became apparent that Lars' social behaviour varied between: 1) keeping at a distance from others, 2) maintaining proximity, without interacting with others, and 3) interacting with others, verbally or non-verbally. These three modes related to different degrees of inclusion and were thus identified as the main themes from the data.

Modes of inclusion

The thematic analysis revealed three modes of inclusion: distance-keeping, maintaining proximity and interacting.

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Typically, when Lars *kept distance*, he was physically on the periphery of a situation or interaction. In this mode, he was often occupied with his own interests. This is a typical example of the mode:

> *Lars is outdoors in the kindergarten. He is standing alone at a distance from the other children and teachers. He goes to the swing, sits down, but goes back to the place where he stood after only a little while. Then he goes to the fence and walks slowly along it. It seems that he is looking at the cars in the parking area (day 2, clip 10).*

On a number of occasions, he was *maintaining proximity* to others, without interacting with them. In these scenarios, he was physically with or just beside others, but seemed to be focused not on the interaction taking place, but on his own interests. Below is an example of this mode:

> *Lars is sitting at a table in the kindergarten and is occupied with drawing, while singing. Two other children sit close beside him and are also drawing. He is looking down on his drawing. After a while he looks up, makes sounds and says some words – looking out into space, without addressing anyone in particular. Then he draws a little bit more, looking up again while he is making sounds. He leaves the table, goes to another table nearby, and sits down there (day 4, clip 2).*

On other occasions, Lars *interacted* with others, verbally or non-verbally. During these interactions, he used language to answer others' questions, often a single word. He answered educational questions asking him to name a color, letter or number. He often repeated his sentences, singing in a low voice, without appearing to address anyone. Examples of non-verbal behaviour included looking at others, pointing, giving hugs, grasping a teacher's hand and showing his work. This is an example of the *interaction* mode:

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The children and teachers in the kindergarten are on tour in the woods. Lars is sitting on a rock and a teacher and three other children are with him. They are sitting in a circle. The teacher has letters written on a card and shows one to the children, asking them to name the letter. Lars looks at the letter and answers at the same time as the other children. They are singing responses to the teacher, making high and low sounds at the teacher's request (day 12, clip 8).

Further analysis of the data revealed how these different modes of inclusion related to 1) who was present in the situation with Lars and 2) which activities he was involved with.

Modes of inclusion related to who was present in the situation

Lars was observed with other people and alone. We considered the proportion of time he was observed with others. He was most frequently observed with both teachers and other children (in 50% of the 112 clips). He was with teachers only for 22%, and with other children, without a teacher attending for 12% of clips. He was observed alone in 16% of the clips (for example when he was the only person in the room). This meant that he was slightly more often alone than with other children when there was no teacher at hand. Additionally we noted frequency of teachers support, and when Lars was with both teacher and other children, he received teacher support in 19 % of those clips. When Lars was with teachers only, he received teacher support in just over half of the clips (13%).

Analysis showed that the modes of inclusion varied according to whom Lars was with. Table 1 specifies how often Lars was with others – teachers, peers, both or neither - in the different modes of inclusion (distance-keeping, maintaining proximity, interacting).

Table 1. *Inclusion modes according to the presence of others in the situation*

[Table 1 near here]

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Lars was with teachers in 22% of the video clips; the most frequent mode of inclusion with teachers present was interacting (17% of the time observed). By contrast, when he was with other children, he only occasionally kept himself apart (1% of observations), but was not observed interacting with them. He was most frequently videoed with both teachers and other children. In these instances, Lars was interacting about half the time. Finally, video observations were classified as alone (16%) when Lars was alone at the start of the clip. For most of these, he continued to keep his distance from others (14%), but there were rare occasions when he approached other (2%), staying beside them for a part of the clip. Finally, it was observed that when Lars kept his distance, he did not receive bids for interaction from teachers or from other children.

Overall, Lars interacted with others in 41% of all clips. If we add the percentage of time he was maintaining proximity, we may conclude that he was present or participating most of the time (76%). However, 59% of the video clips show instances where he is *not* participating ("proximity" and "distance" summed). This finding corresponds with findings in a previous study, which reported that children with autism were socially involved about half of the time they spent in the educational setting (Rotheram-Fuller et al. 2010). The data also show that Lars' interactions were more likely to occur with teachers than with other children, confirming similar findings elsewhere (Brown et al. 1999). Nevertheless, observations showed that Lars received teacher support for less than one third (32%) of the total 112 videoed situations.

Modes of inclusion related to activity

Next, we analysed whether modes of inclusion varied depending on the types of activities in which Lars was engaged. The activities recorded were divided into five categories: (1) indoor free play, which included, for example, drawing or building Lego; (2) organised group play, which included activities facilitated by staff, such as games or singing, whether inside or

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outdoors; (3) daily living routines, such as meal times and getting dressed; (4) outdoor free play, for example using the swing or sandbox, or walking or running around in the garden area, and (5) activities in the woods (usually different unstructured play and games). The most frequent activity observed was activities in the woods (40% of the 112 clips). Lars took part in indoor free play for 17% and organised group play for 17% of the 112 clips. He was engaged in outdoor free play for 15%, and he spent 11% of the clips in daily living routines. Importantly, the nature of inclusion differed according to the activity, as shown in table 2.

Table 2. *Inclusion mode according to the activity.*

[Table 2 near here]

During organised play and during daily-living routines, he was more likely to interact with others (13% and 9%, respectively). These activities were likely to involve more teacher support and were usually structured, which may also have also supported his interactions (Wong and Kasari 2012). During indoor free play (17% of observations), Lars tended not to interact (5% of observations). The low occurrence of interaction during these activities may have been due to his interest in drawing; when drawing, he often refused others' bids for interaction. Other challenging situations for inclusion seemed to be related to outdoor free play and tours of the woods.

Discussion

This study examined the nature of inclusion of a 5-year-old boy with autism within a mainstream kindergarten setting in Norway. The findings suggest that Lars often maintained proximity to others, but also kept distance in many situations. He interacted mostly when he was with teachers, or teachers and other children. Interaction seemed to be closely related to whether he received teacher support. He did not interact when he was with other children

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without teacher support, and when he kept his distance, no bids for interaction either by him or by others were observed.

Lars was most frequently socially participating in arranged play and in daily living routines. In unstructured indoor play, outdoor play and activities in the woods social participation seemed limited. Activities in the woods seemed to be particularly difficult for social inclusion, with Lars keeping his distance in approximately half of the recorded instances. Our observations show that in current practice, the social inclusion of a child with autism in an adapted mainstream kindergarten setting may vary according to the context, activities and teacher support that are available across the day.

The situations that are particularly testing for social inclusion seem to be those less structured, free-flowing activities, which are known to be challenging for children with autism (Mundy 1995; Leach and LaRocque 2011; Lord et al. 2005; Humphrey and Lewis 2008). The degree of teacher support was also much less in these situations. These results imply that accessible opportunities for social interaction are lost and with them potentially important opportunities for experiences of belonging, influencing (Norwegian Ministry of Education and Research 2011), and learning (Wong & Kasari, 2012). The following discussion will address how identified barriers to inclusion might be addressed to promote participation for children with autism and safeguard their participatory rights.

One of the hallmarks of autism is reduced reciprocal social interaction. Children with autism may prefer spending time on their own, attending to their own interests or routines. Sensory sensitivities can also impact on the ability to take part in the social environment (Author 2016; Author 2012a). Autobiographies of people with autism could provide valuable insight to the different ways of experiencing the world and managing sensory stimuli (Davidson & Henderson, 2010). Many author's with autism explain their sense of exclusion to their sensory differences and, in line with our findings, relate barriers to participation to the environment itself (Davidson, 2010). Due to this, it is also worth noting that for some, being in the woods is experienced as pleasurable, and

described as a way of recovering from the 'sensory carnival' of the educational settings (Prince, 2010). Thus, distance keeping in these instances could be understood as a different form of engagement, where withdrawal gives perceptual rest (Davidson & Henderson, 2010).

One implication of this is that social inclusion depends upon the extent and quality of adaptations to the social environment. Individual characteristics associated with autism must be taken into account, thoroughly mapped and reflected upon, in the development

of an inclusive educational practice, which is pedagogically able to meet the diversity of children with autism, in line with the Salamanca Declaration (UNESCO 1994).

Observations indicated that teachers and peers in the kindergarten rarely took the initiative to interact with the observed child in unstructured situations. Existing research on interaction between children with autism and caregivers suggests that previous experience of reduced or atypical responses to bids for interaction by children with autism may undermine the confidence of staff and children and hence the likelihood of subsequent bids (Dawson et al. 1990). Raising awareness and knowledge amongst staff about differences in interactive style might be one way to lower barriers to inclusion (Kossyvaki, Jones, and Guldberg 2012).

It is possible, of course, that a child with autism is perfectly happy being alone. He or she may not have the motivation to interact with others. In this case, subjecting interactions to special surveillance is to hold children and young people on the autism spectrum to inappropriate social and communicative norms (Holt, Lea, and Bowlby 2012). Furthermore, social interaction may be stressful and may be – to varying degrees – an exhausting experience (Prizant et al. 2003), so that the child may need to spend time alone to relax and unwind. Finally, people have a right *not* to be included (Biesta 2007), and nobody can be forced to enjoy social interaction. These factors must be taken into careful consideration when kindergartens develop an optimal inclusive education for children with autism, as not doing so might risk the democratic nerve of individual autonomy itself (Author 2012b). Nevertheless, these results suggest that predictable frameworks, content and tasks, together with social support from teachers, *currently* contribute to increased social inclusion – without special measures being taken, and without indication of negative consequences. There is potential to decrease barriers to interaction and increase opportunities for social inclusion by focusing on these features of current practice. These suggestions concur with the findings of several other

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studies on inclusion in schools (Mundy 1995; Leach and LaRocque 2011; Lord et al. 2005; Humphrey and Lewis 2008; Prizant et al. 2003; Wong and Kasari 2012; Author 2013).

The results also suggest that participation and interaction with peers is especially difficult to attain. This is unsurprising as these are considered to be the major difficulties for children with autism, and the primary target for interventions (Ferraioli and Harris 2011). However, there are three issues that kindergartens might consider to support positive relationships for children on the autism spectrum. First, our study suggests that kindergartens might assess *how* the child with autism is currently included in the daily life of the kindergarten. Second, staff might explore how non-autistic children might *learn* about the differences and preferences of children with autism at a developmentally appropriate level (Crosland and Dunlap 2012). Finally, kindergartens might engage non-autistic children, with appropriate support, in *learning how to interact successfully with children with autism*, to increase their social inclusion in the kindergarten setting and elsewhere (Author 2013; Kasari et al. 2012).

It is noteworthy that Lars spent an average of two hours every day separated from the other children in the kindergarten, to participate in one-to-one behavioral interventions with his teacher. As stated, Lars participated in an EIBI program (Lovaas 1987; Eikeseth et al. 2007). This practice – which often is recommended by Norwegian hospitals, following a diagnosis of autism - potentially conflicts with the notion of inclusion, as it requires skills to be acquired separately from other children, in one-to-one training, before generalization to other contexts. Social skills are learned through participation in the social world (Dreier 2008), so that lack of participation may lead to reduced social experience and limited opportunities to practice social skills for those children most in need of such experience. Additionally, interventions that separate a child from his/her peers risk presenting that individual as “not one of us in the kindergarten”, and engender an understanding (implicit or explicit) by the child with autism and by peers and teachers that s/he is not an equal or naturally included participant in social

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practice (Author 2015). Without an inclusive practice throughout education, such children may not participate in society to the extent that might have been possible (Jordan 2008). These considerations point towards the need to focus on adaptation and support within the typical educational setting as far as possible. By mapping the inclusion of this child, we hope to highlight the ways that current practice may miss accessible opportunities for supporting and enabling a child's full participation in kindergarten life.

Conclusions

This study is not without its limitations. First, it is an individual case study, which means that the results cannot be generalized to explain inclusion for other children with autism in kindergartens. Such case studies, however, highlight issues for theoretical discussion and generalization (Yin 1994). Second, although we observed the child for an extensive period of time, we nevertheless observed only a small portion of his behavior, which means that these results cannot be taken to reflect accurately the prevalence of the modes described. It is noteworthy, however, that the data provides a verifiable record, which warrants confidence in the results. Future work should more closely examine the type of support offered by adults, given that this appears to be an important condition for social inclusion.

In our case study it seems that barriers to inclusion continue to operate in kindergarten practice. To promote and safeguard the participative rights of children with autism in kindergartens, it is imperative that pedagogy is informed by detailed knowledge of current practice. Our study clearly shows that mapping the inclusion of a child with autism is one way of assessing this practice, and this is an important contribution to the research on inclusion in kindergartens.

Disclosure statement

The authors declare no conflict of interests

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Tables:

Table 1:

Mode: / Situation:	Distance-keeping	Maintaining proximity	Interacting	Sum
Alone	14%	2%	0	16%
With teachers only	1%	4%	17%	22%
With other children	1%	11%	0	12%
With teachers+children	8%	18%	24%	50%
Sum	24%	35%	41%	100%

Table 2:

Mode: / Activity:	Distance-keeping	Maintaining proximity	Interacting	Sum
Indoor free play	5%	7%	5%	17%
Organised group play	0	4%	13%	17%
Daily living routines	0	2%	9%	11%
Outdoor free play	7%	4%	4%	15%
Activities in the wood	12%	19%	9%	40%
Sum	24%	36%	40%	100%

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