

Focus on Autism and Other Developmental Disabilities

<http://foa.sagepub.com/>

Autism and the U.K. Secondary School Experience

Gayle V. Dillon, Jean D. M. Underwood and Lauren J. Freemantle

Focus Autism Other Dev Disabl published online 20 June 2014

DOI: 10.1177/1088357614539833

The online version of this article can be found at:

<http://foa.sagepub.com/content/early/2014/06/20/1088357614539833>

Published by:

Hammill Institute on Disabilities



and



<http://www.sagepublications.com>

Additional services and information for *Focus on Autism and Other Developmental Disabilities* can be found at:

Email Alerts: <http://foa.sagepub.com/cgi/alerts>

Subscriptions: <http://foa.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

>> [OnlineFirst Version of Record](#) - Jun 20, 2014

[What is This?](#)

Autism and the U.K. Secondary School Experience

Gayle V. Dillon, PhD¹, Jean D. M. Underwood, PhD¹,
and Lauren J. Freemantle, BSc¹

Focus on Autism and Other
Developmental Disabilities
1–10

© Hammill Institute on Disabilities 2014
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1088357614539833
focus.sagepub.com



Abstract

This research investigated the self-reported mainstream school experiences of those diagnosed on the autistic spectrum compared with the typically developing school population. Existing literature identifies four key areas that affect the quality of the school experience for students with autism: social skills, perceived relationships with teaching staff, general school functioning, and interpersonal strengths of the young person. These areas were explored in a mainstream U.K. secondary school with 14 students with autism and 14 age and gender matched students without autism, using self-report questionnaires and semi-structured interviews. Quantitative analyses showed consistent school experiences for both groups, although content analysis of interview data highlighted some differences in the ways in which the groups perceive group work, peers, and teaching staff within school. Implications for school inclusion are discussed, drawing attention to how staff awareness of autism could improve school experience and success for students with autism attending mainstream schools.

Keywords

autism, mainstream secondary schools, school experience

Literature Review

According to a recent U.K. study, prevalence rates for autism have plateaued since the often cited increase documented in the 1990s. Current prevalence rates stand at around 3.8 out of 1,000 for boys and 0.8 out of 1,000 for girls (Taylor, Jick, & MacLaughlin, 2013). Changes in legislation have resulted in 60% of students with an Autism Spectrum Disorder (ASD) now being educated in U.K. mainstream schools; that is, in state maintained schools that cater for the general student population (Woolfson & Brady, 2009). In fact, children with autism are reported to be the fastest growing group of children with a statement of special educational needs in mainstream schools in England and Wales (Audit Commission, 2002), and the range of abilities is known to be wide (Frederickson, Jones, & Lang, 2010). Some of these mainstream schools have specialist units that operate within them to support the needs of children with special educational needs in a separate environment.

Children are deemed to have special educational needs if they have a significantly greater difficulty in learning than the majority of children of the same age, or a disability that prevents or hinders them from making use of educational facilities of a kind generally provided for children of the same age in schools within the same local authority area. A statement of special educational needs means additional resources are delegated to schools to support their inclusion.

There are many perceived benefits for students with autism attending mainstream schools. It affords these students regular exposure to peer role models for support in developing academic, social, and behavioral skills, while also providing greater access to a general curriculum (Jones, 2013). Mainstreaming also gives students with special needs the opportunity to take part in regular classes during specific time periods based on their skills.

Contrary to popular belief, many individuals with ASD are keen to establish a friendship group and to be included in social activities (Daniel & Billingsley, 2010; Dillon & Underwood, 2012). Having access to social support and social groups greatly enhances the quality of life for individuals with an ASD, of which a large part comes from attending school (Hillier Fish, Cloppert, & Beversdorf, 2007; Renty & Roeyers, 2006). During adolescence, as peers become increasingly influential and important, it is imperative to consider the dynamics between friends and how this may affect school experience for students with

¹Nottingham Trent University, UK

Corresponding Author:

Gayle V. Dillon, Psychology Division, Nottingham Trent University,
Burton Street, Nottingham NG1 4BU, UK.
Email: gayle.dillon@ntu.ac.uk

autism (Humphrey & Symes, 2010; Sciutto, Richwine, Mentrikoski, & Niedzwiecki, 2012).

The main areas by which autism is diagnosed (social communication skills, and restricted, repetitive, and stereotyped patterns of behavior) are vital to our understanding of how young people with autism function and integrate within mainstream school settings. These characteristics are associated with notable challenges to the inclusion of this group (Warnock, 2005). Examples of such challenges include struggling to manage school demands; displaying behavioral difficulties, perhaps due to problems in regulating behaviors and emotions; difficulties with executive function such as paying attention and being able to generalize information to wider settings; and teacher expectations or behavior toward these students (Diamond, Barnett, Thomas, & Munro, 2007; Dillon & Underwood, 2012; Lecavalier, 2006). Students with an ASD are reported to be more likely to behave hyperactively and emotionally and to experience higher levels of anxiety than their typically developing peers (Griswold, Barnhill, Smith Myles, Hagiwara, & Simpson, 2002; Hallett et al., 2013).

Peer interaction and attempts to integrate with peer groups are potential conflict scenarios that can result in disruptive behavior. Wing (1996) noted that students with an ASD had problems with engagement during break times and within unstructured lessons. It is because of difficulties in communication and social skills that some young people with autism have fewer friends and are more likely to become targets of bullying, particularly when attending mainstream schools (Daniel & Billingsley, 2010). Unsurprisingly, it has also been reported that students with an ASD encounter fewer social interactions in comparison with their typically developing peers, spending much more time in areas of the school that are managed by adults, thus avoiding potential conflict (Wainscot, Naylor, Sutcliffe, Tantam, & Williams, 2008).

As well as facing challenges developing or integrating into social groups, students with autism may face challenges resulting from teacher expectations (Hastings, 2005; Woolfson & Brady, 2009). Ashburner, Ziviani, and Rodger (2009) compared teacher perceptions of adolescents with and without autism. They found that negative and detrimental attitudes about students with autism from teaching staff were associated with more problematic behaviors and underperformance academically relative to their ability by such students.

Research considering the role of teaching styles has, however, acknowledged factors that may relieve problematic behaviors displayed by students with autism in mainstream schools. The importance of the nature of the relationship forged between any child and his or her teachers is undisputable (Hughes, Bullock, & Coplan, 2014). Teachers who are characterized as trustworthy, sincere, and showing interest in individual students are suggested to be

very influential in generating successful learners (Rubie-Davis, 2007). Teachers have also been shown to be positive contributors to young people's self-esteem, especially those with Asperger syndrome, by acting as a source of confidence and reassurance (Sciutto et al., 2012). An increased sense of self-worth and esteem can reduce problematic behaviors. Thus, teachers who are more aware of individual learning needs have been found to be more welcoming toward an inclusive setting, ultimately benefiting their students. In contrast to this, those who do not understand individual needs have been found to misuse inclusion units and support in schools, by disowning problematic behaviors as something for support staff to deal with (Jones, 2013).

The current study sought to collect firsthand perceptions of school experience from students with autism. Listening to the student voice provides researchers with a meaningful insight into the experiences of those individuals who may not otherwise always find an outlet. Empowering young people to share their thoughts and feelings has been deemed a successful way to further understand the experiences young people have within the education system (Harrington, Foster, Rodger, & Ashburner, 2014). The importance of capturing the views of the students was considered here to be vital to developing our understanding of what policies, procedures, and interventions work best for this group. There is an important difference between what parents and teachers report on behalf of the individual with autism and the reports of the individual. In addition, a mixed-methods approach to triangulate findings, as used here, is argued to better explore complexities in this area (Greene, 2006).

Research Questions

This study examines the self-reported school experience of students on the autistic spectrum in four key areas: social skills (such as relationships with peers), relationship with teaching staff, school functioning, and interpersonal ability (such as an individual's ability to control emotions and behaviors). The following research questions were posed:

Research Question 1: Do students with autism report an overall different school experience to their non-statemented peers?

Research Question 2: Are there any differences between self-evaluations of social skills, teacher-pupil relationships, school functioning, and interpersonal strengths between those with ASD and those without a statement of educational need?

Research Question 3: To what extent do students with autism report a similar and consistent school experience to one another, in relation to their self-perceptions of social skills, relationship with teachers, general school functioning, and interpersonal strength?

Table 1. Participant Characteristics.

Group	Sex	M chronological age (SD)
ASD (N = 14)	Male = 11 Female = 3	13.57 (0.94)
Controls (N = 14)	Male = 9 Female = 5	13.43 (1.02)

Note. ASD = autism spectrum disorder.

Method

Design

The study used a mixed-methods design, utilizing a self-report questionnaire and semi-structured interviews with each student.

Participants

Students attended an English mainstream, state maintained, suburban secondary school in the West Midlands. A total of 20 students with statements of special educational needs explicitly stating diagnoses of autism were initially identified by the director of inclusion at the school. Of these, a final sample of 14 gave their own and obtained parental permission to take part in the study. These students all spent the majority of their time in the same classes as the control groups but were able to use the inclusion and special needs units as places for time-out, or for additional support and tutoring. A control group of 14 students, individually matched according to chronological age and sex, was identified by school staff. Staff were asked simply to provide a list of students who were the same age and the same sex. They were not asked to try to match the groups in terms of ability. The final sample consisted of a total of 28 students (see Table 1 for details). Each student responded fully to the questionnaires, with no exclusions or missing values.

The process by which a suitable comparison group is chosen is an important issue. Matching peers without any diagnoses warranting additional support were chosen as the comparison group here because they provided a benchmark of the experiences of students in mainstream schools. It is important to establish whether the experiences of the students with autism are unique to that group, or whether their experiences are in line with other students in the school. These students came from the same year group as the matched students with an ASD. The groups were not matched according to any ability measure as this often results in a younger typically developing control group, and an older ASD group (Motttron, 2004). Inherent differences in chronological age between the groups would limit the ability to answer the research questions outlined here.

Measures

Self-report measures of social skills, student-teacher relationship, and behavioral and emotional state were taken. The research instruments were as follows: *The Teenage Inventory of Social Skills*, *Quality of Student-Teacher Relationship Scale*, and the *Behavioral and Emotional Ratings Scale (BERS)-Youth*. Each of these questionnaires was piloted with six students aged 12 to 16, without special educational needs to ensure their suitability. This group was considered typical of the student population at the school and was not used in the main study. The findings from this pilot were used to inform some amendments to the original questionnaires, namely the removal of some items because of difficulties in understanding, age suitability, or question wording. Amendments to questionnaires are noted in each of the following sections.

Teenage Inventory of Social Skills. This measurement was specifically designed for the self-report of adolescents (Inderbitzen & Foster, 1992). It acknowledges the importance of adaptive social skills during teenage years, particularly for the development of relationships with peers. The scale measures attitudes and the decision-making processes that an individual makes in relation to his or her behavior. This is important for understanding school functioning as the conduct of a student while at school has an important bearing on how he or she is perceived, and subsequently treated, by staff and students alike. The original 40 items were reduced by the research team to 17, making them more suitable for this study. Questions with sex or culture biases were removed; for example, "I flirt with another guys girlfriend when I like her." Measured on a 6-point Likert-type scale, questions such as "I tell jokes and get other classmates to laugh" were rated from "does not describe me at all" to "describes me totally," with a maximum score of 102 indicating better communication skills. Reliability for the reduced scale was .65, which is lower than the reliability for the original scale (Cronbach's $\alpha = .88$) but is within expectations for data from social science scales (Kline, 1999).

Quality of Student-Teacher Relationship Scale. This scale assesses student perceptions of closeness, conflict, and dependency on teachers (Fumoto, Hargreaves, & Maxwell, 2007; Pianta, 2001). Constructs such as these are reported to be important to school experience, with qualities of the teacher-student relationship reported as predictors of children's successful school adjustment (Baker, Grant, & Morlock, 2008). Measured on a 5-point Likert scale, the original 28 items were used. The scale has a minimum score of 15 and a maximum scoring of 75, the latter indicative of more adaptive relationships. Questions were rephrased, making them suitable for teachers in general and not solely focused on one particular staff member, for example, "I trust my teacher" became "I trust my teachers."

BERS–Youth Subscales: School Functioning, Interpersonal Strengths. BERS is a strength-based assessment, measuring behavioral and emotional skills and has five subscales, although only two subscales were used here (Epstein, 2000): School Functioning and Interpersonal Strengths. The School Functioning subscale addresses a young person's competence and performance both in class and in school work tasks. This is in line with previous research that has defined school functioning as any cognitive, social, or emotional aspect of behavior that occurs directly within the school setting, or that indirectly affects behavior within the school environment (Gorodzinsky, Hainsworth, & Weisman, 2011). The School Functioning subscale was included here as a means of exploring students' self-rated competences and performance in school. The original nine items were used, with six additional questions devised by the researcher to further explore school behaviors in relation to schoolwork, homework, and classroom behaviors such as "I do my homework most of the time." A total of 15 items were graded on a 4-point Likert scale, ranging from "not at all like me" to "very much like me." Higher scores indicate enhanced school functioning, with a maximum score of 60. Reliability analyses to check for internal consistency showed the scale, with additional questions, to have high levels of reliability (Cronbach's $\alpha = .91$).

For the Interpersonal Strengths subscale, the original 15 items were reduced to 10 items, measured on the same scale as the School Functioning subscale. This subscale measures the ability to control emotions and behaviors in social situations. It differs from the Teenage Inventory of Social Skills by asking questions pertaining to the perceived character strengths of an individual rather than the outward relationships with peers as with the social skills questionnaire. Such skills are considered vital for the development and enhancement of a variety of relationships and for the promotion of personal, social, and academic growth. Understanding how students assess their skills in these areas was considered an important part of school life here.

Items such as "respects the rights of others" and "uses appropriate language" were removed as piloting showed students had difficulty understanding them. A maximum score of 40 suggests a strong ability to positively interact with others. Reliability analyses for the revised scale indicated a good level of internal reliability (Cronbach's $\alpha = .81$).

Procedure

Individual participants completed the study during the school day in a quiet designated room away from distraction. Data collection with each participant lasted 30 to 45 min (the duration of one timetabled 50-min lesson from the school day) and was voice recorded. Participants were told that they were going to be asked about school and how they

felt about things related to school. The researcher was familiar to the students and had prior experience of working in the school. The choice of room, methods, and researcher conducting the sessions were all key considerations, and great care was taken to ensure that participants felt at ease during the session to discuss issues openly. Participants were informed of the confidential nature of the study and assured that any write up would not directly identify either them or anyone they had talked about.

In Phase 1, each of the four questionnaires was read aloud by the researcher with students' verbal responses being recorded by the researcher. Phase 2 followed this with each participant invited to expand on their responses. To encourage participants to explore their ideas, the researcher identified any extreme ratings, picking out trends within responses as a starting point of discussion. The discussions prompted by responses to each of the questionnaires formed the basis of the qualitative analyses. Upon completion, participants were asked to share any final thoughts before voice recording was stopped. They were then de-briefed and escorted to the appropriate lesson.

Data-driven content analyses were conducted on the audio recordings of the session with each student, using Miles, Huberman, and Saldaña (2014) as a guide. A sweep of the data was done by an initial coder to identify discussion of similar content and around similar themes. No a priori themes were applied to the data. This was an iterative process that resulted in an initial superordinate theme list that captured the meaning of each of the identified themes. The process was then repeated by a second coder, and a final list was agreed. The initial theme list was then refined to ensure that the themes were both comprehensive and exclusive. A second coder subsequently listened to the recordings, and a consensus agreement reached for the final theme list. This process resulted in the identification of four superordinate themes: *Understanding of own behaviors, peer interaction and social skills, relationships with teaching staff, and homework*. Each of these themes is discussed in turn. Following the agreement of the superordinate categories, the reliability of its application was tested by two coders using a subset of four recordings.

Results

Scoring. All scales were positively anchored, that is, higher scores indicated enhanced abilities. Means and standard deviations for each scale and group are presented in Table 2.

Total scores from each questionnaire were converted into standardized z scores to enable comparisons across questionnaires in subsequent analyses. A within-subjects ANOVA indicated that students with autism responded in a uniform manner across all questionnaire scales, with no significant differences identified within this group's responses, $F(3, 78) = 0.97, p = .41$. This suggests that the students with

Table 2. Means and Standard Deviations for the ASD and Control Group Self-Report Measures.

Measure	Group 1—ASD	Group 2—Controls
	M (SD)	M (SD)
Social skills (minimum 17, maximum 102)	64.36 (9.11)	70.71 (8.62)
Teacher–pupil relationships (minimum 15, maximum 75)	42.14 (8.26)	49.14 (11.03)
School functioning (minimum 15, maximum 60)	39.93 (7.99)	44.50 (8.63)
Interpersonal strengths (minimum 10, maximum 40)	29.50 (4.85)	30.57 (5.32)

Note. ASD = autism spectrum disorder.

autism were responding to the scales in a similar way. This is interesting given the diverse nature of the autistic spectrum.

Additional between-subjects ANOVAs highlighted no significant differences between how the ASD and non-ASD groups responded to each individual scale: social skills, $F(1, 26) = 3.60, p = .69$; relationship with teaching staff, $F(1, 26) = 3.61, p = .69$; school functioning, $F(1, 26) = 2.11, p = .16$; and interpersonal strengths, $F(1, 26) = 0.31, p = .58$.

Content Analyses

To triangulate the quantitative findings, recognizing the diverse nature of individuals with autistic spectrum conditions and the importance of listening to the student voice, qualitative analyses were also carried out (Greene, 2006).

Understanding of own behaviors. The code “understanding of own behaviors” was applied to comments made by the students that referred to self-reflection on their actions within the school environment. There is a general, and incorrect, assumption that individuals with autism are unable to engage in self-reflection. Some individuals with autism are able to think about their behaviors and the way they react to situations both within and outside of school. The students with an ASD participating in this study reported a level of self-reflection about their behavior in school that demonstrated their concerns about current and future behavior. Subsumed within this code were comments made about how the students reacted angrily or aggressively to situations that they were unsure how to handle. Five of the students with autism and nine of the control group made reference to feeling out of control at some point during their school lives. It was interesting to note that the students with

autism were more likely to describe specific angry outbursts: “I’m getting more angrier now than I was in year 6. And even from now it could start to get more worse. I’m quite concerned” (P1, ASD Male); “I just argue back, I don’t know why” (P2, ASD Male); “I try to count to 10 but people still annoy me and that’s when I start to throw things” (P7, ASD Male). This can be contrasted with quotes from those students without a diagnosis of autism, for example, “I don’t need anger management strategies, I don’t get angry, I just ignore anything I don’t like” (P27, Control Male).

The ability of the students here to recognize and articulate their frustrations demonstrates a self-awareness that is not associated historically with individuals on the autistic spectrum. In fact, one of the female students with autism stated that the “School could do anger management, it would be good and it makes me chill” (PA11, ASD Female).

Relationships with school staff. Relationships with staff also formed one of the codes in the content analysis. The students from both groups in this study presented generally positive views about their teachers and support staff in school. Good relationships with teaching staff were attributed to a caring and helpful manner expressed by teachers, with emphasis placed upon feeling comfortable in a school where they were known by most teachers:

At my old school I wouldn’t be able to put my hand up and ask for help. But if you work hard you do get a lot out of it, the teachers don’t shout at you. That’s a good thing; at least they help you and are not getting annoyed at you . . . He’s trying to make us do well and pushing us forward . . . Teachers can make it good to learn and make you feel self-confidence from understanding subjects. (PA9, ASD Male)

This is perhaps a reflection of this particular school, which is a smaller than average mainstream secondary school with around 600 students on roll. Two of the students with autism commented positively on the size of the school: “I like it ’cause its smaller here . . . There’s more space and you know who people are so it’s ok” (PA8, ASD Male); “Cause is small teachers know you and you can trust them” (PA12, ASD Male). The small size of the school was also mentioned by the students without autism, with one commenting that “the size of this school is nice because it’s not so scary” (PA27, Non-ASD Male).

Those teachers offering little pupil interaction are viewed negatively by students: “When they just leave you to get on with it and no one knows what to do. That’s bad” (PA13, ASD Female). Teachers offering opportunities for group work and interaction are viewed more favorably by their students, signifying the importance of peers for learning and engagement: “I like it when the whole class are involved and you don’t just get told what to do” (PA14, ASD Female). In

terms of delivery style, teachers who remain focused on lesson material and who convey work in a clear and concise manner were portrayed here by students to be more helpful, as opposed to those who digress and are inconsistent: “It’s better just simple. Give out the information you need, not like a whole lecture on what you need to do” (PA9, ASD Male).

Some teachers don’t take their time and do go fast . . . When they just write loads on the board to copy . . . I don’t like that . . . If it gets too long it gets too complicated. (PA10, ASD Male)

The favoring of teachers who plan and are focused was also backed up by the control group. One of the control group commented that his favorite lesson was science. When asked what made this his favorite lesson, his reply was “they (the teacher) plan the work better . . . and I get on with them well” (PA3, Control Male).

The role of support staff within school reinforces the benefits of recent changes in educational legislation, as students voiced their appreciation for staff working within the schools established inclusion and special needs areas: “They just listen and understand you” (PA14 ASD Female).

When I get angry I can go to the youth office . . . It’s good . . . It helps ‘cause I can’t do my work if I’m angry. They just talk it out with me and always know what to do . . . learning support always help me too. Especially with my work. (PA8, ASD Male)

My helper in class helps me loads. And with my homework. She helps other people too. She’s really nice. (PA3, ASD Male)

These quotes reflect the importance of both academic and support roles within schools. All students diagnosed as being on the autistic spectrum openly discussed the value of the support they received, both inside and outside of lessons.

Peer interaction and social skills. Twelve of the 14 students with autism stated that their peers were the biggest distraction faced in class: “Friends mess about and distract me” (PA7, ASD Male); “Classmates talk a lot . . . They just keep talking and talking” (PA8, ASD Male); “I just mess about with my mate . . . He always makes me laugh” (PA6, ASD Male). The control group focused less, as a whole, on peer distraction. However, when this was mentioned, it was typically in relation to teacher control of the classroom. One student detailed his reasons for his dislike of one of his lessons: “In (subject), the teacher has no control, everyone is just talking and messing about. I have a headache most lessons . . . everyone’s just talking and there’s no point because you don’t learn anything from it” (PA15, Control Male).

Students from both the target and control groups expressed a preference for group work within the classroom

setting, stating their enjoyment of collaborative work: “I don’t like being alone . . . I have really good friends here . . . It makes you happier—you’re not a loner or a geek” (PA9, ASD Male); “Friends make me enjoy school” (PA10, ASD Male). As peers have been found to play a vital and key role during adolescence (Steinberg & Monahan, 2007), this should be seen as a positive outcome of mainstreaming.

In further support of the dominant role peers take during the growth to young adulthood, it could be assumed that the tendency for adolescents to respond more productively to group work could be channeled strategically to increase learning and class engagement. This concept is underpinned by Vygotskian psychology and the concept of working within zones of proximal development (Vygotsky, 1978), providing peers for collaboration to successfully increase learning (Norton & D’Ambrosio, 2008). However, for this to occur, it is important to understand exactly how different students interact with group activities: “Friends can be clearer than teachers sometimes” (PA11, ASD Male); “More group work would be fun . . . Playing games in teams and raffles in class are fun” (PA12, ASD Male). Group work needs to be managed carefully, however, and teachers play a pivotal role in ensuring that group dynamics are conducive to learning (Rubie-Davis, 2007). This was also reiterated by the young people when discussing their engagement with group activities: “If there’s too many people in my group they make noise and it puts me off . . . I like working in smaller groups with people I know” (PA14, ASD Female).

Despite similarities in the way that each group spoke about the salience of peers at school, the content analyses revealed a difference in the way that each group thought and spoke about their peers. Analyses revealed that peer group dynamics are operationally different between the two groups of young people; those with autism typically express having one or very few close friends, which they use as a source of social and academic support, whereas those students without a diagnosis of autism appear to have a much wider peer group, with lesser emphasis placed upon one particular friend:

Not many friends, but I have a few close ones . . . (how many?) 2 or 3 . . . I ask them to go places with me in school and at home time ‘cause it’s safer and better . . . I like working with my friend when we have to do group stuff, he knows more people than me. (PA12, ASD Male).

A student from the control group, however, reported having “lots of friends outside school too” and being involved in extracurricular activities that broadened his friendship base considerably (PA15, Control Male).

Homework. Many students, regardless of a statement of learning needs, did not enjoy homework tasks. However, those with autism were much more vocal about their dislike

of homework. One of the key issues with homework is that it blurs the distinction between home and school life (Dillon & Underwood, 2012), which some students find problematic: “Homework takes away my time” (PA4, ASD Male); “Homework’s pointless . . . Been at school all day, then you get more work in your own time” (PA9, ASD Male). Although homework is not necessarily something that students cite as their favorite activity, the students without autism rarely cited completing homework as being problematic. One student without autism commented,

Homework is not a problem for me . . . I’m motivated by getting the grades back and feeling like you have accomplished something. When I get my homework, I’m like ohh, and I don’t really want to do it, but then I do it and I feel really good about myself. (PA13, Control Female)

Another commented, “Some people don’t see why you would want to do homework, but I get it. I want to do better” (PA23, Control Male).

Students with autism also discussed their enjoyment of computer games and the distractions that computer/video games offer instead of completing homework tasks: “I still don’t like doing my homework at home, ‘cause I’m on my Xbox” (PA8, ASD Male); “I just like playing computer . . . I don’t do homework, I just play computer!” (PA1, ASD Male). Furthermore, it could be argued that playing computer games can offer students with autism a source of relaxation and personal time after a day working within the school environment, which can be sporadic and unpredictable at times. This is, of course, also true for other students and is supported by a comment from one of the students without autism: “I like playing on the computer to relax” (PA27, Control Male).

Despite the reticence regarding the completion of homework, the young people with autism here reported completing the tasks asked of them, albeit with help. This particular school provides additional support networks within the school environment that allows students to complete homework while still at school. All the students with autism here acknowledged the value of this opportunity: “I get no help at home, I’ve got to write loads of stuff . . . Sometimes my helper writes it for me before and then I can copy it and do it at home” (PA9, ASD Male).

Summary of the Quantitative Analyses

The statistical analysis showed that these students with autism reported no difference in school experience to their typically developing peers. They indicated that social skills, relationships with teaching staff, school functioning abilities, and interpersonal strengths do not differ significantly between the two groups. Furthermore, students with an ASD performed consistently across all measures, implying

a shared school experience for these students. These findings offer tentative support for inclusive secondary schooling for students on the autistic spectrum. The process of increasing opportunities for social interaction with typically developing peers coincides with developmental milestones experienced by young people during the adolescent life stage, whereby peers become a dominant and vital support, replacing roles previously held by parents and significant family members (Pfeifer & Blakemore, 2012). Attending mainstream environments, where interaction with a variety of people becomes important for success, students with autism are afforded the opportunity to develop both their academic and social skills and to build friendships. By interacting with same-aged, typical peers, children with autism have been shown to improve their behaviors, communication and social skills, and play behaviors, which are all known to be influential to overarching development (Barton & Pavilanis, 2012).

Parents often report that having friendships is an important goal for their children with autism (Boutot, 2007), although this is not always consistent with reports from the children themselves (Calder, Hill, & Pellicano, 2013). Success in developing these skills is not guaranteed simply by attending a mainstream environment, however. Existing literature very clearly highlights the problems associated with students with autism who are unsupported in such settings (Dillon & Underwood, 2012). However, self-report measures detailed here indicate that both the typically developing students and the students with autism are reporting very similar levels of ability and school functioning, suggesting that these students do not feel particularly unsupported, or that they are in danger of the school placement breaking down.

Summary of the Qualitative Analyses

Previous research has recognized the challenges that students with autism present in mainstream schools, due to the expression of what can be maladaptive behaviors and negative emotions, which they often find difficult to regulate (Diamond et al., 2007). Indeed, Lecavalier (2006) has suggested that as a consequence of a lack of knowledge about both the source of angry feelings, and how to control them, students with autism may present themselves as frustrated, stubborn, or hyperactive. This, in turn can have a negative impact on the way that teachers and other students perceive them (Boutot & Bryant, 2005).

In contrast, Robertson, Chamberlain, and Kasari (2003) noted that behavior improvements and increased social inclusion often occur when teacher–pupil relationships are adaptive.

The fact that both groups of students here declared overall positive experiences with staff members is encouraging, as positive relationships have been shown to suppress poor

behavioral tendencies and increase overall school experience (Rubie-Davis, 2007).

As for all children, school staff can affect the way that a child with an ASD conceptualizes his or her school experience. Previous research has reported the detrimental effects of a bad relationship with just one member of the teaching staff, with parents of children with autism reporting the onset of changes in behavior such as crying, school refusal, and the destruction of school uniform as a consequence of perceived difficulties with teaching staff (Dillon & Underwood, 2012). Thus, understanding students with an ASD needs to be at a whole school level, pervading all aspects of school life. The characteristics that enable positive relationships with staff to flourish highlighted by students here are in line with previous research on teacher–pupil relationships. It has been established that teachers who show an interest in their students, operating in a trusting and sincere manner, have a greater influence upon young people and their learning than teachers who are more reticent (Rubie-Davis, 2007).

Similarly, interactive teaching styles are both favored by students and are reported to be more successful for learning outcomes (George, 2010). This preference for interaction with staff is supported here by students with autism and those without, supporting the ethos of inclusive schooling as all young people appear to be responding similarly to staff and sharing consistent thoughts in relation to teaching style preference. Both groups of students highlighted similar views in relation to teaching styles, supporting research which has demonstrated that effective teaching is interactive and explicitly delivered to students (Costley, Keane, Clark, & Lane, 2012). Building on the finding that interactive classes are favored by students, participants from both the target and control groups also expressed a preference for group work within the classroom setting, stating their enjoyment of collaborative work. This finding challenges assumptions made about those with ASD that group interaction is to be avoided (Bauminger, Shulman, & Agam, 2003; Rutgers, Bakermans-Kranenburg, Ijzendoorn, & Berckelaer-Onnes, 2004) and supports the suggestion that inclusive education increases the likelihood of, and the opportunity for, social interaction (Stringer, Irwing, & Giles, 2009). It also emphasizes the importance of considering personalized learning and diversity within the curriculum. Ultimately, the integration of support available to young people is what seems to underpin positive experiences in school.

General Discussion

This study explored the mainstream secondary school experiences of typically developing students compared with students with autism. Findings from quantitative self-report measures indicated a similar overall school experience for both groups of students. Additional content analyses revealed

further similarities in overall functioning, while also highlighting differences in the way that the groups used and viewed peer support. It has demonstrated that teaching styles also affect the engagement of students, with teachers who are clear, consistent, and supportive being received positively by their students.

The use of a self-report methodology was important for gaining an understanding of educational issues directly from the perspective of those involved. This methodology acknowledges the different ways in which students engage and respond to their peers and teachers. Encouraging students to express their views enables schools to reflect on current practice and enhance school functioning where necessary. Although the aim of this study was to explore self-reports of student experience, the importance of effective inclusive practices in a mainstream setting has been highlighted. The findings clearly indicate that with the types of practice and support adopted by this school, young people with autism report sharing similar and enjoyable school experiences to their typically developing peers. It is vital for teaching staff and schools to recognize how an inclusive ethos in schooling can significantly improve the experience of all students. Such practices may be usefully recommended to other schools, such as offering a range of both academic and pastoral support structures, adopting interactive and explicit teaching methods, and ensuring a whole school understanding of the individuality of students with autism.

Several limitations apply to the present study. As with many investigations involving special populations, the sample size is not large, but it is sufficient for the analyses conducted here. The choice of matched pairs across the target and control groups removed some of the variance in the sample and so strengthened the analyses. Conducting the study in a single school also has the advantage of reducing between group variance, as contextual factors were the same for all participants. However, the weakness of a single school sample is that it could be argued that the institution itself was a special case, and if this line of reasoning is followed, it reduces the generalizability of the findings. Although the authors recognize this weakness, there is no reason to presume that this school is significantly different from other mainstream schools, with this school facing the same challenges and opportunities that face other such schools around the country.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Ashburner, J., Ziviani, J., & Rodger, S. (2009). Surviving in the mainstream: Capacity of children with autism spectrum disorders to perform academically and regulate their emotions and behavior at school. *Research in Autism Spectrum Disorders*, 4(1), 18–27. doi:10.1016/j.rasd.2009.07.002
- Audit Commission. (2002). *Educational needs: A mainstream issue*. London, England: Author.
- Baker, J. A., Grant, S., & Morlock, L. (2008). The teacher-student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly*, 23, 3–15. doi:10.1037/1045-3830.23.1.3
- Barton, E. E., & Pavilanis, R. (2012). Teaching pretend play to young children with autism. *Young Exceptional Children*, 15(1), 5–17. doi:10.1177/1096250611424106
- Bauminger, N., Shulman, C., & Agam, G. (2003). Peer interaction and loneliness in high-functioning children with autism. *Journal of Autism and Developmental Disorders*, 33, 489–507. doi:10.1023/A:1025827427901
- Boutot, E. A. (2007). Fitting in: Tips for promoting acceptance and friendships for students with autism spectrum disorders in inclusive classrooms. *Intervention in School and Clinic*, 42, 156–161. doi:10.1177/10534512070420030401
- Boutot, E. A., & Bryant, D. P. (2005). Social integration of students with autism in inclusive settings. *Education and Training in Developmental Disabilities*, 40(1), 14–23.
- Calder, L., Hill, V., & Pellicano, E. (2013). “Sometimes I want to play by myself”: Understanding what friendship means to children with autism in mainstream primary schools. *Autism*, 17, 296–316. doi:10.1177/1362361312467866
- Costley, D., Keane, E., Clark, T., & Lane, K. (2012). *A practical guide for teachers of students with an autism spectrum disorder in secondary education*. London, UK: Jessica Kingsley.
- Daniel, L. S., & Billingsley, B. S. (2010). What boys with an autism spectrum disorder say about establishing and maintaining friendships. *Focus on Autism and Other Developmental Disabilities*, 25, 220–229.
- Diamond, A., Barnett, W.S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science*, 30, 1387–1388. doi:10.1177/1088357610378290
- Dillon, G., & Underwood, J. (2012). Parental perspectives of students with autism spectrum disorders transitioning from primary to secondary school in the United Kingdom. *Focus on Autism and Other Developmental Disabilities*, 27, 111–121. doi:10.1177/1088357612441827
- Epstein, M. H. (2000). The Behavioral and Emotional Rating Scale: A strength-based approach to assessment. *Assessment for Effective Intervention*, 25, 249–256. doi:10.1177/073724770002500304
- Frederickson, N., Jones, A. P., & Lang, J. (2010). Inclusive provision options for pupils on the autistic spectrum. *Journal of Research in Special Educational Needs*, 10, 63–73. doi:10.1111/j.1471-3802.2010.01145.x
- Fumoto, H., Hargreaves, D., & Maxwell, S. (2007). Teachers’ perceptions of their relationships with children who speak English as an additional language in early childhood settings. *Journal of Early Childhood Research*, 5, 135–153. doi:10.1177/1476718X07076680
- George, C. L. (2010). Effects of response cards on performance and participation in social studies for middle school students with emotional and behavioral disorders. *Behavioral Disorders*, 35(3), 200–213.
- Gorodzinsky, A. Y., Hainsworth, K. R., & Weisman, S. J. (2011). School functioning and chronic pain: A review of methods and measures. *Journal of Pediatric Psychology*, 36, 991–1002. doi:10.1093/jpepsy/jsr038
- Greene, J. (2006). Toward a methodology of mixed methods social inquiry. *Research in the Schools*, 13(1), 93–98.
- Griswold, D., Barnhill, G., Smith Myles, B., Hagiwara, T., & Simpson, R. (2002). Asperger syndrome and academic achievement. *Focus on Autism and Other Developmental Disabilities*, 17, 94–102. doi:10.1177/10883576020170020401
- Hallett, V., Ronald, A., Colvert, E., Ames, C., Woodhouse, E., Lietz, S., . . . Happé, F. (2013). Exploring anxiety symptoms in a large-scale twin study of children with autism spectrum disorders, their co-twins and controls. *Journal of Child Psychology and Psychiatry*, 54, 1176–1185. doi:10.1111/jcpp.12068
- Harrington, C., Foster, M., Rodger, S., & Ashburner, J. (2014). Engaging young people with autism spectrum disorder in research interviews. *British Journal of Learning Disabilities*, 42(2), 153–161. doi:10.1111/bld.12037
- Hastings, R. P. (2005). Staff in special education settings and behaviour problems: Towards a framework for research and practice. *Educational Psychology*, 25, 207–221. doi:10.1080/0144341042000301166
- Hillier, A., Fish, T., Cloppert, P., & Beversdorf, D. (2007). Outcomes of a social and vocational skills support group for adolescents and young adults on the autism spectrum. *Focus on Autism and Other Developmental Disabilities*, 22, 107–115. doi:10.1177/10883576070220020201
- Hughes, K., Bullock, A., & Coplan, R. J. (2014). A person-centred analysis of teacher-child relationships in early childhood. *British Journal of Educational Psychology*, 84(2), 253–267. doi:10.1111/bjep.12029
- Humphrey, N., & Symes, W. (2010). Responses to bullying and use of social support among pupils with autism spectrum disorders (ASDs) in mainstream schools: A qualitative study. *Journal of Research in Special Educational Needs*, 10, 82–90. doi:10.1111/j.1471-3802.2010.01146.x
- Inderbitzen, H., & Foster, S. (1992). The Teenage Inventory of Social Skills: Development, reliability and validity. *Psychological Assessment*, 4, 451–459. doi:10.1016/S0140-1971(03)00032-0
- Jones, G. (2013). *Educational provision for children with autism and Asperger syndrome: Meeting their needs*. London, England: Routledge.
- Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London, England: Routledge.
- Lecavalier, L. (2006). Behavioral and emotional problems in young people with pervasive developmental disorders: Relative prevalence, effects of subject characteristics, and empirical classification. *Journal of Autism and Developmental Disorders*, 36, 1101–1114. doi:10.1007/s10803-006-0147-5
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. London, UK: SAGE.

- Mottron, L. (2004). Matching strategies in cognitive research with individuals with high-functioning autism: Current practices, instrument biases, and recommendations. *Journal of Autism and Developmental Disorders*, *34*, 19–27. doi:10.1023/B:JADD0.0000018070.88380.83
- Norton, A., & D'Ambrosio, B. (2008). ZPC and ZPD: Zones of teaching and learning. *Journal for Research in Mathematics Education*, *39*, 220–246.
- Pfeifer, J. H., & Blakemore, S.-J. (2012). Adolescent social cognitive and affective neuroscience: Past, present, and future. *Social, Cognitive and Affective Neuroscience*, *7*, 1–10. doi:10.1093/scan/nsr099
- Pianta, R. C. (2001). *Student-Teacher Relationship Scale*. Lutz, FL: Psychological Assessment Resources.
- Renty, J., & Roeyers, H. (2006). Quality of life in high-functioning adults with autism spectrum disorder. *Autism*, *10*, 511–524. doi:10.1177/1362361306066604
- Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with autism. *Journal of Autism and Developmental Disorders*, *33*, 123–130.
- Rubie-Davis, C. (2007). Classroom interactions: Exploring the practices of high- and low-expectation teachers. *British Journal of Educational Psychology*, *77*, 289–306. doi:10.1348/000709906X101601
- Rutgers, A., Bakermans-Kranenburg, M., Ijzendoorn, M., & Berckelaer-Onnes, I. (2004). Autism and attachment: A meta-analytic review. *Journal of Child Psychology and Psychiatry*, *45*, 1123–1134. doi:10.1111/j.1469-7610.2004.t01-1-00305.x
- Sciutto, M., Richwine, S., Mentrikoski, J., & Niedzwiecki, K. (2012). A qualitative analysis of the school experiences of students with Asperger syndrome. *Focus on Autism and Other Developmental Disorders*, *27*, 177–188. doi:10.1177/1088357612450511
- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, *43*, 1531–1543. doi:10.1037/0012-1649.43.6.1531
- Stringer, M., Irwing, P., & Giles, M. (2009). Intergroup contact, friendship quality and political attitudes in integrated and segregated schools in Northern Ireland. *British Journal of Educational Psychology*, *79*, 239–257. doi:10.1348/978185408X368878
- Taylor, B., Jick, H., & MacLaughlin, D. (2013). Prevalence and incidence rates of autism in the UK: Time trend from 2004–2010 in children aged 8 years. *BMJ Open*, *3*(10), e003219. doi:10.1136/bmjopen-2013-003219
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wainscot, J. J., Naylor, P., Sutcliffe, P., Tantam, D., & Williams, J. V. (2008). Relationships with peers and use of the school environment of mainstream secondary school pupils with Asperger syndrome (high-functioning autism): A case-control study. *International Journal of Psychology and Psychological Therapy*, *8*, 25–38. Retrieved from <http://www.redalyc.org/articulo.oa?id=56080103>
- Warnock, M. (2005). *Special educational needs: A new look*. London, England: Philosophy of Education Society of Great Britain.
- Wing, L. (1996). Autistic spectrum disorders. *British Medical Journal*, *312*, Article 327.
- Woolfson, L., & Brady, K. (2009). An investigation of factors impacting on mainstream teachers' beliefs about teaching students with learning difficulties. *Educational Psychology*, *29*, 221–238. doi:10.1080/01443410802708895