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Educators' Challenges of Including Children with Autism Spectrum Disorder in Mainstream Classrooms

Sally Lindsay*, Meghann Proulx, Nicole Thomson and Helen Scott

Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital, The University of Toronto, Toronto, ON, Canada

Although children with autism spectrum disorder (ASD) are increasingly being placed within mainstream classes, little is known about the challenges that teachers encounter with including them as full participants in the class. This qualitative study draws on a purposive sample of 13 educators who have experience teaching children with ASD within two cities in Ontario, Canada. Through in-depth interviews we asked about teachers' challenges regarding creating an inclusive environment within their classroom. Teachers reported several challenges, including: understanding and managing behaviour; socio-structural barriers (i.e., school policy, lack of training and resources); and creating an inclusive environment (i.e., lack of understanding from other teachers, students and parents). Teachers recommend that more resources, training and support are needed to enhance the education and inclusion of children with ASD.

Keywords: Asperger's; autism spectrum disorder; children; inclusive education; mainstream classroom; qualitative research; social inclusion; teachers

Introduction

Educators have reported a notable increase in students with autism over the past few years (Geneva Centre for Autism, 2010; Lindsay et al., 2013). Autism spectrum disorder (ASD) is one of the most common childhood neurological disorders (Autism Society Canada, 2010), which is characterised by problems in communication (i.e., delay or lack of language development), social development (i.e., lack of development of peer relationships, impaired non-verbal behaviour), ritualistic behaviour and resistance to change (American Psychiatric Association, 2012). With more students with ASD in mainstream classrooms, educators are expected to create an inclusive educational environment, often with few or no guidelines on how to do so (Horrocks, White, & Roberts, 2008; Lindsay et al., 2013). Researchers have also highlighted that many schools are struggling to keep pace in meeting the needs of students with ASD (Humphrey & Lewis, 2008; Symes & Humphrey, 2010). Many teachers and parents agree that more needs to be done to create inclusive social environments within classrooms (Hinton, Sofronoff, & Sheffield, 2008; McGregor & Campbell, 2001; Smith & Brown, 2000). Despite these obstacles, very little is known about educators' challenges with teaching children with ASD.

Evidence on inclusive education shows that successful implementation of inclusive principles can lead to increased student engagement in social interaction, higher levels

*Corresponding author. Email: slindsay@hollandbloorview.ca

of social support, social networks and advanced education goals compared with their counterparts in segregated settings (Bredekamp & Copple, 1997; Chandler-Olcott & Kluth, 2009; Eldar, Talmor, & Wolf-Zukerman, 2010; Vakil, O'Connor, & Kline, 2009). Despite these potential benefits, the inclusion of children with ASD in the mainstream classroom can be challenging for teachers.

Given the social and behavioural impairments of children with ASD, teachers often face considerable obstacles in appropriately managing their needs (Bowe, 2004; Wilmhurst & Brue, 2010; Lindsay et al., 2013). Evidence consistently shows that many teachers feel unprepared to support students with ASD socially, academically, and behaviourally (Hinton et al., 2008; Horrocks et al., 2008; Symes & Humphrey, 2010). Indeed, one of the most important challenges in working with students with autism in integrated classrooms is inadequate knowledge about ASD and lacking access to consultation support and advice (De Boer & Simpson, 2009). For example, one UK-based study found that only 5% of teachers received training about autism even though the majority of teachers had a child with autism in their class (McGregor & Campbell, 2001). Such gaps in training can leave teachers feeling discouraged while students with ASD may miss opportunities to reach their full potential (Allen & Cowdery, 2005; Warnock, 2005). Past research has typically focused on the challenges of managing individual behaviours in attempting to include children with ASD in the classroom. This study addresses an important gap in the literature by also exploring the socio-structural factors influencing the inclusion of these children. As a first step in building a more inclusive environment where children are all considered an equally valued member of the class (Eldar et al., 2010), it is critical to understand the challenges educators may encounter when creating inclusive classroom environments, particularly for children with ASD.

In Ontario, Canada, where this study was conducted, school boards are required to provide students with exceptionalities (i.e., behavioural, communication, intellectual, physical or multiple) with appropriate special education programmes and services to best meet their educational needs (Lindsay, Proulx, Scott, & Thomson, 2013; Ontario Ministry of Education, 2012). Such students may receive these services once an Identification, Placement and Review Committee have formally identified them (Ontario Ministry of Education, 2012; Lindsay et al., 2013).

Within Ontario, Canada, the Ministry of Education has identified the inclusion of students with ASD in school environments as an area of priority for action (Lindsay et al., 2013; Minister's ASD Reference Group, 2007). Other researchers also highlight the need to develop a better understanding of educators' challenges in working with children who have ASD (Davis & Florian, 2004; Humphrey & Parkinson, 2006; National Autism Society, 2003). The Ontario Ministry of Education (2012) has supported this inclusive approach with the Education Act and a commitment to support children with disabilities in the Ontario school curriculum (Lindsay et al., 2013).

Theoretical Perspective: Inclusive education

The provision of inclusive and accepting social climates within schools is necessary to help children reach their full potential and for them to feel important, welcome, and appreciated (De Winter, Baeveldlt, & Kooistra, 1999). The United Nations Convention on the Rights of the Child (1989) stipulates that all children, "should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community" (Article 23). We draw on Lipsky and Gartner's (1997) model on the essential elements of inclusion to inform our analysis.

Their model outlines seven essential elements that can be used to guide an inclusive education programme. These elements include: visionary leadership, collaboration, refocused use of assessment, support for staff and students, funding, effective parental involvement as well as curricular adaptation and effective instructional practices. This model offers a framework by which inclusion can be achieved (Lynch & Irvine, 2009), and is consistent with Ferguson's (1995) concept of authentic inclusion where organising an education programme based on these elements can meet the needs of all students. We argue that applying best-practice elements of inclusion may be difficult for teachers who are including students with high-functioning autism within their class.

Methods

This qualitative design explored educators' challenges in and strategies for including children with ASD in mainstream classrooms (see Lindsay et al. [2013] for methods and findings on strategies) while applying Lipsky and Gartner's (1997) model of essential elements of inclusion. Ethical approval was obtained from the ethics review boards at a children's hospital and two local district school boards.

Sample

This study drew on a purposive sample of educators to gain a better understanding of the challenges they experience when including children with ASD in their classrooms. Teachers were recruited through contacts with a local district school board. Information letters were given to contacts of designated schools. Once the school board approved the project, information letters were sent to teachers who were thought to meet the inclusion criteria (see below). Participants who were interested in taking part contacted the research team to set up a convenient time to be interviewed. Each participant was screened by telephone to determine eligibility prior to the interview. Participants were included if they met the following criteria: they had at least two years of teaching experience in an integrated class; they are currently an educator within an elementary school within a local district school board; and/or they have experience teaching a student with ASD within a mainstream class (Lindsay et al., 2013).

Our sample consisted of 13 educators (10 females, three males) who taught a wide range of classes (see Table 1) (Lindsay et al., 2013). While current teaching roles may not necessarily have been within a "regular" classroom (i.e., one teacher was currently employed in a developmental disability programme, and six teachers were working in a special education room), each educator interviewed was asked to draw on their previous experiences, ranging from three to 22 years, teaching in a mainstream classroom. Saturation was reached when no new or relevant data emerged (Strauss & Corbin, 1998). Five of the teachers were based at a school in a rural area while eight were at an urban school setting. Twelve of the teachers had earned additional qualifications in special education (Lindsay et al., 2013).

Data Gathering

The interviews followed an in-depth, semi-structured format exploring teachers' challenges on including children with ASD in mainstream classrooms. The first two authors conducted the interviews between June 2011 and February 2012—these lasted an average of 38 minutes (Lindsay et al., 2013). Informed consent was obtained from

Table 1. Participant summaries.

		Current experience		Previous experience		Relevant education and training				
Teacher	Gender	Current role[a]	Type of school (rural, urban)	Teaching experience (years)	Teaching experience (Grades)	BEd[b]	MEd[c]	SEAQ[d]	School-based autism training[e]	Challenges
1	Male	Special education teacher	Urban	10	4–6	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement
2	Male	DD[f] classroom teacher	Urban	4	4–8	✓	–	✓	–	Socio-structural barriers Inclusive environment – peer understanding and acceptance
3	Female	Grade 2/3 teacher[g]	Rural	14	2	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour
4	Female	Grade 3 teacher	Rural	11	1–8	✓	–	✓	✓	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance
5	Female	Grade 1 teacher	Rural	12	JK–6	✓	–	✓	–	Socio-structural barriers Inclusive environment – peer understanding and acceptance Understanding and managing behaviour

(*Continued*)

Table 1. (*Continued*.)

		Current experience		Previous experience		Relevant education and training				
Teacher	Gender	Current role[a]	Type of school (rural, urban)	Teaching experience (years)	Teaching experience (Grades)	BEd[b]	MEd[c]	SEAQ[d]	School-based autism training[e]	Challenges
6	Female	Grade 7 teacher	Rural	15	1/2[g], 6	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Managing and understanding behaviour
7	Female	Special education teacher	Rural	21	1–6	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Understanding and managing behaviour
8	Female	Teacher (on leave)	N/A	22	J/K[h]–8	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour
9	Female	Grade 7/8 teacher[g]	Urban	13	6–8	✓	–	–	–	Socio-structural barriers

(*Continued*)

Table 1. (*Continued*.)

		Current experience		Previous experience		Relevant education and training				
Teacher	Gender	Current role[a]	Type of school (rural, urban)	Teaching experience (years)	Teaching experience (Grades)	BEd[b]	MEd[c]	SEAQ[d]	School-based autism training[e]	Challenges
10	Female	Special education teacher	Urban	20+	J/K, S/K[i], 1	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour
11	Male	Special education teacher	Urban	8	1, 2, 4, 5, physical education	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour
12	Female	Special education and physical education teacher	Urban	5	1–6	✓	✓	✓	✓	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour

(*Continued*)

Table 1. (*Continued*.)

		Current experience		Previous experience		Relevant education and training				
Teacher	Gender	Current role[a]	Type of school (rural, urban)	Teaching experience (years)	Teaching experience (Grades)	BEd[b]	MEd[c]	SEAQ[d]	School-based autism training[e]	Challenges
13	Female	JK/SK teacher[g]	Urban	3	JK/SK[g]	✓	–	✓	–	Socio-structural barriers Inclusive environment – parental engagement Inclusive environment – peer understanding and acceptance Understanding and managing behaviour

Notes: [a]Indicates current teaching position. Educators were asked to draw on their current and previous experiences. All teachers had previous experience working in mainstream classrooms.
[b]Bachelor of Education. All educators require this degree to teach in Ontario.
[c]Master's in Education. Not a requirement.
[d]Special Education Additional Qualification.
[e]Reflects those educators who cited a school-based autism training programme (typically workshops).
[f]Developmental Disability programme.
[g]Indicates a split-grade classroom.
[h]Junior Kindergarten.
[i]Senior Kindergarten.

each participant prior to the interview. Demographic information was also collected, including number of years taught, grades taught, type of school (rural/urban) and additional qualifications (refer to Table 1).

Interview questions asked the following: Can you please describe how long you have been teaching for and your training background?; Can you describe the types of children that you have experience teaching (probe for autism)?; What is your approach to teaching children with autism spectrum disorder?; Have you encountered any challenges in educating children with autism within mainstream classes? If so, can you give an example? (probe for essential elements of inclusion according to Lipsky and Gartner's model); and, Is there anything else that you would like to add that we did not get a chance to talk about? These questions are consistent with Lindsay et al.'s (2013) study.

Data Analysis

The interviews were recorded and professionally transcribed verbatim. The analysis began with the first two authors independently reading through each interview several times and noting key emerging themes. We drew on Lipsky and Gartner's (1997) model on the essential elements of inclusion (i.e., visionary leadership, collaboration, refocused use of assessment, support for staff and students, funding, effective parental involvement, curricular adaptation and effective instructional practices) to inform our analysis. Codes with similar meanings were developed, examined and re-defined as necessary. A constant comparative approach of organising the data with continual adjustment and discussion amongst the research team was used throughout the analysis (Grbich, 2007; Lindsay et al., 2013). Quotes that were reflective of each theme were extracted. Code–recode and peer examination helped to establish the trustworthiness of the findings (Grbich, 2007). An audit trail of analytical decisions regarding the themes was kept.

Results

Challenges in including children with ASD, as reported by the teachers interviewed, are as follows: understanding and managing behaviour; socio-structural barriers (i.e., school policy, lack of training and resources); and creating an inclusive environment (i.e., lack of understanding from other teachers, students and parents). Table 1 provides an overview of the challenges reported by each educator. We did not notice any patterns regarding the type of school (rural versus urban), the number of years taught, or the grade levels taught and the number or types of challenges that were reported.

Understanding and Managing Behaviour

Understanding and managing student behaviour was a challenge to fully including children with ASD. Teachers felt they lacked adequate information about ASD, particularly with respect to specific ways to work with a child in the classroom and how to appropriately manage a child when a behavioural outburst occurs. One teacher gives an example:

> There are days where you may have a student with autism who has a meltdown and you can't deal with it right then and there … You just can't always work with just one child. (Teacher 12)

Another behavioural management concern was around how to handle unstructured time such as recesses or field trips, occasions where routines might be broken causing distress in a child with ASD. As one teacher shared:

> When we have something like the play day or something that's not structured, let's say they're shooting hoops and [the student] misses three, he gets mad and screams and goes and sits in the corner … He doesn't know how to have fun if he's not winning … The challenges are when there's an outbreak what do you do with the rest of the kids? (Teacher 3)

With multiple children to supervise, this type of situation makes it difficult for teachers, as one teacher said it best: "The biggest challenge is explaining to the other children that [the student with ASD] needs more time or care" (Teacher 10).

Some teachers found it difficult to engage students with ASD in lessons, noting that they often have specific interests and become frustrated when asked to do something else. For example, a teacher said, "It's difficult to involve my kids with autism into my lessons where they're engaged and participating in a way that isn't distracting, yet productive for them" (Teacher 13). Another teacher also spoke about the challenge of expanding their specific interests:

> One student was quite defiant and quite loud and oppositional towards the general classroom structure. He did get along well with at least one other student but it was a constant challenge with his behaviour and trying to include him within the lessons and the classroom because he had his mind set on working on the computer and doing his own thing versus a specific lesson. So inclusion was much more difficult. (Teacher 11)

Establishing a rapport with a student was noted by teachers as being an important element for helping a child in distress to calm down. This was often a difficult task for some teachers, making it challenging to include students with their peers. For example, one teacher describes:

> I think the biggest challenge is when they shut down and you don't know how to get through to them. Like in the primary grade they might get underneath a table, not talk to you and refuse to do what you want. (Teacher 5)

In sum, teachers often felt unprepared to manage the behaviour of a child with ASD.

Socio-structural Barriers

A second challenge with including a child who has ASD involved socio-structural barriers such as lack of training, availability of resources and school policies. Ten teachers felt they lacked training and continuing education opportunities on how to work with children with ASD. For example: "There's a lot of kids who enter the classroom and the teachers don't know what to do. So these kids are underserviced. If we don't really understand the core problems with the kids, you can't really teach them" (Teacher 1). Other teachers described how more support is needed to be able to fully include children with ASD. For instance:

> There is very little support for teachers in doing the planning [for students with ASD]. Unless you have Special Education qualifications there really isn't time or attention given to working on those practices of planning for inclusivity. (Teacher 9)

Some teachers advocated for a more consistent process in training and supporting teachers. For example, in regards to the special education additional qualification courses: "I think the additional qualifications courses in Special Education have to have an autism component. I think boards have a responsibility to in-service their teachers on meaningful professional development for autism" (Teacher 9). Others commented: "We need more teachers especially trained in autism" (Teacher 10). Some teachers said that although training is available on understanding the basics of ASD behaviour, it is not helpful for learning specific teaching methods to work with students. One teacher commented, "There's a lot about working with students with autism and tracking their behaviors but there's not a lot of workshops on how to teach them, different strategies" (Teacher 12).

Another teacher noted that approaches to working with children with ASD could be more proactive rather than reactive. For example: "most of the energy is spent on correcting difficulties as opposed to making things that are going ok better" (Teacher 4).

Another structural barrier mentioned by eight teachers involved lacking appropriate resources (i.e., financial resources, access to training opportunities, funding for an education assistant) and equipment (i.e., computer software, assistive technology, "fidget toys") for students with ASD. One teacher explains:

> Access to resources is a problem. For example, you know, I had a boy with autism and it was quite a challenge to get that resource because he was in a regular program. There wasn't any money assigned to buying the equipment that he would need … assistive equipment for example a whoopee cushion … or a weighted vest. Or even, you know took me a long time, even you know the [software]. I had to go to other schools with special needs programs to use their [software]. How is it you are able to program for the student if you don't have the necessary things to help the student? (Teacher 1)

Teachers found this frustrating and often had to advocate on the child's behalf on their own time to access these helpful resources. They noted that it was a particular challenge for children with Asperger's syndrome or high-functioning autism because most of the resources tend to go towards children with lower-functioning autism. For example, one teacher explains:

> Even if he just has Asperger's he's still on the spectrum but there's really not a lot of human resource time or financial resource time given to him because, well, it's just Asperger's. You know, it's not like he's a runner or a hitter or non-verbal or anything like that so kind of "just deal with it" sort of thing. I think it's really more of the Asperger's end that I would say is under-funded or under-supported. (Teacher 4)

In addition to lacking resources for equipment and teaching materials, teachers also mentioned there was a lack of funding for education assistants. For example: "There's very little support in terms of EA [education assistant] time unless the child is a threat to themselves or others in a physical way" (Teacher 7). Another teacher agreed: "It would be nice if they [school board] stopped cutting EAs" (Teacher 2). Seven teachers felt quite strongly about having an education assistant in the classroom to integrate the students with ASD.

Barriers were also found at the school policy level, where teachers described the difficulties in meeting the Ministry of Education standards on test scores despite having children with diverse needs in their classroom. One teacher shared her example:

> With special needs students it makes it really hard because there's an expectation from the Ministry [of Education] that a certain percentage of kids will get to a certain level and it's hard when you have those needs in the class and that's not something they're going to be able to achieve. (Teacher 4)

Teachers especially felt this pressure when there were students with ASD in their classroom.

Teachers lacked time to provide additional help to children with ASD, especially in older grades where there are larger class sizes. Five of the teachers mentioned that class sizes were a challenge for being able to successfully include a child with ASD. For example, one teacher commented:

> For some of these ASD kids when they get into Grade 4 where all of a sudden there are 30 kids in their class, double to what they're used to having, then the attention from their teacher probably gets cut in half. (Teacher 6)

The increased class sizes contribute to the teachers' workload, which "can make it difficult to give proper consideration to the way we can support students with special needs" (Teacher 9). Teachers explained that integrated classrooms can be very overwhelming for children with ASD, especially with the class sizes and the noise they can produce. For example: "In an integrated environment they're lost. There's too much stimulus, too much everything. The noise, the kids, the class, the desk, the chairs" (Teacher 8). In summary, teachers encountered many socio-structural challenges affecting their ability to successfully include children with ASD in their mainstream class.

Challenges in Creating an Inclusive Environment

A third challenge teachers encountered was with creating an inclusive environment for children with ASD within their class as well as the school. A common theme that six teachers mentioned included a lack of awareness and understanding of the disorder amongst other staff, students and parents. Teachers told us it is sometimes difficult for other school staff to understand the behaviour of a child with ASD. Teachers also suggested some staff may be nervous and have misperceptions about children with ASD. Teachers described having to educate and bring awareness of ASD to their peers, a role they felt to be challenging.

Parental Engagement

Another barrier that 11 teachers encountered was with engaging parents and maintaining an open communication system. This was difficult, teachers reported, when parents chose not to identify their child's condition. For instance: "Kids that aren't identified but they have ASD, and the parents kind of don't want to hear it" (Teacher 6). Teachers shared with us how a lack of a formal identification of ASD led to children not being eligible to receive resources and supports that could help to enhance their education experience. One teacher describes her experience: "The parents are at different levels of acceptance … We've got to get them to the point where they contact agencies that can help them … Certainly rapport with the parents is sometimes a challenge" (Teacher 3). Another teacher explained: "The most frustrating part is the parents … if they're not on board the success is limited" (Teacher 8).

In addition to communicating with the parents of the child with ASD, teachers also highlighted they had to manage concerns from other parents. For instance, they had to, "Help other parents understand that this child is not bad but is just as important as your child but has other needs … but I can't break privacy and say, he's got autism so give him a break" (Teacher 6). In sum, interactions with parents of children with ASD and parents of students' peers presented to be challenging amongst teachers.

Peer Understanding and Acceptance

Ten teachers mentioned the challenges in creating an atmosphere of understanding and peer acceptance to include the child with ASD. Children often realise there may be something different about a child with ASD, but are unaware of the official diagnosis (due to privacy laws) or are unaware of how these differences manifest as behaviours. This makes it difficult for teachers to create an understanding and empathetic climate within their class. The consequence, as teachers report, is that children with ASD are often excluded from peer activities. One teacher recalls:

> Another huge challenge is getting people to understand that the behavior of [a person with ASD] is communication. When they are behaving poorly they are trying to tell us something … it's hard to get people to understand they're not acting out just to be a pain. They're acting out because they don't have a way of telling you what's bugging them. (Teacher 8)

Most of the teachers, even those with extensive teaching experience, reported struggling with how to promote peer interaction for children with social, communication and behavioural impairments. Eight teachers described challenges in creating social and peer groups for the child with ASD. For example, one teacher described, "In integrated classes if they're anxious they can't function which causes maladaptive social behaviors, which makes them not have friends, essentially" (Teacher 13). Another teacher had a similar example: "One of the big challenges is the fact that they're ostracized or they don't have that circle of friends because they have a hard time keeping friends" (Teacher 4).

Teachers mentioned difficulty with getting other children in the class to understand why a peer behaves differently and to accept them for who they are. For instance: "I find in Grade 5/6 they have a hard time understanding why somebody may not be the same as them and unfortunately, I think that's the time those children might get a little targeted" (Teacher 5). In sum, a lack of peer understanding and acceptance made it difficult for teachers to successfully include the child with ASD in the class.

Discussion

This study explored educators' challenges with including children with ASD in mainstream classes. Improving social inclusion of children with ASD is important not only for their social and academic development but also to provide typically developing children with an opportunity to develop a tolerance and appreciation for others who are "different" (Lindsay & McPherson, 2012a).

Our findings suggest that teachers found it difficult to apply best practices of inclusion (as defined by Lipsky & Gartner, 1997) when there was a child with ASD within their mainstream classroom. Teachers reported difficulty in understanding and managing

the behaviour of children with ASD and enhancing social and communication skills to help them to develop peer relationships. This is consistent with past research showing that teachers often face considerable difficulty addressing the needs of children with ASD (Wilmhurst & Brue, 2010), probably due to a lack of training. Teachers also discussed how it was often difficult to tailor lessons while still engaging all of the children. Indeed, curricular adaptation and effective instructional practices are deemed as best practice for inclusive classrooms (Lipsky & Gartner, 1997); however, our findings suggest that this was difficult for teachers to achieve.

Second, teachers encountered several socio-structural barriers in the school environment, such as a lack of training and resources in addition to restrictive school policies. These are viewed as key elements for achieving inclusion in mainstream classes (Lipsky & Gartner, 1997). Our findings are similar to previous research showing that teachers need specific training and support, understanding and collaboration from their colleagues and the school board to facilitate the full inclusion of children with ASD (Eldar et al., 2010). Indeed, continuing efforts for staff development are needed (such as workshops or professional development) for the successful inclusion of students (Lipsky & Gartner, 1997). Evidence shows that students must receive the necessary funding to ensure they are properly supported (Lindsay et al., 2013; Lipsky & Gartner, 1997).

A third challenge that teachers encountered was creating an inclusive environment within the class and school. Our findings showed that there was a lack of understanding of or familiarity with the disorder among other teachers, students and parents, which inhibited the full inclusion of children with ASD. Collaborating in a multi-disciplinary team to ensure children receive services tailored to their needs is an essential element of a successful inclusive classroom according to Lipsky and Gartner's (1997) model of inclusive education. Yet educators in our sample found it difficult to work with others within the school to enhance the dignity and respect of all students, a key aspect of inclusive pedagogy. Consistent evidence shows that such support from others (i.e., educators, students and parents) is critical because it can benefit students with ASD and can enhance the processes associated with inclusive education (Lindsay et al., 2013; Lipsky & Gartner, 1997; Timmons & Breitenbach, 2004).

Teachers also reported challenges with parental involvement in the child's schooling, which inhibited their access to the supports that could have helped their progress. Past studies show that parental involvement is a key element of successful inclusion of a child with a disability in a mainstream classroom (Lindsay et al., 2013; Lipsky & Gartner, 1997).

One best practice of inclusion according to Lipsky and Gartner's (1997) model that we did not encounter in our findings was visionary leadership, which involves guiding the inclusion movement towards its goal. It could be because teachers were struggling to gain the basic training and necessary resources for the child that the overarching goal of inclusion within the school was not a priority. Other recent studies highlight the importance of disability awareness programmes to improve inclusion and attitudes towards children with disabilities (Lindsay & Edwards, 2013). Perhaps more of a whole-school approach is needed to help support and guide teachers on how to best include children with ASD within their classes.

Having the proper mechanisms in place in a child's social environment is essential for them to thrive and to be treated as a valued member of the class (Humphrey, 2008). For example, past research shows that a lack of social inclusion among children is often the result of typically developing children not being taught to value diversity,

acceptance and peer belonging within inclusive classrooms (Lindsay & McPherson, 2012a, 2012b; Maich & Belcher, 2012).

In aligning our findings with Lipsky and Gartner's (1997) model of essential elements of inclusion, we argue that applying best practices to enhance inclusion may be difficult for teachers who are educating children with ASD. There appear to be several larger, systemic issues that may be challenging for teachers to address on their own. For instance, the additional qualification courses are generally quite short and tend to address generic issues of disability. Thus, there is perhaps a need for longer or more focused training on specific conditions. Teachers in this study also noted that when workshops or training are provided around children with ASD it is often focused on tracking their behaviour, while more time should be focused on how to teach children with ASD and offering solutions on how to successfully include them with their peers within the class. Further, some teachers suggested that more resources should be directed to hiring education assistants to help students with ASD within the class. However, this is somewhat of a contentious issue because some evidence shows that having an education assistant in the class can isolate students from their peers and increase their risk of bullying (Lindsay & McPherson, 2012a). A final recommendation in relation to our findings is that school boards should consider the diversity of students when setting standards for testing and also class sizes.

A limitation in this study is its small sample size, and the findings are not generalisable to all teachers (Lindsay et al., 2013). Our aim, however, was to provide an in-depth understanding of teachers' challenges of including children with ASD in mainstream classes. Further, our study drew on educators' experiences of including children with ASD and some of the teachers were now in different roles within the school. This may have influenced their perception of the inclusion of children with ASD. Nevertheless, our findings are consistent across current roles and are also similar with past research on challenges in educating children with ASD (Lindsay et al., 2013). Another limitation is that many of the teachers in our sample had special education qualifications. Although this is common for the location where our sample was drawn, it may not be typical of all countries. Thus, further research is needed to explore the strategies that teachers use in different locations. Future research should explore how inclusion is enhanced or inhibited by the design of the classroom and school.

Conclusion

Teachers who work with children with ASD in mainstream classes encounter several challenges in including them as full members of the class. These challenges include understanding and managing behaviour; socio-structural barriers (training, resources, policies); and creating an inclusive environment within the classroom. More resources, supports and training are needed for teachers so they can provide an inclusive environment for students with ASD. Based on the findings in this study we recommend that more information and support are provided to teachers so students with ASD can be included as full members of the class. This can be done through both formal and informal training such as workshops and disability awareness resources. Schools should also emphasise teamwork to address the needs of children with ASD to develop effective solutions of enhancing their inclusion.

Key Messages

- Many teachers lack training and resources to successfully include children with ASD in mainstream classrooms.
- Teachers encounter challenges in creating an inclusive classroom environment for children with ASD.
- A lack of understanding of the nature of ASD from school staff, students and parents can inhibit the successful inclusion of children with ASD.
- Teachers need more support in understanding and managing the behaviour of students with ASD.

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