The Wrong Kind of Noise: Understanding and Valuing the Communication of Autistic Children in Schools

Dr Rebecca Wood, Honorary Research Fellow, Department of Disability, Inclusion and Special Needs, School of Education, University of Birmingham. <u>r.wood.2@bham.ac.uk</u>

Abstract

As a result of the association of autism with speech and language difficulties, autistic school children can be subject to interventions ostensibly intended to remedy these problems. However, my study, based in five mainstream primary schools in England, which incorporated the views and experiences of school staff (n = 36), autistic children (n = 10), their parents (n =10) and a sample of autistic adults (n = 10), suggests that these inputs do not always provide the children with the help they require. Indeed, notwithstanding some examples of effective assistance, the more evident communication of the autistic children, in its various manifestations, might be ignored and their wishes denied, if deemed not to correspond with the expectations or intentions of the supporting adult. Furthermore, their communication was also found to intersect with the issue of noise in schools, a complex phenomenon which can be an exclusionary factor for autistic children. Indeed, if some forms of noise were tolerated in school, the sounds emanating from autistic children might be disdained, while the communicative value of their silence was not evidently recognised either. Therefore, whether speaking, making noises or remaining silent, autistic children can be deemed to be making the wrong kind of noise. Elucidated via empirical examples from my study, the implications for research and practice are discussed, providing alternative perspectives on how to support the communication of autistic children, leading to greater agency, well-being and educational inclusion on their part.

Keywords

autism

communication

noise in schools

inclusion

silence

autism education

Introduction

Increasing numbers of children in the UK and beyond are being diagnosed with autism (Baron-Cohen et al. 2009; Kim et al. 2011; Christensen et al. 2016) and, while diagnostic criteria have shifted and widened over recent years (McGuire 2017), the association of autism with communication impairments has remained (Centers for Disease, Control and Prevention [CDC] 2016). Meanwhile, and in keeping with national and international legislation and policy provisions which underscore the right to educational inclusion (Convention on the Rights of Persons with Disabilities [CRPD] 2006; Children and Families Act 2014; Department for Education [DfE] 2014), more autistic children are being educated in mainstream schools in the UK (Emam and Farrell 2009). However, their participation in school and longer-term outcomes are generally poor (Batten et al. 2006; Wittemeyer et al. 2011).

In light of these circumstances, I spent five months collecting data in five mainstream primary schools in England, whereby my aim was to find out how autistic children are accessing the curriculum in schools, and how this is impacted by the support they receive. In the event, my data showed that the communication of the autistic children - in terms of the ways in which they express themselves, how they are supported in so-doing, and how school staff understand and interact with them – is crucial in the context of their participation in the school community. Furthermore, the subject of the communication of autistic children was also revealed to intersect with the issue of noise in schools, as well as what is arguably its antithesis, silence, prompting further questions still about the children's individual agency. Indeed, as I will

explore and explicate in this review by using empirical examples from my study, these overlapping issues have significant connotations for the general well-being and inclusion of autistic children in schools, with potentially important implications for their participation in the education system overall.

Methodology

My study was informed by a predominantly interpretative paradigm and theoretical discussions such as the social and medical models of disability (Molloy and Vasil 2002; Pothier and Devlin 2006) and inclusion (Allan 2008; Liasidou 2012). The five mainstream primary schools where I conducted my data collection consisted of two community schools, a state infant and junior school which were part of the same school (although they operated relatively separately, and so I maintained this division in my study), and a state faith school. These schools were all located in the same, densely populated and multi-cultural local authority (LA) in England, although the autistic adult participants (n = 10) were recruited on a UK-wide basis. Consisting predominantly of interviews (Oppenheim 1992), questionnaires (Denscombe 1998) and structured and unstructured observations (Detheridge 2000) with autistic children aged four ten (n = 10), their parents (n = 10), school staff (n = 36) and the sample of autistic adults, I ascertained their views on different school subjects, tests, educational priorities and inclusion. In addition, sometimes a range of methods were used for the same child (Lewis and Lindsay 2000). All interviews and observations with the children and parents were video-recorded and transcribed verbatim, and I also kept a written running record to note contextual information during data collection.

The structured observations, which included event sampling, were used to ascertain responses to curriculum activities for the two youngest children, both aged four, neither of whom had an established mode of communication. Here, I employed a pre-set list of signs of aversion to or enjoyment of tasks, which I combined with the understanding I had gained of them through a familiarisation period, as well as discussion with their parents and school staff, and the experience I had acquired when employed in the same LA as an autism inclusion teacher. These data were subsequently analysed mainly through thematic analysis (Miles and Huberman 1994; Strauss and Corbin 1998; Braun and Clarke 2006), having been coded (Saldaña 2016) using the software programme NVivo.

In this review, I do not use the real names of the children, and the replacement names I have chosen reflect the cultural and ethnic diversity of the group overall, although in order to protect their identities, not in relation to the individual children themselves. Alternative names are also selected for the autistic adult participants, but to avoid the confusion which an abundance of names might produce, I use abbreviations only for teaching assistants, such as TA1, TA2 etc. and I use neither names nor abbreviations for the parents referenced here.

In the remainder of this paper, I will first consider in more detail the basis on which a diagnosis of autism is typically ascribed in relation to communication, and will also discuss briefly the issue of noise in schools. Then, using empirical examples from my own study, I will explore further the subjects of speech difficulties, communication support, noise and silence, before drawing together these different strands in a summative discussion and conclusion.

Autism and Communication Impairments

According to the Diagnostic and Statistical Manual (DSM)–5, autism is accompanied by "poorly integrated verbal and nonverbal communication", "deficits in understanding and use of gestures" and a "lack of (...) nonverbal communication" (CDC 2016). Similarly, according to the International Classification of Diseases (ICD)–10 (2016), childhood autism is distinguished, inter alia, by "abnormal functioning" in "reciprocal social interaction (and) communication". Thus, the posited difficulties might be "language abnormalities" (Wing and

Gould 1979, 11), or be thought to reside in the shared nature of communication, and so typified by "persistent deficits in social communication and social interaction" (CDC 2016).

Indeed, much research has been devoted to the various manifestations of these posited deficiencies, be they in relation to comprehension (Bartak, Rutter and Cox 1975), use of pronouns (Lee, Hobson and Chiat 1999), ambiguities in speech (Norbury and Bishop 2003), narrative delivery (Dean, Fox Adams and Kasari 2013), intonation (Tager-Flusberg, Rhea and Lord 2005) and what an individual chooses to relate (Loveland et al. 1990). Further, autistic people may also be classified according to whether they are "verbal" or "non-verbal" (Patten et al. 2013), as if these were distinct and easily-identifiable sub-groups, with the latter group – those considered to be "non-verbal" - linked with low attainment in school (Dockrell et al. 2012), and poor longer-term outcomes (Howlin, Mawhood and Rutter 2000). Furthermore, "selective mutism" – "a childhood behavioral disorder characterized by persistent failure to speak in social situations despite speaking in other situations" (Bergman et al., 680) - has also been associated with autism (McKenna et al. 2017).

Therefore, communication impairment in autism might incorporate, within its broad parameters, multiple deficits in terms of lexis, linguistic development, the subjects autistic people choose to relate, and how they communicate and engage in social situations. Indeed, according to Tager-Flusberg, Rhea and Lord (2005), there is still much to be understood about the intricacies of communication dysfunction in autism:

"For example, how is odd intonation related to deficits in communication and social cognition? How do linguistic comprehension deficits relate to the various aspects of deviant language seen in the syndrome? What triggers the initial failure of social cognition and joint attention that seems to be associated with such pervasive communicative difficulties?" (Tager-Flusberg, Rhea and Lord 2005, 356).

Consequently, to be autistic is to be involuntarily or selectively mute, or perceived as saying the wrong things, in the wrong way, and at the wrong time. Here, autistic people are cast into the role of deficient other (Milton and Sims 2016), they are 'disordered', metaphorically locked within an alternative "spatially removed state" (Broderick and Ne'eman 2008, 466), unable to speak, interact or relate effectively.

Moreover, in the UK, and particularly within educational contexts, the result of these posited communication difficulties has been a strong emphasis placed on language and communication interventions (Jordan, Jones and Murray 1998). For example, Roulstone et al. (2012), in a study commissioned by the DfE, identified 158 separate interventions for children with speech and language communication difficulties. This report was one of a plethora of studies assumed by the Department for Children, Schools and Families following the Bercow Review (2008). These included, for example, an appraisal of 60 specific interventions by Law et al. (2012) and a focus on the profiles of need of autistic children and those with language impairments in mainstream schools by Dockrell et al. (2012). Thus, for autistic children, deemed to be impaired in their communication by dint of their diagnosis, communication interventions are perceived as an important priority in school (Parsons et al. 2011; Dockrell et al. 2012).

Noise in Schools

Alongside this focus on support for communication for children with language impairments, there has been a growing concentration on behaviour in schools (DfE 2016), including an emphasis placed on the need to achieve 'quiet' or silence in the classroom. For example, the DfE (2012, iii), in a report concerning pupil behaviour, cites research from Organisation for Economic Co-operation and Development, which suggests that nearly a third of pupils in England find there is "noise and disorder" in most or all lessons. In this same report, the DfE (2012, 24) also references an earlier study which found that 68% of children aged seven – 11

sometimes find it "hard to work" because of noise from other children. Moreover, concerns about behaviour and noise in schools have resulted in publications aimed at helping teachers to quell the din in class, such as *Take Control of the Noisy Class: From Chaos to Calm in 15 Seconds* (Plevin 2016). Furthermore, and notwithstanding the drive towards communication interventions already described, there is certainly evidence to suggest that children who have difficulties in processing language, for example, might be adversely affected by noise in schools (Klatte, Bergström and Lachmann 2013). Indeed, all children can be negatively impacted by excessive noise in their educational setting, be it within-class or externally produced (Shield and Dockrell 2004; Dockrell and Shield 2006).

Therefore, within this alignment of circumstances, a particular set of incongruities emerges for autistic children in schools. On the one hand, by dint of being diagnosed with autism, they are considered to be potentially highly impaired in their speech, communication and social interaction, and so can be subject to specific strategies and approaches in school to tackle these issues (Parsons et al. 2011; Dockrell et al. 2012). In other words, they are being encouraged to alter both their modes of expression and the content of their discourses, to moderate and modulate their own 'noises', if indeed they exist. Meanwhile, teachers, conscious of the emphasis on 'good behaviour' in current educational prescriptions (HoC 2011; DfE 2016), strive to gain order and quiet – if not silence – in the classroom, but nevertheless tolerate certain types of din (Shield and Dockrell 2004; Dockrell and Shield 2006). Indeed, my study revealed that communication, noise and silence all intersect in relation to autistic children in schools, an effect I will now explicate through empirical examples from my research.

Speech Difficulties

While it was beyond the scope of my study – and indeed my own expertise – to conduct a detailed, specialist assessment of the speech and language competencies of my ten autistic child participants, it was evident that they all, to a greater or lesser extent, experienced problems with speech. According to their parents, some had been slow to develop spoken language compared with their peers, while the youngest two, both aged four, were described as "non-verbal" (although, as will be seen, this was not in fact the case). Alex, aged five, was a lively and engaging talker, who enjoyed conversation, but he nevertheless struggled with pronunciation, language recall and narrative order, as this extract from one of our semi-structured interviews demonstrates:

Alex: *The ra, the ra...another day* (i.e. the other day) *there is, there is a man sitting at the road, there's, there is a, there is a man sitting at the road and he got really rundover*

(...)

Alex: An ambulance got in and he went to hospital

(...)

Alex: (shaking head) *He didn't, he really didn't, he, he, he, he looked at the road, he didn't dowan like that, he, he, he croshed the road, he was looking, and he went crosh the road to our house.*

Similarly, Rashan, aged nine, found it difficult to relate anecdotes and pronounce words:

Rashan: But I'm still...I'm still old...I'm still...I know how to...I know how to...like....use the....my sister's compers (i.e. computer)...she didn't....she won't ask me...she always....she wants....her ones

Lucy, aged seven, and the only female participant amongst the children, sometimes struggled to answer my questions during our interviews, of which the extract below is an example: RW: And what about Maths? Do you like Maths?

Lucy: Yeah

RW: Do you find Maths easy or difficult?

(pause)

RW: Or sometimes easy sometimes difficult

(pause)

RW: You're not sure about that one?

Lucy: Yeah

RW: OK, that's all right.

These short extracts exemplify some of the difficulties in speech and communication described earlier as being typical of autistic dysfunction, the "deviant language" described by Tager-Flusberg, Rhea and Lord (2005, 356) or narrative ambiguity explored by Norbury and Bishop (2003). Indeed, when asked to describe or define autism, 18 of the 56 adults in my study felt it is associated with speech and communication difficulties, while 31 considered autism to be characterised by problems with social interaction.

Communication Support

Given the posited – and, moreover, evident – link between autism and speech difficulties, it is perhaps unsurprising that the need for speech and language therapeutic input was described by some school staff as an important rationale for additional support for the autistic children. This input was delivered either by a visiting speech and language therapist (SLT), or by a TA, using techniques the SLT or SENCO had recommended, and was manifested in visual timetables, 'now and next' boards, the employment of Makaton, PECS (Picture Exchange Communication System) and the arrangement of social skills groups. However, the conditions which coalesced around the children in the schools where I was based, and how these impacted on their communication, were more complex than the simple model of speech and language deficiency followed by specialist intervention might suggest. Indeed, the support they received played an important role in how well the children were able to express themselves and be understood.

For example, the interviews of three of the children in my cohort were either conducted or substantially supported by their TA. In these situations, their knowledge of the child, gentle encouragement and ways of offering genuine choices in an accessible manner, were of considerable advantage to the task. Here is an example with TA1, who is supporting Michael, aged eight and a highly competent reader, as he goes through the assent form at the start of our first semi-structured interview:

TA1: Do you know what an interview is?

Michael: Yes. An interview? When someone records videos.

TA1: An interview is when you ask someone some questions and you want to find out what they think.

Michael: Yeah

TA1: And Rebecca would like to interview you and me

Michael: Yeah

TA1: So. But one of the things you have to do (coughs) when you do an interview, you have to agree to be recorded. Now I've already agreed, and your mum's agreed, but we'd like you to agree as well. So do you want to read this, because this tells you all you need to know about what you're agreeing to.

Michael: OK

TA1: Do you wanna read it out loud?

(Michael starts reading the assent form out loud – TA1 corrects when he gets it wrong and uses his finger to trace along the lines to help Michael).

(...)

TA1: Very good. And are you sure you're happy with all of this?

Michael: Yeah

TA1: Good boy

However, other school staff were less certain of how to support the autistic children, both in terms of their curriculum access and their communication skills. For example, Piotr, aged four, and described as "non-verbal", had been provided with a great deal of speech and language support paraphernalia, as recommended by a SLT. These included a 'choosing board', pinned on a partition to one side of the class, a 'now and next' laminated sheet which was used during his alternative curriculum tasks, and other, associated items such as work-trays and pictures. Piotr was also ostensibly being taught, using full physical prompts, to sign "good morning" to his class teacher, as well as "please" and "thank you" when the situation deemed these social niceties to be necessary. According to school staff, their main aim, in establishing these mechanisms, was to help Piotr's independence.

However, it soon became apparent, that rather than being helped to develop his independence, the principle purpose, no doubt unwittingly, was to coerce Piotr into saying what the adults wanted to hear, and in a manner they deemed acceptable. Moreover, as the following example from a structured observation indicates, Piotr was not only far from "non-verbal", but had within his expressive arsenal a range of verbal and non-verbal forms of communication which he employed to demonstrate his unwillingness to carry out certain tasks. Here, TA2 is attempting to conduct a reading activity with Piotr seated on her knee: Signs of aversion to task:

Whining. Says "want to go out" (not heard/understood by TA2); "out"; shaking his head (i.e. 'No') (...). Physically struggling, trying to close the book, trying to get away from the table, falling onto the floor (on knees), physically holding onto the book so it can't be opened, pushing TA2's hand away from book, throwing head back.

During this activity, which lasted for two minutes and 20 seconds, I noted 39 verbal and nonverbal manifestations of aversion to the task from Piotr. Furthermore, on other occasions when Piotr was taken to his communication supports (the laminated sheets pinned on the partition in the classroom), his expressed choices would not always be respected, as an example from an unstructured observation demonstrates:

TA3 and Piotr are at the visual timetable. Piotr picks the 'outside' card. TA3: "No, we're not choosing." (...) TA3 takes him to the 'now and next' board. (...) Piotr shakes his head and throws the tray work card onto the floor. (...) TA3 is holding Piotr in front of her. Piotr tries to stop her from putting the card onto the board, and to wriggle out of her arms.

(...)

Piotr exclaims "No!" (...). Hear what sounds like "I don't wanna do this" from Piotr, but TA3 either doesn't hear or ignores.

It is difficult to ascertain, from these examples where he is being subject to a high level of physical control, how Piotr's independence and communication are being supported. Indeed, while the actual and highly evident communication of Piotr – through speech, sounds, gestures and actions - was being ignored and the cogency of his messages denied, it seemed here that his communication was only validated if it corresponded with what the adults in charge wanted to hear, and in the ways they expected to hear it, an occurrence I observed with other children

too. In addition, even when Piotr attempted to comply with the system of communication chosen by school staff – such as by selecting the 'outside' card - he would be ignored if he was 'off message'. Further, given that the school staff also referred repeatedly to the fact that this four year-old child - who was also the youngest pupil in the school – had not been toilet-trained when he first arrived, it appeared that the unwitting aim of these communication supports was to tame, train and civilise him.

The Complexities of Noise

Although I did not keep a systematic record of this, subjectively I found the schools where I conducted my data collection to be very noisy. For example, when I was transcribing interviews, which were often unavoidably conducted through various interruptions and types of racket, I couldn't always hear what the participants were saying because of the general din from talking and the scraping of chairs. Noise from the playground was a particular issue, especially in the largest school which had staggered lunch and break times across the day, meaning there were always children outdoors at any point. Furthermore, this problem of noise was notwithstanding the drive on the part of staff to control the classroom clamour through tambourine-tapping, rhythmic clapping, or getting the children to sit cross-legged on the floor with a finger placed on their lips, for example.

This is an issue of particular relevance to autistic children who might have a high degree of sensitivity to noise (Sainsbury 2009; Bogdashina 2016). Indeed, Michael did not take part in P.E., attend assembly or have lunch in the school dining hall (going home instead for lunch), because he found these activities and venues painfully noisy, complaining that "noises makes (sic) my ears bleed". Furthermore, some school staff commented that the autistic children had to leave the classroom when it became noisy, with this problem also potentially ruining school trips too. TA4 commented that autistic people "don't like noise" and was of the view that

"people need to accept this", because it is "stronger than them". Similarly, Caroline, an autistic adult participant, stated that when at primary school, she used a lot of her energy "just coping with the noise". These comments suggest that noise can be an exclusionary factor for autistic children in schools, although it should be understood as a multifarious phenomenon, not solely deriving from noise levels alone. For example, Leah, another autistic adult participant, asserted that "sometimes it's the little noises that bother the most". This was exemplified during an unstructured observation, when Rashan became distracted by a fly, flinching every time it was within his proximity, even though he was seated in an empty and so relatively quiet classroom. Rashan complained that the fly "makes a noise that scares me", and that it was driving him "nuts".

Notwithstanding these complexities, it was evident that while a lot of noise was tolerated in class and outdoors in particular, the 'noise' created by the autistic children might be disdained. The TA of Rashan, for example, complained that he talked in an American accent, which she felt was rather affected. Both the TA and teacher of Marcus, aged nine, asserted that he used to "run screaming out of the classroom", while TA4, referring to an autistic child who was not a participant, stated that sometimes he is "screaming" at school. Similarly, Alex's mother described how she perceived a typical "low functioning" (not a term I had suggested to her) autistic child:

A low functioning child to me would be a child that needs specialist care, maybe can't communicate, you know...can't do many day-to-day things, you know, (...) would really freak like, roll around the floor, and scream and so luckily Alex doesn't do that.

Her description of this imagined, "low functioning" child who might "freak" and "scream", as well as being redolent of othering (Pothier and Devlin 2006), also demonstrates a rejection of the noise such a child might make. However, as part of my running record for this interview, I noted that "at that moment there is a sound of a child screaming out in the playground", suggesting again that some sorts of screaming are tolerated, while other forms – those derived from autistic children – are not. Furthermore, the parent of Bobby, aged four, feared that a lack of accepted spoken communication would somehow mark him out as different and strange:

...because Bobby can't talk, I think to us he looks completely normal (...), but I suppose when you take him out (...) he'll start to run up to people or teachers and he'll babble at them and they're kind of like, how old is he? cos he's nearly five now so he probably does look a little odd.

Indeed, while it was certainly the case that Bobby could talk, a phenomenon I noted on a number of occasions, these examples demonstrate that the noises produced by autistic children might be considered devoid of meaning, dismissed as "babble", or considered indicative of freakery, casting them into the role of alien outsider (Broderick and Ne'eman 2008). Furthermore, the autistic adult Caroline who, like a significant proportion of autistic people also has Tourette's Syndrome (Baron-Cohen et al. 1999), asserted that during oral tests, because of the feelings of stress they provoked, she was terrified of "shouting out obscenities".

Therefore, my research suggests that noise is a complex phenomenon in schools, where it can be associated with behaviour issues and classroom control (Plevin 2016). For autistic children, different types of noise can be a distraction at least, and painful at worst, impacting negatively on their well-being and general inclusion in school. Moreover, while some types of school noise are generally accepted and tolerated, others – autistic noises – be they manifested through speech or sounds, are not (Agosta et al. 2004). In other words, autistic children, already considered communicatively impaired by dint of their diagnosis, are simply considered to be making the wrong type of noise.

Silence

Furthermore, these complexities and contradictions were also shown to operate in relation to silence, especially in terms of its communicative value. For example, some of the children demonstrated a range of high approval behaviours when they were engaged with activities of strong interest, which might also have a sensory component. Significantly, such endeavours could be conducted in silence, suggesting that for these children, non-speaking can convey important messages about engagement and well-being. Indeed, all of the children were observed at different times to be absorbed silently and contentedly in activities they enjoyed. Lucy and Rashan engaged voluntarily in silent reading when the subjects aligned with their interests, meaning on occasions that the TA faded back, leaving room for peer engagement. Similarly, Piotr, who was observed earlier to be highly resistant to a reading activity - manifested through multiple verbal and non-verbal demonstrations of disapproval - was almost entirely silent when he was motivated by the learning activity. For example, in this extract from a structured observation, Piotr is looking at a book on his own, with TA2 seated by his side:

Approval behaviours shown:

Turning the pages on his own, looking very intently, trying to find certain pages he is interested in, showing good motor skills e.g. flicking. Copies TA request for an action.

During this activity, which at four minutes and 20 seconds is twice as long as the previous, unsuccessful reading activity, I counted 44 approval behaviours from Piotr, with spontaneous page-turning counting as one of these. Furthermore, Piotr is subject to no direct physical control from the TA, and is carrying out actions independently and with skill, both spontaneously and on request. I observed other, similar activities with Piotr, all of which he conducted independently and in almost total silence, unlike the tasks he disliked, during which he was relatively vocal and struggling to get away. Indeed, during a hand-writing activity with which Piotr was contentedly – and silently - engaged, the power shifted from the TA to him, as he

placed his hand over hers in order to guide her on what he wanted her to draw. Moreover, later during this same exercise, Piotr's attention moved away from his TA towards a peer seated alongside him.

However, despite these clear, non-verbal indications of contentedness, the children's silence could be problematised. For example, Bobby's well-intentioned TA would take his silent engagement in an activity as an opportunity to label items, ostensibly to aid the development of his vocabulary, as this unstructured observation exemplifies:

Bobby is looking through a large alphabet book about animals on the floor.

TA5: Lion....elephant...giraffe...where's the giraffe Bobby?

Bobby independently turning pages – seems quite engaged. Ignores TA and turns slightly away from her. Classroom noisy, so TA has to be quite loud.

TA5: Where's the tiger, Bobby, tiger?

Bobby seems very content, turning the pages on his own and looking at the pictures.

 (\ldots) . TA again tries to get him to point to things, but he doesn't comply.

This observation, which took place during "free flow" time, meaning that the children were able to choose their own activities, demonstrates that the drive towards communication support can in fact create a barrier to genuine engagement with the children. Indeed, in Bobby's case, I observed numerous examples of the equipment of communication support – sand timers, 'now and next' boards, laminated pictures – being earnestly deployed, with Bobby carrying out the required activities in advance of their appearance, showing how unnecessary they were in his case. Similarly, Lucy was observed to participate with great enthusiasm in a whole class activity, but as well as listening and responding to the teacher, she was obliged to answer

supplementary questions whispered to her by a TA, a circumstance she reacted to with growing irritation.

Consequently, children labelled as having communication impairments could be overloaded with the repetitive labelling of items and requests for responses from adults, when their silence - a clear indication of concentration and well-being – was apparently considered to be of no communicative value. This was notwithstanding the possible impact of the 'Hawthorne effect' (Thomas 2013), meaning that the TAs were applying these techniques because I was present. Indeed, this issue could also have been exacerbated by the numerous additional duties the TAs in my study were expected to carry out (Allan 2008), as well as providing one-to-one support for an autistic child. Nevertheless, these examples suggest that school staff felt such approaches were an obligatory manifestation of their intention to support the autistic children, setting aside less tangible, but more natural and spontaneous forms of interaction.

Meanwhile, some staff considered that the autistic children were not able to follow the rules about silence in the school. For example, TA6 stated that she would need to take an autistic child out of the class during tests because he "finds the need for silence difficult", while Rashan was not permitted to join his class for a reading activity in the library, because he apparently failed to understand "the need for silence". However, the previous day I had noted that a teacher instructing some pupils in the library was "quite loud" and "very distracting", as I had been sent there to conduct an interview with another child.

Furthermore, if Rashan was unfairly stigmatised for apparently not understanding the requirement for silence in the library, his own requests for quiet and silence were not always respected, as this unstructured observation, when he is with the rest of his class, demonstrates:

Rashan: Don't tell anyone about this (recounts something to TA7 in a whisper)

TA7: (loudly) Oh the book from the library!

Rashan: (putting his finger to his mouth and looking around him) sshhh

Rashan: (continues shushing her) It's secret.

Moreover, while Rashan complained that he didn't like it "when people tell me to be quiet" and also struggled to express himself verbally at times, I was often struck by the high level of skill he showed in compensatory – but silent - gestures and actions.

Nevertheless, just as the issue of noise emerged as multifaceted and subject to varying interpretations and understandings, the same applied to the question of silence. The adult Myrtle, for example, asserted how much she enjoyed the company of other autistic adults, because "there's less pressure to engage in conversation, to fill silences, to talk for the sake of it". However, while Frank, an autistic adult participant, commented that some autistic children might need "absolute silence", Irena, another autistic adult, considered that autistic children can find "prolonged silences difficult". These comments underscore the highly subjective nature of this circumstance, and the need for an individualised assessment of the functional and affective nature of silence for autistic children.

Discussion

The association of autism with speech, communication and language impairments (CDC 2016) is embedded within diagnostic processes for autism, and interventions to remediate these posited difficulties faced by autistic children are prioritised in educational settings (Parsons et al. 2011). However, my study suggests not only that the correlation of autism with communication dysfunction can trigger generalised approaches in schools which may be entirely ineffective, but that the more evident verbal and non-verbal communication of the autistic children might also be ignored or disdained. Indeed, many school staff showed an allegiance to an impairment narrative of autism, the "abnormality discourses" (Thibault 2014, 80) which can impede more effective forms of engagement. This applies particularly if the

child is not 'on message' with the activity proposed by the staff member, or if the dysfunctional label applied to the child - such as being "non-verbal" - means that communication is unanticipated, and so neither seen nor heard. This "confirmation bias" (Jonas et al. 2001), whereby contrary information is ignored once a decision has been made, underlines how damaging such labels can be (Runswick-Cole and Hodge 2009; Liasidou 2012).

Moreover, the certainty of the "deficit-oriented discourses" (Liasidou 2012, 99) in relation to some children can be contrasted with the scepticism and doubt which result from demonstrations of their cogency, particularly when expressed in unanticipated fashion (Erevelles 2002). Davis, Watson and Cunningham-Burley (2000), for example, found that staff in a special school either misinterpreted, disbelieved or ignored entirely attempts at communication from the children, which in turn impaired the efforts to communicate of those same children. This scepticism on the part of school staff stemmed from the view that as a result of their impairments, the children were "not like us" (ibid, 209), that they were "other" (Milton 2012), potentially indistinguishable even from "feral" children, supposedly raised by wolves (Bettelheim 1959). Therefore, to experience difficulties in speech is to be unquestioningly considered "disabled, disordered or dysfunctional" (Lawson 2008, 74), perceived as intellectually deficient, devoid of reason, civility and plausibility, both in the manner of communication and the message conveyed.

Indeed, alternative forms of communication are mired, within the autism research field, in debates about validity, such as in relation to facilitated communication (FC), a method whereby physical support is provided by a 'facilitator', so that a person with limited speech and motor skills might type or point to letters on a grid. Although FC has consistently failed tests of validity on the question of authorship when subjected to scientific, quantitative assessments (Schlosser et al. 2014), some have argued for a more nuanced approach to this communication support (Bogdashina 2010). Erevelles (2002), for example, has posited that the debates about

FC pivot on notions of competency and the role ascribed to the autistic, "deviant" subject under scrutiny. According to Erevelles (2002, 26), autistic people, having been assigned "to the space of Unreason (disability)", must now somehow demonstrate their understanding through assessments predicated on notions of order and reason, qualities they are considered to inherently lack. In these ways, autistic adults and children are caught within a double-bind (Bateson et al. 1956), whereby a demand contradicts the requested response, and so they cannot possibly win.

Furthermore, considerable research has been dedicated to exploring the posited communication impairments of autistic people (Rapin and Dunn 2003), and even though my own study confirms that there is some justification for these endeavours, it also implies a need to question the premises on which some of this research is based. Muskett (2016) for example, has argued for a re-appraisal of the assessment and diagnosis of autistic communicative dysfunction, querying the "taken for granted" nature of these descriptions by "professional communities" (301). Indeed, according to Muskett (2016, 303), the ways in which communication impairment in autistic children and adults is ascertained must take into account "the specific social, interactional and relational circumstances in which they might be observed", arguing that professional practices should be "oriented towards interactional participation rather than remediation of individual deficit" (314). This suggests the need for an emphasis on the shared, interactional nature of communication, which a therapeutic model, whereby one person is delivering input to an impaired other, necessarily prevents (Wood and Milton 2018). Indeed, some offer instead a "transactional approach" (Prizant et al. 2003) or emphasise the intersubjective nature of communication (Acheson 2008), rather than the "within-child" appraisal of interactive dysfunction (Runswick-Cole and Hodge 2009).

In addition, my study also suggests that the issue of the communication of autistic children, in its various manifestations, inevitably intersects with the question of noise. This is especially given my subjective appraisal of high noise levels in the schools - all in a densely populated, urban setting - where my data collection took place. Indeed, Shield and Dockrell (2004) found that the background noise in classrooms exceeded levels recommended in current standards, while Klatte, Bergström and Lachmann (2013) assert that children with language or attention disorders are especially disadvantaged by sustained noise in schools. Further, excessive noise has been shown to have a negative impact on the long-term recall, language development and reading ability of pupils with special educational needs and disabilities (SEND) in particular (Shield and Dockrell 2004; Woolner and Hall 2010; Klatte, Bergström and Lachmann 2013). Dockrell and Shield (2006, 520) also found that schoolchildren with SEND performed significantly worse on most measures in different noise conditions, especially "babble" - i.e. children talking - which had a "particularly detrimental effect" on them. Therefore, while Bobby's mother, for example, had feared that her young son's "babble" might set him apart as "odd", the research by Dockrell and Shield (2006) suggests that it is the "babble" of other children – not presented pejoratively in this study – which might be detrimental to her own son's learning and progress.

Furthermore, autistic children – arguably more so than many other pupils with SEND - can be particularly susceptible to excessive noise in schools (Jones et al. 2008; Menzinger and Jackson 2009; Sainsbury 2009) and are potentially overwhelmed by these sorts of sensory impacts (Batten et al. 2006). Norwich and Kelly (2004), for example, found that the autistic pupils needed sometimes to withdraw from class as a means to avoid the din, while Bogdashina (2016, 164) describes "central auditory processing disorder" (CAPD) in autistic people, which occurs "when the ear works properly but the parts of the brain that interpret and analyse the auditory information do not". This can result not only in difficulties processing auditory information, but in circumstances where understanding is especially negatively impacted by background noise. Consequently, although noise is a multi-layered phenomenon as far as autistic children

are concerned (Sainsbury 2009; Bogdashina 2016), and not always a question of volume levels alone, it can nevertheless be an exclusionary factor for them in schools.

However, although autistic children might be especially negatively impacted by noise in school, creating additional difficulties in their attempts to communicate, their own 'noise', in its various manifestations, can be disdained. Agosta et al. (2004, 276), for example, describe how the "excessively loud screaming, yelling, humming, and other distracting noises" exhibited by an autistic boy were considered highly problematic, as they not only prevented him from learning, but "distracted and disturbed other students and staff" (279). Similarly, Harvey (2011, 89), while asserting that excessive noise levels could be uncomfortable for pupils with SEND, also found that the "silly noises" of such pupils were a targeted behavioural difficulty in mainstream schools, as was "screaming". Consequently, just as the sounds, words and gestures of the autistic children would be ignored if they did not correspond with the adults' intentions, their other noises might be disparaged too, and considered yet further evidence of deviance and dysfunction. This suggests that there is a qualitative difference subjectively ascribed to different types of noise in school, where screaming in the playground, classroom babble and talking in the library are tolerated, for example, but the noises emanating from subjects considered disordered and deviant – autistic children – are either ignored or rejected.

In addition, although occasional classroom quiet was highly valued by the school staff in my study, the silence of the autistic children was not evidently recognised or rated as indicative of well-being, concentration and communicative intent. Indeed, the focus and silence of the autistic children were sometimes disrupted by the attempts to apply communication interventions by school staff, be they in the form of supplementary questions or repetitive labelling. However, Davis, Watson and Cunningham-Burley (2000, 210), noted that when the children in a special school were either quiet or unresponsive, they were simply choosing when to communicate, and assert that they must be permitted to be "the final gatekeepers to their

worlds". Glenn (2004, xiii) also draws out the association between silence and authority, since it concerns "who remains silent and who silences", thus underscoring the ways in which these issues are inevitably intertwined with questions of individual agency and power (Devlin and Pothier 2006; Allan 2008).

For Lewis (2010, 20), in the context of "child voice", "listening better includes hearing silence" and recognising that "silence is not neutral or empty". Similarly, Acheson (2008, 536), in an account informed by the work of Merleau-Ponty, challenges the notion of silence as "a lack", "the void in which speech occurs, the background or field that frames speech". Acheson (2008, 552) argues that in setting aside the binary of speech and silence, we can learn to value the "communicative fullness" of silences, which must also be interpreted within the cultural, historical and intersubjective situations in which they are produced. Indeed, Humphry (2013), through an exploration of the Foucauldian notion of the "pause", considers how silence can create the opportunity for "a different truth" (493) to be expressed about young people considered to be educationally dysfunctional. Therefore, even though selective mutism, for example, is a complex phenomenon in relation to autism (McKenna et al. 2017), my study suggests that the silences of autistic children should also be recognised and valued with the panoply of communicative techniques they might deploy, and not necessarily pathologised. This is a point which, in the drive to apply communication interventions in schools, might be overlooked entirely.

Conclusion

In my study, the issues of communication, noise and silence were all shown to intersect in relation to the autistic children, creating potential impediments to their well-being, participation and inclusion in school. The communication of the autistic children, considered at times to be "deviant or bizarre" (Emam and Farrell, 2009, 407), can lead to a strong emphasis on interactive

inputs in schools (Law et al. 2012), putatively provided to facilitate their independence. However, despite some examples of skilled and sensitive support from school staff, these very approaches appeared instead to be focused on coercing the children into compliance with the school's routines and norms. Indeed, I found that even though the autistic children demonstrated a range of communicative modes and skills, these would not be recognised or endorsed if they were contrary to the expectations or wishes of the supporting adult. In these ways, the children sometimes stood to gain little from expressing their true intentions, resulting in frustration on their part and a denial of their individual agency.

Furthermore, although the issue of noise in schools is highly complex (Shield and Dockrell 2004), especially in relation to autistic children (Bogdashina 2016), the application of rules for quiet and silence appear to be inconsistent, as some forms of hubbub are accepted, but others are not. According to Woolner and Hall (2010), for example, value judgements are being made about noise in schools by a small group of senior staff only, potentially resulting in "bad sorts of quiet" (3262) in the place of "good noise" (3263). Moreover, if the noises autistic children might produce can be rejected entirely, and considered indicative of oddity and strangeness, their silent engagement with activities is not necessarily recognised for the important messages it conveys. Indeed, whether speaking, screaming or being silent, autistic children can be perceived as making the wrong sort of noise.

My research suggests that although autistic children may experience difficulties with speech, there is nevertheless a need to re-evaluate the generally unquestioned association of autism with communication impairments and to set aside "the spectre of the normative ideal" (McGuire 2017, 414) which haunts diagnostic manuals such as the DSM-5 (CDC 2016). Indeed, Dockrell at al. (2012, 25), in their study of the needs of autistic children and those with language disorders, assert that "diagnostic labels may provide insufficient or misleading information for service planning or curriculum differentiation". Therefore, approaches to

communication programmes for autistic children in schools should place less weight on authoritarian intervention (Milton 2014; Muskett 2017), and emphasise instead more natural forms of engagement with the children. These should derive not only from the child's preferred modes of expression, but from what the child wants to communicate, a circumstance which could also create more opportunities for spontaneous interactions with peers (Guldberg 2010; Wood 2018).

Moreover, while it is increasingly recognised that it can be fruitful to encourage the interests of autistic children (Jones et al. 2008; Wittemeyer et al. 2011; Gunn and Delafield-Butt 2016), research is needed to explore how this could be aligned with communication support in schools. Furthermore, given the plethora of technological communication devices currently available (McNaughton and Light 2013), and the fact that most of the autistic children in my cohort were technically adept and highly motivated when using computers, more emphasis should be placed on these sorts of communicative supports in schools (Murray and Lawson 2007). These initiatives might be facilitated if teaching assistants, in particular, were better deployed (Sharples, Webster and Blatchford 2015) and less pressured to carry out additional duties (Allan 2008), thus potentially creating space for others to learn from within-school examples of good practice.

In addition, even though it is understood that noise in school can have a particularly detrimental impact on children who have difficulties in learning language (Dockrell and Shield 2006; Woolner and Hall 2010; Klatte, Bergström and Lachmann 2013), more research is required to evaluate how this affects autistic children in particular (Menzinger and Jackson 2009). Furthermore, decisions about noise impacts in schools should involve the whole school community (Woolner and Hall 2010), rather than these judgements being located solely within the senior management team. Such an approach places all members of the school on an equal footing, whereby they are "citizens" (Devlin and Pothier 2006), with understandings about

educational inclusion founded on notions of community and participation (Thomas 2012), rather than the identification of some children as "special". Indeed, it is only by "supporting hitherto silenced or marginalised voices" (Slee and Allan 2001, 176), and recognising and valuing the full panoply of the silent, gestural and vocal communication of autistic children, that their well-being, agency and inclusion in school can be ameliorated.

(7971 words – including title and key words)

References

Acheson, K. 2008. "Silence as Gesture: Rethinking the Nature of Communicative Silences." *Communication Theory* 18(4): 535–555.

Agosta, E., Graetz, J., Mastropieri, M. and T. Scruggs. 2004. "Teacher–Researcher Partnerships to Improve Social Behavior Through Social Stories." *Intervention in School and Clinic* 39 (5): 276-287.

Allan, J. 2008. *Rethinking Inclusive Education: The Philosophers of Difference in Practice.* The Netherlands: Springer.

Baron-Cohen, S., Scahill, V., Izaguirre, J. and H. Hornsey. 1999. "The Prevalence of Gilles de la Tourette Syndrome in Children and Adolescents with Autism: A Large Scale Study." *Psychological Medicine* 29(5): 1151-1159

Baron-Cohen, S., Scott, F.J., Allison, C., Williams, J., Bolton, P., Matthews, F.E. and C. Brayne. 2009. "Prevalence of Autism-Spectrum Conditions: UK School-Based Population Study." *British Journal of Psychiatry* 194 (6): 500–509.

Bartak, L., Rutter, M. and A. Cox. 1975. "A Comparative Study of Infantile Autism and Specific Developmental Receptive Language Disorder: 1. The Children." *The British Journal of Psychiatry* 126(2): 127-145.

Bateson, G., Jackson, D.D., Haley, J and J. Weakland. 1956. "Toward a Theory of Schizophrenia." *Behavioral Science* 1(4): 251-254.

Batten, A., Corbett, C., Rosenblatt, M., Withers, L. and R. Yuille. 2006. *Autism and Education: The Reality for Families Today*. London: NAS Publications.

Bergman, R. L., Gonzalez, R.L., Piacentini, J. and M.I. Keller. 2013. "Integrated Behavior Therapy for Selective Mutism: A Randomized Controlled Pilot Study." *Behaviour Research and Therapy* 51: 680-689.

Bettelheim, B. 1959. "Feral Children and Autistic Children." *American Journal of Sociology* 64(5): 455-467.

Bogdashina, O. 2010. Autism and the Edges of the Known World: Sensitivities, Language and Constructed Reality. London: Jessica Kingsley Publishers.

Bogdashina, O. 2016. Sensory Perceptual Issues in Autism and Asperger Syndrome: Different Sensory Experiences – Different Perceptual Worlds. London: Jessica Kingsley Publishers.

Braun, V. and V. Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2): 77-101.

Broderick, A.A. and A. Ne'eman. 2008. "Autism as Metaphor: Narrative and Counter-Narrative." *International Journal of Inclusive Education* 12(5-6): 459–476.

Centers for Disease, Control and Prevention. 2016. "Autistic Spectrum Disorder: Diagnostic Criteria." *Division of Birth Defects, National Center on Birth Defects and Developmental Disabilities*. April 18, 2016. (Accessed October 14, 2017). https://www.cdc.gov/ncbddd/autism/hcp-dsm.html

Children and Families Act. 2014. (Accessed August 16, 2014). http://www.legislation.gov.uk/ukpga/2014/6/contents/enacted

Christensen, D.L., Baio, J., Braun, K.V., Bilder, D., Charles, J., Constantino, J.N., and J. Daniels et al. 2016. "Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years." *Morbidity and Mortality Weekly Report* 65(3). US Department of Health and Human Services: Centers for Disease Control and Prevention. doi: http://dx.doi.org/10.15585/mmwr.ss6503a1

Davis, J., Watson, N. and S. Cunningham-Burley. 2000. 'Learning the Lives of Disabled Children: Developing a Reflexive Approach." In *Research with Children: Perspectives and Practices*, edited by P. Christensen and A. James, 1st edition, 203-220. Abingdon: Routledge.

Convention on the Rights of Persons with Disabilities. 2006. (United Nations, accessed July 15, 2014). http://www.un.org/disabilities/convention/conventionfull.shtml

Dean, M., Fox Adams, G. and C. Kasari. 2013. "How Narrative Difficulties Build Peer Rejection: A Discourse Analysis of a Girl with Autism and her Female Peers. *Discourse Studies* 15(2): 147–166.

Detheridge, T. 2000. "Research Involving Children with Severe Learning Difficulties." In *Researching Children's Perspectives*, edited by A. Lewis and G. Lindsay, 112-121. Buckingham: Open University Press.

Denscombe, M. 1998. *The Good Research Guide: For Small Scale Research Projects*, 1st ed. Buckingham: Open University Press.

Department for Children, Schools and Families. 2008. The Bercow Report: A Review of Services for Children and Young People (0 - 19) with Speech, Language and Communication Needs. DCSF-OO632-2008. Nottingham: DCSF Publications.

DfE (Department for Education). 2012. *Pupil Behaviour in Schools in England*. Education Standards Analysis and Research Division. Research Report DFE-RR218. London: Department for Education.

DfE (Department for Education). 2014. *Special Educational Needs Code of Practice: 0 to 25 Years.* (Accessed September 20, 2014).

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/342440/SEND Code_of_Practice_approved_by_Parliament_29.07.14.pdf

DfE (Department for Education). 2016. *Behaviour and Discipline in Schools: Advice for Headteachers and School Staff*, (DFE-00023-2014; accessed February 15, 2018) https://www.gov.uk/government/publications/behaviour-and-discipline-in-schools

Devlin, R. and D. Pothier. 2006. "Introduction: Toward a Critical Theory of Dis-Citizenship." In *Critical Disability Theory: Essays in Philosophy, Politics, Policy, and Law*, edited by D. Pothier and R. Devlin, 1-22. Vancouver: UBC Press.

Dockrell, J. and B. Shield. 2006. "Acoustical Barriers in Classrooms: The Impact of Noise on Performance in the Classroom." *British Educational Research Journal* 32(3): 529-505.

Dockrell, J., Ricketts, J., Palikara, O., Charman, T. and G. Lindsay. 2012. *Profiles of Need and Provision for Children with Language Impairments and Autism Spectrum Disorders in Mainstream Schools: A Prospective Study*. Research Report DFE-RR247-BCRP9. London: Department for Education.

Emam, M. and P. Farrell. 2009. "Tensions Experienced by Teachers and their Views of Support for Pupils with Autism Spectrum Disorders in Mainstream Schools." *European Journal of Special Educational Needs* 24(4): 407-422.

Erevelles, N. 2002. "Voices of Silence: Foucault, Disability and the Question of Self-Determination." *Studies in Philosophy and Education* 21(1):17–35.

Glenn, C. 2004. Unspoken: A Rhetoric of Silence. Carbondale: Southern Illinois University Press.

Guldberg, K. 2010. "Educating Children on the Autism Spectrum: Preconditions for Inclusion and Notions of 'Best Autism Practice' in the Early Years." *British Journal of Special Education* 37(4): 168–174.

Gunn, K. and J. Delafield-Butt. 2016. "Teaching Children with Autism Spectrum Disorder with Restricted Interests: A Review of Evidence for Best Practice." *Review of Educational Research* 86(2): 408-430.

Harvey, J.A. 2011. "What's so Special about Special? Improving Inclusion for Children with Autism in Mainstream Schools." Doctor of Applied Child and Educational Psychology thesis, University of Birmingham. (Accessed November 12, 2013). http://etheses.bham.ac.uk/3287/1/Harvey 12 Applied Vol1.pdf

HoC (House of Commons). 2011. "Leading and Managing Good Behaviour, Challenging Poor Practice." *Behaviour and Discipline in Schools*. (Education Committee; accessed 5 February 2018).

https://publications.parliament.uk/pa/cm201011/cmselect/cmeduc/516/51607.htm

Howlin, P., Mawhood, L. and M. Rutter. 2000. "Autism and Developmental Receptive Language Disorder - a Follow-up Comparison in Early Adult Life. II: Social, Behavioural, and Psychiatric Outcomes." *Journal for Child Psychology and Psychiatry* 41(5): 561–578.

Humphrey, N. 2008. "Including Pupils with Autistic Spectrum Disorders in Mainstream Schools." *Support for Learning* 23(1): 41-47 doi: 10.1111/j.1467-9604.2007.00367.x.

Humphry, N. 2014. "Disrupting Deficit: The Power of 'the Pause' in Resisting the Dominance of Deficit Knowledges in Education." *International Journal of Inclusive Education* 18(5): 484-499.

International Classification of Diseases (ICD)–10. 2016. "Childhood Autism." *World Health Organisation*. (Accessed October 12, 2017). http://apps.who.int/classifications/icd10/browse/2016/en#/F84.0

Jonas, E., Schultz-Hardt, S., Dieter, F. and N. Thelen. 2001. "Confirmation Bias in Sequential Information Search after Preliminary Decisions. An Expansion of Dissonance Theoretical Research on Selective Exposure to Information." *Journal of Personality and Social Psychology* 80(4): 557-571.

Jones, G., English, A., Guldberg, K., Jordan, R., Richardson, P. and M. Waltz. 2008. *Educational Provision for Children and Young People on the Autism Spectrum Living in England: A Review of Current Practice, Issues and Challenges*. London: Autism Education Trust.

Jordan, R., Jones, G. and D. Murray. 1998. *Educational Interventions for Children with Autism:* A Literature Review of Recent and Current Research. Department for Education and Employment, report number 77. Norwich: Her Majesty's Stationery Office.

Kim, Y.S., Leventhal, B., Koh, Y., Fombonne, E., Laska, E., Lim, E., and S.J. Kim et al. 2011. "Prevalence of Autism Spectrum Disorders in a Total Population Sample." *American Journal* of *Psychiatry* 168(9): 904–912. doi: 10.1176/appi.ajp.2011.10101532.

Klatte, M., Bergström, K. and T. Lachmann. 2013. "Does Noise Affect Learning? A Short Review on Noise Effects on Cognitive Performance in Children." *Frontiers in Psychology* 4, article 578: 1-6.

Law, J., Lee, W., Roulstone, S., Wren, Y., Zeng, B. and G. Lindsay. 2012. '*What Works: Interventions for Children and Young People with Speech, Language and Communication Needs.* Research Report DFE-RR247-BCRP10. London: Department for Education.

Lawson, W. 2008. *Concepts of Normality (The Autistic and Typical Spectrum)*. London: Jessica Kingsley Publishers.

Lee, A., Hobson, R.P. and S.J. Chiat. 1994. "I, You, Me, and Autism: An Experimental Study." *Journal of Developmental Disorders* 24(2): 155-176.

Lewis, A. and G. Lindsay, eds. 2000. *Researching Children's Perspectives*. Buckingham: Open University Press.

Lewis, A. 2010. "Silence in the Context of 'Child Voice'." Children & Society 24(1): 14 – 23.

Liasidou, A. 2012. *Inclusive Education, Politics and Policymaking*. London: Continuum International Publishing Group.

Loveland, K., McEvoy, R., Tunali, B. and M. Kelley. 1990. "Narrative Story Telling in Autism and Down's Syndrome." *British Journal of Developmental Psychology* 8(1): 9 – 23.

McGuire, A. 2017. "De-Regulating Disorder: On the Rise of the Spectrum as a Neoliberal Metric of Human Value." *Journal of Literary & Cultural Disability Studies* 11(4): 403-421.

McKenna, A., Stevenson K., Timmins S. and M. Bindman. 2017. "Developing an Autism Spectrum Disorder Assessment Pathway for Children Presenting with Selective Mutism." *Archives of Disease in Childhood 2017* 102 (Supplement 3): A1–A31.

McNaughton, D. and L. Light. 2013. "The iPad and Mobile Technology Revolution: Benefits and Challenges for Individuals who require Augmentative and Alternative Communication." *Augmentative and Alternative Communication* 29(2): 107-116.

Menzinger, B. and R. Jackson. 2009. "The Effect of Light Intensity and Noise on the Classroom Behaviour of Pupils with Asperger Syndrome." *Support for Learning* 24(4): 170-175.

Miles, M. and A. Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed. London: Sage Publications Ltd.

Milton, D. 2012. "The Ontological Status of Autism: The 'Double Empathy Problem'." *Disability & Society* 27(6): 883-887.

Milton, D. 2014. "So What Exactly are Autism Interventions Intervening With?" *Good Autism Practice* 15(2): 6-14.

Milton, D. and T. Sims. 2016. "How is a Sense of Well-Being and Belonging Constructed in the Accounts of Autistic Adults?" *Disability & Society* 31(4): 520-534.

Molloy, H. and L. Vasil. 2002. "The Social Construction of Asperger Syndrome: The Pathologising of Difference?" *Disability and Society* 17(6): 659-669.

Murray, D. and W. Lawson. 2007. "Inclusion Through Technology for Autistic Children." In *Included or Excluded? The Challenge of the Mainstream for Some SEN Children*, edited by R. Cigman, 151-157. Abingdon: Routledge.

Muskett, T. 2016. "Examining Language and Communication in Autism Spectrum Disorder – In Context." In *Re-Thinking Autism: Diagnosis, Identity and Equality*, edited by K. Runswick-Cole, R. Mallett and S. Timimi, 300-316. London: Jessica Kingsley Publishers.

Norbury, C.F. and D.V.M. Bishop. 2003. "Narrative Skills of Children with Communication Impairments." *International Journal of Language and Communication Disorders* 38(3): 287-313.

Norwich, B. and N. Kelly. 2004. "Pupils' Views on Inclusion: Moderate Learning Difficulties and Bullying in Mainstream and Special Schools." *British Educational Research Journal* 30(1): 43–65.

Oppenheim, A. 1992. *Questionnaire Design, Interviewing and Attitude Measurement*. London: Pinter.

Parsons, S., Guldberg, K., Macleod, A., Jones, G., Prunty, A. and T. Balfe. 2011. "International Review of the Evidence on Best Practice in Educational Provision for Children on the Autism Spectrum." *European Journal of Special Educational Needs* 26(1): 47-63.

Patten, E., Ausderau, K.K., Watson, L.R. and G.T. Baranek. 2013. "Sensory Response Patterns in Nonverbal Children with ASD." *Autism Research and Treatment*, vol. 2013, Article ID 436286. doi:10.1155/2013/436286

Plevin, Rob. 2016. *Take Control of the Noisy Class: From Chaos to Calm in 15 Seconds*. Carmarthen: Crown House Publishing.

Pothier, D. and R. Devlin, eds. 2006. *Critical Disability Theory: Essays in Philosophy, Politics, Policy, and Law.* Vancouver: UBC Press.

Prizant, B., Wetherby, A., Rubin, E. and A. Laurent. 2003. "The SCERTS Model: A Transactional, Family-Centred Approach to Enhancing Communication and Socioemotional

Abilities of Children with Autism Spectrum Disorder." *Infants and Young Children* 16(4): 296-316.

Rapin, I. and M. Dunn. 2003. "Update on the Language Disorders of Individuals on the Autism Spectrum." *Brain and Development* 25(3): 166-172.

Roulstone, S., Wren, Y., Bakopoulou, I., Goodlad, S. and G. Lindsay. 2012. *Exploring Interventions for Children and Young People with Speech, Language and Communication Needs: A Study of Practice.* Research Report DFE-RR247-BCRP13. London: Department for Education.

Runswick-Cole, K. and N. Hodge. 2009. "Needs or Rights? A Challenge to the Discourse of Special Education." *British Journal of Special Education* 36(4): 198–203.

Sainsbury, Clare. 2009. Martian in the Playground: Understanding the Schoolchild with Asperger's Syndrome. London: Sage Publications.

Schlosser, R., Balandin, S., Hemsley, B., Iacono, T., Probst, P. and S. von Tetzchner. 2014. "Facilitated Communication and Authorship: A Systematic Review." *Augmentative and Alternative Communication* 30(4): 359-358.

Sharples, J., Webster, R. and P. Blatchford. 2015. *Making Best Use of Teaching Assistants: Guidance Report*. London: Education Endowment Foundation.

Saldaña, J. 2016. *The Coding Manual for Qualitative Researchers*, 3rd ed. London: Sage Publications Ltd.

Shield, B. and J. Dockrell. 2004. "External and Internal Noise Surveys of London Primary Schools." *The Journal of the Acoustical Society of America* 115(2): 730-738.

Slee, R. and J. Allan. 2001. "Excluding the Included: A Reconsideration of Inclusive Education." *International Studies in Sociology of Education* 11(2): 173–192.

Strauss, A. and J. Corbin. 1998. *Basics of Qualitative Research Techniques and Procedures for Developing Grounded Theory*, 2nd ed. London: Sage Publications Ltd.

Tager-Flusberg, H., Rhea, P. and C. Lord. 2005. "Language and Communication in Autism." In *Handbook of Autism and Pervasive Developmental Disorders*, edited by F. Volkmar, P. Rhea, I. Klin and D. Cohen. Volume 1, 3rd ed., 335–364. New Jersey: John Wiley & Sons, Inc.

Thibault, R. 2014. "Can Autistics Redefine Autism? The Cultural Politics of Autistic Activism." *Trans-Scripts 4*. (Accessed October 13, 2015).

https://www.academia.edu/7234120/Can_Autistics_Redefine_Autism_The_Cultural_Politics_of_Autistic_Activism

Thomas, G. 2012. "A Review of Thinking and Research about Inclusive Education Policy, with Suggestions for a New Kind of Inclusive Thinking." *British Educational Research Journal* 39(3): 473-490.

Thomas, G. 2013. *How to do your Research Project: A Guide for Students in Education and Applied Social Sciences*, 2nd ed. London: Sage Publications Limited.

Wing, L. and J. Gould. 1979. "Severe Impairments of Social-Interaction and Associated Abnormalities in Children: Epidemiology and Classification." *Journal of Developmental Disorders* 9(1): 11–29.

Wittemeyer, K., Charman, T., Cusack, J., Guldberg, K., Hastings, R., Howlin, P., Macnab, N., Parsons, S., Pellicano, L. and V. Slomins. 2011. *Educational Provision and Outcomes for People on the Autism Spectrum*. London: Autism Education Trust.

Wood, R. 2018. "How to Help Autistic Children Socialise in School." *The Conversation*, March 30, 2018.

Wood, R. and D. Milton. 2018. "Reflections on the Value of Autistic Participation in a Tri-National Teacher Training Project Through Discourses of Acceptance, Othering and Power." *British Journal of Special Education*. https://onlinelibrary.wiley.com/doi/full/10.1111/1467-8578.12216

Woolner, P. and E. Hall. 2010. "Noise in Schools: A Holistic Approach to the Issue." *International Journal of Environmental Research and Public Health* 7: 3255-3269.