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To cite this article: Sasha M. Zeedyk, Shana R. Cohen, Jan Blacher & Abbey Eisenhower (2021): Building classroom communities for children with autism spectrum disorder, International Journal of Inclusive Education, DOI: [10.1080/13603116.2021.1978002](https://doi.org/10.1080/13603116.2021.1978002)

To link to this article: <https://doi.org/10.1080/13603116.2021.1978002>



Published online: 15 Sep 2021.



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## Building classroom communities for children with autism spectrum disorder

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### ABSTRACT

Limited research has explored mothers' perceptions of teachers' pedagogical practices that may or may not support the learning and development of their child with autism spectrum disorder (ASD). Mothers of children with ASD were asked to describe their perspective regarding three questions: (1) How do teachers structure the classroom environment to accommodate their students with ASD? (2) How do teachers engage and interact with the child in the classroom? (3) How do teachers facilitate classroom peer interactions? Twenty-nine primary parents (97% mothers) of children with ASD, ages 4–7, were interviewed. Findings revealed structural differences in the students' classroom environments. Some classrooms were described as chaotic and unsafe while others were described as welcoming and accommodating for the child. Teacher interactions with the target child were frequently characterised as competent and encouraging, marked by clear discipline practices and expectations. Peer interactions with the target child were varied, with some mothers reporting that the teacher isolated the child from peers and others reporting that the teacher encouraged explicit peer interaction. Study findings have implications for strengthening the home-school connection, including identifying pedagogical practices for building inclusive classroom communities for young children with ASD and how mothers might utilise similar practices at home.

### ARTICLE HISTORY

Received 18 September 2020  
Accepted 31 August 2021

### KEYWORDS

Social skills; children with ASD; parents' perspectives; teacher practices; classroom climate

High quality inclusive education settings (i.e. including children with and without disabilities) that promote social interactions and positive teacher and peer relationships have been shown to support the development of children with and without autism spectrum disorders (ASD) (Schwartz et al. 2004; Stahmer and Ingersoll 2004). Still, teachers are challenged to make inclusion effective given a lack of adequate teacher training and clear guidelines (Horrocks, White, and Roberts 2008; Lindsay et al. 2013b). Few studies have explored the types of evidence-based practices and teacher pedagogies that can

promote inclusive classroom communities (Leach and Duffy 2009; Lindsay et al. 2013a; Odom 2009).

Although research has explored parents' perceptions of inclusion, much of this work has focussed on general concepts of inclusion (e.g. parents' satisfaction with a child's current placement) (Bennett, Deluca, and Bruns 1996; Starr et al. 2006). Despite the increased interest from parents in understanding how teachers implement evidence-based pedagogy, limited research has explored parents' perceptions of teachers' specific pedagogical practices that may or may not support their child's learning and development (Jacobson 2000).

### **Importance of parents' perceptions: the home-school connection**

Home-school collaboration is defined as an active, reciprocal, process between a parent and one or more school professionals (Cowan, Swearer, and Sheridan 2004). The success of these relationships depends on the continuity between classroom and home practices (Mangione and Speth 1998; Taylor, Clayton, and Rowley 2004). Cox (2005) suggested that home-school collaboration predicted improved child academic and behavioural outcomes over time. For typically developing students, research has shown that when parents are supportive of their child's teacher, they are more invested in promoting similar teaching strategies at home (Mangione and Speth 1998; Salazar 2012). Strong home-school collaboration is arguably even more important for families of children with ASD, given their unique needs (Blue-Banning et al. 2004; Salazar 2012). Despite the importance of these relationships, barriers to successful home-school collaborations (e.g. discrepant educational goals) exist (Hornby and Lafaele 2011; Trainor 2010). The current study examined parents' perspectives of teacher practices specifically related to socio-emotional learning. It is important to consider parents' perspectives of teachers' practices that emphasise strong relationships, peer interactions, and an inclusive classroom environment – three attributes that are necessary for children with ASD to be successful learners in school (Brown et al. 2008).

### **Theoretical framework: building classroom communities**

The current study is framed within a relationship-based approach to building classroom communities (Howes, 2009; 2016). According to Howes (2009), classroom communities are the proximal contexts in which children develop and learn. Students and teachers co-create their classroom communities in their participation and engagement in classroom activities. A safe and trusting classroom community promotes learning and builds strong relationships between students and the teacher (Howes, 2009). In many cases, the teacher guides the development of these classroom communities. For example, a teacher may organise the classroom with specific independent activities to scaffold children's learning and prepare them for later academic challenges. The teacher may also provide the children with nurturing and responsive relationships that support their development. Conversely, the teacher may provide activities that track or segregate children into skills-based groups, limiting the opportunities for children to learn from the variety of learners in the classroom and impeding optimal outcomes (Hanushek and Wößmann 2006). Recent literature examining implications of including children with ASD in general

education settings showed how classroom communities and school system reform efforts (e.g. multi-tiered support systems) can shape the learning outcomes for all students (Crosland and Dunlap 2012).

The classroom community is as much the child's environment as it is the teacher's. Children bring their own skills and experiences to their classroom, as shaped by their home/cultural practices (Howes 2016). Building from sociocultural theory, children and families establish daily routines of childcare and education (Weisner 2002). These practices may or may not be complementary to the practices implemented in the classroom. Understanding parents' perspectives of teacher's pedagogical practices can be useful in identifying how educators can form supportive classroom communities that are responsive to the everyday lives of children and families. This study utilises sociocultural theory and a classroom communities' perspective to explore mothers' perspectives of how teachers develop, scaffold, and nurture social relationships for children with ASD.

## Research questions

To explore mothers' perspectives of teachers' pedagogical practices for supporting their children with ASD, mothers of children with ASD were asked to describe their perspective regarding three questions: (1) How do teachers structure the classroom environment to accommodate their students with ASD? (2) How do teachers engage and interact with the child in the classroom? (3) How do teachers facilitate peer interactions in the classroom?

## Method

### Participants

Participants were 29 primary parents (97% mothers; 69% White) of children with ASD, all of whom were involved in a larger longitudinal study of early school experiences for young children with ASD. Demographic information was obtained from mother and teacher reports. About two-thirds of the mothers reported having a college degree or higher and having an annual household income above \$50,000. The children were 69% male and ranged in age from 4 to 7 years-old. One half (49%) of the children spent most or all of their day in Special Education, and 51% of the children spent most or all of their day in General Education. The predominantly White, female teachers reported an average of 10 years of teaching experience, and only 8% of them reported receiving some professional ASD training. See [Table 1](#).

### Procedure and measures

Study procedures were approved by the Institutional Review Boards of the two universities that hosted the study. Families were recruited through in-print and online advertisements that were distributed to local regional centres, intervention service centres, clinicians, local school districts, as well as ASD specific parent support groups and websites.

**Table 1.** Participant demographics.

	Sample (N = 29)
<b>Child characteristics</b>	
Sex (% male)	69%
Age	5.7 (1.2) [Range: 4-7]
Classroom placement	
Special education	49%
General education	51%
Child IQ (WPPSI)	89.1 (19.4) [Range: 55-119]
<b>Parent characteristics</b>	
Sex (% female)	97%
Age	37.6 (6.9) [Range: 24-52]
Education (% college degree or higher)	66%
Household Income (>\$50,000)	71%
Race (% White)	69%
<b>Teacher characteristics*</b>	
Sex (% female)	92%
Race (% White)	71%
Number of Years Taught	10.4 (8.9) [Range 1-39]
Professional Training in Autism (% yes)	8%
Type of School (% public)	82%

\*Note Teacher N = 24

*Data collection.* A confirmation ASD diagnosis was obtained during the initial eligibility clinic visit. The child was administered the *Autism Diagnostic Observation Schedule* (ADOS, Lord et al., 1999) and *Weschler Preschool and Primary Scales of Intelligence* (WPPSI-3; Wechsler, 2002). All examiners were trained on these assessments and reliable for research purposes on the ADOS.

Eligible preschool, Kindergarten, 1st, or 2nd grade children visited the clinic with their primary parent (majority mothers) three times over two school years. Time 1 occurred in the fall of the first school year, Time 2 occurred in the spring of that school year, and Time 3 occurred in the spring of the subsequent school year. This report is based on mother interview data from the Time 2 visit. While the child was engaging in standardised assessments, mothers participated in a semi-structured interview (approximately 45 minutes) in a private room with one couch and a chair. During this interview mothers were asked questions about three topic areas: (1) their child's relationship with the teacher during the current school year (e.g. 'How does X get along with his teacher?') (2) Mothers' perceptions about the classroom environment (e.g. 'How does the classroom engage X in learning?'); and (3) Mothers' perceptions about the child's academic and social development in school (e.g. 'How does X get along with other students in the class?'). Probing questions identified specific examples of the physical classroom, classroom activities, and the nature of the interactions among the teacher(s), peers, and the target student.

*Data analysis.* A subsample of 29 mother interviews were selected from the larger dataset (N = 207; 14% of the total sample). Interviews that had been completed and transcribed at the time of data analysis were selected. An inductive approach was used to examine mothers' perspectives of teachers' pedagogical practices. To prepare data for coding and analysis, three student researchers transcribed the audio-recorded interviews. The first and second authors first read the interviews, looking for themes specified a priori from the interview questions that asked mothers to reflect upon how the teacher engaged the child in activities, what the teacher did to meet the child's individual needs, and how the child's classroom engaged the child in learning. For the first eight interviews randomly drawn from these 29, each interview was independently coded and then discussed to

identify recurring themes. In a second, analytic inductive phase, researchers made iterative passes through the interview transcripts to develop and modify theme definitions. From this process, more specific sub-themes emerged that described the general themes (Miles et al., 2014). Researchers continued this iterative process of defining and refining themes until they agreed on theme definitions. The resulting general themes and sub-themes addressed mothers' perceptions of how teachers structured the classroom environment, how teachers interacted with students with ASD in the classroom, and how teachers facilitated peer interactions with children in the classroom. Two coders then independently coded all 29 interviews based on theme and sub-theme definitions. Across the 29 interviews, strong consensus was reached (*Cohen's Kappa* = 0.81). Researchers drew from a corpus of 105 data excerpts to address the research questions. Some of the excerpts were double coded if they addressed two of the research questions. All of the children's names in this paper are pseudonyms to protect participants' privacy.

## Results

Results are presented by listing each research question followed by identified themes and representative mother statements. Research questions and subsequent themes are summarised in Table 2.

### *Research question 1: how do teachers structure the classroom environment to accommodate their students with ASD?*

Participant responses to this question yielded one general theme and three sub-themes. The general theme, **Mothers' Perceptions of Classroom Accommodations**, included

**Table 2.** Theme and Subtheme Definitions by Research Question.

Theme/Subtheme	Definition
<b>RQ1: How do teachers structure the classroom environment to accommodate their students with ASD?</b>	
Mothers' perceptions of classroom accommodations	Mothers' perceptions of how teachers structured the classroom environment
Chaotic, unsupportive environment	Teachers provided minimal structure in the classroom and did not accommodate for the needs of the child in the classroom
Classroom accommodations benefit all students	Teachers' accommodations supported the target students and the other students
Specific accommodations	Specific accommodations teachers made to support target child
<b>RQ2: In what ways do teachers engage and interact with the child in the classroom?</b>	
Teacher competence	Mothers' perceptions of teachers' preparedness in addressing child's needs
Teacher encouragement	Examples of teacher providing encouragement and support (or a lack of encouragement/support) for the child
Teacher Discipline	Teachers set limits with their child to redirect undesirable behaviour
Teacher Expectations	Descriptions of teacher scaffolding child's learning
<b>RQ3: How do teachers facilitate peer interaction in the classroom?</b>	
Teachers' Community Building	How teachers build a learning community in the classroom
Separation from Peers	Descriptions of teachers who separate the child from peers
Minimal but Effective Efforts	Teachers who facilitate peer interactions through routine activities
Explicit Efforts	Descriptions of teachers engaging in specific activities to facilitate peer interactions between the target child and typically developing peers

mothers' perceptions of how teachers structured the classroom environment. Mothers identified ways that the teacher specifically did or did not adapt the classroom environment to meet the needs of the child. The sub-themes below illustrate these examples.

The first sub-theme, *chaotic, unsupportive, and at times, unsafe environments*, included instances ( $N = 10$ ) in which mothers described teachers who structured the classroom environment in a way that the mothers believed was unaccommodating for the child. When asked about what they disliked about the child's classroom environment, several mothers explained that their child's classroom had a lot of distractions: there were too many children, the bulletin boards were too crowded which resulted in over-stimulating some children, or there was excessive noise that impeded their child from learning.

Other mothers felt that their child's classroom environment was unsafe. One mother of a 5 year-old girl in a Kindergarten general education setting explained that she wished that her child's teacher kept her child safe. This mother described several instances in which her daughter, Rebecca, was physically injured at school, and the child could not remember how the injury occurred. Rebecca's mother had to ask the school to document when and how Rebecca got hurt. In one instance, Rebecca's father dropped Rebecca off at school, and Rebecca realised that she forgot her lunch. Her mother described the situation:

And the teacher said, 'okay, well don't worry about it.' She knew she could buy her a lunch or do whatever ... [The teacher] had to get the class started. So, by the time she turned around, she [Rebecca] was gone. So, Rebecca waited until the teacher wasn't looking, she walked out of the class, walked all the way through the school, walked through the office, walked outside, and she was trying to cross the street when somebody found her. And that person was somebody that knew her. It was a teacher ... that was coming to school late ... she stopped her from trying to cross the street. She was trying to leave to get home.

Rebecca's mother described how the teacher did not anticipate how Rebecca would react to the abrupt change in her routine and inappropriately responded to Rebecca's concerns about forgetting her lunch. In her opinion, the teacher did not spend adequate time discussing the alternative lunch options in the event a student forgets their lunch.

The second sub-theme identified, *classroom accommodations that benefit all students*, included more instances ( $N = 24$ ) in which mothers described how teachers made classroom accommodations for students. Mothers mentioned general comments about the classroom that seemed to benefit all students, e.g. 'It's welcoming', 'It's clean. It's bright ... The playground is right outside'. Other mothers described the classroom attributes more specifically. One mother was delighted to see a variety of visuals in her daughter's first grade general education classroom. This mother explained:

The teacher incorporates art into what she does. Like I said, she's got the schedule on the board set up as a rainbow. She's got all these letters on the wall set up as the alphabet, so for example the letter "M" might be drawn as part of a mountain, the letter "B" was a sail on a boat. So, it engages the children's imagination.

Other mothers described how their child's teachers structured the classroom environment to support peer interactions. For example, many mothers explained that teachers positioned desks in clusters, and used activity centres in the classroom. One mother of a 4 year-old preschooler in a general education classroom explained:

The impression I get is that there's just enough structure, but there's a lot of opportunities for the kids to have a lot of spontaneous interaction ... it's like Otis doesn't have to do this specific activity. He can choose, which gives him opportunities to have social interaction with his classmates because it's not really in a structured environment.

This mother described the benefits of having some classroom structure, but she also liked the freedom that children had to explore the materials and observe and interact with peers.

The third sub-theme, *specific accommodations*, included several instances ( $N = 15$ ), where mothers described teachers making classroom accommodations for their child. According to one mother, the teacher moved her child's desk to a quieter area so that other children would not bother him when he was working. Another mother described how the teacher introduced a portable 'disco seat' for the child's chair, to give the child some sensory input and encourage him to stay seated during work time. In another example, when the teacher asked students to copy certain words from the board for an activity, she provided the target child with her own copy of the words from the board to help her see the words clearly and stay focussed on the task.

One mother described how her daughter's general education Kindergarten teacher developed whole class activities to support the child in developing her sense of space and supporting her sensory needs. This mother explained:

And with the whole class she's doing movement activities like the 'Crab Crawl Conga.' Then they do things like they sing a song 'What If', and that leads the kids through pretend types of movements like ice skating or tap dancing or swimming or swaying like a tree. They are also using the classroom as an obstacle course, and they're making balance [beams] and they're crawling over and under chairs and jumping over pretend paper puddles ... there's more- more of a sensory diet feeling in the whole class.

### **Research question 2: in what ways do teachers engage and interact with the child in the classroom?**

There were four themes related to the quality of the student-teacher relationship that illustrated mothers' responses. The first theme was **Varied Perceptions of Teacher Competence** ( $N = 10$  instances). In this theme, mothers discussed the teacher's training and preparation in meeting their children's needs. Some mothers discussed disappointment and concern regarding how the teacher interacted with their child. Other mothers disagreed with the teacher regarding the child's placement. For example, one mother believed the child should be exposed to typically developing children, but the teacher believed she should stay in a special education setting.

There were eight instances in which mothers discussed their approval of the teacher's training in meeting the child's individual needs. For example, some mothers discussed the teachers' use of different tools in developing and utilising an emergent curriculum, i.e. the content is carefully planned with clear choices for children that are motivated by the children's own interests and their play. A mother of a 4 year-old boy in a general education preschool class explained: '[When he] expresses an interest in something then they go hog-wild on it, but they still incorporate it in their learning goals. Gosh, I wish every teacher teaches like that'.

Another mother of a 4 year-old boy in a general education preschool class further illustrated the exemplary use of emergent curriculum among the specialists who focussed on meeting her child's specific social needs:

They focus on social stuff more than academic ... There is a lot of ways they try to engage kids, very fun ways in the school: drum circles, music class, Spanish class ... baking. They do baking with the kids every week. Billy will come home and be like, 'we made, you know chocolate pudding with worms in it ...' he seems excited about it.

The second theme was **Mothers' Perceptions of Teacher Encouragement** ( $N = 9$  instances). In this theme, mothers discussed how their child's teachers encouraged and supported their children's learning, while others discussed their disappointment and concern regarding the teachers' level of encouragement and support for their children. For example, one mother of a 5 year-old boy in a general education preschool setting explained, 'I wish [the teacher] could be more, more one-to-one ... like, let's review this, how are you doing in the circle ...'

On the one hand, one mother explained that when the teacher senses that her 7 year-old, first grade boy in general education is upset, tired, or irritable and may end up being less focussed on his work, the teacher encourages the child: ' ... she tries to give him little jobs: to take out chalk or collect the papers. So, by giving him these jobs, it allows him to walk around the classroom ... [this] helps him redirect his focus ...' This mother believes that the teacher has developed a trusting relationship with her child. Her child's teacher understands how to support and encourage the child to become engaged and productive in classroom activities.

Other mothers described how their child's teacher encouraged and supported their child while also utilising strategies to develop and extend students' interests. For example, one mother explained that her 7 year-old daughter's first grade general education teacher loves to tell stories:

So, they just did a fabulous class play that started off as a story she told because one girl in the class lost her seventh tooth on her seventh birthday and the tooth fairy forgot to stop by, so she was kind of upset. So, the teacher told a story to make her feel better and the story just kept growing and growing and growing, and it turned into a class play. They had a full production and it was called, 'The Very Best Thing'.

This teacher used one child's life experience to develop a supportive and nurturing classroom community *and* to support the students with ASD who may need more social skills support, to practice key social skills like empathy and compassion through the production of a class play.

The third theme was **Mothers' Perceptions of Teacher Discipline** ( $N = 7$  instances). Mothers discussed how their children's teachers set limits with the child to redirect undesirable behaviour. For example, one mother of a 6 year-old first grade boy in special education explained:

[The child] always wants to touch stuff, and she always has a few things on his desk that he can fidget with. And even if he needs a break to go outside and jump for a few seconds, she'll allow him. I think she said 3 times a day to do it. So, he knows, you only get 3 times, but you need to choose them wisely.

According to this mother, although the teacher acknowledged the child's need for sensory breaks throughout the day, she set specific limits on how many breaks he could take and then left it up to the child to independently identify when he needed to take a break. Other mothers described how their child's teacher engaged in thoughtful redirection strategies based on the child's needs and personality. One mother of a 4 year-old preschooler in a special education setting explained:

... so Emmy's take charge attitude can also be construed as being bossy and rigid. But she's found ways to take a behaviour or characteristic that might be negative and turn it positive and to find a good outlet for it, while at the same time setting limits on it. You know, remind her that she's not the teacher, but the teacher's helper. So, she's really done a good job of really directing Emmy's behaviours in positive ways.

The fourth theme was **Mothers' Perceptions of Teacher Expectations** ( $N = 8$  instances). In this theme mothers identified teachers' expectations in two ways. Mothers described that their child's teacher is able to scaffold the child's learning experiences so that he feels adequately challenged. One mother of a 6 year-old first grade boy in special education explained:

The teacher read a 30 minute story with no visuals whatsoever that I didn't think Alex would get. And she asked questions, and he answered three. And I was just blown away ... I just love the way she gives everyone the opportunity to expose themselves to the curriculum ... I think her positive attitude has been the biggest bonus, and I think that's what motivates all the kids too. Because they see someone who believes they can do it. So, I think they really do feed off of that.

This mother appeared to be surprised and proud that her child's teacher knew her child well enough to appropriately challenge him.

On the other hand, some mothers identified examples of teachers' expectations that are not consistent with the child's abilities. For example, one mother of a 6 year-old boy in a special education kindergarten classroom explained:

He's um—in the kindergarten room, there's a larger size with a different learning style. He struggles. You know the teacher describes to me that he is willing and able, but he can't keep up with the oral instructions. She does make modifications for him when she can, but ... it's just still too frustrating for him. So, I think that affects him—so I think that he's still working on his work, and he can't get past the first step of something. So, it affects how much he interacts.

This mother realises that the modifications are not working, and the child gets frustrated. The teacher may not know the child well enough to appropriately scaffold his learning.

### **Research question 3: how do teachers facilitate peer interactions in the classroom?**

In the general theme, **Mothers' Perceptions of Teachers' Community Building**, mothers described how teachers developed a learning community among all the children in the classroom. Mothers identified examples of how the teacher specifically did or did not (1) facilitate peer interactions; and (2) support social learning among the children in the classroom. The three sub-themes illustrated the level of effort from the teacher in building a classroom community.

The first sub-theme, *separation from peers*, included instances ( $N = 2$ ) in which mothers described teachers who separated the child from his peers because the child did not want to engage with those peers. One mother of a 5 year-old boy in a general education preschool setting explained that her child does not like it when his peers come to see his work, so the teacher has a separate worktable for the child to use when he wants to be alone.

The second sub theme, *minimal but effective efforts*, included more instances ( $N = 13$ ) in which mothers described teachers facilitating peer interactions through daily routine activities of the classroom. Teachers created a supportive environment so that the target child felt included in the classroom community. Some mothers mentioned that the teacher positioned the desks in clusters to help the target child make eye contact with peers during group work. Other teachers facilitated peer interactions by teaching children to greet their friends. One mother of a 7 year-old second grade boy in general education explained:

... probably one of the most positive things about this school and the class that he's in, I think that the – well the students are ... pretty friendly towards Eli. They know that he's – I mean I always hear them saying hello to him and greeting him. So, I think maybe she's fostering an accepting environment.

Another mother of a 4 year-old boy in special education described how the teacher facilitates peer interactions:

They mainstream the kindergarteners at playtime, and he walked up to two kids and asked if they wanted to play. When she called and told me I was like, 'Oh my God, you're making me cry!' Because he didn't do that at the other school! So just the little things she's done with him and stuff like that, the confidence building and everything, and learning and teaching him to use his brain in a different way ... that's great.

In the third sub-theme, *explicit efforts*, ( $N = 7$  instances) teachers and aides engaged in thoughtful activities to facilitate peer interactions and social learning between the target child and the other children in the classroom. Some mothers described teachers who, after getting to know the target child and his or her interests, developed classroom activities to promote peer interactions and collaboration. For example, one mother described how Travis, her 7 year-old second grader, had an abiding interest in Pokemon. She explained how Travis's aide created a Pokemon behaviour chart to encourage Travis to interact with peers on the playground during recess. Travis's mother explained:

[The aide] encourages him ... to play with other children. Last year, Travis was literally avoiding other children at all costs. He would stand at a tree and pick at a tree through recess and his aide would let him, because she figured that was his downtime, and if that was what he wanted to do she figured, 'Okay, let's let him do it.' But this year his aide [a different one] saw [this behaviour at] the beginning of the school year and said, 'Can I help him get out there, would you mind?' I said, 'I would love it, absolutely get him out there.' ... And Travis now plays soccer with his friends during recess time, and really, his aide has taken that special interest in helping Travis get out there. He's really awesome.

## Discussion

The broad questions posed in this study provided insight into the pedagogical practices mothers noticed the teachers using for their child with ASD. Howes' cultural

communities framework provided a lens through which to interpret mothers' perspectives of their child's educational experiences (Howes, 2009). The children's classroom communities became the proximal contexts – the nurturing environments – for children to form strong relationships with peers and teachers, that in turn, supported social learning (Howes, 2002).

Findings revealed that mothers' perspectives of how teachers structured the classroom environment ranged from mothers' descriptions of chaotic or unsafe classrooms to innovative ways of utilising the classroom environment to support their students with ASD. For example, participants identified visuals as effective accommodations implemented by their child's teacher to facilitate learning. Several studies have found visual schedules to be useful for children with ASD in school (e.g. Hayes et al. 2010; Rao and Gagie 2006). In thinking about implications for practice, teachers who find successful visuals and self-regulation strategies should consider sharing those strategies with mothers to encourage consistent implementation across home and school environments.

Our results showed that mothers' perspectives differed dramatically with regard to teacher engagement with the child in the classroom. Some mothers identified barriers in the development of strong home-school connections. For example, a few mothers expressed that their child's teacher provided minimal encouragement or support to their children on school. Positive behaviour support strategies consistently exhibited across home and school contexts are associated with fewer challenging behaviours (Blair et al. 2010; Lucyshyn et al. 2007). Teacher-parent collaboration in developing consistent and appropriate behaviour plans has been associated with more motivated and engaged children (Salazar 2012; Taylor, Clayton, and Rowley 2004). Considering this, teachers may be encouraged to communicate and learn from mothers about how they use positive behaviour supports to motivate and redirect their children at home.

Fortunately, most mothers viewed their child's teacher as competent and able to implement thoughtful, child-centred strategies that built upon students' interests and needs. When asked about how teachers interacted with the child in the classroom, most mothers described teachers who engaged in appropriately challenging and supportive pedagogical practices that fostered child independence. For example, some mothers described teachers who encouraged their children to self-regulate during large class activities. These practices are supported by research showing that self-management interventions increase the frequency of appropriate behaviours for children with ASD. Studies also show that redirection strategies promote autonomy, prosocial behaviours, social responsiveness, and decrease self-stimulatory, repetitive, and stereotypic behaviours (Hume, Loftin, and Lantz 2009; Koegel et al. 1992; Morrison et al. 2001).

Also encouraging, most mothers described teachers engaging in minimal but effective efforts to support social learning. Many of these pedagogical practices have been empirically tested among children with ASD (White, Keonig, and Scahill 2007), and research has shown the efficacy of explicitly teaching children how to imitate peers and adults in natural environments (e.g. Ingersoll and Schreibman 2006). In the current study, teachers utilised similar pedagogical approaches to facilitate peer interactions. Teachers were often described as supporting the child's initiation and engagement with peers both in special and general education settings. These minimal efforts were not specifically designed to support students with ASD; rather, they were used to support a welcoming classroom community (e.g. greeting friends). These findings indicate that teacher efforts

for supporting peer socialisation do not have to be specialised ASD interventions to be effective.

### *Limitations and future directions*

One limitation to this study is that the participants represented a small, primarily middle- to higher-income sample of mothers. Further, the interview sampling procedures were not random, limiting generalisability of the results. Future studies should utilise more diverse samples to examine the relationship between child characteristics and mother perceptions of teacher practices. Further, we asked the primary parent to take part in the interview, and only one father participant volunteered. Future studies specifically considering fathers' perspectives are warranted.

During the interview, information about how mothers learned about the teacher's practices (e.g. through direct observation, teacher communication), or how frequently they observed the teacher's practices were not collected. Also, teachers were not interviewed to gather information from their perspective. This information would have allowed us to understand how mothers' perceptions map onto those of teachers. Indeed, some studies that have explored how children with ASD are included in classrooms have shown that systemic and structural barriers (e.g. school policies and lack of teacher training) contributed to the challenges that teachers reported in educating their students (Lindsay et al. 2013a). Future research should include randomly selected samples of mother-teacher dyads.

We also asked mothers to report on their child's primary teacher, which prompted some parents to report on a general education teacher, while others reported on a special education teacher. While in our results section we specified which teacher – special or general education – the parent was reporting on, we did not have a sufficient sample size to make group comparisons. In the future, researchers should consider exploring mothers' reports of special education teacher practices as compared to general education teacher practices. These comparisons might provide insight into how teachers adapt classroom management techniques or content to meet the needs of their students, particularly in inclusive classrooms. Findings may also provide opportunities for teachers to collaborate and learn from each other in professional development convenings that include teachers from general and special education settings.

Finally, researchers could explore how mothers engage with their children with ASD at home. Much of the research on parent's involvement in their child's education has been derived from structured, home-based early intervention programmes. In many of these programmes, parents participate in a standardised programme, and their participation as an interventionist is crucial to the efficacy of the intervention (e.g. Kasari et al. 2010). There is increasing demand for productive and meaningful home-school connections between parents and teachers.

### *Conclusions*

This study explored mothers' views of teachers' pedagogical practices related to socio-emotional learning. Our findings have implications for strengthening the home-school

connection. A mother's perceptions of the classroom climate is critical to collaboration with her child's teacher during early school transitions. When the mother agrees with the pedagogical and classroom practices, she is more likely to utilise them with her child at home, and vice-versa (Mangione and Speth 1998; Salazar 2012). Study findings may inform future intervention strategies that can further strengthen home-school connections.

## Acknowledgements

The authors would like to acknowledge the Institute for Education Sciences (R324A110086, J. Blacher, P.I.). We would also like to thank the study participants who took time out of their busy schedules to describe their experiences.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This study was supported by the Institute of Education Sciences (IES) [grant number R324A110086] and the SEARCH Family Autism Center in the Graduate School of Education, University of California-Riverside.

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