'This is what we've always wanted': Perspectives on young autistic people's transition from special school to mainstream satellite classes

Abigail Croydon, Anna Remington and Lorcan Kenny (iD)
Centre for Research in Autism and Education (CRAE), UCL Institute of Education, University
College London, London, UK

Elizabeth Pellicano (iD)
Department of Educational Studies, Macquarie University, Sydney, Australia

Abstract

Background & aims: According to parents, teachers and policymakers alike, including autistic children and young people in mainstream schools is notoriously difficult – especially so for the significant minority of young people on the autism spectrum with additional intellectual, communication and behavioural needs. The current study sought to understand the perceived impact of one particular, emerging model of education, in which selected students from special schools are transferred to dedicated 'satellite' classes in local, mainstream partner schools, while continuing to receive the tailored curriculum and specialist teaching of the originating school.

Methods: We conducted interviews with London-based young autistic people ($n = 19$), their parents/carers and teachers to understand their experiences of transitioning from specialist to satellite mainstream provision.

Results: Participants overwhelmingly welcomed the prospect of transition and its perceived benefits in the short and longer term. Young people and families celebrated achieving access to 'more normal places and things', 'seeing what others are doing', and greater autonomy, without losing the trusted expert support of their former special school. Young people also felt a deep sense of belonging to their new mainstream school, despite only being minimally included in regular mainstream classes and activities. Teachers were equally positive and felt that their students had responded to higher expectations in their new mainstream schools, reportedly resulting in better behavioural regulation and more sustained attention in the classroom.

Conclusions: The strikingly positive evaluations provided by all participants suggest that this satellite model of education might have advantages for young autistic people with additional intellectual disability, when appropriate support extends across transition and beyond.

Implications: These findings shed light on the experiences of an under-researched group of autistic students and a specific model of education – following a needs-based perspective on inclusion – that seeks to extend their participation in local schools. Future research should examine the potential effects of satellite classrooms on the knowledge of, and attitudes toward, autism in non-autistic mainstream peers.

Keywords

Transition, education, mainstream, inclusion, special, satellite

Corresponding author:
Elizabeth Pellicano, Department of Educational Studies, Macquarie University, 29 Wally's Walk, Sydney 2109, Australia.
Email: liz.pellicano@mq.edu.au

School can be particularly challenging for children and young people on the autism spectrum. Autistic[1] students can struggle with social communication, have additional difficulties with their learning and behaviour, and are at an increased risk of developing mental health problems (e.g., Simonoff et al., 2008, 2012). The school environment itself, however, can also present challenges: the physical setting is often large, noisy and chaotic, the social milieu is increasingly complex and there are growing demands on students' academic progress as they move into secondary school. Identifying the 'right' learning environments for these students – where they feel calm, safe, secure, enjoy positive relationships with others and receive the most effective support, adapted to their individual needs – is perceived to be critical to promoting their life chances and opportunities (McNerney, Hill, & Pellicano, 2015; Mann, Cuskelly, & Moni, 2015).

Deciding on the 'best' placement for a particular autistic child or young person is no straightforward task (Lilley, 2014; McNerney et al., 2015). It will likely depend on his or her individual skills and needs, the advice and support parents receive from professionals during the decision-making process (McNerney et al., 2015; Parsons et al., 2011) and on the provision available in their school district, which can vary widely (Lindsay, Dockrell, Mackie, & Letchford, 2005). Placement decisions can also depend on the family's situation and preferences. Parents often report wanting a nurturing, flexible and inclusive school environment, with high educational aspirations, emphasising both academic and life skills, and whose staff have some understanding of autism (Charman et al., 2011). For many parents, such a school is a mainstream school, which allows their child 'to be integrated with the rest of society, and not to be excluded' (McNerney et al., 2015, p. 8; see also Byrne, 2013; Humphrey & Lewis, 2008). Parents and educators also underscore the importance of having typical role models, which is thought to foster autistic children's social development and social relationships (Lord & Hopkins, 1986; Rotheram-Fuller, Kasari, Chamberlain, & Locke, 2010; Waddington & Reed, 2006). Autistic children also report the importance of having friends and being accepted by their peers (Humphrey & Lewis, 2008; McNerney et al., 2015; Makin, Hill, & Pellicano, 2017; see Williams, Gleeson, & Jones, 2019, for review).

These desires and aspirations are consistent with what is sometimes called a rights-based, inclusion-first perspective. This perspective calls for inclusion of all children and young people with special educational needs and disabilities (SEND), including those who are autistic, in mainstream schools on the basis that they have the right to enjoy the same sorts of opportunities as children without SEND and are unlikely to receive such opportunities in specialist, often segregated environments (Allen, 2008; see Ravet, 2011, for discussion). Yet many parents also report having little confidence in the extent to which their autistic children can be included *effectively* within mainstream settings (Whitaker, 2007). They worry about large child-to-teacher ratios (Kasari, Freeman, Bauminger, & Alkin, 1999; McNerney et al., 2015), bullying and rejection of their child by their non-autistic peers (Humphrey & Hebron, 2015; Symes & Humphrey, 2010; Zablotsky, Bradshaw, Anderson, & Law, 2014), the often-challenging sensory environments, including classrooms, corridors, playgrounds and dining rooms (Ashburner, Ziviani, & Rodger, 2008; Makin et al., 2017; Mandy et al., 2016), and especially a lack of access to autism-specific knowledge, expertise and support (Brede, Remington, Kenny, Warren, & Pellicano, 2017; Jindal-Snape, Douglas, Topping, Kerr, & Smith, 2005; Waddington & Reed, 2006; see Nuske et al., 2019, for discussion).

Parents are also concerned about mainstream schools not being able to address what some have referred to as the 'hidden curriculum' (Myles & Simpson, 2001), those social and more general life skills, such as self-care, self-regulation and speech and language skills, which are not taught directly but are nevertheless critical to the progress of young autistic people who may not acquire them in the usual ways. Some parents therefore opt for a special school placement for their child either in the belief that access to high-level expertise on autism will ensure that staff will better cater for their child's individual needs, or because they had already tried a mainstream placement and felt that it had failed (Brede et al., 2017).

Educators and policymakers agree that it can often be exceedingly difficult to include autistic children effectively within regular, mainstream schools compared with children with other SEND (House of Commons Education and Skills Committee, 2006; Parsons, Lewis, & Ellins, 2011). Policymakers in England have therefore recommended that every child on the autism spectrum has 'local access to a diverse range of mainstream and specialist educational provision' (House of Commons Education and Skills Committee, 2006, p. 6). These options include a continuum of placements, ranging from mainstream schooling with or without individualised support, to general or autism-specific resource bases (or 'units') attached to mainstream schools, and general or autism-specific special schools, depending upon local availability.

These sentiments and recommendations follow a needs-based, rather than a straightforward inclusion-first perspective. The suggestion here is that autistic

students present a particular challenge for conventional notions of educational inclusion (e.g., Jordan, 2008; see also Norwich, 2008) because these students' educational needs might best be met by an educational approach specifically informed by expertise in autism. Autistic students' right to participate in the educational provision delivered in local schools might therefore conflict with their right to have these distinctive needs recognised (Ravet, 2011).

Maintaining special school practices – structured yet flexible specialist curriculum and teaching – in a mainstream environment is one potential type of provision that could offer the most advantages for autistic children, while at the same time aligning with what many parents and even children appear to want: to be educated within an inclusive, mainstream school (see Norwich, 2008, for discussion). Below, we outline one such approach, a 'satellite class' model of supported inclusion in which the characteristics of a special school education are kept in place for selected autistic pupils as they transfer to 'satellite classes' within mainstream settings.

Satellite provision

The concept of satellite classes originated in Australia in the late 1990s, in response to evidence that intellectually able autistic children and young people experienced significant difficulty managing in regular, mainstream schools (Roberts, Keane, & Clark, 2008). The country's largest autism service provider, Autism Spectrum Australia (Aspect), felt that for some children and young people, education provided by a specialist provider (the 'base' school) in a small, autism-specific class within a mainstream 'host' school could promote learning and enable them to transition to a less specialised educational placement. Satellite classes are thus conceived as stepping-stones to 'full inclusion' in mainstream schools (Roberts et al., 2008), with successful entry to mainstream classes often considered to be the primary indicator of success (Keane, Aldridge, Costley, & Clark, 2012). The factors reportedly critical to that success – similar to traditional autism resource bases or units (Charman et al., 2011) – include the attitudes and ethos of the host schools, the degree of preparation of the receiving school, the skills and expertise of teachers within the satellite class, ongoing support and training for staff, and strong home-school partnerships (Roberts et al., 2008; see also Martin, Dixon, Verenikina, & Costley, 2019).

Since the 1990s, the satellite model has been implemented on a significant scale in certain parts of Australia (e.g., Aspect has more than 100 satellite classes operating in a single state, New South Wales) as well as in other countries, including New Zealand and England. The current study focused on a model of mixed 'satellite' provision established by a community special school in a local education authority in London, United Kingdom (UK). The school proposed to establish satellite classes in mainstream schools and partnered with two local schools (one primary, one secondary), who agreed to supply dedicated classrooms and host the new classes. Selected children were prepared to transition together with their existing specialist teaching staff, curriculum and range of individualised supports. Like autism resource units, satellite classes combine autism-specific specialist support with some level of inclusive mainstream experience. Yet, unlike such units, in the satellite model, the special school retains responsibility for staff and students, and for delivering the academic and hidden curricula.

The current study sought to understand the perceived impact of this particular model of education. Our aims were twofold. First, we identified the characteristics of the children and young people selected to transition to the satellite classes. In this London-based version of the satellite model, the primary aim was to promote the mainstream learning opportunities of selected satellite class students considered able to benefit from mainstream inclusion. The aim diverges from the original Australian model, in which satellite classes are considered a stepping stone to full inclusion in mainstream classes. The difference in aims suggests that the London-based satellite classes may well be serving a group of children and young people with distinct levels of needs to those educated within the Australian model.

Second, we sought to understand the perceived impact of the satellite classes from the perspectives of parents, teachers and, importantly, the young people themselves. While the majority of autistic children (70%; Department for Education, 2014) are educated within a mainstream setting, a considerable minority attend specialist provision, with many moving from mainstream to specialist provision at some point in their school career, due to inappropriate educational provision or placement breakdown (see Brede et al., 2017, for discussion). In the current study, however, we focus on a group of young autistic people who experienced the *opposite* pattern: those who made the transition to a mainstream, satellite classroom after having spent at least some of their school career in a setting specifically for those on the autism spectrum. Semi-structured interviews with these young people, their parents and teachers therefore examined their transition experiences from a special school to a mainstream environment and the perceived impact of this specific satellite model.

Method

Context

The satellite initiative took place in one particular local London authority in which 60.5% of children are estimated to be living in poverty (i.e., in families with reported incomes less than 60% of median), with a high proportion of children (42%) entitled to Free School Meals.[2] At the time of data collection (2015–2016), 89% of the school-age population were classified as belonging to an ethnic group other than White British, and English was an additional language for 74% of its pupils. A significant minority (21%) of children and young people were registered for some level of additional SEND provision.

Within this authority, there was one autism-specific government-funded community special school – hereafter, the 'Special School' – that caters for both primary and secondary pupils on the autism spectrum. The majority of pupils were boys, from families of Bangladeshi or Somali background, and lived in households in which English was not the primary home language. Most also had moderate-to-severe intellectual disabilities and/or substantial speech, language and communication needs.

At the time the satellite initiative was launched, there was no autism-specific unit-based provision co-located within mainstream primary or secondary schools within the borough. The base Special School therefore partnered with two local mainstream schools (hereafter, 'Host Mainstream' schools), both with a strong, inclusive ethos, including one larger-than-average primary school and one smaller-than-average secondary school. Both host schools shared the borough's characteristically high proportion of young people with SEND, and also had significantly (above the national average) more pupils eligible for the 'pupil premium', a payment made to publicly funded schools in England to help raise the attainment of disadvantaged pupils.

The distinctive form of satellite model implemented by the London Special School was designed, according to its headteacher, to achieve the following: (i) to maintain the individualised, differentiated curriculum and learning support of the Special School, including visiting subject teachers from the Special School; (ii) to provide further continuity by transferring young people alongside familiar peers and teachers, and retaining a low pupil–teacher ratio; (iii) to allow considerable flexibility in support arrangements, with the possibility for satellite children to attend selected mainstream classes according to individual needs; (iv) to enable mainstream teachers to access the expertise of satellite teachers to inform their support of autistic students attending general, mainstream classes; and (v) to provide satellite students with ongoing contact with the base Special School, allowing for the possibility of students to return, if necessary, and to maintain contact with peers remaining in their Special School.

Participants

At the beginning of this study, the satellite initiative was in its second year. At its inception, staff at the Special School had identified 15 students thought to be able to benefit from learning within a mainstream environment. In the academic year 2014–2015, these students transitioned from the Special School to the Host Mainstream primary ($n = 8$) and secondary ($n = 7$) schools. An additional group ($n = 11$) was identified as suitable candidates for transition the following academic year (2015–2016) to the Host mainstream primary ($n = 5$) and secondary ($n = 6$) schools.

All 26 children and young people selected for the satellite initiative were invited to take part in this project. Of these potential participants, 9 parents/carers from the first cohort and 10 parents from the second cohort ($n = 19$; 73%) gave written informed consent for their children to take part (see Table 1 for background characteristics). All participating children had received an independent clinical diagnosis of autism according to ICD-10 (World Health Organization, 1992) or DSM-IV-TR or DSM-5 criteria (American Psychiatric Association, 2000, 2013) and either a Statement of SEN or an Education, Health and Care Plan,[3] specifying autism as their primary need. One family member (17 mothers; 1 father; 1 grandmother; 1 elder brother) of each of the child participants took part, with the exception of the parents of one child whose foster mother and father were interviewed together. Three teachers from the satellite classes (2 female, 1 male) also agreed to be interviewed.

Procedure

Background measures. To measure young people's *general cognitive ability*, we used the Wechsler Abbreviated Scale of Intelligence – second edition (WASI-II; Wechsler, 2011). The WASI-II is a short and reliable measure of ability, consisting of four subtests: (1) Vocabulary and (2) Similarities, which together form the Verbal Comprehension Index (VCI) and (3) Block Design and (4) Matrix Reasoning, which together form the Perceptual Reasoning Index (PRI). Young people's composite (VRI, PRI) were derived following the Manual (Wechsler, 2011) and full-scale IQ scores are reported in Table 2. Three young people were unable to complete the WASI-II and instead completed the British Picture Vocabulary Scales – 3rd edition

Table 1. Participant details.

Young person	Cohort[a]	Age in years; months	Gender	Ethnicity	English first language at home	Communication level (as indexed by PECS level)[b]	Family Participant
1	1	12;8	F	Asian	No	Phase VI & verbal	Mother
2	1	12;2	M	White British	Yes	Phase VI & verbal	Mother
3	1	12;7	M	Black British	Yes	Phase VI	Mother
4	1	13;7	M	Bangladeshi	No	Phase VI	Mother
5	1	8;9	M	Black African	No	Phase VI	Mother
6	1	9;3	M	Bangladeshi	No	Phase VI	Brother
7	1	8;6	M	Bangladeshi	No	Verbal	Father
8	1	9;4	M	Bangladeshi	No	Phase VI	Mother
9	1	8;4	M	Bangladeshi	No	Phase VI	Mother
10	1 & 2	11;6	F	Bangladeshi	No	Phase VI	Mother
11	2	10;0	M	White British	Yes	Phase VI	Mother
12	2	9;1	M	Bangladeshi	No	Phase VI	Mother
13	2	15;3	M	Bangladeshi	No	Phase VI	Mother
14	2	14;9	M	Black African	No	Phase VI	Grand-mother
15	2	16;3	M	Black British	Yes	Phase VI	Mother
16	2	15;10	M	Black African	Yes	Phase VI	Foster parents
17	2	16;3	M	White British	Yes	Verbal	–
18	2	10;0	M	Black African	No	Phase VI	Mother
19	1	17;7	M	White British	Yes	Verbal	Mother

[a]Cohort 1: about to transition to host satellite classes; Cohort 2: already transitioned. One child appears in two cohorts, as she transitioned from the base Special School to the host primary then host secondary school.
[b]The Picture Exchange Communication System (PECS) is an augmentative and alternative communication intervention package for individuals on the autism spectrum and related developmental conditions (Bondy & Frost, 1994). In the final phase (Phase VI), young people learn to comment in response to questions like, 'What do you see?', 'What do you hear?' and learn to construct sentences starting with 'I see', 'I feel', 'It is a', etc.

(BPVS-III; Dunn, Dunn, & Styles, 2009), which provided an estimate of receptive vocabulary.

To index young people's current *autistic features*, parents completed the Social Responsiveness Scale – second edition (SRS-2; Constantino & Gruber, 2012), a 65-item questionnaire that assesses social and behavioural difficulties associated with autism in children and adolescents. Parents were asked to rate their child's behaviour over the past six months on a 4-point scale ranging from 1 ('not true') to 4 ('almost always true'). The SRS-2 has excellent reliability (Cronbach's alpha = 0.95) and strong predictive validity. Higher scores reflect greater autism severity (see Table 2). T-scores of ≥76 indicate 'severe' difficulties in reciprocal social behaviour; 66–75 indicate 'moderate' difficulties; 60–65 indicate 'mild-to-moderate' difficulties; and <60 are considered to be within 'typical limits'.

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was used to index children's *behavioural attributes*. On this 25-item questionnaire, parents are asked to rate the extent to which certain behavioural tendencies were 'not true' (score of 0), 'somewhat true' (score of 1), or 'certainly true' (score of 2) of their children in five areas, including emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviour. This yielded a score out of 10 for each of the 5 subscales and, once scores on the prosocial behaviour subscale were reverse-coded, a maximum total score out of 50. Higher scores indicate higher levels of behavioural difficulties. Reliability estimates for the SDQ are moderate ($\alpha = 0.73$; Goodman, 1997), including with autistic adolescents (all subscales $\alpha > 0.70$ for parent-rated subscales, except for peer problems, $\alpha = 0.61$; Simonoff et al., 2012). In the current study, estimates of internal consistency were also moderate (Cronbach's $\alpha > 0.69$ for all subscales, except peer problems $\alpha = 0.59$).

Semi-structured interviews. There were two cohorts: (1) one half of the sample was making the transition to their satellite class and were thus seen first in their base Special School and second in their Host Mainstream school; and (2) the remaining young people had already transitioned to their host school and so were seen twice in this context, one year apart. At each time point, we asked young people about their experiences in the base Special School, the Host Mainstream school and any perceived differences between them, their friendships, relationships with their teachers, and leisure activities. During the sessions, child consent was viewed as a 'continuous process' (Lloyd, Gatherer, & Kalsy, 2006). As most

Table 2. Scores for individual children on measures of general cognitive ability, autistic severity, perceived quality of life and behavioural difficulties.

Child	BVPS-III[a]	WASI-II[b] VCI	WASI-II[b] PRI	WASI-II[b] FSIQ	SRS-2[c] T score	SDQ[d] Total score	Host mainstream school
1	–	56	57	54	78	14	Secondary
2	–	63	91	74	89	25	Secondary
3	28	–	–	–	49	4	Secondary
4	–	47	70	58	63	11	Secondary
5	–	57	79	66	65	10	Primary
6	–	67	66	64	–	17	Primary
7	–	82	72	75	77	18	Primary
8	31	–	–	–	–	23	Primary
9	42	–	–	–	78	5	Primary
10	–	67	62	67	–	8	Both
11	–	45	46	45	–	17	Primary
12	–	74	82	74	83	10	Primary
13	–	52	44	52	78	12	Secondary
14	–	51	65	51	63	10	Secondary
15	–	54	46	54	58	8	Secondary
16	–	45	44	45	41	12	Secondary
17	–	93	83	93	–	15	Secondary
18	–	82	74	82	–	23	Primary
19	–	71	84	71	–	13	Secondary
Mean	33.67	62.88	63.81	62.88	68.5	13.95	
SD	7.37	36.92	17.27	36.92	13.82	6.14	

[a]BPVS-III: British Picture Vocabulary Scale – third edition (Dunn et al., 2009).
[b]WASI-II: Wechsler Abbreviated Scale of Intelligence – second edition (Wechsler, 2011), VRI: Verbal Comprehension Index; PRI: Perceptual Reasoning Index. Standard scores are reported here.
[c]SRS-2: Social Responsiveness Scale – second edition (Constantino & Gruber, 2012), standard T scores have a mean of 50 and SD of 10. T scores of ≥76 indicate 'severe' difficulties, 66–75 indicate 'moderate' difficulties, 60–65 indicate 'mild-to-moderate' difficulties, and <60 are considered to be within 'typical limits'.
[d]SDQ: Strengths and Difficulties Questionnaire (Goodman, 1997), bandings presented are 'average' (scores of 0–13), 'borderline' (scores of 14–16) and 'atypical' (scores of >16).

young people were recent or current users of the Picture Exchange Communication System (PECS; Bondy & Frost, 1994), they were offered visual supports, as appropriate, such as photographs of the school buildings, and as appropriate, a choice of picture symbols to support answers (e.g., 'yes/I'm happy' (happy face); 'no/it's a problem' (unhappy face) or 'neutral' ('OK' hand gesture). We also offered picture-based school preference choices to those with the most limited spoken communication, based on Hill et al. (2016). The sentiments of all young people's responses were included in the qualitative analysis but more verbally able young people's responses feature more in direct quotation.

Parents were asked about their child's developmental and schooling history, interests, strengths and difficulties, the process and impact of transitioning and their hopes and aspirations for their child's future. Teachers were asked about young people's strengths and interests and the process and impact of transition.

General procedure

Ethical approval was granted by UCL Institute of Education'ss Research Ethics Committee (REC 719). Parents of all children gave their written informed consent for their own and their children's participation in the project and all young people gave their verbal assent. All teachers also gave their written informed consent prior to taking part.

Each participant (young people, parents, teachers) was seen on two occasions, one year apart, by a single researcher. Background information and questionnaire data addressing the first aim were gathered at the first time point only, while semi-structured interviews, designed to address the second aim, were conducted at both time points.

Data analysis

Interviews were recorded with participants' consent and transcribed verbatim. The data were analysed using thematic analysis by two authors (AC and EP),

as outlined by Braun and Clarke (2006). Our analysis adopted an inductive ('bottom up') approach (i.e., without integrating the themes within any preexisting coding schemes or preconceptions of the researchers) to identify patterned meanings within the dataset (Braun & Clarke, 2006) within an essentialist framework (to report the experiences, meanings and reality of the participants). We approached the analysis and discussions from the perspective of autism researchers interested in learning disability, who do not identify as autistic.

To begin, the authors independently familiarised themselves with the data, reading and re-reading the transcripts, and assigning codes to data extracts. We then conferred regularly to discuss preliminary codes. Data were initially coded separately by group (parent, then teacher, then child) and cohort (transitioning vs. transitioned). It soon became apparent through discussion that the codes were common across informants and cohorts, as well as time points. We therefore agreed on consistent codes that could be applied to each transcript for all groups and re-coded the initial transcripts, where necessary. The authors liaised several times to review the themes and subthemes, focusing on semantic features of the data (i.e., 'staying close' to participants' language), checking to ensure that the themes were coherent for coded extracts and the entire data set, resolving discrepancies and deciding on the final definitions of themes and subthemes. Analysis was thus iterative and reflexive in nature and moved backwards and forwards between data and analysis.

Results

Results from questionnaires: Young people's characteristics

Table 2 shows the individual and mean scores for the young autistic people on the WASI-II, the SRS-2 and the SDQ. We note here that the SRS-2 and SDQ scores must be treated with caution as they may be influenced by the presence of co-occurring intellectual disability (Hus, Bishop, Gotham, Huerta, & Lord, 2013; Kaptein, Jansen, Vogels, & Reijneveld, 2008). Nevertheless, overall, the young people's scores on these measures reflected social communication difficulties characteristic of being autistic and, for the most part, additional intellectual disability with or without co-occurring behavioural difficulties.

The majority ($n = 10$) of young people scored in the 'extremely low' range of the WASI-II, five in the 'moderately low' range and one in the 'low average' range. Some family members found the SRS-2 difficult to complete, for reasons related to English as a second language, which meant that the return rate for this questionnaire was low (63%). Of the 12 parents who completed the SRS-2 on their children, six showed scores within the 'severe' range, three in the 'mild-to-moderate' range and three in the 'typical' range. On the SDQ, most ($n = 11$) young people scored in the 'average' range, two in the 'borderline' range and six in the 'atypical' range, the latter reflecting clinically significant behavioural and attentional difficulties.

Results from semi-structured interviews

Overall, participants were overwhelmingly positive about the transition to their new satellite classes and its perceived benefits in the short and longer term. We identified three themes from the data that reflect these encouraging sentiments, including (1) Celebrating the transition to mainstream, (2) The transition to mainstream has been transformative, and (3) Transition has broadened their horizons of the world and of what's possible. Figure 1 shows the three themes and associated subthemes, which are also numbered below and presented in bold and italics, respectively. Illustrative quotes are also provided below (P: Parent, T: Teacher, YP: Young Person) and in Supplementary Table 1.

(1) Celebrating the transition to mainstream. Participants reported being excited about their impending transition to the mainstream satellite classes. Parents wanted their children to be prepared for life after school, 'to get a job and be more independent' because 'he can't rely on anyone after me' (P009) and felt that the satellite classes would provide opportunities 'for more normal places and things' (P012). As one parent described, '*this is something we've always wanted*' (P003; subtheme 1.1). Teachers also spoke of wanting children 'to have the opportunity to be in a more grown-up space and do more things that are practical in real life' (T003), 'to be able to cope in a mainstream setting' (T001) and to have everyday life experiences.

Parents' enthusiasm for the satellite classes was made all the more striking in the context of their overwhelmingly negative, previous experiences of mainstream. Many parents described how their children 'went to mainstream school at first' (P011) prior to attending the special school, but that these placements had failed because either the staff in these schools 'were struggling with his behaviour' (P002), their child 'couldn't speak' (P014), 'could not cope with all the other children' (P005) or that 'he one inch wasn't improving' (P008). Parents also reported that some children had experienced bullying by their mainstream peers, which resulted in school refusal and their children being 'very scared' (P001). They felt that their children made no progress until they had left these placements.
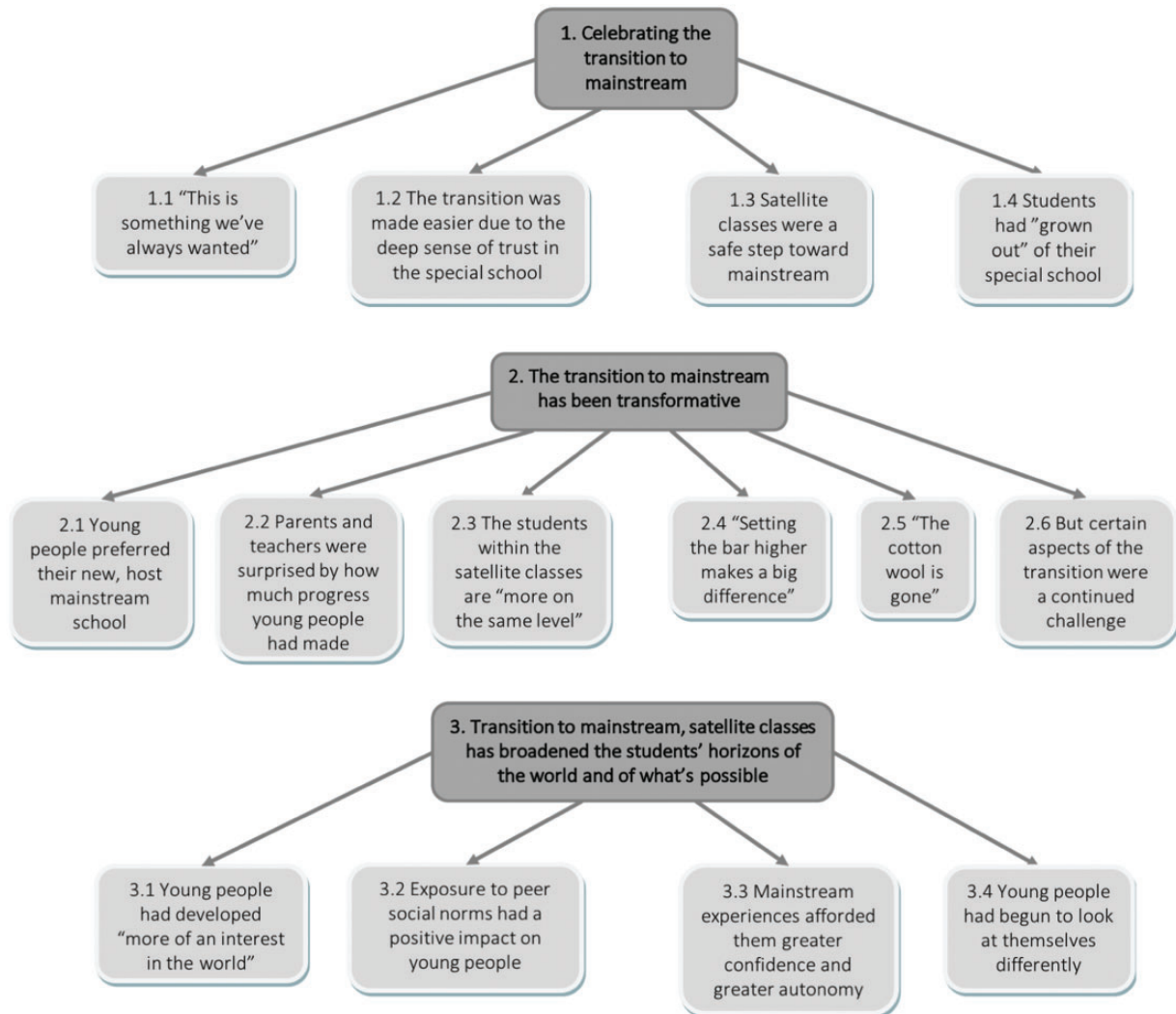
Figure 1. Participants' views and experiences on the transition to satellite provision: themes and corresponding subthemes.

Despite these negative experiences of mainstream, parents were confident that the transition (back) to mainstream was the right path for their children for three key reasons. First, they reported that *the transition was made easier due to the deep sense of trust in the special school* (subtheme 1.2), which allowed them to accept the idea of re-entry to mainstream. Parents expressed admiration for the special school staff and were grateful to benefit from their expertise: 'They know how autistic children work. I just love the people working there. Because I think they understand' (P004). One young person said, 'some of the staff I am going to miss because I had a good bond over here' (YP017). Parents felt that the Special School had been instrumental to their children's progress, especially with regard to language and in the early years, so that the transfer to mainstream came as an additional bonus: '[Special School] took him up a level and this is just the cream on top of the cake' (P015).

Second, the special school had provided consistency, safety and security for their children. Although parents felt 'worried about this transition' (P002), particularly about their children 'being bullied' and 'the complete change of timetable' (P002), they were nevertheless greatly reassured that this degree of consistency would continue as children moved on to the satellite class: 'they'll do the things similar to [Special School] anyway, it's just that he'll be there' (P005). As such, they felt the *satellite classes were a safe step toward mainstream* (subtheme 1.3) because 'it allows children to move on to something bigger whilst keeping a certain degree of continuity and consistency' (T001). Parent felt their children were 'not ready for mainstream, he would not be able to manage' (P005) but they were willing to try the satellite placement in the

knowledge that they had the special school to fall back on if the placement did not work out.

Third, despite being unequivocally positive about the special school, and the substantial progress that parents felt their children had made in that setting, they felt that their children had 'grown out of [Special School]' (subtheme 1.4). Although reluctant to stigmatise other children, parents were also worried that their children had no-one 'to extend their interaction skills with' (P010) and were unable to 'see how normal children behave' (P011). The behaviours of some special school peers were perceived to have a negative impact: 'I saw that he would copy their actions, their behaviours, that sort of thing. So, I had concerns and I saw that he needed to leave' (P014). Young people also reported that other children 'disturb classes every two seconds' (YP017) and 'have anger, everyone has upset feelings' (YP015). One young man described, 'because when I was at [Special School], me and a couple of other students were the most able kids there. We can talk, we can have a decent conversation with anyone. So, our head-teacher thought to put us [in the satellite classes] because it will actually increase our confidence and actually set us a better standard' (YP017).

(2) The transition to mainstream has been transformative. Even though their accounts of experiences at special school had been very positive, *young people preferred their host school* (subtheme 2.1). They described their new school as 'the best' (YP005) and 'cool, actually' (YP018). Those with single-word spoken language indicated their preference by selecting the picture of the new school as their favourite and repeating the school's name. Young people maintained this high level of enthusiasm, even after 1–2 years following transition: 'There's nothing I don't like about it' (YP007). Many young people focused on concrete differences and practical implications of transitioning to their new host schools, including the larger physical space, new school uniforms, travel and lunch arrangements and, for two young people, better Information and Communication Technologies (ICT) provision. Some also referred to friendship possibilities: '[Special School] children like [Host Mainstream] children' (YP005). One boy summed it up: 'They've got baskets, got pizza and it's really good' (YP014).

Their teachers also gave strikingly positive evaluations of the transition and *were surprised about how much progress young people had made* (subtheme 2.2): 'at that age they tend to plateau and don't skyrocket with progress. So, when I went through and did mark off certain things I was like, "oh my gosh; that's great" (T002).' Parents also felt 'so happy about how far [child] has come' (P003) and 'couldn't see him ever going back to [Special School]' (P011).

Parents reported that their children were 'talking more' (P009) and had 'made friends with children in his class' now that *they are* 'more on the same level' (P002; subtheme 2.3). Teachers also noted, 'because they're all able children in an able class together, they can move at a quicker pace' and were thus 'easier to teach' (T002). Young people reported similar sentiments. They noted that 'there are more people that can talk' (YP018) and felt they 'fit much better in this school. It being on my ability' (YP017). The word 'calm' was used frequently to describe what was better about their new placements. Teachers also felt that the 'lack of behaviours and enough staff' also meant that they 'now have a lot of time to be able to put in any interventions that we need to' (T002).

Participants felt that '*setting the bar higher makes a big difference*' (subtheme 2.4). Staff reported that they now 'work like a mainstream class', with 'more emphasis on lessons' (T002). As a result, their 'expectations have increased and [the students] have met that in terms of their concentration, their independence and their motivation for learning' (T003). Young people also noticed the difference in expectations: 'it's time for me to change now ... and learn some harder things' (YP007). One young person described how in the Special School, teachers 'would like, usually tell me the answer', whereas in the Host Mainstream school, 'they will just, like, give me clues' (YP018). Parents also reported observing the effects of these higher expectations: 'when I put on that uniform on his first day of school, you could literally see a shift. He felt like, "oh my, I'm a big boy now" (P003).'

Parents and teachers also identified how, in the new environment, '*the cotton wool is gone*' (subtheme 2.5). Parents described how in their Special School, 'staff were more cautious to let them do things' (P011), and the young people had become (P005) 'a little bit too comfortable'. They felt that young people 'needed that little bit of a push', 'to be a bit more challenged – a bit more independent and not so sheltered' (P005). They were therefore encouraged that satellite staff 'let them do more on their own and with limited supervision' (P011), which meant that young people 'had more freedom and independence' (P001) and needed 'to be responsible' (P002). Staff also described how they were now taking a step back, allowing the students 'to make mistakes' (T001) and have increased opportunities to develop greater flexibility and independence. Young people were reportedly empowered by these opportunities. One young person felt that lunchtime at his former special school was a 'problem' because 'the adults get lunch for me' (YP002). Now, teachers described that the students 'are in charge of their money as well as topping up their cards and making their [lunch] choices' (T003).

That said, not everyone had a smooth transition. Parents reported that some young people had a 'tricky start' (P011), which included some behavioural issues, a temporary renewal of one child's toileting phobia, and increased aggression in the playground for another. Teachers also spoke of children's difficulties 'unlearning' the way that things were done at the Special School: 'Lining up for lunch is exactly the same as how we do it at [Special School] but they couldn't do it. I had to timetable all four staff to be there and it was really difficult' (T002). While these issues were fairly short-lived, *certain aspects of the transition were a continued challenge* (subtheme 2.6). For young people, these aspects centred on the sensory environment. Most young people eventually got 'used to the size of the school, the noise and crowds' (P012), but this was largely because staff had made accommodations, which often meant compromising on their contact with mainstream peers. For one child in particular, however, it was still 'a real challenge. I don't think he's made as much progress academically as I'd hoped and I think he's very distracted a lot of the time (T002).' Being able to 'get over' (T001) the often-distressing sensory environment was perceived by teachers and parents to be critical to a successful transition.

For parents and teachers, an additional challenge was that they felt 'not part of the mainstream school entirely' (T001). Teachers felt that there were times that integration with the broader mainstream school was either not planned in advance 'sort of tacked on the end' (T001) or made difficult by certain 'reluctant' teachers, although they were taking steps to address these issues. Some parents reported that they 'feel 100% part of [Host Mainstream] and also always [Special School]' (P015) but most felt as if 'you're kind of floating in-between', not 'fully belonging because you're in a school where it's not actually the school that's teaching your child' (P011), which appeared to result in inconsistent home-school communication.

There was only one unsuccessful transition. One 17-year-old boy (YP019) had not been keen right from the start ('I'm 50/50'), and had only gone 'for one or two days'. He described the host school as a 'kind of a mainstream place. Sometimes the others like swearing a lot and they usually went to smoke outside by the classrooms. So, I just said, no, ain't my thing.' His mother (P019) described his former, traumatic experiences in mainstream ('he was in a 30-kids class and he couldn't cope with them and he was getting bullied at playtime. And he just went to pot'), and 'going back there brought all the memories back to him'. His age and the fact that he was a 'very complicated, intense character', who had difficulty regulating his emotions

('I need help moving my anger') were perceived also to have contributed to the failed move.

(3) Transition broadened their horizons of the world and of what's possible. Parents and teachers spoke of how their students and children had 'grown up' (P013) and 'matured' (P001) since the transition. Young people agreed: '[I'm] not going to back to [Special School] anymore because I've grown up' (YP014). Teachers put it down to the 'general grownup atmosphere, this feeling of independence, feeling of accomplishment and achievement of being here and being part of something bigger (T003).' Consequently, parents and teachers reported that *young people had developed 'more of an interest in the world'* (subtheme 3.1) and that this was evident at school and at home. According to children and teachers, break and lunch times at special school had been occupied mainly by 'everybody doing their own thing' (T003) ('I play on my own'; YP005) or in simple interactions such as chasing games. In their Host Mainstream schools, young people were now much 'less on their own' (P011). Young people themselves consistently reported that they preferred this newfound social time, describing it as 'fun' (YP018), 'exciting' (YP015) and 'lots of children' (YP007), including friendly encounters ('high-fiving in the corridor'; T002) with their mainstream peers. Although the transition to mainstream meant that 'they understand more what friendship means' (T002), social contact and friendships rarely extended beyond the satellite class, especially in the secondary age group.

There were two exceptions to this pattern, however. One boy with little spoken language was reported to have found his first friendships in the playground at his host school, through his passion for basketball. Another child had 'removed herself from the group entirely and her friends are mainly [Host Mainstream] friends now (T002).' Parents, too, had noticed that their child 'actually wants to play with others', including family members, and were interested 'in what others are doing': 'He used to hate people coming to the house; now – "who's coming? When are they coming? What you cooking? What we going to do?" (P005).' Young people also reported enjoying 'the clubs in lunchtimes' (YP010) and one young person told his parent that he wanted to attend clubs outside school because he 'wants to have friends' (YP014). Similar changes were reported for young people with limited verbal skills.

Teachers and parents also highlighted that *exposure to peer social norms has had a positive impact on young people* (subtheme 3.2). Parents emphasised the importance of being able 'to see how the world is expecting him to behave and carry himself' (P003), to 'see more normal behaviours' (P011) and 'different kinds of

people' (P001). They felt that their children were already showing the benefits of this exposure to mainstream in terms of behaviour and learning. Teachers agreed: 'the level of independence which they see other students and the expectation of what their behaviour is, they're definitely modelling that' (T003). One teacher described how one young person's behaviour had become less challenging in the course of his first year in satellite class: 'It could be a result of just looking around the room, thinking, "wait a second; no one else is behaving like that" (T003).'

Teachers and especially parents felt that the comprehensive change in *young people's mainstream experiences afforded them greater confidence and greater autonomy* (subtheme 3.3). Young people who had once been compliant or 'passive' (P012), were perceived to have developed a sense of agency. According to one mother, the new placement had encouraged her teenage boy, who had limited verbal skills, 'to be smart, to think of these actions, to go and try them, to use more of himself [rather] than let others do it for him' (P003). One father described a 'better rapport' with his son, 'now he is a joker, cheeky. That's something new' (P010). For some parents and teachers, this change was unnerving: 'he used to be passive to do what you wanted – but not now. It may be typical, but I am concerned' (P012). Other parents embraced the way that their children were 'more asserting [of] himself and his point of view than before' (P004). One teacher described the satellite children 'arguing a lot now and swearing and things like that. But I do feel like it's given them a bit more of a sort of personality (T001).'

The transition to mainstream also meant that *young people had begun to look at themselves differently*, highlighting issues of identity construal. When asked about children in the mainstream and special schools, most young people did not describe differences in this way but these categories were nevertheless implicit: 'There's more kids that are more able in this school. At [Special School], there was a lot of mixtures, different disabilities and all that (YP017).' Some described the different 'atmospheres' and preferred the host school for 'being on my ability' (YP018), while others wanted to distance themselves from the special school: 'I'm not a [Special School] boy, I'm a [Host Mainstream] boy (YP015).' This same boy resented the continued contact with the special school and was distressed to share a bus with [Special School] peers, 'why am I on that bus? I'm not like that'. Parents agreed that their children's self-image was changing: he's 'looking at himself differently, and it's all because he's in a bigger school' (P015). Some young people were reported to be wrestling with issues of difference and (autistic) identity: 'he can see the difference

between him and them and it's digging at him now (P003).'

Discussion

This multi-informant study examined the perceived impact of young autistic people's transition from an autism special school to new satellite classes located in London-based mainstream schools. The most striking finding was that the young people, their parents and their teachers were overwhelmingly positive about their experience of satellite class placements. The young people all reported preferring their new schools to their older one, describing a multitude of benefits including larger outdoor spaces, the continuity of staff and peers, the 'calmer' atmosphere, more stimulating work, less behaviour that challenges by peers and the presence of more people 'who can talk'. Parents celebrated the inclusion of their child in this 'satellite' arrangement, which overcame their reservations about children's ability to manage 'full inclusion'. As one mother put it, 'this is what we've always wanted'. The teachers we interviewed were equally positive, stressing children's better behavioural regulation and more sustained attention in the classroom, resulting in better educational opportunities. They also discussed the advantages of more homogeneous class groupings in terms of learning ability, which allowed them to deliver a more focused and challenging academic curriculum.

These findings demonstrate that the young people had at least partially overcome two major challenges. First, they had to face the task of transitioning from a previous school to the new one. And, second, they needed to adapt to a mainstream environment that may be considered more complex than a special school environment, particularly in terms of more complex social demands and fewer accommodations for sensory and language differences. The responses reported herein suggest that those in the satellite classes were managing both of these potential difficulties admirably.

This is no straightforward achievement. School transitions pose a wealth of challenges for autistic students, including for the student themselves (related to managing anxiety and increased social demands), for their parents (in terms of anxiety about school placement decisions and potentially adversarial parent–teacher relationships), and for their teachers (related to lack of training on autism, lack of attention on children's specific needs and the 'broken bridges' between home and school pre- and post-transition; Nuske et al., 2019). The apparently successful experiences reported in the current study – of well-managed transitions, effected with relatively little anxiety – is highly unusual and is most likely attributable to staff expertise in

autism education, the structure of the satellite model implemented here, in particular the elements of continuity (familiar teachers, peers and curriculum), and the efforts staff and parents made to prepare the young people for their change of placement. Furthermore, parents' accounts of their experiences with the special school before transition – the collaborations and the achievements – suggest that they trusted that their children would continue to benefit from the autism-specific expertise of the school and its teachers. The importance of parental trust and building strong, open relationships between teachers and parents is repeatedly emphasised as critical to achieving positive educational experiences for students on the autism spectrum (Falkmer, Anderson, Joosten, & Falkmer, 2015; Hebron & Bond, 2017; Lindsay, Ricketts, Peacey, Dockrell, & Charman, 2016; Tissot, 2011).

Immediately following transition, when it came to adapting to the potentially more demanding environment of the mainstream school, it appears that the young people responded positively. Perceived gains were reported in their behaviour, learning and social interest, which at times far exceeded the expectations of their parents and teachers. What is more striking is that these positive impacts were reported to have generalised across contexts – at school and at home. Supporting young autistic people to transfer their skills from one setting to another is notoriously difficult (e.g., Schreibman et al., 2015). In seeking to explain this apparent success, parents and teachers consistently mentioned the presence of positive behavioural role models and expectations, and the positive effect of leaving behind models of challenging behaviour that had previously been dominant.

One alternative possibility – which was not tested here – relates to young people's executive functions. These skills, which continue to develop until late adolescence (Diamond, 2013), play an important role in how children learn and adapt to new information. They have also been shown to make a substantial contribution to young autistic people's broader social outcomes (Griffith, Pennington, Wehner, & Rogers, 1999; Pellicano, 2010, 2013), as well as their everyday adaptive behaviour (e.g., Kenny, Cribb, & Pellicano, 2019; Pellicano, 2013; Szatmari, Bartolucci, Bremner, Bond, & Rich, 1989) and success in school (Pellicano et al., 2017; see also Pellicano, 2012). Current theoretical (e.g., Pellicano, 2012) and empirical work (e.g., Kenworthy et al., 2014) stresses the importance of practising executive function skills throughout childhood and the teenage years but such skills may well have been less challenged in the highly structured, familiar routines of their former special school. Young people's immersion into their novel, mainstream environment (with the necessary support for transition that the satellite model offers) might have

encouraged the exercising of these skills, thus contributing to their apparent academic progress, more controlled behaviour and gains in independence and autonomy – both inside and outside of the classroom. Understanding the underlying nature of young people's progress deserves further investigation.

The fact that, in this study, these successes also applied to young people with often-significant intellectual disability must be considered the most distinctive achievement of the London-based satellite classes. The young autistic people sampled here had additional intellectual disabilities, ranging from mild to severe, and varying degrees of speech, language and communication needs, ranging from verbally fluent to those with limited phrase speech. Some also showed behavioural and attentional difficulties. This profile of strengths and difficulties is suggestive of significant need and appears to be different from those served by the Australian satellite classes, which include fewer children with additional intellectual disability (Keane et al., 2012; Martin et al., 2019; Roberts et al., 2008). The question of inclusion in mainstream schooling for autistic children all too infrequently takes account of those who are less intellectually able, in spite of some evidence that those with additional intellectual disability may thrive in mainstream placements when structured autism-specific specialist teaching is available (Panerai, Ferrante, & Zingale, 2002). The current findings add to the existing Australian research (Keane et al., 2012; Martin et al., 2019; Roberts et al., 2008) to suggest that the structure of, and support provided within, the satellite classes may be beneficial to many children on the autism spectrum, not just a select few.

That said, the London-based and Australian satellite classes differed significantly in their overall aims. The London-based version aimed to promote the mainstream learning opportunities of satellite class students but, unlike the original Australian model, did not aim to prepare all students for full inclusion in mainstream classes. It is therefore noteworthy that few young people in the London-based satellite classes were integrated into the mainstream classes in their host schools. They also only sometimes shared physical education, assemblies and lunchtime clubs – although teachers reported they were 'looking to improve that'. One potential obstacle in achieving further integration, however, was the busy schedules of mainstream peers, particularly those in secondary school. Art, Drama and Physical Education were identified by satellite teachers as areas of 'natural overlap' in provision, yet were often given low priority in mainstream pupils' schedules, thus limiting their availability for shared activities.

The level of separation from mainstream peers highlights the limited extent to which the satellite classes can be called an inclusive model of education. Article

24 of the United Nations Convention on the Rights of Persons with Disabilities supports the right of every student, including those on the autism spectrum and those with intellectual disability, to access inclusive, quality, free education in their community with the necessary support to help enable them to reach their potential. Some proponents of an inclusion-first perspective read this as a demand for full inclusion within mainstream educational provision, with such provision modified in order to accommodate the needs of all learners. Others, however, challenge this perspective, arguing that autistic students' needs in particular should be met through expert input, which attends to the specific needs of this type of learner. The findings here, especially the sense of belonging reported by young people, support the idea that the form of inclusion enabled by the satellite provision may be beneficial for many in this distinct group, and for their families (Pellicano, Bölte, & Stahmer, 2018).

Notwithstanding the specific nature of the inclusion, young people appeared to benefit from the greater expectations on learning and behaviour as well as the change in peer social norms afforded by their new mainstream settings. This context also appeared to impact upon young people's sense of identity (see Williams et al., 2019, for review) and personal autonomy – while the satellite classes served to buffer the often-negative aspects of inclusive mainstream schooling, namely, bullying (Humphrey & Hebron, 2015; Symes & Humphrey, 2010; Zablotsky et al., 2014) and accentuating difference between themselves and their neurotypical peers (Williams et al., 2019).

This study is not without its limitations. First, given the small scale of the project, we did not administer objective measures, pre- and post-transition, of language, academic achievement and behaviour, which means that we could not corroborate the extent of such gains reported by parents, teachers and even young people themselves. We also did not include a comparison group, and therefore cannot be sure that the reported gains are attributable to the transition to the satellite classes rather than to natural developmental processes alone. Nevertheless, that participants were unanimous in their preferences for their new mainstream schools, and reported newfound confidence and autonomy is extremely encouraging. Second, we did not elicit the perspectives of young people in the broader mainstream schools. The attitudes of mainstream peers (e.g., Ranson & Byrne, 2014) – and indeed the involvement of such peers in classroom interventions (e.g., Kasari, Rotheram-Fuller, Locke, & Gulsrud, 2011) – have been shown to be critical to the participation of included young autistic people in school life. Understanding the views and perspectives of mainstream peers and the most effective ways of making young autistic people feel included in their mainstream

school is of critical importance for future work. Finally, it was a strength of our study that our sample was representative of the broader local population from which the participants were derived, and therefore included racial and ethnic groups known to be under-represented in autism research (West et al., 2016). But we did not examine if, and how, background cultures may have influenced the findings reported herein. Examination of the influence of culture on family's attitudes to and, experiences of, school is an important avenue for future research.

Conclusion

A number of studies of inclusion for young people on the autism spectrum have explicitly called for novel models of supported inclusion that offer effective teaching and support (e.g., Carrington & Graham, 2001; Smith, 2011). The strikingly positive evaluations provided by young people, their parents and their teachers suggest that this London-based satellite model might be one such model. The results suggest that this model has advantages for young autistic people with additional intellectual disability, and for their families, when appropriate support extends across transition and beyond, thus guaranteeing their right to a supportive and successful educational experience.

ORCID iDs

Lorcan Kenny https://orcid.org/0000-0002-5877-8099
Elizabeth Pellicano https://orcid.org/0000-0002-7246-8003

Supplemental material

Supplemental material for this article is available online.

Notes

1. We use 'identify-first' language ('autistic person') rather than person-first language ('person with autism'), because it is the preferred term of autistic activists (e.g., Sinclair, 1999) and many autistic people and their families (Kenny et al., 2016) and is less associated with stigma (Gernsbacher, 2017).

2. In England at the time of writing, a Free School Meal is a statutory benefit available to school-aged children from families who receive other qualifying, government benefits. Eligibility for Free School Meals is widely used as a proxy for socioeconomic status (Taylor, 2017). The estimate reported for the current context is high when compared to estimates for inner (27%) and outer (14%) London boroughs and for England as a whole (13%; 2016 figures: Department for Education, 2014).

3. These are legal documents that detail the child's needs and services that the local educational authority in England has a duty to provide.

References

Allen, J. (2008). *Rethinking Inclusive Education: The Philosophers of Differences in Practice*. London: Springer.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, Text Revision (DSM-IV-TR)* (4th ed.). Washington, DC: APA.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5)* (5th ed.). Washington, DC: APA.

Ashburner, J., Ziviani, J., & Rodger, S. (2008). Sensory processing and classroom emotional, behavioral, and educational outcomes in children with autism spectrum disorder. *American Journal of Occupational Therapy*, 62, 564–573.

Bondy, A. S., & Frost, L. A. (1994). The picture exchange communication system. *Focus on Autistic Behavior*, 9, 1–19.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.

Brede, J., Remington, A., Kenny, L., Warren, K., & Pellicano, E. (2017). Excluded from school: Examining the educational experiences of students on the autism spectrum. *Autism and Developmental Language Impairments*, 2, 1–20.

Byrne, A. (2013). What factors influence the decisions of parents of children with special educational needs when choosing a secondary educational provision for their child at change of phase from primary to secondary education? A review of the literature. *Journal of Research in Special Educational Needs*, 13, 129–141.

Carrington, S., & Graham, L. (2001). Perceptions of school by two teenage boys with Asperger syndrome and their mothers: A qualitative study. *Autism*, 5, 37–48.

Charman, T., Pellicano, E., Peacey, L. V., Peacey, N., Forward, K., & Dockrell, J. (2011). *What is good practice in autism education?* London, UK: Autism Education Trust. Retrieved from http://www.autismeducationtrust. org.uk/resources/good%20practice%20report.aspx

Constantino, J. N., & Gruber, C. P. (2012). *Social responsiveness scale (SRS-2)* (2nd ed.). Los Angeles, CA: Western Psychological Services.

Department for Education. (2014). *Children and Families Act 2014*. London, UK: HMSO. Retrieved from http://www. legislation.gov.uk/ukpga/2014/6/contents/enacted

Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135.

Dunn, L. M., Dunn, D. M., & Styles, B. (2009). *British Picture Vocabulary Scale – 3* (3rd ed.). London, UK: GL Assessment Ltd.

Falkmer, M., Anderson, K., Joosten, A., & Falkmer, T. (2015). Parents' perspectives on inclusive schools for children with autism spectrum conditions. *International Journal of Disability, Development and Education*, 62, 1–23.

Gernsbacher, M. A. (2017). The use of person-first language in scholarly writing may accentuate sigma. *Journal of Child Psychology and Psychiatry*, 58, 859–861.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38, 581–586.

Griffith, E. M., Pennington, B. F., Wehner, E. A., & Rogers, S. J. (1999). Executive functions in young children with autism. *Child Development*, 70, 817–832.

Hebron, J., & Bond, C. (2017). Developing mainstream resource provision for pupils with autism spectrum disorder: Parent and pupil perceptions. *European Journal of Special Needs Education*, 32, 556–571.

Hill, V., Croydon, A., Greathead, S., Kenny, L., Yates, R., & Pellicano, E. (2016). Research methods for educational psychologists: Developing techniques to facilitate all children and young people to have a 'voice'. *Educational and Child Psychology*, 33, 26–43.

House of Commons Education and Skills Committee. (2006). *Special educational needs*. Retrieved September 21, 2014, from http://www.publications.parliament.uk/pa/cm2005 06/cmselect/cmeduski/478/478i.pdf

Humphrey, N., & Hebron, J. (2015). Bullying of children and adolescents with autism spectrum conditions: A 'state of the field' review. *International Journal of Inclusive Education*, 19, 845–862.

Humphrey, N., & Lewis, S. (2008). "Make me normal": The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism*, 12, 23–46.

Hus, V., Bishop, S., Gotham, K., Huerta, M., & Lord. C. (2013). Factors influencing scores on the social responsiveness scale. *Journal of Child Psychology and Psychiatry*, 54, 216–224.

Jindal-Snape, D., Douglas, W., Topping, K. J., Kerr, C., & Smith, E. F. (2005). Effective education for children with autistic spectrum disorder: Perceptions of parents and professionals. *International Journal of Special Education*, 20, 77–87.

Jordan, R. (2008). The Gulliford lecture: Autistic spectrum disorders: A challenge and a model for inclusion in education. *British Journal of Special Education*, 35, 11–15.

Kaptein, S. D., Jansen, E. M. C., Vogels, A. G. C., & Reijneveld, S. A. (2008). Mental health problems in children with intellectual disability: Use of the strengths and difficulties questionnaire. *Journal of Intellectual Disability Research*, 52, 125–131.

Kasari, C., Freeman, S. F. N., Bauminger, N., & Alkin, M. C. (1999). Parental perspectives on inclusion: Effects of autism and Down syndrome. *Journal of Autism and Developmental Disorders*, 29, 297–305.

Kasari, C., Rotheram-Fuller, E., Locke, J., & Gulsrud, A. (2011). Making the connection: Randomized controlled

trial of social skills at school for children with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 53, 431–439.

Keane, E., Aldridge, F. J., Costley, D., & Clark, T. (2012). Students with autism in regular classes: A long-term follow-up study of a satellite class transition model. *International Journal of Inclusive Education*, 16, 1001–1017.

Kenny, L., Cribb, S., & Pellicano, E. (2019). Childhood executive function predicts later autistic features and adaptive behaviours in young autistic people: A 12-year prospective study. *Journal of Abnormal Child Psychology*, 47, 1089–1099.

Kenny, L., Hattersley, C., Molins, B., Buckley, C., Povey, C., & Pellicano, E. (2016). What terms should we use to describe autism? Perspectives from the UK autism community. *Autism*, 20, 442–462.

Kenworthy, L., Anthony, L. G., Naiman, D. Q., Cannon, L., Wills, M. C., Luong-Tran, C., ... Wallace, G. L. (2014). Randomized controlled effectiveness trial of executive function intervention for children on the autism spectrum. *Journal of Child Psychology and Psychiatry*, 55, 374–383.

Lilley, R. (2014). Professional guidance: Maternal negotiation of primary school placement for children diagnosed with autism. *Discourse: Studies in the Cultural Politics of Education*, 35, 513–526.

Lindsay, G., Dockrell, J. E., Mackie, C., & Letchford, B. (2005). The roles of specialist provision for children with specific speech and language difficulties in England and Wales: A model for inclusion? *Journal of Research in Special Educational Needs*, 5, 88–96.

Lindsay, G., Ricketts, J., Peacey, L. V., Dockrell, J. E., & Charman, T. (2016). Meeting the educational and social needs of children with language impairment or autism spectrum disorder: The parents' perspectives. *International Journal of Language and Communication Disorders*, 51, 495–507.

Lloyd, V., Gatherer, A., & Kalsy, S. (2006). Conducting qualitative interview research with people with expressive language difficulties. *Qualitative Health Research*, 16, 1386–1404.

Lord, C., & Hopkins, J. M. (1986). The social behaviour of autistic children with younger and same-age nonhandicapped peers. *Journal of Autism and Developmental Disorders*, 16, 249–262.

Makin, C., Hill, V., & Pellicano, E. (2017). The primary-to-secondary school transition for children on the autism spectrum: A multi-informant mixed-methods study. *Autism and Developmental Language Impairments*, 2, 1–18.

Mandy, W., Murin, M., Baykaner, O., Satunton, S., Hellriegel, J., Anderson, S., & Skuse, D. (2016). The transition from primary to secondary school in mainstream education for children with autism spectrum disorder. *Autism*, 20, 5–13.

Mann, G., Cuskelly, M., & Moni, K. (2015). Choosing a school: parental decision-making when special schools are an option. *Disability & Society*, 30, 1413–1427.

Martin, T., Dixon, R., Verenikina, I., & Costley, D. (2019). Transitioning primary school students with autism spectrum disorder from a special education setting to a mainstream classroom: Successes and difficulties. *International Journal of Inclusive Education*, DOI: 10.1080/13603116.2019.1568597

McNerney, C., Hill, V., & Pellicano, E. (2015). Choosing a secondary school placement for students with an autism spectrum condition: A multi-informant study. *International Journal of Inclusive Education*, 19, 1096–1116.

Myles, B. S., & Simpson, R. L. (2001). Understanding the hidden curriculum an essential social skill for children and youth with Asperger syndrome. *Intervention in School and Clinic*, 36, 279–286.

Norwich, B. (2008). What future for special schools and inclusion? Conceptual and professional perspectives. *British Journal of Special Education*, 35, 136–143.

Nuske, H. J., McGhee Hassrick, E., Bronstein, B., Haumptman, L., Aponte, C., Levato, L., ... Smith, T. (2019). Broken bridges – New school transitions for students with autism spectrum disorder: A systematic review on difficulties and strategies for success. *Autism*, 23(2), 306–325. https://doi.org/10.1177/1362361318754529

Panerai, S., Ferrante, L., & Zingale, M. (2002). Benefits of the treatment and education of autistic and communication handicapped children (TEACCH) programme as compared with a non-specific approach. *Journal of Intellectual Disability Research*, 46, 318–327.

Parsons, S., Guldberg, K., MacLeod, A., Jones, G., Prunty, A., & Balfe, T. (2011). International review of the evidence on best practice in educational provision for children on the autism spectrum. *European Journal of Special Needs Education*, 26, 47–63.

Pellicano, E. (2010). Individual differences in executive function and central coherence predict developmental changes in theory of mind in autism. *Developmental Psychology*, 46, 530–544.

Pellicano, E. (2012). The development of executive function in autism. *Autism Research and Treatment*, 2012, 146132. doi: 10.1155/2012/146132.

Pellicano, E. (2013). Testing the predictive power of cognitive atypicalities in autism: evidence from a 3-year follow-up study. *Autism Research*, 6, 258–267.

Pellicano, E., Bölte, S., & Stahmer, A. (2018). The current illusion of educational inclusion. *Autism*, 22, 386–387.

Pellicano, E., Kenny, L., Brede, J., Klaric, E., Lichwa, H., & McMillin, R. (2017). Executive function predicts school readiness in autistic and typical preschoolers. *Cognitive Development*, 43, 1–13.

Ranson, N. J., & Byrne, M. K. (2014). Promoting peer acceptance of females with higher-functioning autism in a mainstream education setting: A replication and extension of the effects of an autism anti-stigma program. *Journal of Autism and Developmental Disorders*, 44, 2778–2796.

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.

Roberts, J. M., Keane, E., & Clark, T. R. (2008). Making inclusion work: Autism spectrum Australia's satellite class project. *Teaching Exceptional Children*, 41, 22–27.

Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school classrooms. *Journal of Child Psychology and Psychiatry*, 51, 1227–1234.

Schreibman, L., Dawson, G., Stahmer, A. C., Landa, R., Rogers, S. J., McGee, G. G., & ... McNerney, E. (2015). Naturalistic developmental behavioral interventions: Empirically validated treatments for autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45, 2411–2428.

Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T., & Baird, G. (2008). Psychiatric disorders in children with autism spectrum disorders: Prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 921–929.

Simonoff, E., Jones, C. R. G., Baird, G., Pickles, A., Happé, F., & Charman, T. (2012). The persistence and stability of psychiatric problems in adolescents with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 54, 186–194.

Sinclair, J. (1999). Why I dislike 'person-first' language. Retrieved from http://web.archive.org/web/20090210190652/http://web.syr.edu/~jisincla/person_first.htm

Smith, T. (2011). *Making inclusion work for students with autism spectrum disorders: An evidence-based guide*. New York, NY: Guilford Press.

Symes, W., & Humphrey, N. (2010). Peer-group indicators of social inclusion among pupils with autistic spectrum disorders (ASD) in mainstream secondary schools: A comparative study. *School Psychology International*, 31, 478–494.

Szatmari, P., Bartolucci, G., Bremner, R. S., Bond, S., & Rich, S. (1989). A follow-up study of high functioning autistic children. *Journal of Autism and Developmental Disorders*, 19, 213–226.

Taylor, C. (2017). The reliability of free school mean eligibility as a measure of socio-economic disadvantage: Evidence from the Millennium Cohort Study in Wales. *British Journal of Educational Studies*, 66, 29–51.

Tissot, C. (2011). Working together? Parent and local authority views on the process of obtaining appropriate educational provision for children with autism spectrum disorders. *Educational Research*, 53, 1–15.

Waddington, E. M., & Reed, P. (2006). Parents' and local education authority officers' perceptions of the factors affecting the success of inclusion of pupils with autistic spectrum disorders. *International Journal of Special Education*, 21, 151–164.

Wechsler, D. (2011). *Wechsler Abbreviated Scale of Intelligence – Second edition*. Bloomington, MN: Pearson.

West, E. A., Travers, J. C., Kemper, T. D., Liberty, L. M., Cote, D. L., McCollow, M. M., & Stansberry Brusnahan, L. L. (2016). Racial and ethnic diversity of participants in research supporting evidence-based practices for learners with autism spectrum disorder. *The Journal of Special Education*, 50, 151–163.

Whitaker, P. (2007). Provision for youngsters with autistic spectrum disorders in mainstream schools: What parents say – And what parents want. *British Journal of Special Education*, 34, 170–178.

Williams, E. I., Gleeson, K., & Jones, B. E. (2017). How pupils on the autism spectrum make sense of themselves in the context of their experiences in a mainstream school setting: A qualitative metasynthesis. *Autism*, 23, 8–28

World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines*. Geneva, Switzerland: World Health Organization.

Zablotsky, B., Bradshaw, C. P., Anderson, C. M., & Law, P. (2014). Risk factors for bullying among children with autism spectrum disorders. *Autism*, 18, 419–427.