

A small-scale qualitative study exploring the experiences of autistic children at primary school who have limited spoken language and their preferences for social engagement.



By Louise Pay

In July 2022 I received some thrilling news, I was fortunate to have been awarded the practitioner research award through the Children's Research Centre. This meant I could put into practice a research proposal I had created as part of my psychology degree. I was given the chance to get out into the field and bring to life a research topic that I have always been very passionate about. Before I tell you about my research, I wanted to explain what motivated my research and how personal experience inspired me to pursue research in the field of autism.

In 2010 my son was diagnosed with autism. He was only three years old when he received his diagnosis and as I had limited knowledge of autism, I threw myself into research mode to find out how I could help my son. As time progressed my son was not reaching his milestones, and I remember a speech and language therapist telling me he may never talk. Although eventually he did start talking it was a very slow process. Firstly, he just started repeating words he heard a process known as 'echolalia', then he moved on to just asking for only the things he wanted such as I want a biscuit, or I want park. You couldn't really have a conversation with him, and he didn't really seem that interested in other people. He was in his own little world. However, some years later he started to initiate two-way conversation, yet he lacked the skills needed to make social connections.

He would endlessly talk about his favourite subject often not picking up on the social cues of others that not everyone wanted to talk about football non-stop. And often his opening line to a conversation would be asking people how old they were, when their birthday was, and whether they had any dental fillings. He would have no idea that ladies of a certain age did not want to talk about how old they were or about their dental history and that the children in his class had no interest in hearing all about the different players in his favourite football team on a conversational loop. However, slowly over time, he started to learn the art of conversation, he learned to listen to people and ask them questions that engaged the other person, but above all he has learned how enjoyable it is to talk to people who do share his interests. Sometimes I wonder if the reason he was so late in blossoming into the social butterfly that he is today is that when he was younger, he was so bogged down with his sensory difficulties and a world that just didn't understand him that it was just too overwhelming to socialize with others.

Seeing my son grow and flourish over the years inspired me to want to help other autistic children and share everything my son has taught me and its these experiences that led me to pursue my studies with The Open University and what ultimately led to my research motivations. I was motivated to explore what we can do

to help facilitate the social learning of autistic children and help them navigate the social world.

Now that I have shared a bit of background into what inspired my research, I would be delighted to share my research journey with you and discuss some of the fascinating findings that came out of it

Firstly, my study aimed to explore the experiences of autistic children at primary school and their preferences for social engagement with a focus on children who had limited spoken language. Previous research has suggested that autistic children often experience difficulties understanding the emotions and perspectives of their peers, difficulties with emotional regulation, and difficulties with sensory processing which can often impact the way autistic children interact with their peers.

Consequently, this can also have the potential to impact life outcomes. Although previous research acknowledged the importance of addressing social interaction difficulties early on there appeared to be little research in this area particularly with autistic children who had limited spoken language and who were in a primary school setting. Therefore, my study aimed to explore the experiences of autistic primary school children who present with limited spoken language and their preferences for social engagement. The hope for my study was that by exploring children's social motivations future researchers could develop new ways to encourage and develop social engagement strategies.

My Literature Review Journey

According to The Diagnostic and statistical manual of mental disorders: DSM-5. Fifth edition. (2013), autism is a neurodevelopmental disorder that can cause a range of impairments including difficulties with social communication, social interaction, and restricted and repetitive behaviors. In addition, autistic individuals may experience difficulties with sensory processing, and coping with changes to routine, and may have special interests that can often become intense and all-consuming. Historically research has explored the difficulties autistic children face as outlined by DSM-5, however, my aim was to focus on social interaction difficulties whilst simultaneously being mindful that all difficulties outlined by DSM-5 (2013) have the potential to impact social interaction on some level. Thus, most researchers would agree on the importance of providing social interaction support and effective interventions early on. Yet according to Factor, *et al.*, (2023) there is limited evidence of effective social skills interventions taking place in the classroom. This is particularly concerning considering a classroom setting has the potential to provide the most ecologically valid setting for effective social interaction support. Furthermore, when young people socially engage with their peers a form of social and emotional development is taking place and children learn to recognise others have different desires and mental states to their own. This is a time when children also start to learn pro-social behaviors such as kindness and sharing (Farrington-Flint, 2014). Indeed, The SEND code of practice (DfE, 2014) acknowledges autistic children particularly those with speech, language, and communication needs have difficulty interacting with others and one of its aspirations is to help children achieve better life outcomes.

Despite these aspirations through my literature review, I found common themes suggesting that autistic children experience difficulties with understanding the emotions and perspectives of their peers, difficulties with emotional regulation, and situations of bullying and social isolation at school (Ghanouni *et al.*, (2019); Burton *et al.*, (2020). In addition, Observational studies suggest that autistic children demonstrate less sharing, less social conversation, and more parallel play than typical children (Bauminger *et al.* (2008). In addition, autistic children also spend more time engaged in solitary behaviour and less time in cooperative interaction (Humphrey and Symes, 2011) and in initiating and responding to the interactions of others within mainstream settings (Bauminger *et al.*, 2003; Sigman and Ruskin, 1999). Although my literature review highlighted that many autistic children have a preference to withdraw from social interaction there is however, contrasting evidence to suggest some autistic children have such strong desires to fit in with their peers, they go to great lengths to hide their autistic traits a behaviour known as 'camouflaging'. Camouflaging can often leave young people feeling exhausted and prone to anxiety which consequently has implications for young people's mental health (Halsall *et al.*, 2021). Although Halsall *et al.*, (2021)'s study was based on a small sample of adolescent girls there is evidence to suggest camouflaging can occur irrespective of gender Hull *et al.*, (2021).

Despite the growing research on camouflaging and children's motivation to fit in with their peer's research still tends to favor the assumption that younger children with autism have more or a desire to play by themselves (Calder *et al.*, 2013). Indeed, Calder *et al.*, (2013) suggests if teachers and parents want to empower children to engage then it would be beneficial to explore the level and degree of social involvement an autistic child would like to have. Interestingly, in line with Calder *et al.*, (2013)'s findings that autistic children can find it too overwhelming to interact with others research by Jones *et al.*, (2020) found that negative sensory experiences such as difficulties with noise, smell, taste, touch, and visual sensitivities within the school can also impact levels of social participation.

Although previous research highlights the many social interaction difficulties autistic children experience at school previous research tends to use quantitative methods that focus on secondary school children and the perspectives of teachers, parents, and practitioners rather than the voice of the child. Furthermore, research particularly lacks the voice of younger autistic children particularly those who have limited spoken language. Indeed, when considering all the existing literature regarding social interaction difficulties it is not always clear what significant factor restricts children's social engagement.

Thus, to fill this gap in research I proposed a small-scale qualitative study to explore the experiences of autistic children at primary school who have limited spoken language, and I proposed the following research question:

What are the social engagement preferences of autistic children at primary school who present with limited spoken language?

Methodology

To investigate I used participant observation and visual participatory activities. According to Bucknall (2014) historically research has depended upon adult descriptions of children's lives and experiences. Furthermore, children with disabilities particularly those with speech and language impairments are often excluded from research. However, my study sought to use a methodology that empowered children to participate and allowed them to express themselves and take part in research on their own terms. Therefore, my study used participatory visual methods to aid and facilitate expression. Indeed, according to Flewitt (2014), researchers need to be sensitive and creative regarding the methods they use. Thus, to explore children's experiences I felt that participant observation and participatory visual methods would help give children a voice, particularly for those children who have other forms of communication. According to Flewitt (2014), researchers often find it difficult to determine the literacy skills of children with special educational needs however there are many other ways children who are non-verbal communicate for example, body language, movement, and facial expression. In addition, children need certain conditions in place to be able to express themselves thus researchers need to facilitate this in spaces where children feel comfortable (Kellett, 2014).

Data Collection:

For my data collection, I used participant observation by immersing themselves in the children's classroom environment. Visual participatory activities, including small group games and games that tapped into shared interests, were used to explore the impact of social, emotional, and sensory difficulties on children's social learning. However, before any participatory activities took place, I took time to build rapport with the children. According to Bucknall (2014), it is important to build rapport with children to address issues of 'otherness'.

Data Analysis:

My findings were analysed using thematic analysis, which is a qualitative research method for identifying and analysing patterns and themes in the data. Participants mentioned in my field notes and reflections were anonymised using pseudonyms for de-identification and then analysed for themes. Firstly, I read through my field notes many times for familiarisation. Secondly, I looked for patterns in the data in relation to the research question and grouped them together. Initial codes were produced with a bottom-up approach to avoid interpreting the data at this stage whilst simultaneously being mindful of epoche. To do this I was reflective in terms of setting aside any previous experience on the topic and any assumptions or previous theoretical frameworks. Codes were then narrowed down to establish developed themes. Once this had been carried out with all fieldnotes I looked for similarities and differences within the data. Similarities were then developed further to reveal common themes across the data including what observed situations revealed about a participant's experience.

Participants and Research Setting:

My study involved 11 children who had a diagnosis of autism. These children were between the ages of five and eleven. The study included 9 male and two female participants.

The research was conducted in an autism resource base attached to a mainstream primary school. The autism base was split into two classrooms with a corridor connecting both classrooms. There was also a newly built sensory garden which the children had access to. The children carried out a mixture of free play, one to one national curriculum work at their workstations and a range of group learning sessions.

All participants who took part in the study had limited spoken language. For this study limited spoken language was broken down into four stages:

Stage 1 – No speech at all

Stage 2- Inconsistent speech (uses echolalia)

Stage 3 – No speech when distressed

Stage 4 – Has speech but refuses to use speech in certain situations

Ethical Considerations:

Before the research began it was important for children and parents to understand the purpose of the research, what the research would involve, and how it would be disseminated. Leaflets were given to parents and children to take home explaining all about the research to help aid their decision to consent. Participants were also informed of their rights to withdraw. As many of the children in the study had limited spoken language it was difficult to gauge whether children would be happy to take part and when they would like to withdraw. Therefore, if children showed any signs of distress throughout the research, I decided that would be taken as a sign they would like to withdraw.

Another consideration was how to engage with children in a way that creates positive power dynamics. Clark (2014) suggests researchers should pay attention to their own body language whilst showing children respect and sensitivity. Therefore, I was aware of such power dynamics throughout the research process and took time to build rapport with the children, sit at their level, and use body language and a tone of voice that allowed children to feel comfortable.

Finally, my study anticipated the ethical and practical challenges of what Horton (2008) describes as the everyday messiness of research. Indeed, Montgomery (2014) highlights how working with children often poses many unexpected scenarios. In line with the everyday messiness of research, my study did not always go to plan. For example, my proposed study had planned to carry out four weeks of participant observation and four weeks of participatory activities. The participatory activities were going to involve group games to socially engage the children. However, it was clear early on that this may not work as it had been observed that the children did not seem to be motivated to be in each other's company most of the time. Indeed, up until this point, children seemed to mainly play on their own and even when there

were moments of subtle interaction many of the children had much difficulty with their emotional regulation and sharing toys and activities. Thus, I soon realised that perhaps activities that gaged a shared interest may be a way forward. Therefore, I began to look at participatory activities that included an element of engagement that may capture a shared interest rather than orchestrating activities that children may be uncomfortable or reluctant to take part in.

Findings and Discussion

The aim of my study was to explore the experiences of autistic children at primary school who have limited spoken language and find out what their social engagement preferences were. I hoped that my study would provide policymakers and educational practitioners with an understanding of what schools could do to improve the social and emotional development of autistic children at primary school based on their social engagement preferences. It also aimed to help future researchers create strategies and interventions to encourage positive interaction and social relationships. Finally, my study sought to give voice to children who are often excluded from research by giving an insight into their world and encouraging a more participatory approach to research with autistic children, particularly children who have limited spoken language. After conducting a thematic analysis, my findings revealed four themes which included:

- Being on my own
- Barriers to interaction
- The complexity of social engagement
- Moments of shared interest and awe.

Being on my own:

In line with previous findings that autistic children spend more time engaged in solitary behaviour and less time in cooperative interaction (Humphrey and Symes, 2011) and in initiating and responding to the interactions of others within mainstream settings (Bauminger *et al.*, 2003; Sigman and Ruskin, 1999) my study found that children did indeed engage in more solitary behaviour. For example, in my study I observed children pacing up and down the classroom completely absorbed in their own sensory world, rocking, lining up toys, and talking out loud to themselves. One child would sit playing snakes and ladders by himself whilst also talking out loud to himself. He appeared to be very happy. He didn't even seem to notice lots of noise and crying coming from another little boy in the class, he did not even look up once he was so absorbed in his own game.

Another example was when I was in the outside area and three children were outside playing. They were all making noises to themselves. One child was on the playmat steps, and another was climbing on the other playmats with a third child on his own waving a ribbon. Despite the children all playing in the same area, they did not at all acknowledge one another, show any eye contact or make any attempt to engage with each other.

In addition to these accounts of solitary play and being absorbed in one's own world a theme running throughout was the absence of morning chatter between the children when they first arrived at the start of each morning. In one particular class children would come in take their bags and coats off and just sit in their designated workspaces, making no attempt to engage with their peers. I found this particularly interesting as many children of the same age in a typical mainstream school are usually engaged in social chit-chat at the start of school.

Barriers to interaction

Although it could be easily assumed from the evidence thus far that the children appeared to prefer being on their own it is also important to highlight that certain social interaction barriers were also observed which may indicate the choice of being on one's own may not be quite as it seems and indeed certain barriers to their social engagement were observed. Therefore, the theme of interaction barriers was broken down into three sub-themes, sensory barriers, emotional regulation barriers, and communication barriers. For example, findings from my observations suggested that some children were so absorbed in their sensory world that they often ignored any opportunities for social engagement such as a young boy who was absorbed in waving a ribbon, a boy who liked to rock on his mat and another boy who liked to pace up and down. This finding was also in line with previous findings by *Jones et al.*, (2020) that found difficult sensory experiences can impact levels of social participation.

For the barrier of emotional regulation, I observed a lot of upsets around children not wanting to share and being possessive over toys. In addition, children showed signs of poor impulse control which supports research by *Ghanouni et al.*, (2019), and *Burton et al.*, (2020) in that autistic children experience difficulties with understanding the emotions and perspectives of their peers and difficulties with emotional regulation.

For the barrier of communication, I observed children not being able to express themselves when they were uncomfortable with another child being in their space or effectively communicating that they were not in the mood to play. With all of these barriers to social engagement, it could be suggested if we are to encourage and facilitate children's social engagement then it is of vital importance that some of these barriers are addressed to give children as much opportunity as possible to participate.

Despite much of the evidence from my literature review indicating autistic children having limited social engagement, there were often some surprising moments of positive interaction throughout my study which produced the theme of:

The complexity of social engagement.

What is meant by this is that on several occasions children would be observed showing signs of social engagement with each other that would from the outside appear to be engaging in a way that would not be much different from their typically developing peers however this would often be short-lived when the barriers of emotional regulation, sensory processing and difficulties with communication and

reading social cues would creep in which would often bring an abrupt end to the observed moments of positive social engagement. For example, on one occasion some children were running up and down in the school sensory garden and in and out of a play hut, they were chasing each other, and all appeared to be having a good time in each other's company however when one of the girls fell over and asked another boy to rub her knee he just ignored her. She got up and continued chasing him shouting to him to rub her knee he then turned around and pushed her.

There were also other occasions where positive social engagement started to emerge yet the barriers of sensory, emotional regulation, and communication would prevent engagement from progressing any further.

Thus, social engagement is complex and if we are to encourage social engagement then future research would benefit from understanding that if we are to facilitate social engagement then we need to tune in to supporting children with some of the barriers they face.

The final theme is perhaps the most encouraging for future research and that is the theme of:

Shared interests and moments of awe.

According to research by Calder *et al.*, (2013) some children with autism express how they do not have the desire or motivation to socially interact with other children and indeed many studies including my own have found much evidence to support this. However, in contrast, my study also found that if children have a shared interest or a moment of awe that captures shared attention then there appears to be much more motivation for social engagement. This was observed in my study when children had an interest in forest school, with magnets, huge bubbles, easter bonnets, and the King's Coronation. Indeed, there was also evidence of shared interest in bringing children together. In addition, even those children who have no verbal language and who are usually so absorbed in their sensory world that they often ignore the people and activities in their environment would also break free from their own company when there was a shared interest or a moment of awe which in summary can only be described as a moment that wowed the children into being motivated to socially engage. The following is a summary of some of those moments that were observed.

Moments of shared interest

Pokémon:

In the classroom, two boys began interacting over a shared interest in Pokémon. One boy, who was initially reluctant to share his book, eventually engaged with the other boy by mimicking Pokémon noises, leading to shared enjoyment. Later, a Pokémon board game further encouraged their interaction, though they played by their own rules.

Playdough:

Despite initial challenges with sharing, a playdough activity facilitated subtle interactions between a boy who was more verbal, and another child, who usually remains in his sensory world. They exchanged small gestures over forming letters.

Dolls:

Two of the girls in my study who previously struggled with sharing were observed interacting positively when given identical doll heads to style. This activity allowed them to connect briefly over their mutual interest in dolls and hair.

Snakes and Ladders:

One boy, who was typically solitary in his play and who on many occasions played snakes and ladders on his own, joined others in a giant Snakes and Ladders game, showing an unexpected willingness to take turns and engage with peers.

Participatory Activities with Adults:

A boy who usually is so absorbed in spinning a ribbon, engaged with a teacher while interacting with sensory mats, showing eye contact and smiles. Another boy, who is non-verbal and who often rocks alone, was guided to build towers, sharing moments of excitement with an adult.

Moments of Awe:

Bubbles:

In the sensory garden, two children were captivated by giant bubbles, sharing glances of excitement with each other.

Magnets:

Two girls marvelled at the force of large magnets, sharing intrigued expressions.

Easter Bonnets:

To celebrate Easter, decorated bonnets brought the children together, prompting smiles and social interaction uncommon during the morning routine.

Coronation Day:

During the celebration of King Charles' coronation, the classroom decorations inspired unusual levels of social engagement, with children trying on hats and giving each other more eye contact.

Forest School:

At the forest school pond, even typically nonverbal children expressed excitement, saying "frog" and "tadpole," sharing in the moment with teachers and peers.

To conclude, my study aimed to explore the experiences of autistic children at primary school who have limited spoken language and their preferences for social engagement. Whilst it is difficult to make any assumptions on what children's social engagement preferences are what is clear from the research is that far too often, we assume we know what children's preferences are. However, if we are to truly

understand what motivates autistic children to socially engage then it is important to immerse ourselves into their world as indicated by the findings from this study. Although it may appear that young autistic children prefer to want to be on their own when you dig a little deeper observation revealed that social engagement is much more complex than either being on one's own or engaging with others. Indeed, before we make assumptions it is important to acknowledge that autistic children face many barriers to social engagement including difficulties with sensory processing, emotional regulation, and communication. Despite these barriers, my study found that when children have shared interests or experience moments of awe, they are much more likely to socially engage. Therefore, it is recommended that future research explores how shared interests and moments of awe can be created and facilitated in the classroom. In addition, it is also important to develop strategies to support children with the difficulties and barriers they face in relation to social engagement such as support with sensory processing, emotional regulation, and communication. My study suggests with the right conditions and support there are many ways that social engagement can be encouraged and facilitated.

Despite these positive findings, my study was not without limitations. Firstly, the study was only conducted on a small sample and most participants were male. Secondly, the setting for the study included only autistic children, and therefore the findings may have produced something quite different if it was conducted in a mainstream setting. Finally, my study acknowledges that findings were drawn mainly from participant observation and despite every effort to eliminate the bias and assumptions of the researcher without asking children directly about their preferences for social engagement the potential for assumption cannot be eliminated. Simultaneously most of the children who took part in the study had limited spoken language and with the study only being small scale it was difficult to gauge what alternative methods could have been used to give more voice to the children. Therefore, my study recommends future research use visual symbols and alternative communication to help give children with limited spoken language a voice in research.

Moving forward, I plan to share my findings with educational practitioners to encourage the use of awe and shared interests to boost social engagement in classrooms. I am grateful to The Children's Research Centre for the opportunity to conduct this research, which has significantly contributed to my growth as a researcher. I also hope my experience inspires others to pursue their research interests and the things they are passionate about.

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