



UNIVERSITY OF LEEDS

This is a repository copy of *The mainstream school experiences of adolescent autistic girls*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/170125/>

Version: Accepted Version

Article:

Tomlinson, C, Bond, C and Hebron, J orcid.org/0000-0001-6688-3940 (2022) The mainstream school experiences of adolescent autistic girls. *European Journal of Special Needs Education*, 37 (2). pp. 323-339. ISSN 0885-6257

<https://doi.org/10.1080/08856257.2021.1878657>

© 2021 Informa UK Limited, trading as Taylor & Francis Group. This is an author produced version of an article, published in *European Journal of Special Needs Education*. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Title

The mainstream school experiences of adolescent autistic girls

Authors

Carla Tomlinson (corresponding author), Caroline Bond and Judith Hebron

Salford Educational Psychology Service, Salford, UK. School of Education, University of
Manchester, Manchester, UK. School of Education, University of Leeds, Leeds, LS2 9JT,
UK

The mainstream school experiences of adolescent autistic girls

Abstract

Research into the school experiences of autistic adolescents tends to utilise predominantly male samples, effectively neglecting the views of autistic girls. This study explores the perspectives of three autistic girls attending a mainstream secondary school recognised for its good autism practice. Semi-structured interviews were conducted with the girls, their mothers and a therapeutic member of staff at the school. Findings highlight the unique experiences of secondary school and common challenges including anxiety resulting from sensory issues and inconsistencies in staff understanding of individual need. Implications for practice include ensuring effective sharing of information about individual needs and specialised support for developing social skills, to enable autistic girls to navigate the complexity of female friendships during adolescence.

Key words: autism, autistic, girls, school experiences, secondary education

Introduction

Autism has historically been considered a predominantly male condition but in recent years, awareness of autism in girls has increased (Mandy and Li 2017). Autistic girls may be less easily identified as they tend to internalise or mask their difficulties and have more surface level social skills (Hebron and Bond 2019). Earlier estimates put differential rates of male to female diagnosis at 4:1 (Mandy, Chilvers, Chowdhury, et al. 2012), but more recent figures suggest the ratio is closer to 2:1 (Kirkovski, Enticott, and Fitzgerald 2013). Although there is growing awareness of the need to recognise and support girls in education (NASEN 2016), there has been less research focusing on the educational experiences of autistic girls and their perceptions of factors which facilitate a positive school experience. To address these gaps, this paper focuses on the educational experiences of three autistic girls at a mainstream secondary school in the North West of England. Case studies involved interviews with each girl, a parent/carer and a key member of staff. The school where the research took place was selected for its good autism practice and an enhanced understanding of the specific needs of autistic girls.

Autism in girls

In 1944 Hans Asperger suggested that the behaviours of females he studied were ‘reminiscent of autism’ without presenting the ‘fully formed’ autism he had observed in boys (Frith 1991). Though the core difficulties underlying autism are largely gender non-specific (DSM-5, American Psychiatric Association 2013), differences in the behavioural presentation of autistic traits between boys and girls have been highlighted as a significant factor in the ‘mis-diagnosis or missed diagnosis’ of girls (Gould and Ashton-Smith 2011). Despite social communication difficulties, it is argued that autistic females generally tend towards greater sociability and friendship than autistic males (Sedgewick, Hill, Yates, et al. 2016). Girls’ strategies for approaching social relationships include rote-learning of conversational phrases

and the imitation of social behaviours, thereby ‘camouflaging’ their social difficulties (Gould and Ashton-Smith 2011).

A number of possible factors are thought to contribute to the under- or misdiagnosis of autism in girls. Many autism diagnostic tools were developed with predominantly male samples, which may mean that they are less sensitive to how autism presents in girls. For example, Ratto et al. (2018) found girls were underdiagnosed using standard diagnostic instruments; however not all studies have identified this pattern (Kaat et al. 2020). As the female autism phenotype may be less familiar, teachers may also be less likely to recognise a girl’s difficulties as being consistent with autism or sufficiently severe to warrant referral (Hillier, Young, and Weber 2014). As autistic girls are more likely to internalise or mask their difficulties, it is not uncommon for their difficulties to be misdiagnosed as a mental health difficulty such as anxiety or an eating disorder rather than autism (Bargiela, Steward, and Mandy 2016), thereby delaying diagnosis and autism specific intervention.

School experiences of autistic girls

Autistic females interviewed about their school experiences (Honeybourne 2015) reported feeling isolated, lonely and misunderstood. Goodall and Mackenzie (2019) also reported these feelings and highlighted the anxiety they engender. Other challenges identified for girls at high school include the negative impact of a late diagnosis and the complexity of coping in a mainstream high school environment (Cridland et al. 2014). More recently, Sproston, Sedgewick and Crane (2017) explored eight autistic girls’ and their parents’ perceptions of mainstream secondary schooling following exclusion, highlighting sensory issues, difficulties with relationships and a lack of understanding of need, often resulting in tensions between staff and parents. The long-term negative impact of unmet needs in educational settings can be devastating, resulting in higher levels of mental health disorders, and feelings of social exclusion and isolation well into adulthood (e.g. Baldwin and Costley 2016). To support girls effectively, staff need to be trained to identify and address the specific needs of autistic girls,

particularly their ‘subtler’ presentation of symptoms (Gould & Ashton-Smith 2011). This can be supported through a shared understanding of need between staff and parents (Authors 2019).

Researching the experiences of autistic children and young people

The engagement of autistic children and young people as active participants in research is neglected in comparison to that of their non-autistic peers (Ellis 2013). Although focus groups and interviews can be used to capture the voice of children and young people, they may not be as effective for autistic children due to social interaction and communication difficulties (Fayette and Author, 2018). This has led researchers to seek the views of important others such as parents and teachers (Mandleco 2013). Promising research techniques to facilitate the engagement and participation of autistic individuals are developing and include diary accounts (e.g. Humphrey and Lewis 2008) and participant-driven photo elicitation.

Rationale for the present research

Although qualitative research exploring autistic children and young people’s experiences of education exists (e.g. Humphrey and Lewis 2008), samples have largely consisted of male participants. The intention of this study was to facilitate the participation of the girls as much as possible by offering a choice of data collection methods, thus attempting to reduce the traditional power imbalance between the researcher and participant (Nelson and Wright 1995).

Such research is essential in highlighting autistic girls’ priorities and effective educational interventions to improve their life outcomes (Fletcher-Watson et al. 2019). Although recent research exploring the voice of autistic girls who have attended mainstream secondary settings exists (Goodall and Mackenzie 2019), the current exploratory study specifically focuses on three autistic girls attending one setting identified for its good autism practice.

Focusing on the girls' experiences rather than the school itself enabled the diversity of the girls' needs and their experiences of a range of individualised adaptations to be the focus and explored in more depth. The study sought to address the following research question:

How do autistic adolescent girls experience a mainstream secondary school?

Method

Design

The study utilised a multiple-case design with embedded units of analysis (Yin 2014) where the 'cases' were three female pupils with an independent clinical diagnosis of autism and the context was a school recognised for good autism practice. Although the girls' experiences were based within a single context, the emphasis of the research was on the distinct and individualised experiences of each girl and how they experienced the support provided within that context. Semi-structured interviews were conducted with each girl to capture rich detail on their individual experiences of attending a mainstream secondary school. Interviews with parents and the school psychotherapist provided a broader understanding of the girls' experiences within the school context.

Participants

The autistic female participants were pupils at a suburban, co-educational, mainstream secondary school in England. To preserve anonymity, the pseudonyms Elizabeth, Bella and Katherine were ascribed to participants. They were recruited via the school Special Educational Needs Co-ordinator (SENCo). The selected school is much larger than the average secondary school (c.1300 pupils) and is a designated centre for students with physical disabilities. At the time of the research the school had been recognised by Ofsted (Office for Standards for Education in England) for its inclusive ethos. The school practised an integrative approach (Ravet 2011) to supporting autistic pupils, combining systemic

practices such as staff training and raising awareness of autism amongst pupils alongside individualised interventions. The school's flexible provision recognised the heterogeneity of autistic pupils, offering access to quiet spaces, timetabling accommodations and lunchtime clubs in addition to individualised interventions such as social skills groups and psychotherapy.

Procedure

The research received ethical approval from the host institution and formal consent from participants. The first author met with the girls as a group to build rapport and discuss potential data collection methods to capture their school experiences, including photo elicitation, diary accounts, and art-based methods such as drawings. Following a week-long data collection period using their preferred method, each girl was interviewed twice at school. The initial interview consisted of a general discussion of their school experiences using their chosen data recording method to facilitate the interaction. A follow-up semi-structured interview enabled the lead researcher to check whether there was anything the girls had forgotten to mention using a series of broad prompts, covering aspects of school experiences identified in the autism literature including learning, relationships, school environment and transition (full interview schedule available on request). Data were collected between April and July 2018.

Following the pupil interviews, the first author interviewed the mother of each girl (mothers self-selected as the representative parent) and the school psychotherapist who had supported all three pupils therapeutically. Interviews with staff and parents aimed to provide contextual information regarding; general academic progress of the girls, their path to diagnosis, as well as enabling the adult participants own perceptions of the girls' experiences to be integrated with the reported experiences of the girls themselves.

Data analysis

Interviews ranging in length from 19 minutes (Elizabeth) to 1 hour 23 minutes (psychotherapist) were audio-recorded and transcribed verbatim. Data were analysed using Braun and Clarke's (2006) six-step model for thematic analysis. A hybrid approach was employed, whereby inductive themes emerging from the data were combined with themes informed by the first author's knowledge of the autism literature (Fereday and Muir-Cochrane 2006). Initial themes were checked back with each student during the analysis to ensure they accurately reflected what the girls intended to convey, and relevant changes were made to the analyses to reflect any misconceptions on the part of the researchers. Parent and staff interviews were analysed and partially coded focusing on salient information relevant to the girls' school experiences (McLellan, MacQueen, and Neidig 2003).

Findings

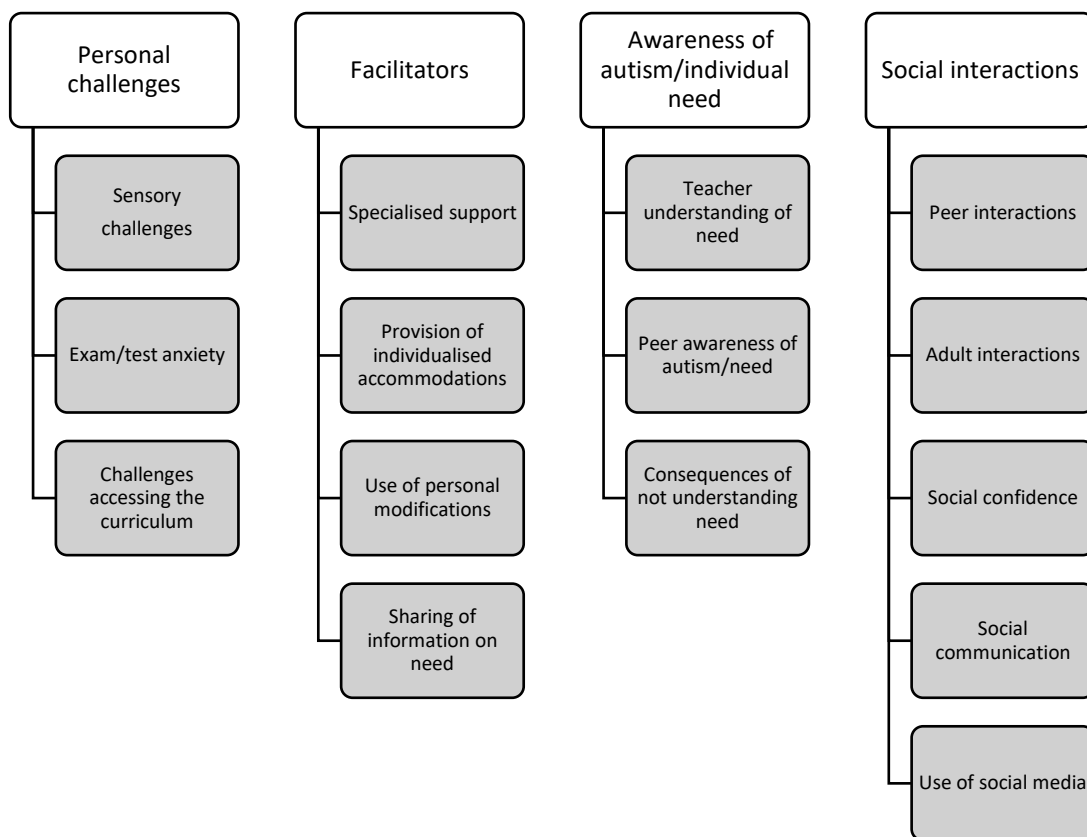
The findings are presented on a case-by-case basis followed by a cross-case analysis.

'Elizabeth'

Elizabeth was in Year 10 (aged 14) at the time of interview and had received her autism diagnosis in Year 9 after a self-disclosed period of struggling to cope in school and presentation of negative self-coping strategies including self-harm, restricted patterns of eating and suicidal ideation.

Elizabeth chose to make written notes of her experiences of school. Although there was inevitable overlap between themes (see Fig. 2 for full thematic map), analysis of her interviews identified four broad themes: personal challenges, facilitators, autism awareness/understanding of need, and social interactions.

Fig. 2. Thematic map of Elizabeth's reported school experiences



Personal challenges

Elizabeth identified challenges within the mainstream school context which led to feelings of stress and anxiety. Sensory issues were noted, such as noise and overcrowding in the corridors or canteen, and struggles with the mainstream classroom environment, particularly when regular teachers were not present; ‘just too noisy... too many people’. Elizabeth reported a preference for fact-based subjects, finding compulsory subjects and accessing schoolwork challenging. Tests and exams also appeared to create stress, specifically issues with remembering all the necessary information and the pressure of teaching staff insisting on a uniform approach to exam preparation.

Facilitators

Elizabeth's perceived facilitators comprised support from staff, such as homework clubs and a specialised social skills group, alongside the provision of personalised accommodations to help reduce anxiety. Accommodations shared by Elizabeth included a pass to leave lessons, flexibility in exam arrangements, and the provision of a designated space for support with learning. Elizabeth shared that she had become better at making her own adaptations to manage her anxieties; 'so I normally take an extra five minutes to just go somewhere like the toilets'. Elizabeth felt her pupil passport (information provided to teachers documenting need) helped, as 'teachers who read it understand it'.

Awareness of autism/individual need

Elizabeth was clear in her observations that there were several adults who did not have a sufficiently detailed understanding of her needs resulting in unrealistic and/or inappropriate expectations; 'a trainee teacher in the past ... tried to get me to talk to someone ... I said I couldn't, and she said, 'that's a bit rude of you''. Elizabeth also highlighted a possible inconsistency of accommodations as not all staff appeared to be familiar with her pupil passport; 'I've only known two teachers that have read it'. Of further importance was conflict with peers who she felt did not understand her; 'I don't think a lot of my friends get what autism is... I've had arguments in the past about how they think I use autism as an excuse'.

Social interactions

Relationships with staff and peers seemed to be a challenge for Elizabeth, perhaps underpinned by social communication difficulties and a general lack of social confidence; 'I've been struggling with homework and I've not been able to tell them that'. Social communication difficulties were exacerbated on social media leading Elizabeth to choose not to communicate with peers using this medium; 'You don't have a lot of social cues.... it's hard for me to tell if somebody's being sarcastic'. Helpful interventions identified by

Elizabeth included support from staff with managing conflict and a specialised speech and language therapy group intervention focusing on support with peer relationships.

Staff and parent perspectives

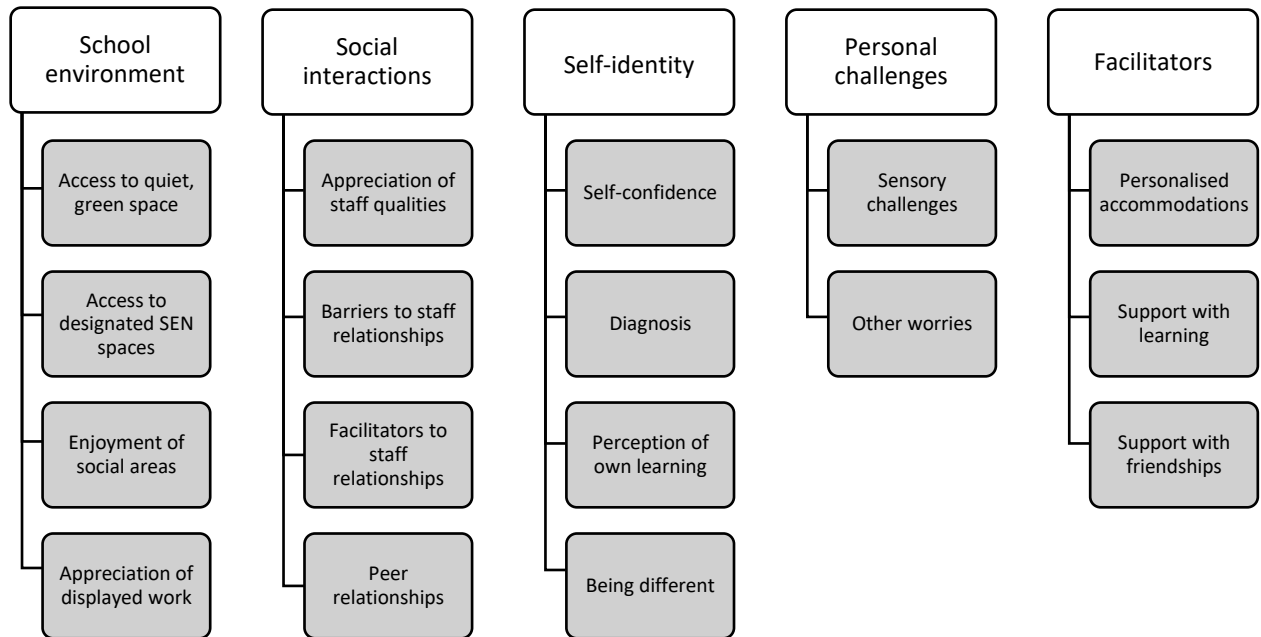
Staff and parent interviews revealed overlap with themes arising from Elizabeth's interview including difficulties with social interactions and sensory issues. Of interest was the perception that diagnosis had led to significant changes in Elizabeth, notably in her increased self-awareness and reduction in masking tendencies; 'so she was definitely masking ... I've noticed there is a difference between the before diagnosis and after diagnosis ... she now presents more ... with ... autistic traits (psychotherapist)'. Both adults shared that Elizabeth had experienced significant mental health issues including anxiety, low mood, restrictive eating, self-harming behaviours and suicidal ideation. These behaviours had slowly declined post-diagnosis and Elizabeth's mother felt access to professional support including the school psychotherapist and open family discussions regarding her diagnosis had facilitated this.

'Bella'

Bella was in Year 10 (aged 15) at the time of interview. She received her autism diagnosis in Year 6 having experienced difficulties in mainstream primary school since Year 2, including moving primary schools and a period of school refusal. Bella attended a specialist provision on transition to secondary school before transferring to her current school at the beginning of Year 8.

Bella brought a selection of photographs she had taken around the school environment to the interview to facilitate discussion of her school experiences. Analysis of her interviews revealed five main themes; the school environment, social interactions, self-identity, personal challenges and facilitators (see Fig. 3 for a full thematic map).

Fig. 3. Thematic map of Bella's reported school experiences



School environment

Bella's comments were largely positive. She identified the school environment as enhancing her educational experience, particularly the abundance of quiet, green spaces around school and their calming effect; 'whenever I feel anxious or anything, I can just sit out there and look at all the wildlife'. Bella shared that she appreciated designated spaces for SEN pupils social areas such as cafes, and artwork displayed on the walls around school; 'it makes me feel really calm ...it makes me really inspired ... wanting to find out more about it'.

Social interactions

Bella emphasised the positive qualities of staff and the benefits of relationships with trusted staff; 'whenever I feel anxious, they [staff] know how to help me'. Trust seemed to be facilitated through taking time to get to know Bella and understand her individual needs; 'I was really upset ... she spent all of break time with me ... that's why I began to trust her

because she gave up her time for me'. Of interest was Bella's perceived conflict with some teaching assistants, often in relation to receiving support when she did not feel she needed it; 'I just feel like they give too much support sometimes'. This appeared to be tied in with the additional attention this brought and not wanting to be perceived as different; 'I think it's just my anxiety ... I don't want to be seen as different'. Bella's experiences of peer relationships were mainly positive, including good relationships with classmates and support from close friends; 'I generally don't have much conflict [with friends]'. However, she did note some challenges, often related to her perceived differences to peers and the fact that they may not be aware of her autism diagnosis. Like Elizabeth, Bella also shared some reluctance about the use of social media as a means of interacting with friends, largely due to challenges with social communication.

Self-identity

Bella shared that she was confident she was progressing well in her studies and in her preparation for exams. Despite this, she described some difficulties, including answering questions in class; 'I think what the other students are going to think? I'm worried about getting things wrong in front of people'. Bella was reluctant to share her diagnosis with others; 'even though I've got autism I find it hard to accept it ... and I don't really like to tell people'. Bella seemed to perceive herself as less mature than her peers; 'A lot of my friends are different to me ... like more mature. I just feel like I'm not up to them yet ... so I'm mainly friends with younger students'.

Personal challenges

Bella shared some challenges with the school environment, namely sensory issues on the corridors, or in class particularly when unfamiliar staff were covering, and the noise levels were higher. Other worries she identified related to feeling vulnerable in relation to older or physically bigger peers and concerns over transitioning to college.

Facilitators

Bella acknowledged the importance of personalised accommodations to facilitate her educational experience; 'I've got a card which says I need help or I'm OK', 'They had extra transition days for those with special educational needs'. Other helpful factors included revision clubs and access to support staff during unstructured times as well as support managing friendship challenges, which may include sharing information on autism with peers to enhance understanding.

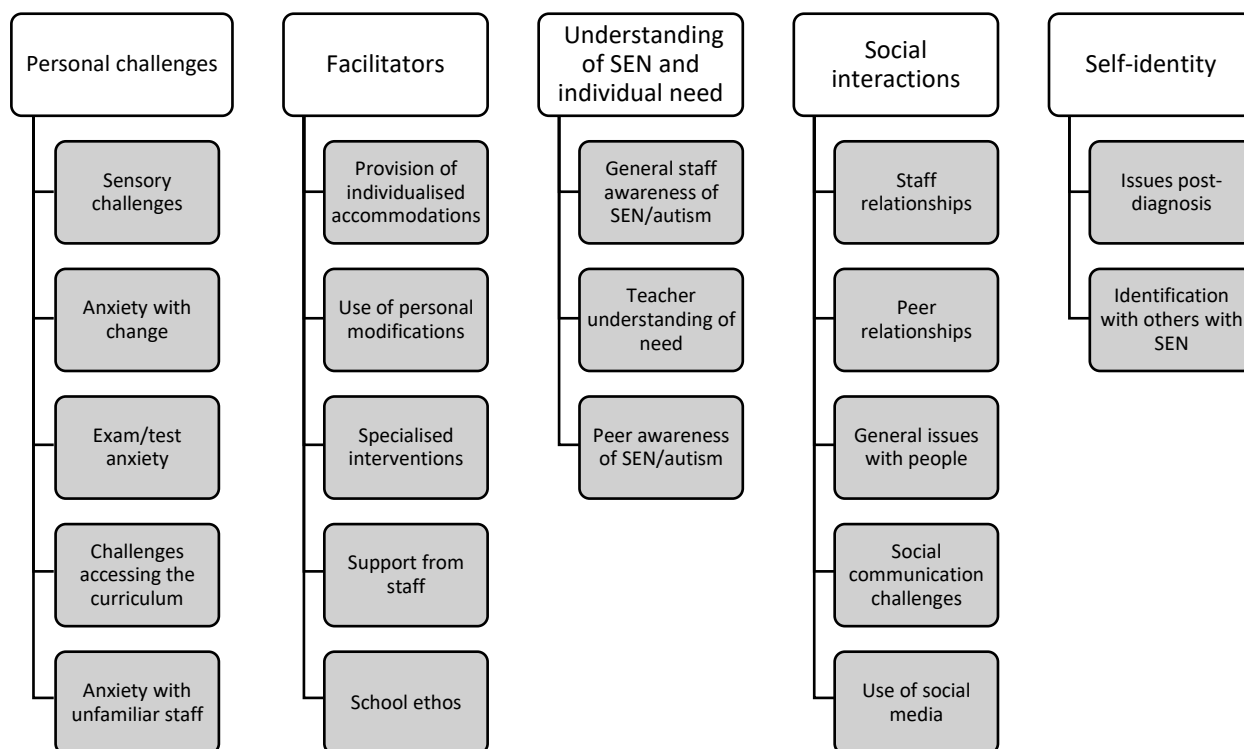
Staff and parent perspectives

There were several areas of overlap in Bella's reported experiences and the perspectives of staff and parents, including her ease in the environment and her general enjoyment of school; 'She loves it ... she'd stay weekends and nights if she could (parent)'. Other similarities were Bella's perceived differences to her peers and issues with her diagnosis. There were also differences in perspectives, principally relating to Bella's relationships with her peers where both her mother and the psychotherapist felt that she experienced more social conflict than she had shared.

'Katherine'

Katherine was in Year 11 (aged 16) at the time of interview, having received her autism diagnosis at the end of Year 10. Katherine brought detailed notes to the interviews and analysis revealed five main themes; personal challenges, facilitators, understanding of SEN and individual need, social interactions and self-identity (see Fig. 4 for a full thematic map).

Fig. 4. Thematic map of Katherine's reported school experiences



Personal challenges

Katherine’s descriptions of her experiences of school made numerous references to her experiences of anxiety. This encompassed the intense stress felt in response to exam pressures, dealing with change such as rooms and staffing, sensory anxieties (e.g. ‘the fire alarm is horrific ... usually I get so annoyed I’d bite my fingers’) and difficulties accessing the curriculum. Katherine reported finding unfamiliar staff covering a class difficult; ‘if there’s a supply teacher or trainee then ... that is always a time where I will leave’. She was able to share that this was linked to general anxiety around change and potential sensory challenges if pupils were noisier than usual, and if unfamiliar staff were less aware of her individual needs; ‘They’re just sort of there like, ‘why is that girl there rocking? What’s she doing?’.

Exams were experienced as an intense source of stress for Katherine, seemingly exacerbated by the pressure some teachers put on pupils to do well; ‘exams are evil...they [the teachers] just don’t shut up about them’. Furthermore, difficulties accessing the curriculum, specifically problems concentrating for long periods of time or switching focus from one lesson to another; ‘I need a bit of time to sort my head out before the next lesson....I can’t concentrate for long.....period five might as well not exist for me’, were shared as additional challenges. Sensory needs were identified as a constant battle for Katherine, especially her profound dislike of noise and her sensitivity to touch, causing anxiety during unstructured times; ‘the corridors are evil... there’s lots of people...it’s very noisy and they touch you and I don’t like it’. The combined impact of these challenges was often so intense it was overwhelming and had resulted in self-injurious behaviours; ‘if I’m very angry...I’ll do something dangerous ... I hit my head....I scratched myself’.

Facilitators

Katherine was able to identify protective factors facilitating her inclusion in the mainstream environment, including the inclusive school ethos, support from staff with problem-solving as well as the implementation of personalised accommodations tailored to her individual needs; ‘I’ve got my wristband which is green on one side, red on the other ... I can flip it and people know whether to talk to me or not’ and ‘I leave five minutes early for each lesson’.

Additional accommodations ranged from the provision of a safe space during unstructured times to flexibility around timetabled lessons, and a pass to leave class when she was feeling overwhelmed. Katherine also demonstrated a great insight into her own needs and shared personal modifications she made to reduce her anxiety, ranging from the pro-active use of ear defenders to self-removal from lessons when an unfamiliar member of staff was present. She was appreciative of access to more specialised support to manage anxiety including access to the school’s well-being animals; ‘we have tortoises which are great ... they’re very calming’, as well as weekly sessions with the school psychotherapist; ‘who basically sorts my life out

for me'. She also received structured speech and language therapy intervention to support with social skills.

Understanding of SEN and individual need

Katherine felt some mainstream teachers had absolved themselves of responsibility for pupils with SEN, expecting specialist support staff to meet their needs; 'people higher in the school think...well I don't need to do it now because we've got curriculum support staff ... leave it to that lot'. She expressed frustration at some teachers' lack of autism knowledge and misconception that her brain works the same as others. Like Elizabeth, Katherine felt there were inconsistencies in the accommodations provided by staff, related to lack of knowledge regarding individual needs; 'X is the only teacher who has noticed so far'. Similarly, Katherine acknowledged the negative impact of peers' lack of awareness of autism and SEN in general, resulting in negative comments directed towards her or other pupils with SEN.

Social interactions

Katherine found it difficult to be around people, leading to the avoidance of shared spaces such as the school canteen. Katherine's difficulties with the subtleties of communication, could be amplified in relation to social media; 'I didn't realise it was an argument! Until somebody said, 'can we just stop arguing!' and I was like, 'What? We're arguing?'... I didn't understand that'. Katherine highlighted the changing nature of her relationships with peers throughout adolescence and her growing perceived differences in relation to them, often resulting in feelings of social exclusion. Positive relationships with staff were linked to an understanding of her individual need, experiencing conflict with those she felt did not understand her.

Self-identity

Like Bella, Katherine revealed an interesting insight into her self-identity. Katherine had noticed changes in adults' expectations of her capabilities post-diagnosis; 'like people before

I was diagnosed would always say ‘when you live on your own’ it was always ‘when’ and now it’s ‘if’. And it’s like...what’s changed?’ Katherine shared that she identified with others with additional needs, as illustrated by her close relationships with a member of staff with attention deficit and hyperactivity disorder (ADHD) and with peers with identified SEN.

Staff and parent perspectives

Staff and parent perspectives were largely congruent with Katherine’s reported experiences. Struggles with the school environment were acknowledged as a challenge, alongside extreme stress in response to exam pressure, perceived difficulties interacting with peers, exacerbated during adolescence and identification with others with SEN. Like Elizabeth, the perception was that diagnosis had led to changes in Katherine in that she was no longer masking her difficulties to the same extent.

Cross case analysis

Cross case analysis revealed some noteworthy similarities in the reported experiences of the girls; for example, anxieties relating to the school environment, difficulties with social relationships and the usefulness of specialised interventions to develop social skills in relation to friendships. Relationships with staff were perceived as positive when teachers were familiar with individual needs, and inconsistency of personalised accommodations was linked to lack of staff awareness. When flexible provision was made the utility of this was clearly recognised, and all girls were noted by adults to have used their initiative in making personal modifications to reduce anxiety. Despite these similarities, differences also emerged. Bella’s experiences of attending a mainstream secondary school were reported to be largely positive, and she was able to discuss at length the supportive nature of teaching staff and the benefits of the school environment. This was in direct contrast to Katherine’s experiences and her self-disclosed profound dislike of most teachers. Other notable differences related to diagnosis and self-identity with Bella openly sharing her discomfort the autistic label and

refusing to share this with peers. This contrasted with the experiences of Katherine and Elizabeth who explained that diagnosis had led to a greater understanding of their own individual needs. Issues of self-identity and mental health challenges were also relevant to at least two of the girls. These included awareness of difference, self-injurious behaviours, suicidal ideation, depression, anxiety and disordered patterns of eating.

Discussion

Key findings and implications for practice

These case studies provide detailed insights into the individual experiences of three autistic young women who successfully attended a mainstream high school. The cross-case analysis highlights environmental, social and personal challenges but also the importance of supportive relationships and personalised planning. This offers a counterbalance to previous research focusing on the challenges of attending mainstream school from the perspective of autistic girls whose placements had not been successful, necessitating a move from mainstream to more specialist provision (Goodall and Mackenzie 2019; Sproston et al. 2017). An important facilitator for all three girls was the wider school environment. The importance of an inclusive school ethos, staff awareness and personalised planning were evident in the findings: these factors have been highlighted in the general autism education literature and in relation to autistic girls specifically (Authors 2019). Positive relationships with staff were inextricably linked with individual teacher knowledge and trusted relationships were formed with those adults who understood the girls' needs, which concurs with Goodall and Mackenzie (2019). The school also enhanced its provision through in-house psychotherapy provision which facilitated community access to mental health support and was well received by the girls. As several autistic girls attended the school, it was possible to extend the school's good autism practice to include female-specific activities such as girls' groups, which have been found to be helpful for autistic girls (Jamieson & Schuttler 2017). The school emphasised a student led approach, which focused on pupils developing their

problem-solving skills. The data illustrate how all three girls found their own resolutions to problems; the benefits of this self-advocacy approach are highlighted clearly in the literature (e.g. Wild 2019).

However, despite the school's autism-friendly approach the girls reported challenges managing the school environment and some strategies such as pupil passports not working as effectively as the school envisaged. Challenges included inconsistencies in levels of staff awareness of need (particularly among less familiar staff), sensory issues, and struggles with social interactions. These difficulties have been identified in the general autism and education literature (e.g. Humphrey and Lewis 2008), and literature specific to autistic girls (e.g. Goodall and Mackenzie 2019; Sproston et al. 2017). Despite being keen to engage in activities with peers, conflict and challenges negotiating female friendships in person and on-line were also reported by the girls, leading to decreased social media use and two girls reporting preference for friendships with younger pupils; patterns which have also been identified in previous research (Mademtzi, Singh, Shic, and Koenig 2018; Sedgewick et al. 2016). These challenges highlight the need for ongoing staff training with a particular focus on how autism presents in girls (Hillier et al. 2014) and highlighting adaptations which can be made, particularly in complex secondary school environments.

The girls' experiences of the wider school environment highlighted common facilitative factors which are important for autistic pupils generally (Authors 2019; Humphrey 2008) and for autistic girls (Authors, 2019). The autism-friendly strategies offered by the school provided a broad framework; however, given the heterogeneity of autism this needed to be individualised further by school staff and the girls themselves. The girls, their parents and the school psychotherapist noted the positive effects of these individualised strategies, which has also been identified previously (Preece and Howley 2018). The case studies also illustrate some of these unique aspects of the girls' individual experiences, which required individual adaptations, such as exam arrangements for Elizabeth or ear defenders for Katherine. Mental health and diagnosis were also areas where the girls' experiences varied. Reported

experiences of intense stress and anxiety were pertinent to at least two of the girls' accounts of attending a mainstream secondary school, highlighting the importance of staff being aware of associated mental health difficulties in autistic girls (Bargiela et al. 2016) and enabling appropriate support to be put in place (Eaton 2019; Wild 2019). Although the perspectives of the girls and adults around them tended to be similar, anxiety was one instance where the adults underestimated the difficulties experienced by the girls, which is potentially a consequence of the girls' ability to mask their difficulties (Gould and Ashton-Smith 2011). The availability of a school psychotherapist to work through issues was valued by both the girls and their mothers and was identified as a key factor in maintaining a successful school placement. The psychotherapist noted that individualised therapeutic sessions were more likely to be accessed by autistic girls than autistic boys, suggesting that the provision of specialist therapeutic support may be one way of maintaining successful placements for girls in mainstream secondary settings.

The girls also reflected upon issues of diagnosis and identity. Staff and parent perspectives provided useful context for the girls' experiences in relation to their diagnosis and the observation that (aside from Bella) their difficulties were largely missed in primary school. This finding is consistent with the broader literature and the observation that girls are likely to exhibit more obvious symptoms with the onset of adolescence (Mandy et al. 2018). For two participants an autism diagnosis had brought with it a perceived increase in self-awareness, lessening of anxiety and improved mental health, which concurs with previous literature (Milton and Sims 2016). Of interest was the observation by parents and the psychotherapist that diagnosis had led to a reduction in masking and a greater sense of understanding in at least two of the girls, as if they had become 'more confident in their own skin' (Milton and Sims 2016; Salter 2019).

Implications for research

This study highlights that more research is needed to help develop our understanding of the female phenotype, how autistic girls develop their sense of identity, how this may result in increased vulnerability to mental health challenges and what can be done to further support autistic girls in mainstream school settings (Eaton 2019). This is especially relevant for developing strategies to improve longer-term social inclusion and mental health outcomes (Baldwin and Costley 2016). Given that a diagnosis is potentially a protective factor for some girls, the school experiences of girls who are suspected to be autistic would also warrant further exploration.

Limitations

The participants in this study were academically able autistic females however, despite the use of methods such as photo-elicitation to facilitate discussion, two of the girls needed additional support and prompting from the researcher to discuss their experiences and their responses were often brief. This highlights the need for sustained collaborative research using accessible methods which enable a wider range of autistic voices to be included (Fayette and Author 2018; Fletcher-Watson et al., 2019).

Conclusion

While small-scale, this is the first study to date to explore the experiences of autistic girls in a successful mainstream secondary school placement and as such contributes to a growing body of literature on autism and girls. The findings suggest that adoption of a whole school approach to supporting autistic pupils is a key contributing factor to successful placement. Individualising these approaches in collaboration with girls themselves and additional specialised interventions, particularly access to psychotherapeutic support and friendship interventions are also of great value. Despite this, the findings also highlight the challenges faced by autistic girls in mainstream settings, emphasising the need for more research in this area.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Authors 2019

Anderson, M., & J. Jiang. 2018. "Teens, social media & technology 2018". *Washington, DC:*

Pew Internet & American Life Project.

American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental disorders (5th ed.)*. Arlington, VA: Author.

Baldwin, S., & D. Costley. 2016. "The experiences and needs of female adults with high-functioning autism spectrum disorder". *Autism*, 20, 483-495.

Bargiela, S., R. Steward, & Mandy, W. 2016. The experiences of late-diagnosed women with autism spectrum conditions: An investigation of the female autism phenotype. *Journal of Autism and Developmental Disorders*, 46(10), 3281–3294. <https://doi.org/10.1007/s10803-016-2872-8>.

Braun, V., & V. Clarke. 2006. "Using thematic analysis in psychology". *Qualitative Research in Psychology*, 3, 77-101.

Cridland, E. K., S. C. Jones, P. Caputi, & C.A. Magee. 2014. "Being a girl in a boys' world: investigating the experiences of girls with autism spectrum disorders during adolescence". *Journal of Autism and Developmental Disorders*, 44, 1261-1274.

Eaton, J. 2019. "A clinical psychology perspective on the experiences and mental health challenges of girls with autism". In J. Hebron & C. Bond. (Eds.), *Educating Girls on the Autism Spectrum: Developing an Integrated Approach* (pp. 183-199). London: Jessica Kingsley Publishers.

- Ellis, J. 2013. Methodological challenges of researching the social worlds of children on the autism spectrum. PhD diss., University of Southampton. Retrieved from <http://eprints.soton.ac.uk/354345/>.
- Fayette, R., & C. Bond. 2018. "A systematic literature review of qualitative research methods for eliciting the views of young people with ASD about their educational experiences". *European Journal of Special Needs Education*, 33, 349-365.
- Fereday, J., & E. Muir-Cochrane. 2006. "Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development". *International Journal of Qualitative Methods*, 5, 80-92.
- Fletcher-Watson, S., J. Adams, K. Brook., T. Charman, L. Crane, J. Cusack, S. Leekam, D. Milton., J.R Parr, & E. Pellicano. 2019. "Making the future together: Shaping autism research through meaningful participation". *Autism*, 23, 943-953.
- Frith, U. 1991. *Autism and Asperger Syndrome*. Cambridge University Press.
- Goodall, C., & A, MacKenzie. 2019. "What about my voice? Autistic young girls' experiences of mainstream school". *European Journal of Special Needs Education*, 34, 499-513.
- Gould, J., & J. Ashton-Smith. 2011. "Missed diagnosis or misdiagnosis? Girls and women on the autism spectrum". *Good Autism Practice (GAP)* 12, 34-41. Hebron, J. & Bond, C. 2019 *Education and girls on the autism spectrum: developing an integrated approach*. London. Jessica Kingsley.
- Hillier, R.M., R.L. Young, and N. Weber. 2014 'Sex differences in autism spectrum disorder based on DSM-5 criteria: Evidence from clinician and teacher reporting'. *Journal of Abnormal Child Psychology*, 42, 1381-1393.
- Honeybourne, V. 2015. "Girls on the autism spectrum in the classroom: Hidden difficulties and how to help". *Good Autism Practice (GAP)*, 16, 11-20.
- Humphrey, N., & S. Lewis. 2008. "'Make me normal' The views and experiences of pupils on the autistic spectrum in mainstream secondary schools". *Autism*, 12, 23-46.

- Jamison, T. R., & J.O Schuttler. 2017. "Overview and preliminary evidence for a social skills and self-care curriculum for adolescent females with autism: The girls night out model". *Journal of Autism and Developmental Disorders*, 47, 110-125.
- Kaat, A., Shui, A., Ghods, S., Farmer, C., Esler, A., Thurm, A., Georgiades, S., Kanne, S., Lord, C, Kim, Y. & Bishop, S. 2020. Sex differences in scores on standardized measures of autism symptoms: a multisite integrative data analysis. *Journal of Child Psychology and Psychiatry*. <https://doi.org/10.1111/jcpp.13242>.
- Kirkovski, M., P,G, Enticott, & P.B. Fitzgerald. 2013. A review of the role of female gender in autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43, 2584-2603.
- Mademtzi, M., P. Singh, F. Shic, & K. Koenig. 2018. "Challenges of females with autism: A parental perspective". *Journal of Autism and Developmental Disorders*, 48, 1301-1310.
- Mandleco, B. 2013. "Research with children as participants: Photo elicitation.". *Journal for specialists in Pediatric Nursing*, 18, 78-82.
- Mandy, W., R. Chilvers, U. Chowdhury, G. Salter, A. Seigal, & D. Skuse. 2012. "Sex differences in autism spectrum disorder: evidence from a large sample of children and adolescents". *Journal of Autism and Developmental Disorders*, 42, 1304-1313.
- Mandy, W. R. & M-C. Lai. 2017. Editorial - Towards sex – and gender informed autism research. *Autism*, 21(6), 643-645.
- Mandy, W., L.Pellicano, B. St Pourcain, D. Skuse, D., & J.Heron. 2018. "The development of autistic social traits across childhood and adolescence in males and females". *Journal of Child Psychology and Psychiatry*, 59, 1143-1151.
- McLellan, E., K.M. MacQueen, & J.L Neidig. 2003. "Beyond the Qualitative Interview: Data Preparation and Transcription". *Field Methods*, 15, 63–84.

- Milton, D. & T. Sims. 2016. "How is a sense of well-being and belonging constructed in the accounts of autistic adults". *Disability and Society*, 31, 520-534
- NASEN (National Association of Special Educational Needs). 2016. *Girls and Autism: Flying Under the Radar*. Tamworth: NASEN.
- Preece, D., & M.Howley. 2018. An approach to supporting young people with autism spectrum disorder and high anxiety to re-engage with formal education—the impact on young people and their families. *International Journal of Adolescence and Youth* 23 (4): 468-481.
- Ratto., A.B., L. Kenworthy B.E. Yerys, J. Bascom, A. Trubanov Wieckowski, S.W. White, G.L. Wallace, C. Pugliese, R.T. Schultz, T.H. Ollendick, A. Scarpa, S. Seese, K. Register-Brown, A. Martin, & A.L. Gutermuth. 2018. What about girls? Sex based differences in adaptive traits and autistic skills. *Journal of Autism and Developmental Disorders* 48:1698–1711. <https://doi.org/10.1007/s10803-017-3413-9>.
- Ravet, J. 2011. "Inclusive/exclusive? Contradictory perspectives on autism and inclusion: the case for an integrative position". *International Journal of Inclusive Education*, 15, 667–682.
- Salter, R. 2019. Education as a girl with Asperger's Syndrome. In J. Hebron & C. Bond. (Eds.), *Educating Girls on the Autism Spectrum: Developing an Integrated Approach* (pp. 31-46). London: Jessica Kingsley Publishers.
- Sedgewick, F, V. Hill, R. Yates, L. Pickering, & E. Pellicano. 2016. "Gender differences in the social motivation and friendship experiences of autistic and non-autistic adolescents". *Journal of Autism and Developmental Disorders*, 46, 1297-1306.
- Sproston, K., F. Sedgewick, & L. Crane. 2017. "Autistic girls and school exclusion: Perspectives of students and their parents". *Autism & Developmental Language Impairments* 2: 2396941517706172.

Wild, S. 2019. The specialist secondary experience. In J. Hebron & C. Bond. (Eds.),

Educating Girls on the Autism Spectrum: Developing an Integrated Approach (pp. 137-

158). London: Jessica Kingsley Publishers.

Yin, R.K. 2014. *Case Study Research: Design and Methods (5th Ed.)*. London: Sage