*Doctorate in Professional Educational, Child and Adolescent Psychology*

*Programme Director: Vivian Hill*


# Autistic young people's experiences of support for Emotional Barriers to School Attendance (EBSA) and their perceptions of the AV1 telepresence robot

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## Declaration

I, Hayley Morgan, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signed:

Hayley Morgan

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*Dedicated to the memory of*

Dr Daphne Kajobe

Bright and beautiful, you were in full bloom.

Like the flowers that shared your name, you brought happiness and serenity into this world.

Your greatest legacy being the seeds you sowed in the lives of children, and the kindness which you gave to many.

Rest in peace.

Flowers also bloom in heaven.

*In loving memory of my inspiring friend and course mate.*

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## Impact Statement

This research provides an important contribution to understanding the experiences of autistic secondary-aged pupils experiencing emotional barriers to school attendance (EBSA). Drawing on in-depth qualitative findings from both young people and parents, this study provides a multi-layered account of support experiences, highlighting the critical importance of safe physical and sensory environments, relational connection, pupil autonomy, and a responsive, flexible, and individualised understanding of autistic needs. This is also the first known UK-based study to explore the perspectives of autistic pupils and their parents regarding the AV1 device, a form of robotic telepresence technology (RTT), as an intervention. The findings suggest that while the AV1 has the potential to be a valuable tool for inclusion, its effectiveness depends on careful, consent-driven, context-specific implementation that considers the diverse needs and preferences of its users.

**Implications for Educational Psychologists (EPs):**

- EPs can play a critical role in embedding neuro-affirmative practice across home, school, and local authority levels. This involves reframing the rhetoric around neurodivergent pupils, shifting the focus from perceived deficits to the broader environmental and systemic factors. EPs can also challenge misconceptions and stereotypes, fostering a strengths-based understanding of neurodivergent needs. This may include leading reflective practice groups or training sessions, creating open, non-judgemental spaces for staff to share challenges and explore setting-specific support strategies.
- EPs can facilitate the development of individualised support plans for autistic pupils experiencing EBSA, ensuring these are evidence-based, pupil-centred, and include young people's voices. Effective support plans should prioritise key factors identified in this study, including sensory and physical environmental safety, positive peer and staff relationships, and flexible, personalised approaches to support. This may also include the integration of RTT, such as the AV1 robot, to maintain inclusion during absence, if they would like this and where appropriate.
- EPs can support whole-school initiatives to apply evidence-based theory in practice, including creating emotionally and sensorially safe environments for autistic pupils. This might involve helping schools conduct sensory audits with autistic pupils and establish pupil-led working groups,

empowering young people to advocate for their needs and promote more inclusive, neuro-affirming practices.

**Wider Implications**

- EPs are well positioned to contribute to systemic reform in response to the challenges posed by neoliberal education policies, which prioritise performance, market competition, and high-stakes accountability, over flexible and relational approaches. This may involve actively engaging in policy development, participating in governmental consultations, and shaping the direction of SEND reforms.
- EPs can advocate for broader alternative provision options, including home education, where young people often report feeling safer, more supported, and in control. This involves promoting settings that prioritise emotional regulation, personalised learning, and flexible support, better reflecting the diverse needs of autistic pupils with EBSA.
- There is a growing need for EPs to conduct and disseminate research on pupils experiencing EBSA, particularly as the number of autistic pupils affected continues to rise. By disseminating evidence-based insights, EPs can raise awareness of the unique challenges faced by this group and promote neuro-affirming approaches, aligning policy and practice with the lived experiences of those they support.

## Abstract

Autistic young people are more likely to experience higher rates of absence from school compared to their non-autistic peers, yet their perspectives on support remain underexplored. This study aimed to address this gap by investigating the views and experiences of autistic pupils experiencing emotional barriers to school attendance (EBSA). The research also sought to explore the novel use of robotic telepresence technology (RTT), specifically the AV1 robot, as a potential intervention to facilitate access to school for this group.

Data were collected through individual semi-structured interviews with both young people and their parents. Young people also completed an adapted version of the 'Ideal School' activity and all participants viewed a short video introducing the AV1 robot before sharing their views on it.

Reflexive Thematic Analysis identified several key themes. Participants emphasised the foundational importance of sensory-safe environments; trusting, attuned relationships with staff and peers; and enhanced pupil autonomy with support being flexible, personalised, and consistently available. These core components were also seen as critical to the successful implementation of the AV1 telepresence robot. While many participants acknowledged the AV1's potential to support inclusion for autistic pupils experiencing EBSA, its effectiveness was viewed as conditional - it would need to be embedded within a consent-driven, adaptable, and supportive framework, tailored to the individual needs of the pupil and used in conjunction with, rather than as a substitute for, more appropriate or longer-term provision.

Overall, this study provides a valuable contribution to understanding the support experiences and needs of autistic pupils with EBSA, while exposing the structural barriers to attendance in the education system. The findings highlight the need for more flexible, neuro-affirming educational practices and systemic changes to better support this group. It also offers important implications for EPs and schools seeking to create more inclusive, responsive learning environments.

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# 1. Introduction

## 1.1 Emotional Barriers to School Attendance (EBSA)

Emotional Barriers to School Attendance (EBSA) refers to difficulties in attending school that are underpinned by emotional distress, most commonly anxiety, which causes the school environment to feel psychologically unsafe or overwhelming for the pupil. EBSA is increasingly conceptualised as a complex and multidimensional issue influenced by an interplay of different factors, including individual factors (e.g., child's age, temperament, physical health etc.), home-based factors (e.g., parenting style, family attitudes around school, parental health needs etc), and school-based factors (e.g., relationships with teachers, bullying, boring lessons etc), rather than a difficulty located solely within the child (Onslow & Cartmell, 2025; EdPsychEd, 2024). The West Sussex County Council's Educational Psychology Service (WSCC, 2022) defines EBSA as the co-occurrence of emotional distress and reduced school attendance. It is typically conceptualised as existing along a continuum of need, from pupils who attend school but experience significant emotional dysregulation, to those who don't attend school or chronically non-attending (Kearney, 2019; Thambirajah et al., 2008). These difficulties are frequently framed in terms of *push and pull* factors, whereby the psychological and environmental 'push' away from school, due to factors encouraging non-attendance (e.g., bullying), outweighs any internal or external 'pull' to attend from factors that encourage attendance (e.g., positive pupil-teacher relationships). Given ongoing debate around its terminology and conceptual scope, these complexities in conceptualisation will be examined in greater detail in the following section.

### 1.1.1 Defining and conceptualising EBSA

The terminology used to describe challenges related to school attendance remains highly contested, reflecting a lack of consensus within both academic and professional domains. This has led to interchangeable and imprecise use of terms, resulting in confusion around definitions and prevalence of EBSA (Heyne et al., 2019; James, 2015). Kearney (2003) refers to this as a "fractured state of terminology," highlighting the difficulty in establishing a single definition that accurately captures the heterogeneity of behaviours involved. Therefore, determining the true prevalence of attendance difficulties remains difficult, and this lack of clarity may hinder the development of appropriate support and interventions (Pellegrini, 2007).

*Author Note: Identity-first language (e.g., autistic individuals) is used throughout this report in accordance with the policy of Autism in Adulthood. This choice reflects the preference of numerous autistic individuals and their families in the UK who favour this language over 'with autism', viewing autism as an integral aspect of their identity (Bottema-Beutel et al., 2021).

The conceptualisation of school attendance difficulties can be traced back to Broadwin (1932), who introduced the term “psychoneurotic truancy” to describe anxiety-related absences, later reframed as “school phobia” (Johnson et al., 1941). Over time, the medicalised framing gave way to the more widely used term “school refusal behaviour” (Berg et al., 1969), which became a catch-all for a broad range of attendance problems. However, school refusal has been criticised for its lack of specificity (Heyne, 2019), particularly in failing to distinguish between emotionally driven non-attendance and other forms, such as truancy (Elliott, 1999). It has also been challenged for implying volition, suggesting that young people choose not to attend school, thereby overlooking contextual and systemic contributors (Pellegrini, 2007; WSCC, 2018) and reinforcing a deficit-based, within-child perspective.

In response to these limitations, alternative terminologies have emerged in an attempt to reduce the pathologisation of children and refocus attention on environmental factors. Examples include Lauchlan’s (2003) “chronic non-attendance,” Kearney’s (2008) “problematic absenteeism,” and Thambirajah et al.’s (2008) “school non-attendance.” Pellegrini (2007) further proposed the term “extended school non-attendance” as a neutral alternative that avoids assumptions about causality and centres broader systemic influences, including family, school, and societal dynamics. However, despite its conceptual clarity, this terminology has not gained widespread use, potentially due to its connotation of chronicity or prolonged absence and the lack of specificity regarding the emotional underpinnings of the difficulty.

In the UK, a notable shift has occurred with the rise of the term “emotionally based school avoidance” (EBSA) and its close variant, “emotionally based school non-attendance” (EBSNA), particularly in Local Authority (LA) contexts. These terms have emerged as more nuanced alternatives to the historically dominant term “school refusal”, which has been widely critiqued for locating the problem within the child and for implying a wilful decision not to attend school. The introduction of these terms was proposed to reframe the narrative, emphasising the emotional distress that often underpins school non-attendance and drawing attention to the wider systemic and environmental contributors (WSCC, 2022). Related variants, such as “emotionally related school avoidance” and “anxiety-based school avoidance”, further emphasise anxiety as a core factor, while acknowledging the broader complexity of attendance difficulties. However, despite their increased adoption, these terms have also attracted critique. The use of the word “avoidance” can still imply volition, potentially reinforcing the misconception that the young person is actively choosing not to attend. Similarly, while EBSNA has been viewed as a more empathetic and psychologically informed alternative, some argue it may risk oversimplifying the issue by attributing causality solely to emotional factors. Nonetheless, both terms mark a clear movement

away from deficit-based or behaviourist framings and reflect an evolving discourse that seeks to better understand the lived experiences of young people facing school attendance challenges.

### 1.1.2 The terminology used in the current study: Emotional Barriers to School Attendance (EBSA)

The present study contextualises challenges related to attendance within the social model of disability, asserting that societal structures and systems, rather than inherent individual impairments, give rise to an individual's needs (Goodley, 2001). Thus, in line with this perspective, the terminology adopted avoids framing the issue as a problem located solely within the individual, and instead highlights the wider systemic and contextual influences shaping a young person's experience of school attendance.

At the time of this study, emotionally based school avoidance and emotionally based school non-attendance remain the most widely recognised and applied terms within educational psychology literature and are commonly referenced in LA guidance across the UK. However, an emerging alternative, "emotional barriers to school attendance" (EBSA), is gaining traction in both academic and practice-based discourse. This terminology builds on the notion of "barriers to attendance" introduced in recent government guidance (Department for Education [DfE], 2024b). While relatively underrepresented in academic literature, the term has been welcomed for its child-centred and non-blaming orientation. Rather than implying deliberate avoidance or internal deficit, "emotional barriers" draws more attention to the interaction between the pupil and their environment, bringing the environmental and systemic barriers that impact school engagement to the fore (Onslow & Cartmell, 2025). It encourages an ecological and holistic understanding of need that considers a young person's wider educational, psychological, and relational context (EdPsychEd, 2024).

The use of this terminology, emotional barriers to school attendance, is increasingly being adopted within professional practice. For example, Manchester City Council (2024) has formally incorporated the term into its official guidance for supporting pupils with attendance difficulties. The growing conceptual and applied relevance of this terminology reflects a broader shift towards ecologically informed approaches to understanding school non-attendance. Accordingly, emotional barriers to school attendance (EBSA) is adopted throughout the present study to ensure consistency with its theoretical positioning and to reflect current developments in policy and practice.

### 1.2 Legislative and Policy Context of EBSA

In the UK, education is compulsory for all children between the ages of five and sixteen, and parents are legally responsible for ensuring their child's regular attendance at school, as set out in the Education Act (1996). Under Section 444 of the Act, parents may face prosecution if their child incurs persistent or unauthorised absences, defined as absences not due to illness or pre-arranged with the school. The Department for Education defines a 'parent' as any individual with parental responsibility or who has care of the child (DfE, 2016). Legal consequences for non-attendance may include parenting orders or fixed penalty notices, with Local Authorities (LAs) holding the authority to enforce such measures.

The DfE provides a set of codes for recording pupil absence, covering reasons such as illness, medical appointments, authorised leave, and religious observance (DfE, 2024b). However, these codes currently lack a dedicated category for EBSA, or even mental-health related barriers to attendance, therefore failing to recognise its significance in national attendance legislation. This is despite the current emphasis on improving attendance as a central priority as evidenced in the government's 2024 statutory guidance, *Working Together to Improve School Attendance*. This lack of formal recognition not only contributes to EBSA being underreported and underestimated in national datasets (Kawsar et al., 2021), but it also primarily frames non-attendance through a lens of behavioural compliance and system accountability. This policy direction reflects a broader trend toward tightening attendance enforcement mechanisms and in doing so, it risks reinforcing the legal vulnerabilities faced by families whose children are struggling with mental health needs.

Without legislative differentiation, families of children experiencing EBSA may be treated under the same punitive frameworks applied to truancy. Section 444(1A) of the Education Act (1996) specifies that parents aware of their child's absence may face harsher penalties, placing them in a vulnerable position when non-attendance is driven by anxiety or emotional distress. Recent findings from Square Peg suggest that these punitive approaches are not only ineffective but may also intensify distress for both the child and their family (Bagley, 2023). Similarly, a national parent survey by Not Fine in School (2020) reported that 98% of parents prosecuted for non-attendance saw no improvement in their child's situation following legal action. This raises concerns about the appropriateness of sanctions in response to mental health-related absences, and highlights the need for relational, needs-led alternatives. The absence of updated legislation or national guidance explicitly addressing EBSA has led to growing calls for reform, with advocacy groups emphasising the importance of responsive, person-centred support (Not Fine in School, 2022). These concerns are echoed in wider demands for systemic change within SEND. For

example, Stanbridge (2024) argues for a fundamental overhaul, or "SEND revolution," aimed at creating a more inclusive and responsive education system that can better meet the diverse needs of pupils with SEND.

At an even broader level, school responses to EBSA are deeply influenced by the wider ideological environment shaping the education system. Neoliberal education reform in England has reoriented schools around performance indicators, market competition, and accountability metrics (Ball, 2003; Gillies, 2011). Schools are increasingly expected to meet stringent targets for attendance, attainment, and behaviour, often with limited resources and minimal flexibility. These imperatives narrow what is recognised as legitimate educational practice and can marginalise the relational, inclusive, and preventative approaches that are critical for supporting EBSA.

As a result, children with complex support needs may be misunderstood, deprioritised, or even pathologised in systems that reward quantifiable outcomes and penalise deviation from attendance norms. Bagley (2023) highlights how attendance policies can place disproportionate responsibility on families, overlooking the systemic and school-based factors that contribute to distress and disengagement. Square Peg's work further illustrates how high-stakes accountability models can disincentivise early intervention, driving schools towards compliance-focused responses rather than the proactive, emotional- and relationship-based support that EBSA requires (Bagley, 2023). It is therefore important to understand EBSA within this broader structural and ideological framework, recognising the constraints schools and families operate within, and for informing more flexible and context-sensitive approaches to support that prioritise emotional wellbeing alongside academic outcomes.

### 1.3 Prevalence of attendance difficulties

Although national data is not currently disaggregated to identify pupils experiencing EBSA due to conceptual and categorisation challenges, broader school attendance statistics offer relevant insights. The DfE defines persistent absenteeism as missing 10% or more of possible school sessions (DfE, 2019), a threshold within which many children with EBSA are likely to fall, depending on the frequency, duration, and severity of their difficulties.

The issue of persistent absenteeism has gained national prominence, particularly following the Covid-19 pandemic. The DfE (2024a) reported that, in the 2023/24 academic year, 20.7% of pupils in England were persistently absent, almost double the pre-pandemic rate of 10.9% recorded in 2018/19. Concerningly, 2.3% of pupil enrolments were classified as severely absent (compared to 2.0% in the previous year), meaning they missed at least 50% of school sessions, marking the highest rate since

records began (DfE, 2024d). These figures reflect a substantial rise in attendance difficulties and reinforce the need to develop comprehensive responses to EBSA.

Disaggregated figures further reveal striking disparities for pupils with SEND. The most recent DfE data (2024a) indicates that 35.5% of pupils with an Education, Health and Care Plan (EHCP) and 30.1% of those receiving SEN support were persistently absent, compared with 16.8% of pupils without identified SEN. Similarly, absence rates overall were higher among these groups; 12.6% for pupils with an EHCP and 10.2% for those receiving SEN support, compared to 6.3% for pupils without SEN. These statistics indicate the heightened vulnerability of neurodivergent pupils, including autistic learners, to school attendance difficulties.

Nevertheless, existing national data may still underestimate the scale of the issue, particularly for autistic pupils. Totsika et al. (2020) argue that official statistics only account for children identified as autistic if autism is listed as their primary need on their EHCP, thereby excluding those with comorbid diagnoses. In their study of 486 UK parents of autistic children, 'school refusal' accounted for 43% of all reported absences over a one-month period, significantly exceeding DfE-reported persistent absence rates for autistic pupils. The study also found a higher incidence of school non-attendance behaviours among older pupils, highlighting the relevance of exploring EBSA specifically in secondary school-aged populations.

Generally, the prevalence of EBSA, however, remains contested in the literature, with figures commonly ranging from 1% to 5% of the school-age population (Elliot & Place, 2019; Nuttall & Woods, 2013). This range is likely to underestimate the true scale of need with recent NHS Digital data showing that the proportion of children and young people reporting mental health difficulties in the UK rose from one in nine in 2017 to one in five by 2023 (NHS Digital, 2023). Moreover, qualitative reports from schools indicate a sharp rise in anxiety-related presentations among pupils (Hamilton, 2024; Woollard & Randall, 2024), many of whom may continue to attend school while experiencing significant emotional distress. These pupils, who may struggle to arrive on time, remain in class, or cope with the demands of the school environment, are likely to be underrepresented in persistent absence statistics but may still meet criteria for EBSA.

The ongoing ambiguity in defining EBSA, along with the inconsistent terminology used across research and professional contexts, further complicates efforts to monitor and support this group effectively (Heyne et al., 2019). As a result, EBSA remains insufficiently recognised within policy and practice, with the absence of a dedicated attendance code and conceptual clarity contributing to the statistical invisibility of these pupils.

## 1.4 The focus of the current study: autistic secondary-age pupils and EBSA

### 1.4.1 Autism and EBSA

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) reflects a predominantly medical model that conceptualises autism in terms of deficit. It defines autism as involving "persistent difficulties with social communication and social interaction" alongside "restricted and repetitive patterns of behaviour, interests, or activities," which are present from early development and cause "functional impairment" across settings (American Psychiatric Association, 2013). This framing positions autistic individuals as inherently disordered, with emphasis placed on deviation from non-autistic norms. However, there is increasing recognition that many of the challenges experienced by autistic pupils are not intrinsic to the individual, but rather emerge from a misalignment between the pupil and an inflexible, often exclusionary environment. The Autism Education Trust (2021), for example, adopts a social model of disability that shifts the focus from internal deficits to external barriers, such as rigid systems, inaccessible environments, and outdated attitudes.

Building on this shift, critical theorists have highlighted how dominant constructions of autism operate as "regimes of truth" (Foucault, 1980; Begon & Billington, 2019), shaping what is considered legitimate knowledge and whose voices are heard. These discourses, often authored by non-autistic professionals, marginalise lived experience and reinforce narrow, deficit-based narratives that can disempower autistic individuals (Milton & Bracher, 2013). In contrast, the neurodiversity movement and the field of Critical Autism Studies advocate for alternative framings of autism as forms of natural variation within the broader spectrum of human diversity (Broderick & Ne'eman, 2008; Woods et al., 2018). These perspectives emphasise identity, agency, and the importance of designing systems and supports that respond to individual difference rather than attempting to "fix" the person. In line with this, some individuals now choose to self-diagnose or -identify as autistic, reflecting a growing rejection of medical gatekeeping and a reclaiming of autistic identity from within the community itself (Begon & Billington, 2019; Gillespie-Lynch et al., 2017).

This critical reframing is particularly relevant to the participant group in this study, which includes young people whose school attendance has been disrupted by systemic and contextual barriers. Participants were recruited regardless of whether they had a formal autism diagnosis; inclusion was based on self-identification and articulation of experiences consistent with autistic ways of being. By emphasising the need to change contextual factors, that is, by amplifying autistic voices, challenging epistemic injustice, and moving toward participatory and inclusive practices, this study adopts a social model of disability perspective that extends beyond deficit-based approaches.

This framing is especially pertinent given the growing body of evidence highlighting the heightened vulnerability of autistic pupils to EBSA. Autistic young people are disproportionately affected by EBSA compared to their non-autistic peers (Munkhaugen et al., 2017; Preece & Howley, 2018; Totsika et al., 2020). This disparity is strongly associated with the challenges autistic pupils often experience in mainstream education, including high levels of social anxiety (Spain et al., 2018), sensory sensitivities (Price & Romualdez, 2025), exposure to peer bullying and social exclusion (Humphrey & Symes, 2010), academic isolation, and a perceived lack of understanding from staff (Goodall, 2018; Heyworth et al., 2021). Autistic pupils are also more likely to be affected by unpredictability and changes to routine, increasing their vulnerability to sustained emotional distress in environments that don't meet their needs (Jones et al., 2020), further reducing their sense of emotional safety and autonomy (Pellicano et al., 2014).

While many of these factors are shared with other pupils with SEND, the specific barriers commonly experienced by autistic pupils in relation to sensory processing, information processing and flexibility, and social communication (Autism Education Trust, 2023), warrant dedicated exploration. The decision to focus this study exclusively on autistic pupils in mainstream education is therefore not intended to diminish the relevance of EBSA across the broader SEND population, but rather to facilitate a more in-depth understanding of how EBSA is experienced and navigated by a group that is disproportionately affected. Much of the existing research on EBSA presents a generalised perspective, which risks overlooking the distinct support preferences of autistic students. A focused approach therefore enables more meaningful insights into how support is perceived by autistic pupils themselves, whose voices have previously been underrepresented in both research and practice (Taneja-Johansson, 2023). Given this, there is a clear need for research that listens to the voices of autistic young people to better understand how support is experienced, what facilitates engagement, and where systemic barriers persist. This study aims to address this gap by exploring autistic pupils' views and experiences of EBSA support.

Although this study is situated within the context of autism, the findings are anticipated to carry broader implications for inclusive practice across the wider SEND population. Many of the environmental and emotional factors contributing to EBSA are not exclusive to autistic pupils. As such, the insights arising from this research may contribute to the development of more responsive and inclusive support frameworks that benefit a wider range of pupils with diverse profiles of need.

### 1.4.2 Secondary-age pupils and EBSA

While EBSA affects pupils across all age groups, evidence suggests that its onset and persistence increase with age, with prevalence rates rising considerably during the secondary school years (Kearney, 2008). Despite this, much of the existing research and intervention guidance is oriented towards primary-aged children, resulting in a gap in the literature and practice concerning secondary-aged populations (Gray et al., 2023).

Primary school settings typically offer more predictable routines, closer adult guidance, and stronger relational continuity with teachers, which are factors that may mitigate the emotional impact of school for some autistic pupils (Goodall, 2018). In contrast, secondary school environments are often more complex and demanding; pupils must navigate multiple teachers, less structured social settings, higher academic expectations, and more variable classroom environments, which can be particularly challenging for autistic students who are sensitive to change, sensory input, and social anxiety (Jones et al., 2020; Pellicano et al., 2014). Furthermore, adolescence is a developmental period associated with increased social awareness and emotional vulnerability, factors that may compound existing barriers to school engagement (O'Hagan et al., 2022).

Autistic secondary-aged pupils are thus positioned at the intersection of developmental, relational, and systemic challenges that increase their susceptibility to EBSA. Yet, their voices remain markedly unheard in the current evidence base, particularly in relation to how they perceive support. The secondary years are not only a period of heightened risk but also a critical window for intervention and engagement, with long-term implications for educational outcomes and emotional wellbeing. Understanding how support is experienced by secondary-aged pupils is therefore important for informing age-appropriate and sustainable approaches to attendance support that are, at present, relatively overlooked in the literature.

## 1.5 The role of Educational Psychologists

Educational Psychologists (EPs) are trained to apply systemic models of thinking, allowing them to consider the interactions between children and young people (CYP), families, schools, and wider ecological systems (Bronfenbrenner & Morris, 2005). Their role enables them to contribute at multiple levels, including individual casework, staff consultation, and organisational development, with a view to creating more inclusive educational environments. In relation to this study, which explores autistic CYP's experiences of support for EBSA, EPs are well placed to challenge narrow, within-child conceptualisations and to promote more relational, preventative responses within school systems.

EPs are expected to practise in an evidence-informed manner, integrating relevant research with professional judgement and the lived experiences of CYP and their families (HCPC, 2015; Arnell, 2018). However, broader systemic issues, including ongoing funding constraints and austerity measures, have impacted the availability and timeliness of support for CYP experiencing EBSA (Beckles, 2014). These pressures, alongside those presented by accountability demands and the aftermath of the Covid-19 pandemic, may limit schools' capacity to engage with EPs proactively, often resulting in intervention only when non-attendance becomes more entrenched.

Despite these challenges, EPs are uniquely positioned to support schools in identifying the 'push' and 'pull' factors contributing to EBSA (Thambirajah et al., 2008) and implementing systemic changes that foster emotional safety and belonging. Recent local initiatives, such as EBSA guidance developed by Educational Psychology services (e.g., Buckinghamshire Council, 2022), reflect a growing recognition of the role EPs can play in shaping policy and practice. Findings from this study therefore contribute to the emerging evidence base by centring autistic pupils' voices and providing important implications for EPs and wider professional practice.

### 1.5.1 Advocating for the voice of the child

A central principle underpinning this research is the recognition of children and young people as active agents in their own lives, with the right to be consulted on matters affecting their education and wellbeing. Article 12 of the United Nations Convention on the Rights of the Child (UNCRC) affirms the child's right to express their views freely and to have those views given due weight in all matters concerning them (United Nations, 1989). This is further supported by the Children and Families Act (2014), which emphasises the importance of child and family involvement in educational decision-making processes. Within the context of EBSA, where decisions are often made without full exploration of the young person's perspective, the value of hearing directly from young people is particularly salient (Thambirajah et al., 2008; O'Hagan et al., 2022).

Prioritising the voices of young people is pivotal in developing a meaningful understanding of the lived experiences of EBSA and the systems of support surrounding it. A frequent dissonance between professional interpretations of EBSA and the perspectives of those directly affected, namely, young people and their parents has been drawn by the existing literature (Bagley, 2023).

Educational Psychologists, as professionals operating at the intersection of individual, family, and systemic practice, are well placed to elevate the voices of CYP and ensure these are embedded in support planning. Gersch et al. (2021) also emphasise the importance of prioritising pupil voice in Educational

Psychology practice, not only as a statutory obligation but as a vital means of co-constructing support that reflects the experiences and preferences of CYP themselves.

The current study contributes to this agenda by eliciting the views of autistic pupils and further insights from their parents, with a view to informing educational practice and EP involvement in EBSA-related work. Through this, the research aims to strengthen the role of EPs as advocates for pupil voice, and as practitioners capable of supporting more inclusive and contextually-informed responses to school attendance difficulties.

### 1.6 Supporting EBSA

Schools are often positioned as the primary access point for support with EBSA, yet they frequently lack the capacity to respond proactively. Austerity measures, funding constraints, and the long-term impact of the COVID-19 pandemic have placed increased pressure on schools to meet pupils' emotional and educational needs with limited resources (Children's Commissioner, 2022a; Lester & Michelson, 2024). As a result, support is often reactive and offered only once EBSA becomes entrenched (Elliott & Place, 2019; McDonald et al., 2023). Compounding this issue, school staff may overlook the influence of school-related factors, instead attributing difficulties to the young person or their family circumstances (Burtonshaw & Dorrell, 2023; McDonald et al., 2023).

Lester and Michelson (2024) emphasise that addressing EBSA requires a multi-component, cross-sector approach involving education, health, social care, and voluntary services. This aligns with calls for interventions that address both immediate attendance difficulties and the broader systemic drivers that maintain them (Elliott & Place, 2019; Kazdin, 2019). Effective approaches are likely to include flexible, individualised support in school; collaboration between families and professionals; and accessible, evidence-based interventions that can be delivered at scale. However, the existing models of EBSA support have been largely developed with non-autistic pupils in mind.

While some research has begun to explore autistic-specific experiences of school attendance (Ochi et al., 2020), there remains a pressing need for research that examines support strategies from the perspectives of autistic pupils and their families. Understanding how school environments can be adapted to meet the sensory, social and emotional needs of autistic pupils is essential for developing inclusive support approaches that promote genuine wellbeing alongside attendance.

### 1.6.1 The use of AV1 robotic telepresence technology to support EBSA

Alongside other approaches to supporting EBSA, there is growing interest in the potential of robotic telepresence technology (RTT). RTT systems enable individuals to be virtually present in a remote location via a physical, mobile robot. Increasingly adopted in educational settings, RTT has emerged as a response to both mental and physical health-related school non-attendance (Page et al., 2020), aiming to help pupils remain socially and academically connected when they are unable to attend in person.

Within this growing field, the AV1 robot, developed by the Norwegian company, No Isolation, has gained particular traction in the UK and across Europe. AV1 was designed specifically for young people unable to attend school due to illness, anxiety, or other barriers (see Figure 1). The robot streams a secure, one-way video feed to the pupil's tablet, allowing them to observe the classroom environment. The young person can rotate the robot's head to follow the classroom, activate LED signals to indicate participation preferences, and, if desired, contribute verbally via a built-in microphone. This flexible design allows users to shift between passive observation and active engagement, maintaining control over their level of interaction in line with their emotional readiness and comfort.

AV1 has been piloted across UK settings, including through the Department for Education's Alternative Provision Innovation Fund project, delivered in collaboration with No Isolation (No Isolation, 2021). In this context, AV1 was described as a "cost-effective way to remain connected" to school, positioning it as a more affordable alternative to traditional forms of alternative provision. It reported that 75% of participating pupils showed improved attendance and maintained engagement with learning and peers. As of 2024, over 50 UK Local Authorities have been involved in active trials, and early evaluations by No Isolation suggest that RTT may serve as a promising support tool for pupils with EBSA (No Isolation, 2024). This includes a mixed-methods evaluation conducted by No Isolation (2019) across UK and Scandinavian settings which reported that 86% of young users felt more connected to classmates, and 74% of teachers believed the robot increased the likelihood of returning to school.

Despite its promise, concerns remain regarding the robustness of the current evidence base. A 2024 review by the University of Northampton highlighted that the available data from No Isolation is insufficient for evaluating broader social or economic impact. The report called for more robust and comprehensive research. The DfE (2021) also advised that remote learning tools like AV1 should be viewed strictly as a last resort, rather than a replacement for in-person attendance.

International research has begun to highlight RTT's potential to reduce social isolation, support learning and academic engagement, and facilitate the reintegration of pupils unable to attend school (Johannessen et al., 2022; Weibel et al., 2020). However, its effectiveness is likely to depend heavily on the context in which it is implemented, shaped by factors such as staff attitudes, peer acceptance, family involvement, and the extent to which pupils have agency over how the technology is used. These contextual considerations are important when evaluating the ecological validity and ethical use of RTT.

Given the relative novelty of RTT and its increasing uptake in the UK, there is a clear need for more user-centred research, particularly from the perspective of young people. At the time of this study, no known research has specifically explored how autistic young people experience RTT in the context of EBSA. This represents a significant gap, as telepresence technologies may offer particular benefits for autistic pupils who experience sensory, communication, and social differences that can make full-time school attendance particularly challenging.

Rather than relying on direct use or lived experience, the present study draws on participants' initial impressions of the technology, elicited through video-based methods. This enables the exploration of early-stage, user-informed insights into the acceptability, relevance, and anticipated usefulness of AV1 within this context. By engaging with these views prior to any formal implementation, the study avoids potential positive bias associated with novelty effects or post-use rationalisation, offering a more neutral lens through which to evaluate the perceived value of RTT. Crucially, this approach provides space to consider whether AV1 is something autistic young people would want or feel comfortable using, before substantial investment or integration into practice. In doing so, the research contributes to informed decision-making around the role of RTT within EBSA support strategies and highlights directions for future research into its appropriateness and effectiveness for autistic pupils.

As RTT becomes more embedded in attendance-related policy and practice, the findings of this study also hold practical relevance for Educational Psychologists (EPs), whose systemic, child-centred perspectives position them well to support ethical and effective implementation. EPs can play a key role in assessing pupil readiness, ensuring appropriate safeguarding and consent processes, and working with schools to embed RTT in ways that uphold pupils' autonomy, inclusion, and emotional safety (Young et al., 2019).

**Figure 1.**

*The AV1 telepresence robot developed by No Isolation (photograph by the author).*

## 1.7 Theoretical frameworks

### 1.7.1 Ecological Systems Theory

To understand the multifaceted nature of EBSA among autistic pupils, this study is underpinned by Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979) and the later developed Process-Person-Context-Time (PPCT) model (Bronfenbrenner & Morris, 2006). This theory conceptualises human development as being shaped by a set of nested environmental systems, ranging from the immediate context of the microsystem (e.g., family, school, community) to the mesosystem (interactions between microsystems), the exosystem (e.g., local authority decisions, educational policy), and the macrosystem (e.g., societal values, cultural norms, and legislative frameworks) (see Figure 2). These systems interact dynamically and continuously, shaping a young person's experiences and responses to their environment.

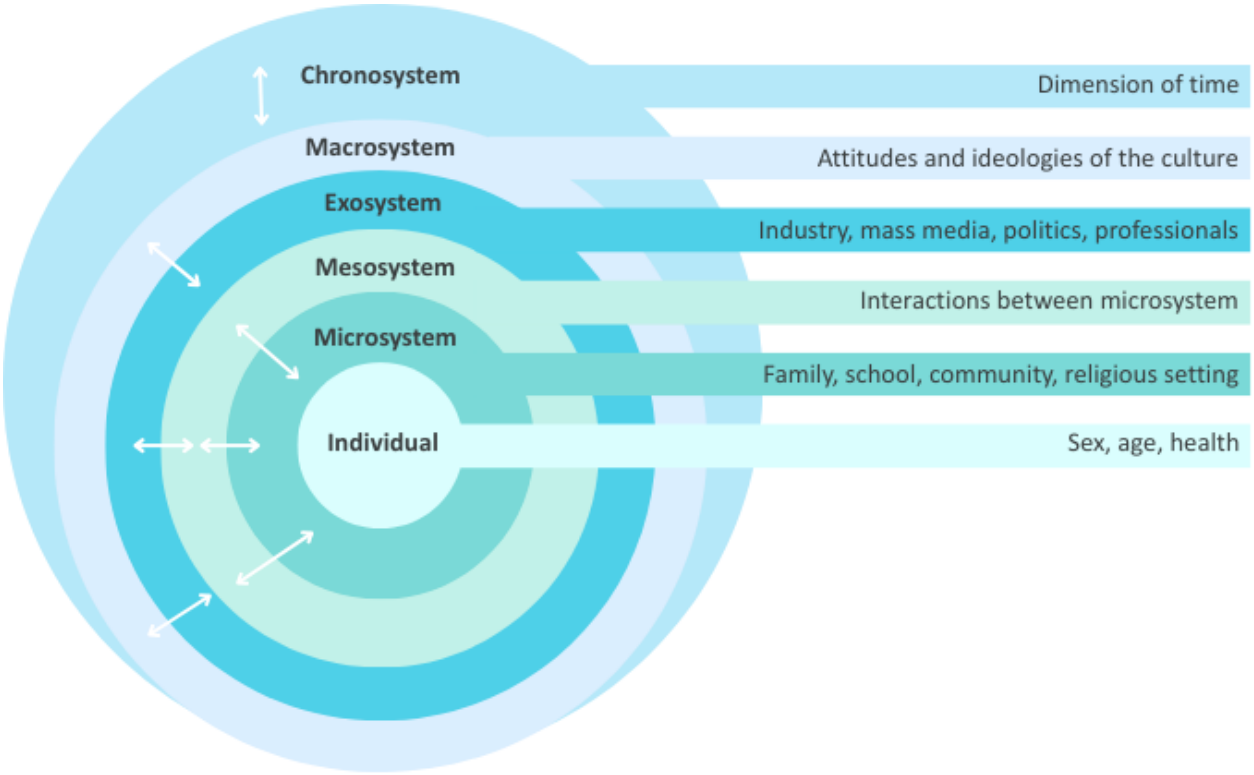
For autistic young people experiencing EBSA, this framework allows for an exploration of how interactions across systems may either support or hinder their school engagement. For instance, a lack of understanding from school staff at the microsystem level may be reinforced by rigid attendance policies or funding pressures operating at the exosystem level. The chronosystem adds a crucial temporal dimension by considering how the timing and sequencing of life events, such as school transitions, exclusions, or prolonged unmet needs, can influence a young person's current engagement with education. It also allows for the consideration of broader societal changes over time, such as shifting policies or increasing awareness of neurodiversity, and how these may shape the pupil's developmental context.

This framework is also applied to examine the implementation of RTT as a support for EBSA. The effectiveness of RTT is influenced not only by the technology itself, but also by the systems in which it is embedded. For example, the willingness of school staff to support the device, the attitudes of peers, and

the coordination between families and professionals all influence its impact. By using an ecological lens, the study considers how the success or failure of RTT interventions reflects the interaction between the child and their surrounding systems, rather than the inherent characteristics of the intervention or the pupil alone.

**Figure 2.**

*Visual representation of Bronfenbrenner's Ecological Systems Model (2005).*




### 1.7.2 Self-Determination Theory

Self-Determination Theory (SDT) (Ryan & Deci, 2000) provides a psychological framework for understanding the motivational and emotional aspects of EBSA (Figure 3). Central to SDT is the proposition that three basic psychological needs - autonomy (the need to feel in control of one's actions), competence (the need to feel effective and capable), and relatedness (the need to feel connected to others) - are essential for wellbeing, intrinsic motivation, and sustained participation in learning environments. When these needs are not consistently met, individuals are more likely to experience heightened anxiety and disengagement from contexts perceived as emotionally unsafe or overwhelming.

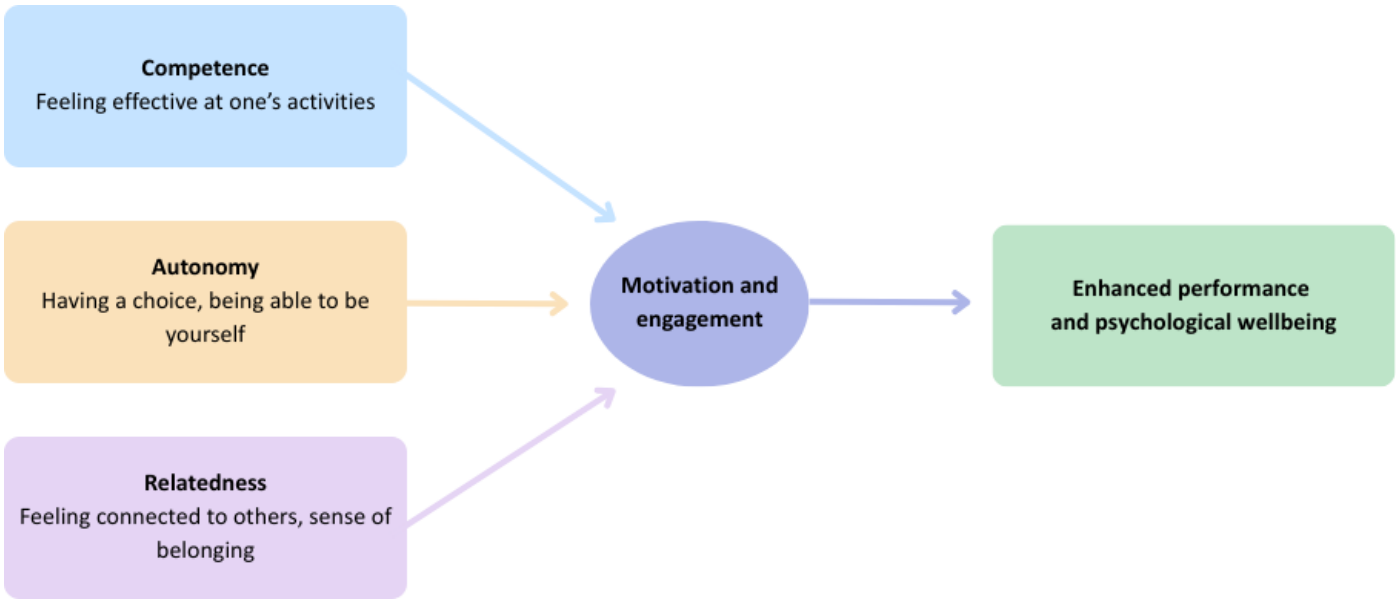
This framework is particularly relevant to autistic pupils experiencing EBSA, who often report challenges in meeting these core needs within mainstream educational settings. Rigid school routines and limited opportunities for choice may undermine *autonomy*, while academic demands and insufficient differentiation can negatively affect *competence*. Furthermore, difficulties in social understanding or inclusion may curtail *relatedness*, leaving pupils feeling isolated or misunderstood. Over time, repeated threats to these needs may result in the pupil associating school with emotional distress, which may contribute to a distancing from school.

SDT also provides a useful lens through which to examine the perceived value and limitations of RTT, such as the AV1 device. For some autistic pupils, continued access to classroom learning through RTT may enhance competence by allowing ongoing academic participation, or relatedness through continued social presence. However, if not implemented in a way that supports pupil autonomy, such as through active consultation and ongoing review, its use may inadvertently reinforce feelings of disempowerment. SDT thus supports a nuanced interpretation of both traditional and technological interventions, grounded in the emotional needs of the pupil.

By centring these needs, SDT complements the ecological perspective, allowing for a deeper understanding of how the school environment, and the supports within it, can either foster or reduce meaningful engagement for autistic pupils experiencing EBSA.

**Figure 3.**

*Visual representation of Self-Determination Theory. Diagram adapted from Ryan and Deci (2000).*



### 1.8 Thesis Structure

This thesis is structured as follows: Chapter 2 reviews literature on how autistic secondary-aged pupils perceive support for EBSA, including the use of AV1 RTT. It also considers the intersection of autism, secondary schooling, and support experiences. Chapter 3 outlines the study's methodology, including research design, data collection, and analysis. Chapter 4 presents the study's findings, which are discussed in relation to existing literature and theory in Chapter 5. Chapter 6 outlines implications for educational psychologists and the wider education system, and considers the study's strengths, limitations, and directions for future research.

# 2. Literature Review

## 2.1 Aims

This systematic literature review aims to provide a comprehensive understanding of how autistic young people of secondary school age perceive the support available for EBSA. It explores the intersection of autism, the secondary school experience, and the nature of support provided for EBSA. In doing so, the review identifies and analyses existing literature that foregrounds autistic pupils' perspectives on support for attendance difficulties. It also explores studies involving RTT, with a particular focus on how young people perceive this as a mental health-based intervention. Recognising the growing importance of gaining pupil voice (DfE, 2015), this review focuses on their views. However, it also includes studies which incorporate the perspectives of parents or professionals in addition to those of the young people. To maintain the integrity of the subsequent qualitative analysis and minimise the risk of introducing prior interpretive bias, the literature reviewed at this stage has been purposefully limited in scope to a focused set of studies most directly relevant to the research questions. This selective approach was intended to ground the study in key contextual and conceptual frameworks without overly shaping or pre-empting the analytic process that follows.

## 2.2 Literature search method

Initial keyword terms were identified through a scoping search, which helped refine the search strategy and ensure alignment with relevant terminology used in the literature. Keyword searches were then conducted using Boolean operators ('AND' and 'OR') across educational and psychology databases, including ERIC via EBSCOhost and PsycInfo. Grey literature was searched using ProQuest, alongside an advanced Google search. Following initial screening, the Critical Appraisal Skills Programme (CASP) was employed to evaluate the methodological quality of the included studies. Further details of the search strategy, including keyword combinations and the inclusion and exclusion criteria for each literature review question are provided in Appendix 1.

## 2.3 Primary review question: What are the views and experiences of school for secondary-age autistic pupils?

The following literature explores the school experiences of autistic pupils from their own viewpoints, reviewing fourteen journal articles and four doctoral theses identified in the primary literature review search. While the identified literature highlights important and recurring themes, variations in

methodological transparency, participant sampling, and the use of trustworthiness strategies across the cited studies make it difficult to fully assess the validity and transferability of the findings. In particular, reliance on retrospective self-reports without triangulation may limit the dependability of conclusions drawn.

### 2.3.1 Academic demands

Autistic young people discussed both the challenges and opportunities presented by the academic demands of school (Colat-Parros, 2023; Dillon et al., 2016; Goodall, 2018; Gray et al., 2023; Hebron & Bond, 2017; Neal & Frederickson, 2016). Across these studies, many participants expressed stress and anxiety stemming from needing to meet curriculum requirements and academic targets, leading to feelings of academic isolation (Goodall, 2018). In Higgins' (2022) study, participants described school subjects and lessons as "very hard" and "confusing," noting the overwhelming amount of homework. Humphrey and Lewis (2008) found that students struggled to keep up with learning and often found themselves placed in lower academic sets, characterised by increased noise and disruption, which hindered their concentration and learning.

However, not all academic and learning aspects of school were considered challenging, particularly where pupils attended a resource provision within their mainstream school. Some students reported finding the broad curriculum in the provision enabled them to explore the subjects they wanted to (Hebron & Bond, 2017). Moreover, some autistic pupils in Dillon et al's (2016) appreciated opportunities to participate in collaborative work within small groups, which not only enhanced their happiness but also understanding of the learning, explaining that "Friends can be clearer than teachers sometimes". However, the study's reliance on a predominantly male sample limits the transferability of its findings, particularly in relation to group work activities, which may be experienced differently by female pupils.

### 2.3.2 Sensory environment

A prominent theme in the literature revolved around how the sensory environment influences the school experiences of autistic pupils. They often described feeling anxious due to the loud classrooms, crowded corridors, and communal areas being too chaotic to manage sensorially (Goodall, 2018; Goodall & MacKenzie, 2019; Gray et al., 2023; Menzies, 2013; Moyse, 2020; Neal & Frederickson, 2016; Tomlinson et al., 2021). For instance, using a 'Design your own school' participatory method, similar to that of the Ideal School, and which was triangulated with other methods, Goodall (2018) reported how students

found corridors crowded, noisy, and chaotic, with one student feeling "closed in" and unable to breathe. Some students resorted to personal strategies to avoid crowded areas, such as not eating to avoid the school canteen (Goodall & MacKenzie, 2019). Others proposed changes to the school environment, including designated quiet spaces, toilet passes, homework clubs, exit cards, support request cards, ear defenders, and pupil passports to outline their strengths and needs to staff (Tomlinson et al., 2021). Across studies, autistic pupils stressed the significance of having quiet and safe areas in school to alleviate any anxious or overwhelming feelings (Colat-Parros, 2023; Goodall, 2018; Humphrey & Lewis, 2008; Menzies, 2013; Myles et al., 2019; Tobias, 2009). They also supported the idea of smaller schools and class sizes (Goodall, 2018).

### 2.3.3 Relationships with peers

Positive peer relationships play a crucial role in protecting autistic pupils' well-being (Menzies, 2013; Sproston et al., 2017). In Humphrey and Lewis' (2008) study, one student expressed, "if people are nice to you, you feel better... now more people like me it's easier". Friendship was identified as a fundamental aspect of belonging and positively influenced school experiences (Goodall, 2018; Goodall & MacKenzie, 2019). However, many of the participants in the studies found establishing friendships difficult, with some having not formed any friendships at all (Colat-Parros, 2023; Cook et al., 2018; Goodall, 2018; Goodall & MacKenzie, 2019). Additionally, the quality of friendships reported in the studies varied notably (Hebron & Humphrey, 2014; Myles et al., 2019). Participants highlighted the impact of the broader peer group's attitudes on forming relationships, with some feeling excluded due to their disability: "it's all about themselves and if you have a disability, [they don't] want to know" (Goodall, 2018).

Across studies, autistic participants reported feeling lonely and isolated in school (Goodall 2018; Goodall & MacKenzie, 2019; Myles et al., 2019). Participants' challenges with forming friendships were often underpinned by difficulties understanding the subtleties of social communication and so they tended to value social skills support at school (Goodall, 2018; Tomlinson et al., 2021). Menzies (2013) corroborated this, demonstrating through a detailed multiple case study design of four autistic participants, that interventions such as 'social stories' and social communication groups, supported the development of peer networks and enhanced feelings of belonging and group identity. This therefore highlights the critical role of providing appropriate support to enhance peer relationships, which serves as a protective factor.

Interestingly, gender differences emerged in several studies. For instance, many autistic girls discussed concealing or masking their differences in order to better fit in or avoid bullying (Cook et al.,

2018; Myles et al., 2019). These girls found it challenging to form friendships and believed that hiding their differences would enhance their social inclusion. Some described using a camouflaging strategy to conceal their learning challenges during lessons, though they acknowledged that this approach could hinder their learning due to the increased demands they'd place on themselves when doing this.

### 2.3.4 Relationships with staff

Many autistic participants described their relationships with school staff, with some recalling negative experiences with staff. They described how they felt that teachers were unsupportive and did not seem to care: "I would ask for help and they wouldn't care", or that they lacked flexibility and understanding about autism: "they just kind of abandoned people who had problems" (Goodall, 2018). Sproston et al.'s (2017) study emphasised the significant impact of staff relationships on the school experiences of autistic girls excluded from mainstream education. Participants who'd attended mainstream schools recounted experiencing judgement and ridicule from teachers, contrasting with the approachable and attentive staff at Alternative Provision schools who listened and took the time to understand them (Gray et al., 2023). Similar sentiments were expressed by students in other studies, who wished for teachers who were patient, empathetic, kind, and flexible in addressing their needs (Goodall, 2018; Menzies, 2013; Tomlinson et al., 2021).

On the contrary, not all the experiences of staff relationships reported by participants were negative. In Goodall's (2018) study, positive experiences were articulated by pupils: "he got to know me and showed an interest". Likewise, Dillon et al. (2016) conducted a comparison of the perspectives of a group of autistic pupils and a control group of non-autistic pupils in a secondary school with only 600 pupils. Both groups reported experiencing positive interactions with staff, with autistic pupils particularly appreciating designated spaces to communicate with staff. This implies that in smaller school settings like this, staff can get to know pupils better and establish closer connections with them.

Students emphasised how important it was for them to have strong relationships with school staff for fostering a sense of belonging at school (Gray et al., 2023; Neal & Frederickson, 2016). Hummerstone and Parsons (2021) highlighted pupils' value in feeling supported, cared for, and understood by school staff. Studies also revealed the need for school staff to adopt a more empathetic approach and undertake increased autism training (Goodall, 2018; Gray et al., 2023; Humphrey & Lewis, 2008; Moyse, 2020; Tomlinson et al., 2021). Some of the pupils expressed frustration over the lack of appropriate staff training, noting responses based on assumptions or stereotypes, rather than understanding needs specific to them (Colat-Parros, 2023; Sproston et al., 2017; Tomlinson et al., 2021).

This lack of understanding was further evident in instances where staff prevented access to individual adjustments, including 'support hubs,' and assumed a more negatively perceived approach following the pupils' diagnosis of autism (Goodall, 2018; Moyse, 2020; Tomlinson et al., 2021).

Tobias (2009) adopted a focus group methodology incorporating PCP techniques with students and parents. The findings indicated that staff had essential knowledge of autism and recognised the need to understand each student individually, knowing their unique needs, which led to appropriate support and adjustments being made. Despite these findings reinforcing the value of appropriately-trained staff, the results of the study do not clearly differentiate between the themes that emerged from each respective participant group and so it is unclear whether the themes are different for parents and pupils. This highlights how the voices of young people can be overshadowed in studies reporting findings where parents are also involved; a key consideration for the reporting of findings in the current study. Furthermore, while PCP techniques can offer rich, in-depth insights into participants' personal constructs, the credibility and dependability of the findings may be affected by the absence of detail on how these techniques were applied and analysed; the lack of clarity about analytic procedures limits transparency, making it difficult to evaluate the validity of the interpretations drawn from the focus group data.

### 2.3.5 Bullying

Autistic pupils frequently encountered bullying in their school experiences, facing rejection, physical and verbal abuse, and judgement, often with minimal intervention from staff. Verbal harassment, including derogatory insults like "weirdo," was commonly reported (Humphrey & Lewis, 2008). Physical violence was also disturbingly common, with reports of being pushed, squashed behind doors, tackled, and punched (Humphrey & Lewis, 2008).

Goodall (2018) and Humphrey and Lewis (2008) prioritised the perspectives of young people in their research, designing their research focusing on the young people's advice prior to data collection in order to account for their needs and social communication difficulties. This led to the researchers employing participatory research methods such as, semi-structured interviews, drawings, diary entries, and various interactive activities like diamond ranking and 'design your own school.' Participants in the studies acknowledged their increased vulnerability as an autistic person due to challenges in social communication, which made them susceptible to bullying (Goodall, 2018; Humphrey & Lewis, 2008). Further, the autistic pupils' views were explored in both alternative provisions (Goodall, 2018) and

mainstream schools (Humphrey & Lewis, 2008), thus indicating that bullying is a common and shared experience irrespective of the setting.

### 2.3.6 Anxiety and mental health

For many autistic young people across studies, school had a detrimental effect on their mental health, with reports of experiencing heightened anxious feelings, as well as distress and overwhelm (Colat-Parros, 2023; Cook et al., 2018; Goodall, 2018; Gray et al., 2023; Humphrey & Lewis, 2008). Participants attributed these feelings to the factors aforementioned, including the overwhelming school and sensory environment, poor relationships, bullying (Goodall, 2018; Hebron & Humphrey, 2014; Humphrey & Lewis, 2008), and academic demands (Tomlinson et al., 2021). Some participants described feelings of depression and more concerningly, suicidality: “School was always awful, I went through a bit of a severe depression” (Goodall, 2018), and “other pupils are shouting kill yourself… This made me suicidal, and teachers tried to help but it got too much”. While these participants continued attending school, their expressions of anxiety and reluctance to go, such as "I would put off going to sleep to put off school as much as possible" (Goodall, 2018), shed light on how attendance challenges may manifest when school fails to meet their needs.

### 2.3.7 Autistic identity

A common experience among the young people in these studies was feeling different because of their autism (Humphrey & Lewis, 2008; Menzies, 2013; Moyse, 2020; Tomlinson et al., 2021). In Menzies' (2013) study, this feeling stemmed from challenges in socialising, physical outbursts, inflexibility regarding routines, and behaviours of a repetitive and ritualistic nature. These factors often hindered the formation and maintenance of friendships at school (Cook et al., 2018; Goodall, 2018; Goodall & MacKenzie, 2019) and led to perceptions by others of being different or even "freaks" (Humphrey & Lewis, 2008).

Disclosing their diagnosis of autism was viewed negatively for participants who wanted to be considered ‘normal’: “I’d rather they did not know because then I wouldn’t be treated differently and that’s fine” (Humphrey & Lewis, 2008). This perceived difference can result in some young people adapting themselves and their identities to conceal aspects of their autism and appear socially and behaviourally ‘normal’ (Humphrey & Lewis, 2008). A phenomenon that is known as autistic ‘masking’ or ‘camouflaging’, which involves efforts to hide autistic traits to fit into non-autistic societal norms (The Autism Service, 2021).

Conversely, several students acknowledged the importance of accepting their autistic diagnosis (Colat-Parros, 2023; Humphrey & Lewis, 2008). Participants in Humphrey and Lewis' (2008) study reported that disclosing their autism diagnosis sensitively to peers facilitated their relationships with them and reduced the ignorance which often leads to negative peer relationships, rejection and bullying. These individuals viewed autism as integral to their identity, enabling them to accept themselves and their uniqueness: "I like being like this you know, that's the way it is" (Humphrey & Lewis, 2008). This highlights the need for school staff to support students with understanding and accepting their differences, along with supporting others' perceptions of autistic pupils, which could lead to enhanced peer relations.

### 2.4 Secondary review question: How do autistic secondary-age pupils experiencing EBSA perceive and experience the support they receive?

There were only two studies, a journal article and a doctoral thesis, that explored the experiences of autistic pupils' support in secondary schools from their perspectives (O'Hagan et al., 2022; Higgins, 2022). In their study, O'Hagan et al. (2022) investigated how three autistic girls successfully reintegrated into a mainstream school following EBSA. The researchers reasoned that investigating the experiences of autistic females was necessary, given that EBSA has been identified as a risk factor contributing to delayed diagnosis in girls (O'Hagan & Bond, 2019). However, they also acknowledged that autistic boys experience EBSA more so than their typically developing counterparts, and thus would, too, benefit from research into the support that led to their successful re-engagement. The researchers employed a qualitative exploratory multiple case study design, conducting semi-structured interviews with each participant, including the young person, their parents, and a school staff member, which enabled the triangulation of multiple sources of evidence. Thematic analysis of the interview transcripts revealed that the girls had reintegrated with mainstream school successfully due to several key supportive factors. These included a key adult in school, sense of belonging, having friendships, an individualised flexible approach to support, and alternative provision. The young people, parents, and school staff in this study identified that a key trusting relationship with someone in school was often the first step to re-engagement. It was particularly important for the autistic girls that they felt understood by a key adult who had knowledge about autism and the associated behaviours. Positive student-teacher relationships were highly influential of autistic girls' school experiences and this study highlighted that a barrier to this is staff perceptions of autism in girls, which often led to inflexibility and inappropriate sanctions. All of the girls in the study wanted to have friendships and social connections

but needed support to develop social skills and to identify pupils to befriend. The girls also valued the significant pastoral support provided, the availability of safe and calm spaces, participation in gardening activities, and receiving individual coaching. These elements of the re-engagement support seem to have played a crucial role in enabling the girls to return to school.

Participants also highlighted the importance of the girls being actively engaged in their own support planning, which contributed to them feeling heard, understood, and empowered. This emphasises the importance of person-centred planning to support reintegration. Furthermore, the study revealed that receiving a formal diagnosis helped the autistic girls learn about their autism, reducing anxieties about perceived differences. This highlights the importance of psycho-education and support post-diagnosis to empower autistic students and enhance their awareness of their strengths and challenges.

The authors concluded that establishing trusting relationships, starting with a key adult, is fundamental to autistic girls reengaging with school. This relies on school staff having a comprehensive understanding of autism in girls, a flexible approach tailored to individual needs, and resources to offer alternative provision and person-centred interventions. Such supportive measures promote a greater sense of belonging and acceptance, facilitating easier school attendance for autistic females.

This study exclusively focused on the perspectives of autistic girls, illuminating a less represented group in research, although simultaneously revealing a gap in the literature regarding supportive factors for a broader population of autistic students. While O'Hagan et al.'s (2022) study deepens our understanding of successful supportive factors for a small sample of autistic females experiencing EBSA, research with a larger, mixed-gender sample is warranted to explore this topic further.

The second study, conducted by Higgins (2022), explores the perspectives of ten autistic pupils and identifies potential factors that could support their EBSA. The participants, aged 11 to 16 years, all had a diagnosis of Autism. The rationale for participants selected was grounded in the heightened prevalence and risk of EBSA among secondary-age autistic pupils (Kearney, 2008). The researcher utilised a method rooted in Personal Construct Psychology (PCP), whereby the 'Drawing the Ideal School' activity (Williams & Hanke, 2007) was combined with a semi-structured interview. During these interviews, autistic pupils were asked to envision both their ‘ideal’ and ‘non-ideal’ schools, subsequently engaging in solution-focused scaling, which enabled their voices to be heard. This PCP approach has been acknowledged for its efficacy in assisting children of varying ages who experience difficulty articulating their thoughts verbally (Burnham, 2008).

Reflexive Thematic Analysis used in Higgins (2022), revealed that participants desire greater freedom and autonomy at school, increased opportunities to fulfil their basic needs before learning, and a more collaborative and interactive learning environment. They also expressed a need for fostering positive relationships with staff who understand and value them, echoing findings from O'Hagan et al. (2022). Higgins (2022) emphasised the importance of providing staff supporting autistic students with enhanced training and supervision to better address flexible approaches, sensory needs, and personalised learning support. Overall, autistic students described their ideal school as being able to have increased flexibility throughout the day, positive relationships between staff and students, personalised learning, and calm, sensory-friendly environments.

Higgin's (2022) study offers important insights into supporting autistic pupils experiencing EBSA and includes key considerations that were presented using a clear visual, developed in line with guidelines for conducting research with autistic participants (Gowen et al., 2019). While this study provides valuable insights into potentially beneficial support factors for autistic students experiencing EBSA, participants were not recruited based on having experienced support, and thus any possible conclusions about effectiveness cannot be drawn, as the suggested strategies were not necessarily implemented, and it was often unclear whether the young people's suggestions were based on actual experience or hypothetical reflection. Further research is needed to examine the impact of such support when proactively introduced, particularly within mainstream settings where difficulties frequently first arise.

### 2.5 Tertiary review question: how do users (i.e., young people, parents, and school staff) perceive the use of robotic telepresence technology in schools?

The following section reviews seventeen journal articles examining the use of RTT in school settings, focusing on the perceptions and experiences of individuals who have directly engaged with the technology. These studies, drawn from both UK and international contexts, provide insights into RTT's implementation, benefits, and challenges as experienced in practice. Notably, no studies were identified that explored perceptions of RTT based on video-based elicitation or prior to direct use. As such, this review reflects the current literature's emphasis on lived experience, while highlighting a gap that the present study seeks to address.

### 2.5.1 Inclusion

Many studies reported inclusion benefits associated with RTT use, encompassing both educational and social dimensions. Educational inclusion was highlighted through pupils' continued access to classwork during absence (Ahumada-Newhart & Eccles, 2020; Breivik, 2017; Fletcher et al., 2023), while social inclusion benefits were noted through positive interactions in classrooms and playgrounds (Henriks, 2017). A combination of learning and social environments was found to contribute to improvements in overall social inclusion (Ahumada-Newhart & Olson, 2019; Chubb et al., 2021; Fletcher et al., 2023; Johannessen & Haldar, 2020; Johannessen et al., 2023b; Lister, 2020; Newhart et al., 2016; Nordtug & Haldar, 2024; Nordtug & Johannessen, 2023; Spoden & Ema, 2024; Weibel et al., 2020; Weibel et al., 2023b; Weibel et al., 2024). Across studies, a general consensus emerged that RTT use tended to reduce feelings of isolation among young people experiencing school absence (Chubb et al., 2021; Fletcher et al., 2023; Johannessen & Haldar, 2020; Lister, 2020; Newhart et al., 2016).

Contrastingly, some of the literature has, however, highlighted challenges in achieving inclusion. Successful use was found to depend heavily on systemic and relational factors, including consistent peer support, responsive school systems, and sensitive adult facilitation (Johannessen & Haldar, 2020; Fletcher et al., 2023; Weibel et al., 2020; Weibel et al., 2023a). Staff availability influenced both the setup and frequency of RTT use, with limited capacity sometimes undermining integration (Henriks, 2017). Moreover, meaningful interaction often relied on pupils having pre-existing peer connections, with social inclusion less likely where these were absent (Johannessen & Haldar, 2020).

Although some pupils experienced increased attention positively, others described discomfort with the visibility RTT use created, sometimes referred to as "red carpet syndrome" (Henriks, 2017; Johannessen et al., 2022). One parent in Johannessen et al. (2022) reflected that RTT helped their child feel less alone, but this was not universally echoed. Where systemic supports were lacking, RTT risked reinforcing feelings of marginalisation rather than promoting belonging (Johannessen & Haldar, 2020).

### 2.5.2 Academic Engagement

RTT has increasingly been recognised for its potential to support academic engagement. Pupils reported improvements in self-esteem, motivation, and participation in lessons through RTT use (Chubb et al., 2021; Lister, 2020; Newhart et al., 2016). RTT has also been found to facilitate continuity in academic routines and reduce disruption to learning during periods of absence (Ahumada-Newhart & Olson, 2019; Weibel et al., 2023b; Weibel et al., 2024).

Parents similarly viewed RTT as providing a "low-threshold, safety net" for sustaining access to learning without the emotional pressures of physical attendance (Johannessen & Haldar, 2020). In the UK, Fletcher et al. (2023) reported that school staff perceived AV1 to positively support curriculum access and re-engagement during prolonged absence. However, there remains a need for exploration of other user perspectives in the UK, namely with young people and parents.

Moreover, sustained academic engagement was found to be contingent on systemic and relational factors. Risks included inconsistent staff facilitation, logistical barriers within classrooms, and reduced motivation over time (Johannessen et al., 2023b; Weibel et al., 2023b). Concerns around passive participation at home (Johannessen, 2024) further suggest that RTT cannot guarantee meaningful engagement. Its success depends on careful integration within relationally and pedagogically supportive systems that centre sustained learning rather than superficial presence.

### 2.5.3 Design

RTTs have generally been well received in terms of their technological design by both pupils and educational staff. Studies consistently highlight their user-friendly interfaces, lightweight designs, and intuitive functionality (Chubb et al., 2021; Henriks, 2017; Johannessen & Haldar, 2020). More recent research similarly notes pupils' appreciation for features such as light-up participation indicators and simple control systems (Weibel et al., 2023b; Spoden & Ema, 2024).

Despite positive feedback on usability, technical reliability remains a significant concern. Persistent connectivity issues, such as Wi-Fi instability, poor sound or video quality, and limited mobility, have been widely reported (Ahumada-Newhart & Eccles, 2020; Ahumada-Newhart & Olson, 2019; Breivik, 2017; Chubb et al., 2021; Fletcher et al., 2023; Henriks, 2017; Johannessen & Haldar, 2020; Lister, 2020; Weibel et al., 2020). Recent studies confirm that such disruptions risk exacerbating feelings of frustration and exclusion among users (Weibel et al., 2023a; Weibel et al., 2024).

Two studies specifically addressed concerns about the design of their respective RTT, noting its adverse impact on practical subjects like sports or music (Johannessen & Haldar, 2020). Additionally, several studies addressed the concept of "social debt," which arises from the dependence on peers to move or manage the RTT between classes (Ahumada-Newhart & Eccles, 2020; Newhart & Olsen, 2017; Weibel et al., 2020). In contrast, Lister (2020) found that the particular robot used in their study had mobility features, thus reducing the need for peer assistance in relocating the robot, which in turn increased the user's independence.

### 2.5.4 Acceptability

Studies have generally reported acceptance of RTT among users, including teachers, pupils, and parents. One large-scale, qualitative study has specifically highlighted largely informal acceptance from pupils (Johannessen et al., 2022), while others mentioned acceptance from class teachers, parents, and/ or classmates (Breivik, 2017; Henriks, 2017; Lister, 2020; Newhart et al., 2016; Spoden & Ema, 2024; Weibel et al., 2020; Weibel et al., 2023b). Chubb et al. (2021) similarly reported positive reception from all user perspectives.

However, acceptance was not universal. Staff concerns about IT reliability, privacy, and surveillance were noted (Johannessen & Haldar, 2020; Johannessen, 2024). Cost and reliance on external funding also created hesitations in UK schools (Fletcher et al., 2023). Lister (2020) observed that pupils and staff not familiar with RTT users were generally less receptive to the device, reflecting broader challenges around normalising its presence. Johannessen (2024) and Johannessen et al. (2023a) further emphasised that teacher reactions varied from positive facilitation to discomfort around perceived "peeping" or "broadcasting," particularly in schools with less established digital practices.

Moreover, concerns about long-term social consequences were also raised. While RTTs such as AV1 were valued for sustaining participation, several studies warned that acceptance among classmates may decline over time, potentially leading to social fatigue or diminishing enthusiasm (Weibel et al., 2023a; Nordtug & Haldar, 2024).

## 2.6 Literature review summary and rationale for the current study

The three systematic literature searches conducted as part of this review reveal a significant gap in the existing evidence base concerning autistic young people's experiences of school and their perceptions of the support they receive when facing difficulties with attendance. To provide broader contextual insight, an initial search was carried out to explore autistic young people's general perspectives on school. This search consistently revealed negative experiences, typically characterised by academically demanding and sensorially overwhelming environments, strained relationships with peers and staff, instances of bullying, heightened anxiety, and a conscious awareness of how their differences influence their developing autistic identity. Collectively, these findings underscore the pressing need for deeper understanding of how to address these issues in order to foster greater wellbeing and engagement in school among autistic pupils.

Notably, only two studies, O'Hagan et al. (2022) and Higgins (2022), directly examine the perspectives of autistic pupils in relation to the support they receive for EBSA. Both studies emphasise the

significance of relational and environmental factors in sustained attendance. Specifically, they emphasise the importance of nurturing positive peer and staff relationships, implementing flexible and individualised support approaches, and ensuring access to safe, calm environments that are sensitive to pupils' sensory needs. These findings further highlight the lack of research focused explicitly on autistic pupils' lived experiences of EBSA support, and point to the need for a more comprehensive understanding of the current support and systemic mechanisms being employed to engage this group, and the perceived effectiveness of it.

The final review question focused on user perceptions among young people, parents, and educational professionals regarding RTT. The technology was associated with a number of benefits, including enhanced inclusion, improved engagement, and novel design features. However, users also reported several limitations. These included challenges relating to social exclusion, technological reliability, restricted mobility, funding barriers, and concerns about privacy. Moreover, much of this research has been conducted outside of the UK, resulting in limited insight into the applicability and reception of RTT in UK educational contexts.

Given the increasing use of RTT within Local Authorities to support pupils experiencing EBSA, including autistic pupils, further investigation is warranted into its acceptability, perceived effectiveness, and practical implementation, particularly from the perspective of autistic young people themselves. Addressing this gap, the present study represents the first UK-based research to explore the views of a mixed-gender sample of autistic secondary-age pupils and their parents concerning both the support received for EBSA and the potential role of RTT in promoting school engagement.

# 3. Methodology

## 3.1 Research aims

This research aims to explore the support provided to autistic pupils who are experiencing barriers to attendance, alongside their perceptions of the AV1 telepresence robot as potential component of that support, by accessing their voices through semi-structured interviews. While participants did not have direct or lived experience using the AV1 robot, their views were elicited using a short, accessible video demonstrating the device in use within a school context. This video-elicitation approach enabled young people and their parents to reflect on the concept, potential benefits, and possible limitations of AV1 in supporting attendance and inclusion, based on hypothetical rather than personal use.

The study also seeks to gain broader insights into the support systems currently available to autistic young people, and how difficult school experiences are being addressed. In addition, the voices of the parents are included through semi-structured interviews, recognising their role in navigating support systems and their perspectives on the wider systemic and structural dynamics surrounding EBSA. These parental insights also offer valuable points of comparison and complementarity with the perspectives of the young people where appropriate.

Ultimately, the research hopes to empower autistic young people by amplifying their voices in the development of future EBSA support. It aligns with the principles set out in the SEND Code of Practice (2015), which emphasises the importance of involving children, young people, and their families in decisions that directly affect them, and ensuring that their views are both heard and respected.

## 3.2 Research questions

**RQ1.** What are the views and experiences of support for autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA), and what might these reveal about effective future support?

**RQ2.** What are the views and perceptions of the AV1 robotic telepresence device for supporting autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA)?

### 3.3 Research Paradigm: Critical Realism

This study was situated within a critical realist paradigm, which provided a coherent philosophical foundation for examining both the structural realities of the education system and the lived experiences of autistic pupils experiencing support for EBSA. Critical realism, as developed by Bhaskar (1978, 2013), assumes that a single reality exists independently of human perception, but our access to it is always partial and mediated through social, cultural, and personal contexts. This position was particularly appropriate for the current research, as it enabled recognition of the reality of EBSA, such as the observable occurrence of non-attendance and the emotional distress reported by pupils, while also acknowledging the individuality and subjectivity of each participant's experience.

The ontological position of critical realism rests on a stratified view of reality, which posits three interconnected levels: the empirical, the actual, and the real (Bhaskar, 1978). The empirical level represents what is directly observed and experienced; in this study, this includes the articulated perspectives of autistic pupils and their parents on EBSA support and their perceptions of AV1 as a tool for facilitating school engagement. The actual level encompasses the events and practices occurring within schools, such as the implementation of support strategies and the practical use of AV1.
The real level consists of the deeper structures and mechanisms, such as educational policy, funding systems, societal attitudes, and institutional practices, that shape these experiences, often operating beyond the immediate awareness of individuals (Archer et al., 2013). This ontological framework allowed the study to engage with both lived experiences and the less visible systemic influences that frame them.

Epistemologically, critical realism acknowledges that knowledge is socially constructed, interpretive, and inherently fallible (Sayer, 2000). While participants' views are shaped by their unique social contexts, histories, and prior experiences of support, these perspectives are not formed in isolation; they are influenced by real structures and mechanisms that exist independently of perception. This approach diverges from pure constructivism, which posits that all aspects of reality are socially constructed, and from positivism, which reduces phenomena to measurable variables at the expense of meaning-making and emotional depth. In relation to the first research question, which examines how autistic pupils and their parents perceive EBSA support, participants' accounts provided valuable insights into their lived realities while also revealing the role of broader systemic factors such as policy, school culture, funding constraints, and professional practice. The second research question, exploring perceptions of the AV1 robotic telepresence device, similarly illustrates this duality as although AV1 is an

objectively existing assistive technology, perceptions of its utility and effectiveness are shaped by contextual influences, including national policy on inclusive technology, school-level decision-making, and societal attitudes toward assistive devices and remote learning.

### 3.4 Researcher Positionality

This study was informed by my dual positionality as both an insider and outsider within the research context (Goundar, 2025). My own experiences of secondary education, marked by anxiety, academic and social stressors, and thus periods of intermittent non-attendance, resonated with some of the emotional barriers faced by the autistic young people in this study. Although I do not share their diagnostic identity, my familiarity with the emotional landscape of school-related distress positioned me as a quasi-insider (Goundar, 2025). This insider lens enabled empathetic understanding and supported a deeper exploration of the nuanced experiences surrounding EBSA.

To critically engage with the dynamics of my own identity in relation to the participants, I employed Burnham's (2018) Social GRACES framework, reflecting on how social factors, such as race, age, neurotypicality, education, and gender, shaped my role in the research. As a non-autistic adult female academic, I did not share the participants' lived experiences of navigating an education system that frequently fails to accommodate their specific autistic needs. I was also conscious that gender may shape access to and experiences of EBSA support differently, and that the generational gap between myself and participants placed me in a socio-historical context distinct from theirs.

Additionally, I remained aware of the power dynamics embedded in my role as a doctoral researcher. Participants may have perceived me as holding academic authority, potentially influencing how freely they felt able to disclose their experiences. To address this, I actively sought to position myself as an advocate for their voices, creating space for participant-led discussion and maintaining a stance of reflexive humility. I approached the research with openness, curiosity, and a commitment to amplifying the voices of autistic young people and their families without imposing my own assumptions.

### 3.5 Research Design

This study employed an exploratory qualitative research design to investigate the views and experiences of autistic secondary-age pupils and their parents regarding support for EBSA. A concurrent triangulation approach was utilised through multi-method data collection, in which pupil and parental perspectives were gathered using a dyadic interviewing approach. Participants were recruited as young person–parent dyads, reflecting a methodological commitment to recognising the interdependent nature

of educational experiences and support systems (Morgan et al., 2013). This structure allowed for the collection of both shared and novel perceptions within each dyad to enrich the data. The inclusion of both voices contributed to a more holistic understanding of EBSA, while maintaining the depth and authenticity of individual perspectives.

Despite this multi-perspective investigation gathering insights from both autistic pupils and their parents, the voices of the autistic pupils remained central. The researcher was mindful of the literature which posits that autistic young people's perspectives are frequently overshadowed by those of parents, educators, and professionals (Fayette & Bond, 2018). To redress this imbalance, their experiences were placed at the forefront to meaningfully shape the research narrative. A prevailing assumption in the literature suggests that autistic individuals may find it difficult to engage with qualitative methods like interviews, often resulting in their exclusion from relevant research (Fayette & Bond, 2018). To counter this, the study adopted an interactive, participatory approach, incorporating the Ideal School activity (Williams & Hanke, 2007) to support accessible, visual, and participant-led expression.

### 3.5.1 Recruitment process

The sampling strategy employed in this study was purposive, with participants selected based on predefined inclusion and exclusion criteria. The recruitment method involved disseminating a recruitment poster across different social media platforms, including X (formerly Twitter), as well as within Facebook groups specifically designed for parents of young people experiencing school attendance difficulties and/or autism-related school non-attendance. Recognising the challenges associated with accessing this potentially hard-to-reach population, the recruitment strategy prioritised homogeneity by engaging with targeted social media communities, particularly the *Not Fine in School* parent and professional pages. A recruitment poster (Appendix 3) was shared within these groups, inviting parents to express their interest in the study either by directly emailing the researcher or by following a hyperlink or QR code to a Research Expression of Interest Form (Appendix 4). This form provided access to the Parent Information Sheet (Appendix 5) and allowed interested individuals to consent to leaving their contact details for further communication about their potential participation in the study. Those who opted to be considered for participation were subsequently provided with additional information via detailed parent and child information sheets (Appendix 5). Prior to formal inclusion in the study, informed consent was obtained from both the parent and the young person using the designated parental and young person consent forms (Appendix 6). This multi-step recruitment process was designed to ensure transparency, ethical integrity, informed consent and assent for the parent and young person respectively, and voluntary

participation while maintaining clear communication throughout. Table 1 presents the participant inclusion and exclusion criteria with corresponding rationale.

**Table 1.**

*Participant Inclusion and Exclusion Criteria*

| **Criteria for young people** | | |
|---|---|---|
| **Inclusion criteria** | **Exclusion criteria** | **Rationale** |
| 1. Autism diagnosis or social communication needs<br>Young people should have social communication needs which are either recognised through a formal diagnosis of autism or as having communication and interaction difficulties recognised by their parent or school. | Young people's social communication needs are not recognised through a formal diagnosis of autism or by their parent or school. | EBSA among autistic pupils is highly prevalent. |
| 2. Age<br>Young people will be between the ages of 11 and 16 years. | Young people will not be 11-16 years old. | EBSA is increasingly more prevalent in secondary-age young people. |
| 3. Attendance difficulties due to emotional reasons<br>Young people will have current or historical persistent absence with emotional reasons cited. | Young people do not have a history of persistent absence and will not identify emotional reasons as the cause of their absence. | The present study endeavours to gather the experiences of support for young people with EBSA. |
| 4. English language<br>Participants will be able to understand and express themselves using the | Young people who experience challenges with understanding or expressing themselves in the | The study will require participants to articulate themselves in English through talking and / or drawing, |

| | | |
|---|---|---|
| English language and not have any recognised learning difficulties that would impede their participation in the interview or the activities during it. | English language or have recognised difficulties with their learning that could hinder their participation in any aspect of the interview. | and be able to comprehend language in order to engage effectively with the interview questions and activities. |
| 5. Absence of alternate reasons for non-attendance<br>Young people will not have attendance difficulties due to other reasons in relation to conduct and antisocial disorders, such as fixed term or permanent exclusions, juvenile delinquency, disruptiveness, or sexual activity. | Young people whose school non-attendance is attributed to reasons other than emotional difficulties, such as conduct or antisocial disorders. | The research seeks participation of young people whose inability to attend school is rooted in emotional reasons, reflecting an increasing trend of school absences associated with EBSA. |
| **Criteria for parents** | | |
| 1. Child experiencing EBSA<br>Parents / guardians will have parental responsibility for an autistic young person participating in the study. | Parents / guardians will not have parental responsibility for an autistic young person participating in the research. | The study primarily focuses on the support experiences of autistic young people experiencing EBSA, while also incorporating parental perspectives to capture broader systemic aspects of support, as well as to complement the young people's views. |
| 2. Verbal communication<br>Parents / guardians will be able to express themselves verbally using the English language. | Parents / guardians who have difficulty communicating verbally in the English language. | The study will require parents to be able to articulate themselves verbally. |

### 3.5.2 Participants

In qualitative research, it has been suggested that maintaining a sample size of fewer than twenty participants facilitates the development of strong researcher-participant relationships, thereby enhancing the richness of the data and ultimately strengthening the validity of the findings. This aligns with the qualitative research paradigm, which prioritises the depth, quality, and contextual richness of data (Braun & Clarke, 2019). A key consideration in qualitative research is data saturation; defined as the point at which no new themes, concepts, or insights emerge from continued data collection and analysis (Vasileiou et al., 2018). In this study, it was felt that data saturation was reached with a sample of 11 participants, consisting of six autistic young people experiencing EBSA and five of their parents. The assessment of data saturation is shaped by several factors, including the scope of the research, the homogeneity of the participant group, and methodological choices, with researchers using their judgment to determine when saturation has occurred (Hennink & Kaiser, 2022). In this study, saturation was supported by the consistency of thematic content emerging across interviews, with notable similarities in the experiences shared by participants prior to formal analysis. Based on these recurring patterns and the specific focus of the research, the author concluded that data saturation had been reached and that the sample size was sufficient. Given the defined characteristics of the participant group and the study's targeted aims, the sample was deemed appropriate for generating meaningful and comprehensive insights. Tables 2 and 3 present the participant demographic information.

**Table 2.**

*Parent – Young Person (YP) Demographic and Background Information (Anonymised)*

| Participants' unique codes | YP age[2] | YP year group | YP gender | YP ethnicity | Parent code | Parent age | Parent gender | Parent ethnicity |
|---|---|---|---|---|---|---|---|---|
| YPA-PA | 12 | 8 | Female | White British | PA | 35 | Female | White British |
| YPB-PB | 15 | 11 | Male | White British | PB | 49 | Female | White British |
| YPC-PC | 11 | 7 | Female | White British | PC | 44 | Female | White British |
| YPD-PD | 13 | 9 | Female | White British | PD | 40 | Female | White British |
| YPE-PE | 14 | 9 | Male | Mixed White British and Asian | PE | 55 | Female | Mixed White British and Asian |
| YPF-PE[3] | 11 | 7 | Male | Mixed White British and Asian | PE | 55 | Female | Mixed White British and Asian |

*Note.* [2] Age at interview. [3] PE was the parent of both YPE and YPF.

**Table 3.**

*Additional Young Person (YP) Background Information (Anonymised)*

| Young Person's unique code | Parent-reported comorbid diagnoses / needs | Main reason(s) for attendance difficulties[4] | Onset of attendance difficulties | School attendance history | Date of autism diagnosis[5] |
|---|---|---|---|---|---|
| YPA | Epilepsy | Bullied by a teacher and failed transition | Nursery | Intermittent attendance during Primary school; | 2022 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | currently not attending school and hasn't attended for ten months | |
| YPB | Physical health needs and anxiety | Don't want to and wake up late | Year 10 | Attends an average of one to two days per week | 2018 |
| YPC | Acute stress, sensory processing needs, physical health needs, and sleep difficulties | Peer behaviour, the stress of going to lessons and moving through busy corridors | Beginning of Year 7 | Variable attendance | 2022 |
| YPD | Anxiety | PE, teachers, and other students | Year 4 during Covid-19 | Attends an average of three days per week | 2019 |
| YPE | Irlen Syndrome[6] and anxiety | Anxiety, overwhelm, and depression | Recently, a few weeks ago | Previously home-educated from Year 3 until the beginning of Year 9; currently attends school for four to five half-days per week | 2022 |
| YPF | ARFID[7] and anxiety | Lack of sleep, stress from school, social anxiety and | Since the first week of Year 7 | Previously home-educated until the beginning of Year 7; currently attends | 2023 |

| | | | | | |
|---|---|---|---|---|---|
| | | concentration fatigue | | school an average of four days per week | |

*Note.* [4]Main reasons for attendance difficulties reported by the young person and parent at the beginning of the interviews. [5] Date of autism diagnosis obtained from the parent. [6] Irlen Syndrome is a perceptual processing disorder affecting visual perception, often causing reading difficulties, light sensitivity, and depth perception challenges (Irlen, 2005). [7] Avoidant/ Restrictive Food Intake Disorder (ARFID) is an eating disorder involving restrictive eating that leads to nutritional deficiency or weight loss, unrelated to body image concerns (APA, 2013).

## 3.6 Data Collection

### 3.6.1 Semi-structured interviews

Individual semi-structured interviews were conducted with both autistic young people and their parents, using schedules tailored to each group. This method was chosen for its balance of structure and flexibility, enabling consistent data collection while allowing the researcher to probe emerging themes and explore participants' unique perspectives in depth (Braun & Clarke, 2021; Kallio et al., 2016; Robson & McCartan, 2024).

Interview schedules were developed and refined in consultation with the researcher's academic supervisors and a trainee Educational Psychologist to align closely with the study's research questions, eliciting views on EBSA support and, subsequently, perceptions of the AV1 telepresence robot as a potential intervention. The young people's schedule incorporated core elements of Williams and Hanke's (2007), the Ideal School technique, alongside questions informed by EBSA literature. The parent schedule similarly drew on literature to explore parental perspectives on EBSA support. Both groups were shown the same AV1 video clip, followed by targeted questions adapted from existing telepresence research to explore perceived effectiveness.

### 3.6.2 The Ideal School

An adapted version of the Drawing the Ideal School technique was used as a core data collection method, recognising the value of combining visual and verbal expression to reduce some of the challenges autistic individuals may face with traditional interviewing (William & Hanke, 2007). Rooted in Personal Construct Psychology (Kelly, 1955), the technique evolved from Moran's (2001) Drawing the Ideal Self and was adapted by Williams and Hanke (2007) to explore school experiences. Its successful application in

research with autistic pupils (Fraser-Smith et al., 2021; Higgins, 2022; Moyse, 2020) supports its relevance for this study.

Using Moran's (2001) structured approach as a guide, participants were invited to describe their non-ideal ("worst") and ideal ("best") schools, eliciting underlying constructs and values about their school experiences. To accommodate online delivery of this approach and individual preferences, the activity gave the young people the choice to either talk, write, or draw their responses about their ideal and non-ideal school environments. While one participant chose to both draw and talk for half of the activity, before just talking, the remainder preferred not to draw. This aligns with previous research demonstrating the technique's effectiveness in supporting verbal communication when drawing is not used (Higgins, 2022). To reflect this flexibility, the technique is referred to throughout this study as 'The Ideal School' activity as drawing was not consistently used. Designed to be inclusive and participant-led, the activity reduced pressure, supported accessibility, and allowed young people to engage in a way that suited their communication style. In this study, it served primarily as a conversational anchor, guiding participant-led dialogue and priming their thinking before exploring support needs.

The second part of the activity involved a scaling task, where participants rated their current school in relation to their ideal and non-ideal schools. This process encouraged critical reflection on past and present support, and helped identify changes that could bring their experiences closer to their ideal school. It also provided a natural transition into more focused discussions about support and intervention.

#### 3.6.3 AV1 video clip

To address the study's secondary research question, a video clip of the AV1 telepresence robot was shown to both young people and parents during their individual interviews. This provided a consistent and accessible introduction to the technology before exploring participants' perceptions of its potential to support autistic pupils with school attendance difficulties. The use of video in participatory research is well established, particularly for introducing unfamiliar technologies and enhancing participant engagement and understanding (Lee et al., 2017; Tanqueray et al., 2025; Winkle et al., 2020). This method was especially valuable given the online format of the interviews, offering a practical and effective means of supporting informed, meaningful discussion in the absence of direct interaction with the device.

The video clip, sourced from *No Isolation*, the company that produces AV1, was selected for its clear and accessible presentation of the device. It was considered an appropriate and engaging way to introduce both autistic young people and their parents to the technology (No Isolation, n.d.). See

Appendix 8 for details about the video clip. To maintain research integrity and neutrality, participants were informed that the researcher had no affiliation with the company and no conflicts of interest.

### 3.6.4 Data collection procedure

Data collection commenced in October 2024, following ethical approval and completion of informed consent procedures. Parents and young people received separate, age-appropriate information sheets outlining the study's aims, process, and their rights. Written consent was obtained from parents prior to initial contact. The researcher then held introductory phone calls with each parent–young person dyad to explain the study, address questions, and build rapport. During these calls, young people provided verbal assent before giving written consent via an emailed form, ensuring their informed and voluntary participation.

Participants were given the option to complete their interviews via Zoom or Microsoft Teams. To support preparation and promote comfort, the researcher followed up with an email containing a visual Interview Plan (Appendix 9), the pre-interview resource for the Ideal School activity (Appendix 7), and an 'All About Me' document introducing the researcher (Appendix 10).

At the start of each online interview, the researcher reviewed participants' rights, including the option to pause or withdraw at any time. Young people were interviewed first, followed by their parents. Young participants could choose whether their parent remained present; four opted for parental presence, while two preferred to be interviewed alone. In these cases, the researcher briefly checked in with the parent to ensure they were available if needed. Interviews lasted approximately 45 to 90 minutes, varying according to participant engagement, rapport, discussion depth, breaks, and any technical issues.

Each session began with rapport-building activities based on participant preference. Young people could choose between an online game (e.g., Tic-Tac-Toe or Connect Four) or a random-question spinner as an informal icebreaker. These activities were intended to create a relaxed and supportive environment to help participants feel at ease.

The Ideal School activity (Williams & Hanke, 2007) was introduced as the first stage of the interview. In line with the original structure (Moran, 2001), participants were invited to describe, draw, write, or type their ideas about a 'non-ideal' and 'ideal' school, with reassurance that artistic ability was not required if they drew. Visual prompts (Appendix 11) were shared onscreen to aid understanding. This was followed by a visual scaling task (Appendix 12), where participants rated their current and previous

schools against their ideal. Together, these activities served as entry points into more in-depth discussions about support and intervention experiences.

After completing the Ideal School activity and scaling task, participants were shown a short video (approximately two minutes) introducing the AV1 telepresence robot and its use in educational settings. This served as a stimulus for the second phase of the interview, where young people were asked about their perceptions of the device, including its potential benefits, limitations, and suitability for supporting autistic pupils experiencing EBSA (see Appendix 14 for the young person's interview guide).

Parent interviews followed a similar structure to those with young people, excluding the Ideal School activity and scaling task (see Appendix 15). Parents were asked open-ended questions about their child's experiences with EBSA, existing support or interventions, and preferences for future provision. They then viewed the same AV1 video clip, followed by questions exploring their views on the device's potential relevance and effectiveness.

All interviews were conducted online and audio-recorded with participants' consent. Recordings were transcribed verbatim for subsequent reflexive thematic analysis. At the conclusion of each interview, participants were debriefed, invited to ask questions, and informed about the next stages of the research. They were also assured that a summary of key findings would be shared in an accessible report upon study completion.

## 3.7 Data analysis

### 3.7.1 Reflexive thematic analysis

Reflexive Thematic Analysis (RTA) was selected as the method of data analysis for this study, in line with its compatibility with qualitative, exploratory research and its alignment with the study's critical realist paradigm. RTA enables the identification of patterned meaning across a dataset while acknowledging the active role of the researcher in the interpretation of data (Braun & Clarke, 2019, 2021). Rather than seeking objectivity or a singular truth within participants' accounts, RTA embraces the notion that meaning is co-constructed through the interaction between the data and the researcher's theoretical lens, values, and positionality.

RTA was chosen specifically for its epistemological fit with the study's aim to explore both the subjective experiences of autistic young people and their parents, and the broader structures that shape those experiences. The approach is consistent with a critical realist position, which recognises that while

individuals construct meaning in socially and culturally situated ways, those meanings are shaped by real, external structures and mechanisms (Fletcher, 2017).

The analytic process followed Braun and Clarke's (2006, 2022) six-phase model of Reflexive Thematic Analysis, as illustrated in Figure 4. All interviews were transcribed verbatim, and data were managed and coded manually. Initial codes were generated inductively from the data while remaining sensitive to the research questions and theoretical orientation. To enhance reflexivity and enrich interpretive depth, one anonymised transcript was independently coded by another trainee educational psychologist, supporting critical reflection and diverse interpretive insights (Braun & Clarke, 2019; Terry et al., 2017). Themes were then developed iteratively and reflexively, through close engagement with the data and ongoing critical reflection on the researcher's influence throughout the process (see Appendix 14 for details of the RTA process).

RTA does not assume neutrality or objectivity; rather, it requires reflexivity and transparency about the researcher's role in shaping analysis (Braun & Clarke, 2021). Reflexive notes were maintained throughout the analysis process to identify potential biases and assumptions (Spradley, 2016). This reflexive stance aimed to enhance the trustworthiness of the analysis and ensure that participant perspectives were represented with authenticity and care.

**Figure 4**

*Adaptation of Braun and Clarke's (2022) Reflexive Thematic Analysis process for this study.*

### 3.8 Ethical considerations

Ethical approval for this study was granted by the University College London Institute of Education Research Ethics Committee on 27th March 2024 and a data protection registration number was issued by the UCL Data Protection Office on 12th March 2024 (see Appendix 2 for ethics and data protection approval). The study adhered to the British Psychological Society's Code of Human Research Ethics (BPS, 2021) and the Health and Care Professions Council's Standards of Conduct, Performance and Ethics (HCPC, 2016), alongside emerging best practice in autism research (Gowen et al., 2019; Nicolaidis et al., 2019; Pellicano & Stears, 2011).

Prior to participation, written informed consent was obtained from all parents for both their own and their child's involvement in the research (see Appendices 5 and 6 for information sheets and consent forms). Verbal assent was also sought from young people during an introductory telephone call, ensuring they understood the purpose and voluntary nature of the study before providing written consent. Participants were clearly informed that their involvement was entirely voluntary and that they retained the right to withdraw from the study at any point without consequence or the need to provide a reason. This included the right to withdraw during the interview itself and up to approximately one month following data collection, prior to the commencement of transcript analysis. These rights were reiterated verbally at the start of each interview session. All participants were assured that confidentiality would be upheld throughout the research process, unless there were concerns about their safety or the safety of others, in which case appropriate safeguarding procedures would be followed in line with ethical protocols. No participants chose to withdraw from the study.

Given that participants included autistic young people under the age of 16, all were considered potentially vulnerable. As such, safeguarding their psychological wellbeing was prioritised throughout the research process. The researcher, a trainee Educational Psychologist, used their professional judgment and training to recognise and sensitively respond to any signs of distress or discomfort during the interviews. To minimise risk, interviews were conducted remotely in participants' home environments, with a parent present or on standby. The use of child-friendly, participant-led methods, including visual tools such as the Ideal School activity, aimed to facilitate a non-threatening and accessible approach to sharing their views. Participants were reminded throughout that they could pause, take a break, or withdraw at any time without needing to give a reason. All interviews began with a verbal briefing on confidentiality and consent, and participants were debriefed at the end of the session. No safeguarding concerns were raised during the course of the study.

All data, including interview recordings and transcripts, were securely stored on an encrypted, password-protected device accessible only to the researcher. To protect participants' identities, all personal and school-related identifiers were removed during transcription. Participants were given unique code identifiers e.g., Young Person A (YPA), which were used throughout the research process and in all reporting of findings.

**3.9 Research rigour and trustworthiness**

This study applied Lincoln and Guba's (1985) trustworthiness framework of credibility, transferability, dependability and confirmability to ensure rigour within its qualitative design (Korstjens & Moser, 2018).

Credibility was supported through prolonged engagement in interviews, including time for rapport-building, clarification, and co-construction of meaning. Visual tools, such as the Ideal School activity, and the use of real-time clarification helped ensure participants' views were accurately represented. The inclusion of both young people and their parents as part of a dyadic approach further enhanced credibility and by Interviewing separately, this structure enabled exploration of both shared and contrasting perspectives, enriching the dataset without aiming to corroborate accounts (Eisikovits & Koren, 2010; Morgan et al., 2013).

Transferability was addressed through the provision of thick description. Detailed accounts of the sample, context, and data collection procedures, including participant characteristics, inclusion criteria, and interactive methods, enable readers to assess relevance to other contexts (Korstjens & Moser, 2018; Guba & Lincoln, 1994).

Dependability and confirmability were enhanced through an audit trail documenting decisions made during the research process. A reflective research journal was maintained to log theoretical, procedural, and analytical reflections, supporting transparency and grounding interpretations in the data (see Appendix 14 for excerpts from the reflective journal). Reflexivity was central to the research, particularly given the use of Reflexive Thematic Analysis (Braun & Clarke, 2021). A reflexive stance was maintained throughout via journaling, peer discussion, and supervision, ensuring ongoing awareness of how the researcher's values and assumptions may have shaped interactions and interpretations.

# 4. Findings

## 4.1 Findings in Relation to Research Question 1

Drawing on the perspectives of both young people and parents, five themes with nine corresponding subthemes were developed through reflexive thematic analysis to address the first research question, as illustrated in Figure 5.

> **RQ1. What are the views and experiences of support for autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA), and what might these reveal about effective future support?**

**Figure 5**

*Thematic representation of participants' themes and subthemes for RQ1.*


*Note.* The numbers or positioning are not a reflection of quantification or ranking of themes.

### 4.1.1 Theme 1. Safe Physical and Sensory Environments are at the Core

Psychological safety was seen as the essential ground upon which all other forms of support could be built. In imagining their ideal schools, young people consistently emphasised quietness and calmness as vital to feeling safe. These environments were described using affective language - "peaceful," "quiet," "calm" - and closely linked to feelings of emotional regulation and ease. Young people highlighted the features that made these environments safe and supportive:

> *Well just like a bit more quiet, a bit quieter, and just like a bit calmer as well… I'd probably talk a bit more… Just less people in the school… not everyone shouting. (YPB)*

> *Just be just a much nicer and healthier environment… everyone would be a lot happier… a much more kind of inspiring place. (YPE)*

> *Calm and relaxed… No bullies… Nice, understanding and supportive adults. (YPF)*

In contrast, non-ideal schools were described as loud, chaotic, overcrowded, and often unhygienic - places where emotional safety was absent. Sensory overload, social unpredictability, and harsh discipline created environments that were overwhelming and distressing:

> *You can hear constant screaming, yelling… screeching… very crowded… claustrophobic… Loud. Very loud. (YPC)*

> *Still dirty I guess… annoying noises… Like shouting and just kind of making noises. (YPF)*

> *Just like all like the people that shout a lot… Throwing stuff… Probably like throwing like pens, or throwing rubbers across the class. (YPB)*

> *Everything, I can hear everything… a teacher screaming… it sounds like a London street… I hate PE… I hate getting hot and sweaty… the clothes make me feel like I'm suffocating. (YPD)*

These unsafe environments triggered heightened emotional states and deepened distress:

> *Probably don't like it and the classes, I'm overwhelmed. (YPB)*

*Kind of forced to be there… trapped… everyone's kind of on edge all the time… survival instinct would kind of come into play… Because of the stress and anxiety brought up by the environment… your brain, like your primate brain, would be made to feel unsafe and insecure. (YPE)*

Parents echoed these experiences, describing how overstimulating environments and lack of sensory accommodation led to exhaustion and shutdown at home:

*The classroom environment, the number of children, the noise, the smell, the lights… very dirty… huge anxiety. (PE)*

*The crowds… the corridor, the noise, the unpredictable nature of the behaviour… She laid under a blanket with the lights off for two hours when she got home. (PC)*

*It's loud… she is incredibly sensitive… she just can't cope… (PD)*

Parent C captured a key concern that in such dysregulated states, learning becomes impossible:

*She's not in that part of her brain… She's clearly in her flight, fight, freeze. How much actual learning is she doing in the environment that she's in? (PC)*

Some young people identified dedicated quiet spaces or calm rooms as helpful when accessible:

*[Before I had] a relaxing area to go to… The [support room] was somewhere… a room to go to. (YPA)*

*I'm able to go into a kind of more quiet and relaxed area if I need to… that helps (YPF)*

Parents' responses were consistent with those of the students', stressing the importance of non-stigmatising, consistent access:

*He would like to be able to do his work quietly in a quiet room… a quiet place available at lunchtime and break time… a place that feels like a legitimate way to spend your break. (PE)*

However, these spaces often fell short in practice. Barriers such as overcrowding, restricted access, and inflexible rules undermined their potential:

*That room became quite unsafe… lots of children went in. (PA)*

*She's still got to get herself to that room, which is the stumbling block. (PC)*

*It's quite a strict safe room... they only get 15 minutes, and when they first get there, they have to fill out this form thing. (PD)*

### 4.1.2 Theme 2. Seeing Beneath the Surface

Young people typically described masking distress to avoid judgment or punishment, and parents highlighted how quiet or compliant presentations often led schools to assume their children were coping. When distress was visible, it was still sometimes misunderstood and interpreted as defiance or non-compliance rather than anxiety or emotional overwhelm. These misassumptions meant that there were missed opportunities for support, and sometimes, instead punitive responses.

### 4.1.2 Subtheme 1. Masked Distress, Missed Support

For many young people, the act of masking (consciously or unconsciously hiding emotional distress in order to appear regulated and "fine") created a paradoxical barrier to support. The more effectively they concealed their needs to maintain safety, avoid judgement, or gain social acceptance, the less likely those needs were to be recognised or met by school staff. Masking functioned simultaneously as a form of self-protection and a barrier to support. Young Person E described this explicitly:

*I do this thing called masking… I mask all of the troubles I have with anything, so I might be really struggling, which I was really badly at one point, but I'd always mask it, make it look like I was fine… My mum would always be saying, 'Can you look into this for him? Can you do that? Can you try this for him?', and they always said no because they thought I was fine… when I was masking… that was a really bad habit. (YPE)*

His outward calmness led school staff to dismiss his needs and miss out on intervention, despite his mother's repeated attempts to advocate on his behalf. As Parent E explained:

*They were saying that he does not appear to have any problems… They clearly weren't looking at… the number of times he was going to the medical room, the number of times I was bringing him home - they were not seeing that as connected to anything… Even though they've got the diagnosis report… that counts for nothing. (PE)*

Other parents echoed this pattern, describing how internalised distress was often misunderstood or ignored because it did not present as overtly disruptive behaviour. Parent A recalled how staff continued to insist her daughter was "fine," while her emotional needs continued to be unrecognised:

> *'They're alright once they're here,' and I just think, I can't bear that sentence… They don't realise what it takes for us to get her here and the meltdown we have when we get home. (PA)*

Similarly, Parent C described how her daughter's distress was obscured by a compliant outward presentation:

> *We were told no, there is no need, why would we refer when we are meeting the need?... They're telling me she is absolutely fine when she's there… I wanted them to see what she's like immediately upon leaving their school. (PC)*

Young Person F also reflected on his intentional use of masking to appear socially typical and avoid unwanted attention:

> *Most of the time I mask… so… I try to seem very kind of, you know, relaxed, strategic, just really normal, to be honest. (YPF)*

While effective at avoiding stigma, this strategy left his struggles hidden. Parent C elaborated on this dilemma, describing how her daughter was praised, while quietly struggling:

> *Everyone tells me, you know, she's a pleasure to teach, she's a model pupil… that's lovely to hear, but it's like beating your head against something solid. (PC)*

Because she did not exhibit behaviour that disrupted lessons or triggered intervention, her needs were deprioritised:

> *She's not a priority because she's not a school priority… The school think they're managing her when she's there… but what is it doing to her in the meantime? (PC)*

The long-term cost of masking became clear in Parent A's account. Years of perceived coping eventually gave way to emotional breakdown:

*Years of masking for [Young Person A] and pretending that she was okay… she then took off the mask, and this is what's been revealed… all this mess underneath… I begged her primary school, 'Let's do an EHCP for her…' - 'No, no, no, she'll be absolutely fine,' they said… I said, 'But you're dropping her into a pit of lions to see if she survives.' (PA)*

### 4.1.2 Subtheme 2. Distress Mistaken For Defiance

Several autistic young people and their parents described a difficult dynamic in which emotional distress, particularly in the form of panic, shutdown, or avoidance, was interpreted by school staff as defiance or deliberate non-compliance. Rather than recognising these behaviours as signs of overwhelm or unmet need, staff responses were described as being disciplinary, escalating distress and undermining opportunities for meaningful support.

Young Person D articulated how her expressions of overwhelm were routinely dismissed and met with punitive consequences in her current school:

*Teachers shouldn't be dismissive of emotions and feelings, or wants that I have in school… like if I tell them I can't go to PE, I'm overwhelmed, I don't think them rejecting me is the most moral thing they can do… it's 'get in the lesson… get in isolation'… I think isolation is where you shouldn't take an overwhelmed child… naughty kids in isolation and overwhelmed children should not be mixed together. (YPD)*

Her attempts to communicate emotional need were viewed through a behavioural lens that left no room for accommodation. She recalled a vivid moment of distress when even access to a safe space was denied due to rigid procedures:

*I was like balling my eyes out… and they straight up rejected me because I don't have a safe card… whether I'm neurodiverse, neurotypical, or just anyone, you can't just say no. (YPD)*

This response reflected a broader pattern of school systems prioritising compliance over support. Parent D shared how her daughter's panic attack was not met with compassion or care, but rather a punitive escalation:

*She had a panic attack… couldn't cope with going to detention, so they gave her a day of isolation instead… She had nearly two weeks off because of that… help me make it make sense. (PD)*

She described a rigid and escalating behaviour plan implemented by the school:

> *If she refuses to come through the door, we'll take her to isolation; if she refuses isolation, it'll be an after-school detention; if she still refuses to leave the safe room, they'll suspend her… I was just - well, that escalated quickly. (PD)*

These accounts illustrate how disciplinary pathways can dominate over supportive ones, even when young people are in visible distress. Emotional dysregulation and sensory overload were seemingly indistinguishable from wilful defiance for some staff. Parent C described how this culture led her daughter to remain silent in moments of need, fearing reprimand:

> *It's just easier for her to sit there and put up with it than it is to have a conversation with the teacher to explain that she needs to go somewhere else… she's frightened of getting into trouble. (PC)*

Young Person E offered a similar account, highlighting how emotionally unsafe environments, and the way staff wielded authority, could feel dehumanising rather than supportive:

> *Instead of being there to help and guide you… they talk to you not in a helpful manner, but in a kind of mean way. (YPE)*

His mother, Parent E, powerfully summarised how these misinterpretations resulted in autistic pupils being routinely punished for the way they cope:

> *If he's staring out the window, or he's dissociating - just leave him be, don't give him a detention… [Schools] need to review their behaviour and sanction policies… because at the moment they do discriminate against people with autism… It's the same kids getting detentions and isolation every day… They are basically being punished for being autistic. That - that is unacceptable. (PE)*

#### 4.1.3 Theme 3. Connection as a Cornerstone of Support

Young people described how kind, approachable staff fostered a sense of emotional safety that enabled them to seek help and stay engaged in learning. Calm, friendly, and emotionally attuned adults were consistently valued over formal structures. Peer relationships also played a key role, wherein trusted friendships offered stability, while exclusion and conflict heightened anxiety and disengagement.

### 4.1.3 Subtheme 1. Emotionally Attuned Adults

Young people consistently emphasised that the presence of emotionally available, kind, and understanding adults was central to feeling safe and supported at school. In their descriptions of ideal school environments, staff were described as "nice," "helpful," and "understanding"; qualities that fostered trust and emotional security. These relationships were essential for pupils to access help, express themselves, and remain connected to learning.

Rather than strict or distant authority figures, young people wanted adults to feel "human", who responded with warmth, humour, and care. These preferences were often shaped by contrast to their non-ideal school experiences, which they described as emotionally cold and behaviourally rigid:

> *I want teachers that aren't like constantly giving out signings and detentions for ridiculous reasons… For an 'RJ' [Restorative Justice]… that basically means that teacher screaming at you for like 5 minutes and then sending you back to the lesson. (YPD)*

> *Teachers would be genuinely getting angry at you if you don't have your shirt tucked in or whatever… just a friendly reminder would be nice… the amount of ferocity and anger in everyone in the building just sucks. (YPE)*

What young people wished for, instead, was warmth and emotional reciprocity. Young Person E described a teacher-student relationship grounded in mutual respect:

> *Just a much nicer vibe… They could laugh a bit more… They could represent less like a teacher who was above you… they're just people who know things. (YPE)*

He also acknowledged the structural constraints that make it difficult for staff to be relational in the current system:

> *The student isn't under such unhealthy pressure… the work is more productive… and that starts with teachers being nicer, of course, but teachers have the room to be nicer when there isn't such pressure on them… teaching a small room of kids who are all struggling, anxious and distressed. (YPE)*

For many young people, meaningful support was tied to specific individuals, typically staff who engaged with them consistently and relationally. Teaching assistants and pastoral staff, including ELSAs (Emotional

Literacy Support Assistants), were frequently named as key sources of emotional containment and connection:

> *There was one assistant teacher that I liked… he'd obviously ask me to do work but we'd just talk at the same time about stuff I actually liked, like football. (YPB)*

> *Yeah, there's this… ELSA lady… I think it might be like emotional support… Yeah, she… tries to understand when I'm struggling. (YPF)*

> *I have one teacher I can talk to… she listens… I love her… She teaches the intervention, she does my social skills and stuff…. (YPD)*

Parents strongly reinforced this theme. Parent D described how a trusted TA supported her daughter by responding to her interests and providing emotional grounding:

> *She loves this TA so much… she listens to her, she talks to her about her special interest… lets her listen to music on her laptop… finds her some headphones so she can listen to Taylor Swift. (PD)*

She also described how a teacher's relational approach transformed her daughter's engagement with learning:

> *She was moved down two sets… because they felt like she'd get on with the teacher better and she has, she absolutely adores her... she's doing her homework, she's going to all the lessons… and maths is now the most fabulous thing. (PD)*

This connection extended beyond lessons, shaping how her daughter began each day:

> *They actually open the doors down there at 8:00… and her favourite TA is in there… she'll have a bit of a whinge about what she's got going on that day. (PD)*

#### 4.1.3 Subtheme 2. Belonging Through Peer Connection

For many young people, peer relationships emerged as a critical form of everyday support. When positive, these relationships fostered emotional safety, predictability, and a sense of belonging that helped regulate distress. When strained or absent, however, peer dynamics became a source of anxiety, dysregulation, and ultimately, withdrawal from school.

Several young people described the stabilising impact of long-standing, trusted friendships. These close connections acted as a protective buffer against the unpredictability of school life:

> *[I'd know school felt safe]… by just being with my friends… talk about like football, or about the game, or something. (YPB)*

> *Having a small group of friends is good because like I've got two friends that I know are real friends… If you could put up with me for more than 5 years, you're definitely a friend. (YPD)*

These friendships offered consistency and predictability in environments that often felt overwhelming. However, this sense of security was fragile. Many participants spoke about the volatility and emotional intensity of peer interactions, describing how quickly social situations could turn to feeling unsafe:

> *[Friends are] short-tempered… easy to make mad and argue over silly little things… it's very intense. (YPC)*

> *Kids my age are treacherous… like they are animals… they suck… everyone's like a predator. (YPE)*

The structure of the school environment also played a role in shaping peer connection. Young Person B recalled how a physical space, such as the football field at break times in primary school, had previously enabled informal peer bonding and provided regulation time away from the classroom:

> *In primary… there was a football field you could use at break and lunch… me and my mates would play. My current school doesn't have that… (YPB)*

Parents reinforced the idea that autistic pupils often need supported, structured pathways into peer relationships, especially in socially complex or overstimulating environments. Parent E emphasised the value of slow, one-to-one social support rather than being pushed into group settings:

> *One-to-one friendships are really the best way forward… Autistic children need that help to break the ice… not in a 'go and join in that group' kind of way. (PE)*

She also addressed the common misperception that autistic pupils prefer solitude. In reality, social withdrawal was often a form of self-protection rather than a reflection of disinterest:

*They do want to be part of it, but they can't, they can't because they need to decompress, and that is not understood… They think, oh, that's what they want, they want to sit in a room on their own. Actually… they don't. (PE)*

Parent E also called for more inclusive and affirming break-time spaces, places that honoured neurodivergent social needs without stigmatising time alone or difference:

*He would like to have a quiet place available at lunchtime and break time, and although those places are available, I feel that it would be nicer for him, but it's a place that feels like a legitimate way to spend your break and lunch rather than oh, you've got to go over there and just be on your own. (PE)*

### 4.1.4 Theme 4. One Size Doesn't Fit All

Young people typically described how autonomy with learning and routines reduced anxiety and enabled engagement, while inflexible structures increased distress and led to non-attendance. Parents reinforced that surface-level adjustments or generic interventions often missed the mark when not grounded in an understanding of their child's experience. What emerged was a clear call for co-produced, adaptable support that recognised difference not as a barrier, but as a basis for responsive practice.

### 4.1.4 Subtheme 1. Autonomy Reduces Anxiety

Young people spoke about the value of having choice and control over their school experiences. Rather than rejecting structure altogether, they spoke of a need for flexible, pupil-led support, where autonomy was respected, and learning could adapt to individual needs and preferences. Rigid expectations were associated with distress, and balanced autonomy fostered ownership, safety, and dignity.

Young Person E imagined a more trusting, self-directed learning environment that would allow pupils to work at their own pace and make decisions about their learning:

*[Students] would have more control over what they're doing… not to an unhealthy extent… but like they'd have control over what they did, how much they did of it. (YPE)*

He emphasised that pupils often know their own limits and should be trusted to act on them:

*They know when they've been pushed to their limit or when they need to take a breath, and stop. (YPE)*

Rather than calling for a lack of structure, he described a school culture where staff supported self-awareness and allowed pupils to manage their own needs:

*There wouldn't be that kind of manic control over everyone… and it would be a lot more like accommodating… and understanding, I guess. (YPE)*

His mother, Parent E, echoed this idea, describing how validating a child's self-awareness, especially during moments of overwhelm, can be both supportive and empowering:

*Allow [Young Person E] to have the freedom to say 'I don't think I can face going into another lesson right now',and for there to be understanding around that… the messaging of that would be so powerful… so supportive and affirming of that person. (PE)*

This call for autonomy also extended to curriculum choices. Participants described how personalised timetables and interest-led learning improved motivation, reduced anxiety, and supported re-engagement. For Young Person D, designing her own school day around subjects she enjoyed felt manageable and meaningful:

*The only subjects would be art… and you could do whatever you want in it… English, physics and only physics, maybe chemistry, Spanish and history… oh and sociology - I like sociology. (YPD)*

Her mother, Parent D, observed the positive impact of being allowed to drop subjects that caused distress:

*Only doing the subjects that she wants to do has helped… That's one thing [school] do well - more choice over what they're learning. (PD)*

Other parents highlighted the need to remove subjects that consistently overwhelmed their child and replace them with options aligned to strengths and interests. Parent C reflected:

*She needs a timetable that is created around her… I cannot get her to take herself out of [the difficult lessons]… I think they need to be removed from her timetable. (PC)*

Parent E advocated for a strengths-based, trust-driven approach:

> The classes that he really struggles with… can we just not do those?… He could sit and do drawing, do research… people need to put the trust in neurodivergent children… know that they are always telling the truth of what they need. (PE)

Young people wanted to be actively involved in planning and decision-making about their own support. Young Person B described how exclusion from these conversations added to his frustration and sense of disempowerment:

> No, they just said you're gonna do this… they tried to get me back into school… so when they said that I've got to get back into school by doing it, I have to try… they didn't ask my opinion about it. (YPB)

#### 4.1.4 Subtheme 2. Available, but Not Accessible

While most young people and parents valued school-based support, many described how the provision, albeit technically present, was often emotionally inaccessible, socially risky, or poorly aligned to individual needs. These accounts point to a disconnect between the availability of support and its *usability*, highlighting how generic, performative, or inflexible strategies can ultimately deepen anxiety around school.

Young people shared how supports intended to offer flexibility, such as time-out or exit cards, could become ineffective in practice. For Young Person D, the restricted time limit attached to her exit pass undermined its usefulness in moments of overwhelm:

> *I have an exit card but I don't really use that… We only get 15 minutes… If I'm overwhelmed, I don't know how long it's going to take for me to calm down. (YPD)*

Similarly, Young Person C had multiple support cards, but found them difficult to use due to sensory and social anxiety:

> *I have a card for leaving early and a toilet queue jump card… I find the leaving early card hard to use… I zone out when I go into the corridors… I get really anxious. (YPC)*

Parent C confirmed that although these tools existed, they were rarely used:

*She's got a time out… but she doesn't use it… There's at least five different cards. The only one she uses is a toilet card… We are trying to encourage her to use, for example, the leave the class five minutes early one… I cannot get her to do it. (PC)*

Young Person A similarly avoided using cards meant to help her communicate in class. The tools felt socially conspicuous, drawing unwanted attention:

*Too showy and unusual. (YPA)*

The social implications of using support, such as being seen, judged, or made to stand out, often outweighed the potential benefits. Parent D explained that the time restrictions and the fear of being watched deterred her daughter from accessing help:

*She's only allowed to use it for 15 minutes… so she won't use it because they'll make her go back into a lesson… someone might look at her, someone might judge her. (PD)*

This anxiety extended beyond tools to human support. One-to-one assistance, while well-intentioned, could feel exposing rather than reassuring:

*She sends them away… that was the problem because she's so concerned about being different… She just felt like everybody was looking at her. (PD)*

Parents also critiqued support that appeared outwardly therapeutic but failed to engage their child in a meaningful or individualised way. Parent C described a range of enrichment and wellbeing activities that had little impact:

*They have dog therapy, art therapy, swimming after school on a Friday… it's not that they're not doing anything, but none of it's working. (PC)*

Such offers of support may have ticked boxes but lacked emotional resonance or personal relevance for the young person.

Another layer of concern emerged around formal plans like Education, Health, and Care Plans (EHCPs), which were described as symbolically important but inconsistently implemented. Parent D voiced this frustration:

*Apply for an EHCP… I'm just like, it's not a magic wand… doesn't mean you're going to find a miraculous school that's going to actually follow it to the letter. (PD)*

#### 4.1.4 Subtheme 3. Supporting Neurodiversity Means Understanding It

Participants often described a disconnect between the support they needed as autistic individuals and the support they actually received. Rather than recognising neurodivergence as something that requires meaningful, differentiated support, participants described schools that often misunderstood, overlooked, or inconsistently addressed autism. For these autistic young people, the consequences of these misunderstandings led to heightened anxiety.

Young people often expressed a desire for deeper understanding of their individual experiences. Young Person A shared simply that she wanted staff to "understand… about me… with everything," signalling a broad but unmet need for relational empathy.

Young Person D also voiced frustration about how her perception of having an invisible disability was minimised or ignored compared to physical disabilities:

*Schools favour disabled - like physically disabled kids - over mentally-disabled… I also have my diagnosis, I think that my autism is valid too… some people just don't recognise it as a disability still, in 2025. (YPD)*

Parent D reinforced this concern, noting that while individual teachers may show initiative or compassion, school-wide autism awareness remained inconsistent:

*They do get some autism training, but I think until they've got their own autistic child, it's not really a special interest of most teachers… we've come across some amazing teachers who've got lived experience. (PD)*

Young people also called for practical, autism-informed adaptations that acknowledged their everyday challenges. For Young Person F, support meant small, thoughtful adjustments grounded in real understanding:

*If the day was a bit shorter… if students were less chaotic… and if people were just more understanding of the struggles - especially with autism… I struggle with writing and with noise…*

*It just needs to be more supportive and understanding… trying to find solutions that actually help. (YPF)*

Parent E described one rare example of adaptive support that felt aligned with her son's needs:

*The English teacher… said well… he can use a Chromebook or I can give him less writing… she really wants to help. (PE)*

However, these personalised responses were the exception. More often, parents called for a greater understanding of autism, particularly its variability from day to day. Parent E highlighted how rigid expectations overlooked this nuance:

*Even if it's a lesson that he normally performs well in… to recognise that autism is different on different days… there will be different reasons why he cannot go into that lesson today where he went into it fine yesterday. (PE)*

#### 4.1.5 Theme 5. Rethinking Education Through Flexibility and Fit

This theme explores how flexible, personalised, and alternative approaches to education were viewed as helpful and often essential for autistic pupils experiencing EBSA. Across accounts, rigid mainstream expectations around full-time attendance and uniform provision frequently clashed with individual needs.

#### 4.1.5 Subtheme 1. Reduced Hours Enable Recovery

Reduced school hours were experienced by young people and parents as a necessary and personalised support strategy. Rather than signalling failure or avoidance, part-time or shortened timetables were described as essential adjustments that helped manage emotional exhaustion and cognitive fatigue. For some pupils, reduced hours were the reason school remained even partially accessible.

Young people described the intense strain of full school days and the relief that came from a shorter, more manageable schedule. For Young Person F, the length of the day could feel overwhelming:

*If the day was a bit shorter… It can be very, very long… it can feel like an eternity. (YPF)*

Young Person E described how his school accommodated a flexible approach following a period of non-attendance:

> *They let me do half days, which is nice… I do period 1-2 and 3 and then I can stay for lunch, but I can leave after period 3… it's called half days or a reduced timetable… The reason I do half days is because I wasn't going in enough… my mum told the school why and they were very accommodating. (YPE)*

Similarly, Young Person B found reassurance in knowing that his school day had an earlier endpoint:

> *They let me do like half days for about 3 to 4 weeks… Just helped knowing that I only have to do like about 2 or 3 lessons, and then I'll be able to go home. (YPB)*

By allowing young people to remain connected to school without becoming overwhelmed, part-time attendance supported regulation and sustained a sense of belonging.

Parents echoed this, describing reduced timetables as protective. Parent E explained how shorter days helped her son manage the emotional toll of masking:

> *It gives him that huge buffer… it's recovery time… it's reducing the amount of time he has to mask… to hold it all together when he's falling apart. (PE)*

However, parents also noted that schools often treated reduced hours as a temporary fix rather than a valid and ongoing strategy. Parent E cautioned against this approach:

> *I think it's going to be counterproductive to just suddenly go back to full time because none of his challenges are going to disappear… A four- or five-minute movement break isn't enough… they need a full reset. (PE)*

Accessing reduced hours in the first place was also described as a challenge. Parent C recounted how a request for flexibility to help her daughter sustain attendance was denied:

> *She needs less time in the school and some time out so she can breathe… we asked the school… and they said no… the reason for asking them for flexibility was so that she could keep going. (PC)*

This tension between school attendance expectations and pupil wellbeing was a recurring theme. Parent C concluded:

> *Somebody needs to recognise the bigger picture here… that the wellbeing of this child and the physical and mental health of this child is way more important than the case of whoever it is that's got a problem about their attendance policy. (PC)*

#### 4.1.5 Subtheme 2. When Mainstream Doesn't Fit: The Case for Alternative Provision

For many young people, mainstream education environments were misaligned with their sensory, emotional, and learning needs. Mainstream settings were often described as overwhelming, rigid, and unsafe. In contrast, smaller, quieter, and more flexible alternatives were preferable and often necessary for wellbeing and recovery.

In imagining their ideal schools, young people consistently described reduced class sizes and calmer environments, reflecting the distress they associated with noise, crowding, and peer dynamics:

> *Less children, maybe 10. (YPA)*

> *Very few [students] in my best school… (YPD)*

> *A small class… probably like about 10 other students in the class. (YPB)*

Parent C echoed this, questioning whether mainstream schools could meaningfully accommodate their children's needs:

> *It would be very beneficial for her to have smaller class… It's a big secondary school… do they have the ability to create a smaller class for the children who need it in mainstream? (PC)*

Young people also described difficulties with the pace and delivery of mainstream lessons. They called for slower, more manageable teaching that allowed for processing time and reduced pressure:

> *They go a bit quick… when I've done the first sentence, they're already on the next slide… slowing the tempo of the lesson down a bit (would help). (YPB)*

> *I quite struggle with writing… I have a processing delay… I might be given extra time. (YPF)*

Parent E reinforced this need for understanding around processing differences:

> *Teachers acknowledging that quick-fire instructions do not work… they need time to process it. (PE)*

Some young people shared positive experiences of home education that better matched their needs:

> *I was home educated for like, 10 years… I was getting bullied a lot… my parents were fortunate enough… so they gave me the choice, and I said yes. (YPE)*

> *It was better than my current school… it wasn't very loud or anything because it was just me… I preferred that… it was nice… just be able to relax. (YPF)*

For many, mainstream settings are unable to provide the safety or flexibility required, leading parents to advocate for therapeutic, off-site alternatives - often only available in the independent sector and inaccessible due to cost. These settings were described as essential for children whose needs could not be met within standard, traditional schooling models.

Parent C articulated this powerfully, emphasising the mismatch between what autistic young people need and what mainstream schools typically offer:

> *She needs an environment that does not exist, except in the independent, private sector… something like that… go and pet the horses… just breathe… the idea that we just stick them all in these concrete blocks… there is absolutely no evidence to support that… And the children who are struggling the most are the ones who are wired differently, because they need the outside and the creativity, and that gentle approach… Why are we surprised they're not in school? Why are we surprised they're struggling? (PC)*

Similarly, Parent A described how her daughter, following school-based trauma, needed deep emotional recovery before re-engaging in any form of learning:

> *She's going to need rebuilding from the bottom up… something therapeutic… working with animals or something for her to find herself again… Forget the education and let's sort her out… then we can start thinking about education… She's never going to step foot back into that mainstream setting. (PA)*

Parent E reflected on how traditional schooling often becomes irrelevant by the time a child has reached the point of EBSA:

> *Once a child has got to a point of EBSA, there is no school-based response that can help… They need healing. They need therapy. They need love, compassion… Unless school is going to start providing those things, support at that point cannot come from school… Forest, beach, cinema - just get them out and let them heal. (PE)*

Parent D spoke about the need for whole systemic reform in mainstream education as a longer-term solution:

> *The whole system, I think, I think it is, we are talking about system change here, like it has to be a whole-school approach… when you look at other countries… where they don't have to do like formal testing, they're just learning… Any successive government ever in the last 30 years don't seem to realise that sort of theory of dragging people out of the river, like they need to sort of go upstream and find out what's happening. (PD)*

Young Person E offered a similarly insightful view, acknowledging the limitations of the mainstream system and the difficulty of making it work for a diversity of learners:

> *At the core of it, it's not really a nice system… I don't think it really works well for anyone - with a few exceptions… It completely misses the point of what learning should be… I wouldn't blame the teachers individually… they're trapped in a system that doesn't work for most people… It only works for one type of person, and everyone else is crammed in and told to get on with it… I think my school especially do everything they can to support students who need it but what makes it bad really, is not up to them… I think that's a wider thing that needs to happen… (YPE)*

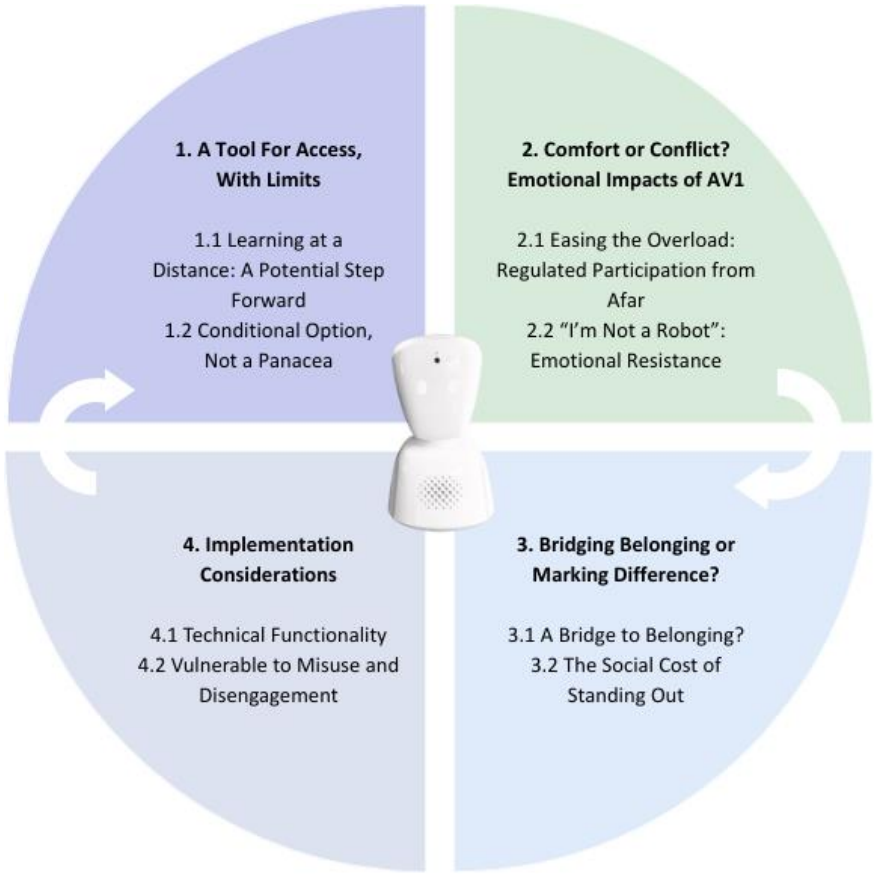
### 4.2 Findings in Relation to Research Question 2

Drawing on the perspectives of both young people and parents, four themes with eight corresponding subthemes were developed through reflexive thematic analysis in response to the second research question, as depicted in Figure 6.

**RQ2. What are the views and perceptions of the AV1 robotic telepresence device for supporting autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA)?**

**Figure 6**

*Thematic representation of participants' themes and subthemes for RQ2.*




*Note.* The numbers or positioning are not a reflection of quantification or ranking of themes.

### 4.2.1 Theme 1. A Tool For Access, With Limits

The AV1 robot was seen as a potentially valuable tool for maintaining access to education when used flexibly and with pupil consent. While it could reduce stress and support learning, participants emphasised that it must be part of a broader, responsive framework, rather than a superficial solution to deeper systemic challenges.

### 4.2.1 Subtheme 1. Learning at a Distance: A Potential Step Forward

A key affordance of the AV1 robot was its ability to maintain educational access during periods of absence. Young people and parents valued AV1 particularly when it was offered flexibly and temporarily, supporting continued engagement without replacing in-person schooling. One young person commented on the value of simply having alternatives available:

> *It's really good that there are alternatives and accommodations for you if you may be struggling… I think that's a really good idea… (YPE)*

This view was echoed by another participant, who framed virtual attendance through AV1 as a reassuring option:

> *Oh, the fact that you're able to, you know, essentially, attend school completely, virtually. (YPF)*

Young people expressed the possibility that AV1 might support learning by offering reduced stress and increased accessibility. One young person highlighted how the robot could help mitigate classroom challenges by creating a less overwhelming learning environment:

> *It could be less stressful in class because you're not really there… you could maybe turn off the audio if it's getting really loud… might make it less stressful… people might be able to lower the volume if they're finding it stressful and [that helps] them to concentrate better and work better. (YPF)*

From the parental perspective, AV1 was valued for its capacity to sustain learning in ways that reduced social anxiety and preserved the child's agency in the process. One parent described it as a way to participate without the pressure of physical presence:

> *You can participate without actually being there… it's taking that peer pressure off. So you're able to listen and participate without actually being there. (PB).*

In addition to reduced anxiety, the device was seen to support certain cognitive needs by enabling pupils to process information at their own pace:

> *They just need that bit more time to soak in the information… if the teacher's talking… they can take it in at their own pace without actually being there. (PB)*

However, this view of AV1 as a seamless educational tool was not universally shared. One participant dismissed the idea that AV1 would make any difference to their learning:

> *Researcher: Would you find it useful for your learning?*
>
> *YP: No. (YPA)*

Another commented that unless the content felt intrinsically important, they would remain disengaged regardless of the method of delivery:

> *No, no… I don't really care about the learning unless it was something that I really needed to know… (YPE).*

Some parents similarly questioned the robot's effectiveness, particularly for pupils whose school non-attendance stemmed from deeper emotional distress or systemic educational harm. One parent cautioned against using AV1 as a superficial solution to complex needs:

> *The child should be able to access school in a more meaningful way than the robot… It's so easy to say we're doing this instead of assessing the need. (PC)*

There were also practical reflections about whether AV1 could fully replicate the breadth of a school curriculum. One parent questioned its applicability to more physical or interactive subjects:

> *How do they do drama? How are they doing Dance… sprinting across the floor? She's not doing PE, is she? (PD)*

She also raised questions about the feasibility of meaningful learning when a child is accessing AV1 from home without direct supervision:

> *You've got your phone right there… you're looking at a screen while you're actually watching TV over there behind the screen… there's no one to sort of be like, 'Are you paying attention?' (PD)*

#### 4.2.1 Subtheme 2. Conditional Option, Not a Panacea

Participants viewed AV1 as a conditional intervention; potentially useful in some cases, but not a solution to the deeper challenges underlying EBSA. While both groups acknowledged its value, young people were more likely to view AV1 as a viable option for those experiencing anxiety or mental health-

related school non-attendance, provided it was entirely voluntary. One participant reflected on its relevance for emotionally overwhelmed students, while simultaneously rejecting its use for physically unwell pupils:

> *If there's a student who's struggling with being in the classroom… I think this is really good for people like that… but if you're ill and you have to talk through one of these robots… I really don't like that… Definitely not a good idea for people who are physically ill. If I'm too ill to be in school… I would actually do anything to not have to be on a robot like in the class… that's so horrible… if I was ill, then absolutely not. I'd hate the idea. (YPE)*

Interestingly, this perspective was inverted by the same participant's parent, who suggested that AV1 might be better suited to those experiencing temporary, physical illness, rather than children whose distress stems from long-term mental health difficulties brought on by school:

> *If you are ill… a neurotypical student who's doing well and doesn't want to miss out on school—brilliant… but I have a huge problem with it being used for children who are unable to go to school because of what school has done to them. (PE)*

Despite these differences, both young people and parents strongly emphasised the importance of consent and autonomy. It was clear that AV1 must never be imposed; its success depended entirely on the pupil's willingness and readiness to use it. One young person made this particularly clear:

> *I think it's… very child-dependent… you can't really force it on a child. Like, it'd be a great option for a child, but if a child doesn't want it, then you can't really force it. (YPD)*

Parents echoed this, reinforcing the need for a child-led approach to any consideration of AV1:

> *If the child is saying themselves, 'I think this robot could be useful to me, could I try it?' Yeah, why wouldn't you? (PC)*

Some participants viewed AV1 as a superficial fix, masking deeper unmet needs. Several parents described it as a "sticking plaster" used instead of addressing the root causes of distress, raising concerns that reliance on the robot might hinder access to more appropriate, needs-led educational support. One parent reflected:

*It's an attempt to solve a problem without fully understanding what the problem is or what the needs are… and I would hate for [the robots] to become another barrier for providing an appropriate setting. (PC)*

This concern was particularly salient among families whose children had experienced significant distress. One parent warned that, if not carefully implemented, AV1 could inadvertently reinforce the same systemic issues that had contributed to their child's difficulties:

*Children who have already been damaged… their whole lives are probably going to be scarred by that damage… the whole concept of, well, you can still attend school, you can still listen to the teacher's voice, you can still be expected to join in and speak up and understand and do your homework… that messaging is cruel and it is wrong. It's completely missing the point. (PE)*

Even among those who cautiously endorsed AV1, some parents stressed that for young people with profound school-based distress, emotional recovery should take precedence over maintaining school attendance. In such cases, continuing education, whether through AV1 or otherwise, was seen as potentially inappropriate and secondary to wellbeing. As one parent explained:

*They need healing when they have got to the point where they cannot leave the house, they need healing, they don't need more classroom… unless school is going to start providing those things—support, love, compassion—support at that point cannot come from school. (PE)*

### 4.2.2 Theme 2. Comfort or Conflict? Emotional Impacts of AV1

Across interviews, AV1's ability to reduce sensory and emotional overload was seen as one of its main strengths. However, some participants expressed discomfort with the robot, viewing it as depersonalising and intrusive, blurring boundaries between school and home rather than fostering genuine connection or inclusion.

### 4.2.2 Subtheme 1. Easing the Overload: Regulated Participation from Afar

A prominent narrative was AV1's potential to reduce the sensory and emotional demands of school. For some autistic pupils, the robot offered a way to regulate emotions, protect against

overstimulation, and engage with learning more manageably by allowing greater control over when and how they participated. One young person described it simply:

> *Yeah… it would make it easier to manage stuff – go to lessons. (YPC)*

Another reflected on how the robot might offer a more comfortable way to participate without the need for overt, attention-drawing gestures or verbal interaction:

> *It looks good… you can be at home but still participate in the lesson… you can just put… instead of like raising your hand… it'll go green instead… it'd probably be better to interact with. (YPB)*

Sensory overload, particularly in relation to noise, was another common source of classroom distress. Young people highlighted how AV1 could help mitigate these challenges by enabling them to learn in quieter, less stimulating environments:

> *It's hard to interact and talk normally in an actual school with loads of people… I feel like it'd be easier on that robot… so you can actually talk without hearing lots of people. (YPB)*

> *It could be less stressful in class because you're not really there… you could maybe like turn off the audio if it's getting really loud. (YPF)*

For some autistic pupils, AV1 offers a means of filtering sensory input, allowing them to engage with learning while remaining in a space that feels safe and manageable.

One parent, too, recognised AV1's potential to reduce the emotional burden associated with peer dynamics. They described how AV1 could protect a young person from the socially fraught experience of speaking up in a mainstream classroom:

> *You're able to listen and participate without actually being there… it's taking that peer pressure off… So because you're out of body, so to speak, and you're not within that environment, you feel more comfortable to ask [questions]. (PB)*

They went on to explain that this distance from the physical classroom could help reduce anxiety around peer judgment:

*You haven't got everyone turning around… sniggering… it's just being in the classroom with the peer pressure, the kids… it always has been. It always will be… (PB)*

### 4.2.2 Subtheme 2. "I'm Not a Robot": Emotional Resistance

Some participants expressed discomfort with the symbolic meaning of AV1. For certain young people and parents, the robot evoked feelings of disconnection and dehumanisation, reducing the pupil to a mechanical presence rather than fostering genuine inclusion. When asked whether they would feel comfortable with its use in the classroom, one young person responded:

*No… it's weird… everything is weird about it. (YPA)*

Another was similarly emphatic:

*Yeah. No, I really don't like that. (YPE)*

These responses appeared to stem not solely from discomfort with the technology itself, but from a deeper unease about how the robot might alter or obscure their sense of identity. For some, AV1 was perceived as offering a form of presence that felt inauthentic or reductive. As one participant explained:

*I'm not a robot… I'd rather not be there than be a robot. (YPA)*

For this young person, AV1 represented a loss of identity and not wanting to participate in school under terms that felt artificial or depersonalising. This view was echoed by some parents, who raised concerns that AV1 risked symbolically replacing, rather than representing, the child. One parent reflected:

*They can't be the face of a robot in class… That does almost replace the child, doesn't it? It's not acceptable. (PA)*

Some parents viewed AV1 as an intrusion into the home, which they saw as a vital sanctuary for emotional recovery. For families whose children had experienced profound school-related distress, the idea of extending school into the home space through the robot was met with deep concern. As one parent explained:

*I'd rather my child be at home with me, safe, loved, and secure, rather than put in the face of… a robot in class. (PA)*

Another reflected on the potential consequences of removing that separation between home and school:

> *When they have got to the point where they cannot leave the house, they need healing… It's just bringing it into their home… Where is the safe space? (PE)*

### 4.2.3 Theme 3. Bridging Belonging or Marking Difference?

AV1's potential to maintain peer connections was met with cautious hope. While many valued its role in supporting belonging and friendships during absence, concerns were raised about visibility, stigma, and reliance on others. Participants questioned whether the robot might inadvertently highlight difference or expose pupils to embarrassment and bullying.

#### 4.2.3 Subtheme 1. A Bridge to Belonging?

Participants reflected on AV1's potential to act as social scaffolding, helping autistic pupils maintain peer connections during periods of absence. For those who found face-to-face interaction overwhelming, the robot offered a way to sustain relationships and a sense of belonging without the pressures of direct engagement. One participant described the value of continued informal interaction from a distance:

> *I'd say it would definitely support with the talking to my mates. (YPB)*

Others expressed that the indirect nature of the robot's interface might be particularly beneficial for autistic pupils with a desire for less verbal or in-person interaction:

> *If you don't like talking with people around you… then yeah, like I think if it's beneficial, then it's a really good thing… (YPE)*

> *You could socially interact less if you struggle with social interactions. (YPF)*

Similarly, another parent saw value in AV1's capacity to support peer connection during long-term absence:

> *I guess it could… be nice for the children to be able to talk to their friends at school. (PE)*

However, some young people expressed uncertainty about AV1's capacity to support meaningful social interaction. As one participant reflected:

> *It would be kind of harder to socialise with that guy than… in just… in real life. (YPF)*

Participants also raised concerns about the reliability of school systems in supporting AV1's social function. They emphasised that without consistent staff support and appropriate integration into routines, the robot's potential to sustain peer connections could be undermined. One parent highlighted this potential vulnerability:

> *Is a child going to actually be sitting at home looking forward to—'Oh great, I can speak to so-and-so today' - and then the robot head never actually gets taken?… That child is sitting at home and feels let down again… and disrespected yet again that their needs just aren't that important. (PE)*

#### 4.2.3 Subtheme 2. The Social Cost of Standing Out

Although AV1 aims to maintain social connection, some young people and parents highlighted its potential to increase visibility and stigma. For pupils already sensitive to standing out in mainstream classrooms, the robot risked amplifying discomfort rather than facilitating inclusion:

> *I wouldn't like it or use it 'cause it would feel too 'standing out' for me… my sole purpose to me at school is… to fit into the rest of the kids… it will definitely cause issues if you don't like standing out like me. (YPD)*

Another young person shared a similar perspective, drawing attention to the potential feelings of awkwardness and dependence associated with using the robot:

> *It might be kinda embarrassing… because you just have this little robot that has to be taken around… might be kind of embarrassing 'cause you have to be carried around everywhere." (YPF)*

He expanded on this point by noting the potential social and logistical challenges involved in relying on a peer to support AV1 use, such as dependence on peers, and the possibility of being seen as inconvenient to others:

*That would have to be someone who has all the same lessons as you… otherwise they'd be wasting their own time… and then you being close enough friends with them that they're willing to carry around this little robot… that's even lower of a chance. (YPF)*

The potential for AV1 to increase social vulnerability was also noted. One young person reflected on how using the robot might leave pupils feeling exposed or at risk of negative peer attention:

*It must be really, really easy to bully someone through a robot like that… you'd be in like a kind of powerless position… because you're talking through a robot… oh, that's so—that's bad when I think of it… (YPE)*

Parents also expressed similar apprehensions, describing the potential for AV1 to become a source of lasting social stigma, particularly when pupils transition back into the physical school environment after using the device:

*You imagine when that child wants to go back to mainstream school, how? Are they going to be bullied because they were once the robot?… That makes me feel really anxious… really sad for that child. (PA)*

*What is the other kids' reaction to the robot head? Is the child actually going to feel a bit stigmatised and embarrassed? (PE)*

For families whose children already experienced challenges with peer inclusion, the visibility of AV1 was seen as potentially compounding those difficulties. One parent reflected on how the device might intensify feelings of difference rather than alleviate them:

*Children already have a really difficult time to fit in… She already feels different… Do you think... she'd want to look around the classroom at all the friends in the classroom? What benefit would she get from that? (PA)*

#### 4.2.4 Theme 4. Implementation Considerations

AV1's sensory-sensitive design and less socially exposing features were valued, although practical considerations were noted. Participants stressed the need for supervision to prevent misuse and ensure

engagement. Ultimately, AV1's success was seen as dependent on thoughtful design and consistent, well-supported implementation within a responsive school system.

#### 4.2.4 Subtheme 1. Technical Functionality

Participants identified practical considerations around AV1's functionality, including accessibility, reliability, and responsibility for its use. Young people in particular highlighted specific design elements they found appealing, including AV1's visual interface and signalling functions, such as its light-up feature to indicate a 'raised-hand'. Several participants commented positively on these features:

> *It seems impressive. (YPF)*

> *It looks good… I like the lights on it… (YPC)*

> *It looks good… the fact that… instead of like raising your hand, you can actually just- it'll go green instead… I like that… makes it easier to interact with in class. (YPB)*

Participants also considered the robot's accessibility for students with different communication profiles:

> *If you're nonverbal or you have difficulty speaking, then it's probably not [a good idea]… because your voice is on blast to a whole classroom. (YPE)*

Similarly, a parent reflected on how AV1 might meet the needs of pupils with hearing impairments:

> *Maybe if they're deaf or… they have to lip-read… some sort of—like we have subtitles on the TV [would help]. (PB)*

There was also some reflection on the practicality of AV1's cues being noticed by teachers in busy classroom environments. While its visual indicators were seen as innovative, participants noted they might be more effective when paired with complementary auditory prompts.

> *If it just went green… the teacher might not be able to see it… they might not notice the colour change if it doesn't make any sound… and you actually want to talk… that might be awful to be honest. (YPB)*

This was further reflected in parents' accounts about the various responsibilities teachers are required to manage:

*They seem quite small… the teacher's not just looking at the robot, she's trying to teach everybody… even the best teachers in the world can sometimes miss the child at the back. (PB)*

*Is the teacher going to recognise [the signal] immediately in a class full of 32–35 bouncy people? If you've still got disruption, frankly you're going to turn it off. Why would you bother? (PC)*

Logistical management was also a recurring consideration. Parents raised practical questions about how the robot would be transported between lessons, who would oversee its operation, and how consistently it could support social opportunities such as breaktime interactions:

*At the end of the lesson, who's carrying this robot around? How does the robot get from A to B to C? (PC)*

*Are the teachers going to be too busy to take the robot head [into social spaces]?... Is anyone actually prioritising that child's need to have a little social 10 minutes? Probably not. (PE)*

There was also a degree of cautious optimism among parents, particularly if technical aspects could be addressed and appropriate support structures established.

*I think it's a really good idea… but if it's not working, what do you do to replace [it]?... there's always the fear of that. (PB)*

#### 4.2.4 Subtheme 2. Vulnerable to Misuse and Disengagement

Several participants reflected on the potential for AV1 to be misused in practice, particularly in school settings where behavioural or supervisory challenges were already present. Some young people voiced apprehension about how the device might be used in ways that detracted from its educational purpose. One participant, for example, speculated on how AV1 could be misappropriated to disrupt classroom learning:

*People who are just kind of normally very chaotic… they can probably just like play the most loud, annoying thing at max volume and no one could really stop them… You could do like really inappropriate things with the robot or basically stop the entire class because of what they're doing through the robot… if it got into the wrong hands. (YPF)*

While AV1's interactivity aimed to enhance engagement, some participants saw it as a potential vulnerability without clear boundaries and safeguards. Parents similarly raised concerns about the robot's physical security and questioned whether it would be respected by peers in everyday school environments:

> *What happens when it [the AV1 robot] goes missing or gets broken because some other child has taken it and walloped it? (PC)*

Such remarks point to broader uncertainties about how well the device can be protected in busy or unpredictable school contexts, especially if consistent adult supervision or peer respect is not ensured.

Both young people and parents identified the need for built-in safeguards to prevent inappropriate use. One young person proposed design features that could mitigate misuse:

> *You could mute the robot… or disconnect the person… kind of a feature so if the person controlling the robot was doing bad things, the person on the other end can stop them. (YPF)*

Participants also raised concerns about potential disengagement. Without sufficient structure or oversight, AV1 risked becoming a passive or underutilised tool. One young person reflected on how easily attention could drift away from learning:

> *You could just watch YouTube videos… or watch a film… there's no way to actually know what you're doing. (YPF)*

This perspective was echoed by a parent, who questioned the practicality of sustaining focus when a pupil was accessing AV1 from home without direct supervision:

> *If they're at home, it's a lot of distractions… you've got your phone right there… you're looking at a screen while you're actually watching TV over there behind the screen… there's no one to be like, 'Are you paying attention?' (PD)*

# 5. Discussion

This chapter addresses each research question through a synthesised discussion of the corresponding themes, critically engaging with existing literature and theoretical frameworks. Where new insights have emerged from the data, additional relevant literature is introduced to extend and enrich the discussion.

## 5.1 Research Question 1: What are the views and experiences of support for autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA), and what might these reveal about effective future support?

The findings in the current study highlight that a sense of safety within the physical and sensory school environment is a fundamental component of support for autistic pupils. Participants consistently described the importance of calm, quiet, and low-arousal school settings, echoing findings from prior research (e.g., Higgins, 2022; Colat-Parros, 2023), and aligning with a recent comprehensive review of autistic young people's negative experiences in mainstream education (Horgon et al., 2023). A particularly strong preference was expressed for smaller class sizes, which participants associated with reduced sensory and social overwhelm. This aligns with prior research identifying large, busy mainstream classrooms as a significant source of distress for autistic pupils (Gray et al., 2023), further highlighting the environmental barriers to inclusion that are often embedded within mainstream educational structures.

Psychological safety, as posited in Maslow's Hierarchy of Needs (1954), is a fundamental human need that must be satisfied before higher-order processes such as learning, self-esteem, and self-actualisation can be meaningfully pursued. Within the context of this study, safety was described as a prerequisite for school engagement. For autistic pupils experiencing EBSA, the act of attending and participating in school was viewed as secondary to first feeling physically and emotionally safe. This foundational need for safety underpins many of the themes discussed throughout this section, reinforcing the idea that without a psychologically safe and supportive environment, educational access and inclusion remain out of reach.

Given the extensive literature documenting how autistic pupils often experience secondary school as overwhelmingly loud and crowded, it is unsurprising that participants in this study reported similar challenges (Gray et al., 2023; Tomlinson et al., 2021). These environmental features were consistently identified as critical barriers to attendance, contributing to heightened anxiety and emotional withdrawal.

Despite longstanding awareness of the impact of sensory overload on autistic pupils, the findings suggest that such basic sensory needs remain insufficiently prioritised within mainstream school settings. Reasonable adjustments intended to mitigate sensory distress, such as designated safe spaces, toilet passes, and exit cards, were inconsistently implemented or absent altogether. Several participants reported being denied access to these supports, often due to variability in staff attitudes and perceptions about who was 'entitled' to use them. Some young people also described how autism was perceived as an 'invisible disability,' which contributed to challenges in accessing support when needed. These findings echo broader literature that critiques the underdevelopment of sensory support in mainstream education (Tomlinson et al., 2021; Goodall & MacKenzie, 2019). Moreover, they align with research showing that such supports are more routinely embedded in specialist or alternative provisions, whereas in mainstream schools, they are frequently treated as supplementary or discretionary (Higgins, 2022).

One such support, the provision of designated safe spaces or areas within school settings, was strongly advocated by pupils in this study. This aligns with earlier research highlighting the value of safe spaces as critical self-regulation support for autistic pupils (Humphrey & Lewis, 2008; Menzies, 2013). Such spaces, where pupils can temporarily withdraw to regulate themselves sensorially and emotionally, are widely recognised as a central component of good autism practice (National Autistic Society [NAS], 2023; Price & Romualdez, 2025; O'Hagan et al., 2022). Given the established value of this relatively minor adjustment, and its potentially significant impact on the attendance and wellbeing of autistic pupils, it raises a critical question regarding the continued lack of safe spaces being routinely embedded in practice. One parent participant in this study pointed to inconsistent staffing as a barrier, noting that access to such spaces often requires adult supervision, which schools are not always able to provide. This reflects wider concerns around funding shortfalls in education, with Gray et al. (2023) highlighting how cuts to school budgets, including staffing, negatively affect the availability of necessary support. Similarly, a national survey of mainstream teachers in England identified limited resources, especially the lack of funding, resources, and support staff, as their primary barriers to inclusive education for children with SEND (Warnes et al., 2022). These systemic constraints align with Bronfenbrenner's ecological model (2005), illustrating how exosystemic-level influences, such as government funding decisions, can have far-reaching consequences for the provision of critical supports within schools, often disproportionately disadvantaging children with SEND.

Inadequate funding to support autistic pupils may further constrain school leaders' and teachers' capacity to adopt flexible and individualised approaches to inclusion. This was reflected in the current study, where support was often described as mismatched to the pupils' actual needs, with it being

standardised, generic or a “tick-box”, and the flexibility around support provided limited. Consistent with these findings, Goodall (2018) identified flexibility as a key enabler of inclusive practice from the perspectives of autistic students. Similarly, O’Hagan et al. (2022) found that access to additional funding enabled staff to provide more flexible and individualised support for autistic girls, highlighting the importance of tailoring provision to meet individual needs.

When flexibility and individualisation were lacking, even support measures formally in place, such as timeout or exit passes, were often underused. Several young people in this study described avoiding the use of these passes due to fears of being reprimanded by staff or judged by peers. This reluctance to access support was commonly rooted in a desire to avoid appearing different, a pattern echoed in previous research, where autistic pupils preferred less conspicuous forms of support to prevent their differences from being highlighted (Moyse, 2020; Saggers et al., 2011). This issue was particularly salient among autistic girls in the study, many of whom expressed wanting to be perceived as the same as their peers. These findings reflect established patterns of autistic masking, often more commonly experienced by autistic girls (Halsall et al., 2021; Moyse, 2020). They also call for more subtle and discreet support for autistic pupils who want this, rather than those that make them more prone to standing out among their peers. Masking was a common theme in this study and will be discussed in more detail later in this section.

This disconnect between support in principle and support in practice was also evident in relation to formal support plans. Even when appropriate provisions were outlined in documentation, such as Education, Health and Care Plans (EHCPs), participants frequently reported inconsistent or absent implementation. One parent observed that having support written into an EHCP did not necessarily translate into real-world delivery, highlighting a broader systemic issue. This concern is echoed by the Children’s Commissioner (2022b), who found that many EHCPs are not fit for purpose, often containing provisions that are unrealistic, generic, or poorly tailored to the individual. Their report emphasises the need for genuine co-production of EHCPs with children and young people, ensuring that support plans reflect meaningful, attainable goals based on each pupil’s specific needs.

Building on this, the current study also highlighted how rigid expectations around attendance can conflict with autistic pupils’ needs, revealing another area where policy and practice are often misaligned. Participants described how mainstream expectations of full-time attendance frequently clash with their need for flexibility, particularly in relation to recovering from the sensory and social overwhelm that characterises many mainstream school environments. Just as EHCPS may fail to account for the realities of autistic pupils’ lived experiences, so too do inflexible attendance models, which often neglect the importance of rest and recovery for emotional regulation and mental health, particularly in relation to

‘autistic burnout’ as a result of persistent masking. This state, characterised by chronic exhaustion, diminished functioning, and reduced tolerance for everyday demands, has been well-documented as a significant factor impacting school attendance (Hamilton, 2024). Although there is limited research specifically addressing the use of reduced or flexible timetables (bespoke timetables where school contact time is reduced) with autistic pupils experiencing EBSA, existing studies provide corroborative insights. For example, Chian (2022) found that reduced hours helped alleviate school-related pressure and supported emotional wellbeing among pupils experiencing EBSA. Similarly, Sproston et al. (2017) reported that ‘part-time timetables’, when used to address overwhelming aspects of school such as unstructured social periods, were perceived as helpful by some pupils.

However, Sproston et al. (2017) also noted that these strategies did not prevent long-term disengagement from education. This highlights the need for not treating reduced timetables as short-term fixes or reactive measures and calls for governmental revision of this view. Currently, The Education Act (1996) allows a Local Authority (LA) to provide an education that is not full time if it is in the best interest of the young person. However, reduced timetables are viewed by the DfE as being used in very “exceptional circumstances” based on an individuals’ needs with there also being emphasis on them not being treated as a long-term solution (DfE, 2024b). However, when implemented without addressing the underlying sensory and systemic barriers to attendance, they may only delay rather than prevent full withdrawal from school. Parents in the current study reinforced this point, describing reduced hours as essential for enabling a "full reset," on an ongoing basis, and especially following periods of distress or burnout. They advocated for flexible attendance to be recognised as a valid, long-term strategy, not a last resort, grounded in wellbeing rather than attendance compliance. These findings further support the need for a paradigm shift away from standardised, attendance-focused models towards more individualised, needs-led approaches that prioritise pupil wellbeing as a foundation for sustained engagement.

Aligned with this, young people in the study consistently called for greater flexibility and autonomy not only in attendance but also in how support was delivered and how the school day was structured. Participants frequently emphasised the importance of having more choice and control over decisions affecting them and expressed a strong desire for their voices to be heard and taken seriously. These views align closely with the findings from Higgins (2022), whose research using the ‘Ideal School’ approach with autistic young people experiencing EBSA also identified a lack of autonomy as a significant barrier to school engagement. Denial of basic needs, such as access to the toilet, was cited as emblematic of the wider absence of agency, which negatively impacted pupils’ perceptions of school and their motivation to attend. Such experiences reflect a broader critique in the literature, which highlights how

school staff often maintain a position of authority that creates a power imbalance between adults and students (Higgins, 2022; Moyse, 2020).

Conversely, when autonomy has been supported through the provision of choice and collaborative decision-making, young people have demonstrated greater willingness to re-engage with education during periods of EBSA (Nuttall & Woods, 2013). Similarly, O'Hagan et al. (2022) found that autistic girls who were actively involved in shaping their own support felt more heard, understood, and empowered, resulting in more positive and sustained re-engagement with school. These findings are consistent with wider calls within the EBSA literature for support approaches that prioritise pupil voice and co-participation in planning (Goodall, 2018; Clissold, 2018; Menzies, 2013).

Despite legislation and governmental guidance around the importance of giving young people a voice (Children's Act, 1989; United Nations, 1989), this appears somewhat contradictory to the use of behaviourist approaches and sanction-based behaviour policies widely implemented in secondary schools (DfE, 2024c). The consequences of these approaches can be understood through the lens of Self-Determination Theory (Ryan & Deci, 2000), which distinguishes between extrinsic motivation, where behaviour is shaped by external rewards or punishments, and intrinsic motivation, which arises from personal interests, values and a sense of agency. Behaviourist approaches tend to rely heavily on extrinsic motivators, encouraging compliance through external control and thereby limiting pupils' autonomy. This can increase pressure to conform while diminishing students' intrinsic motivation, ultimately leading to disengagement, passivity, and reduced investment in learning. By contrast, embedding opportunities for pupil choice, voice, and collaboration throughout the school day may foster greater intrinsic motivation, supporting pupils to engage on the basis of interest and self-determined goals. In the context of EBSA, this suggests that rethinking disciplinary and support models through the promotion of autonomy and shared decision-making could lead to more meaningful and lasting school engagement and attendance.

However, promoting autonomy and collaboration is not without challenges for schools. As highlighted by young people in the current study, while flexibility is essential, they also recognised the importance of maintaining healthy structure and boundaries to support effective learning. This emphasises the need for schools to find a balanced approach, one that upholds clear expectations while allowing space for pupil agency (Higgins, 2022). A key step towards achieving this balance between structure and autonomy lies in equipping staff with a deeper understanding of autism. Staff who demonstrate such understanding are often perceived as more empathetic and responsive to individual needs, creating an environment where both structure and flexibility can coexist to support autistic pupils effectively. In the broader literature, this knowledge is consistently cited as fundamental to improving

school for autistic pupils (Goodall & MacKenzie, 2019; O'Hagan et al., 2022). While some studies indicate that school staff are increasingly positive about the inclusion of autistic pupils, this openness often depends on their awareness of a formal diagnosis, which may not be apparent in all cases (Nah & Tan, 2021). This contrasts with the findings of the current study, where many autistic pupils reported that their diagnosis was overlooked, and their distress misinterpreted by staff, often resulting in missed support. Masking emerged as a key theme, with many participants sharing that they deliberately hid signs of anxiety or overwhelm, which in turn prevented staff from recognising their need for support. One young person explicitly stated that because he masked his emotions and anxiety, staff did not believe he required additional help. His mother echoed this view, describing how inclusion staff dismissed his autism-related needs despite his challenges related to the social and sensory environment and a formal diagnosis.

While masking has been widely documented in the autism literature, particularly among girls (Cook et al., 2017; Humphrey & Lewis, 2008; Moyse, 2020), the current study found that boys also engaged in masking to a similar extent. This may challenge broad gendered assumptions about how autism presents and suggests the need for further research into how masking manifests in autistic boys. Importantly, the data indicate that while some boys may mask or conceal their internal difficulties to the same extent as girls, they may still find socially visible supports, such as timeout passes, helpful, even if the girls do not. These differences point to the possibility that gender may influence how support is perceived and valued by young people. These findings, ultimately, reinforce the importance of challenging stereotype-based assumptions and instead adopting a truly individualised approach to support. Recognising the diverse ways in which autistic pupils experience and express distress, regardless of gender, is essential for ensuring that support is tailored appropriately to each young person's needs and preferences.

Further compounding this challenge, participants in the current study also described instances in which their externally expressed distress, often in the form of emotional release of built-up sensory or social overwhelm or a panic attack, was misinterpreted by staff as defiance or deliberate misbehaviour. Rather than prompting understanding or the implementation of personalised regulation strategies, these behaviours often resulted in punitive responses such as detentions. This reflects a broader issue highlighted in the literature whereby many staff in mainstream settings report feeling inadequately trained to support autistic pupils effectively (Gray et al., 2023; Roberts & Webster, 2020). As a result, current disciplinary practices may inadvertently contribute to disaffection, unmet needs, and exclusion among autistic pupils (Humphrey & Lewis, 2008). There have been reports that autistic secondary-aged pupils are, on average, three times more likely to be excluded than their non-autistic peers (Guldberg et

al., 2021), pointing to a systemic lack of understanding in how to respond appropriately to neurodivergent presentations of distress. A lack of autism-specific training, compounded by non-mandatory professional development and reduced budgets, has limited schools' capacity to improve practice, prompting increasing calls to build staff expertise and close this knowledge gap (Guldberg et al., 2021).

In light of these challenges, research on alternative provision offers a contrasting perspective, which may inform more inclusive practice. Studies have consistently highlighted more positive experiences for autistic pupils in alternative provisions, where they often report feeling respected, listened to, and genuinely supported by staff, which they rarely experienced in their former mainstream settings (Goodall, 2018; Gray et al., 2023). Gray et al. (2023) found that alternative provision teachers typically demonstrated greater warmth toward their pupils and held higher aspirations for them. Crucially, this translated into more flexible, individualised approaches that fostered both autonomy and emotional safety. Autistic pupils in these settings valued having a higher degree of control over their learning and support, which in turn contributed to stronger engagement and wellbeing in school. This culture of mutual respect and empathy between staff and pupils stands in stark contrast to the often rigid and disciplinary approaches adopted by mainstream schools. It also offers a practical challenge to the 'double empathy problem' - the notion that communication breakdowns between autistic and non-autistic individuals arise from reciprocal misunderstanding (Milton, 2012). These findings suggest that alternative provisions, which often show deeper understanding and acceptance of neurodivergence, may offer valuable lessons for mainstream schooling. As the number of autistic pupils in mainstream schools continues to grow, and places in alternative provisions remain limited, there is a growing imperative for mainstream settings to re-evaluate their approach and prioritise genuinely inclusive, neurodiversity-informed practices.

This is strongly echoed in the findings of the current study, where autistic pupils often described their vision of ideal school environments in terms that closely resembled alternative provision. Participants spoke about the value of smaller class sizes, reduced sensory stimulation, greater staff understanding of autism, and the availability of individual adjustments. Home education was also highly valued, with participants explaining that this better met their needs, as home was an emotionally and sensorially safer place than school. There was a profound emphasis on the need for therapeutic support and "healing" from previous negative school experiences. Parents described how the continued failure of mainstream environments to meet their children's needs led to increasing withdrawal from school, with some characterising the experience as persistently "traumatising". These accounts align with Moyse (2020), who found that autistic girls finding it difficult to attend were not rejecting education per se, but rather rejecting school environments and cultures that were detrimental to their mental health. This

resonates with wider literature that positions environmental factors as key drivers of EBSA (Onslow & Cartmell, 2025). Such perspectives challenge deficit-based understandings of non-attendance, reframing it as a systemic issue rather than a problem located within the individual. This conceptual shift is supported by Bronfenbrenner's (1979) ecological systems theory, which emphasises the reciprocal interactions between the individual and their surrounding systems. It also reflects broader critiques of the current education system, including those by Stanbridge (2024), which argue that schools must adapt to meet the needs of pupils with SEND, rather than expecting the pupils to fit inflexible systems.

Aligned with this systemic lens, the current study also underscored the foundational role of trusting staff-student relationships in supporting school attendance. Consistent with previous research (Goodall & MacKenzie, 2019; Higgins, 2022; O'Hagan et al., 2022), participants emphasised the importance of warm, empathetic and responsive relationships with staff as central to how they experienced school. Many young people expressed a desire for adults to be kinder, more approachable, and able to relate to them in a more "human" way, using humour, empathy and understanding in their interactions. However, one young person reflected on how staff often seemed too stressed or overwhelmed to engage in this way, suggesting that structural pressures were limiting their capacity for rapport-building. This echoes concerns in the wider literature about the increasing demands placed on school staff by government-driven targets, particularly those related to academic outcomes, behaviour management, and attendance (Moyse, 2020). These pressures appear to manifest in inflexible behaviour policies and a perceived lack of emotional availability from staff, reinforcing a system that prioritises performance over wellbeing.

A seismic, systemic shift is therefore needed; one that recognises the central role of relationships in school engagement. This would require a shift at the macrosystemic level (Bronfenbrenner, 2005), a changing of ideology that has long been entrenched for many years as part of UK culture. There is a need for school staff to relinquish some control in order to reduce the power-imbalance often described by pupils. However, this would involve staff stepping away from strict, authoritarian roles, which would likely feel counterintuitive, particularly in light of persistent governmental policy narratives that place emphasis on control, discipline and sanctions (DfE, 2022). However, relational and behaviourist approaches need not be mutually exclusive. There has been longstanding advocacy in the educational psychology literature supporting more integrative frameworks that balance warmth, communication, and autonomy with clear boundaries, expectations and consistency (Jones et al., 2024). This model is conceptually similar to Baumrind's (1966) authoritative parenting style, which blends responsiveness and empathy with firm

guidance, suggesting that effective, inclusive practice in schools can and should be grounded in both compassion and structure.

Promoting a sense of belonging and relational connection within school settings has been associated with improved attendance (Payne & Welch, 2017), underlining the importance of staff-student relationships as clearly indicated in this study. Many participants emphasised the significance of forming a strong connection even with a single trusted adult in school. Such relationships were described as pivotal in supporting emotional wellbeing and motivating attendance, echoing earlier findings that identify key adult relationships as critical to re-engagement (O'Hagan, 2022; Colat-Parros, 2023). Where pupils had access to a consistent adult, such as a learning support assistant (LSA) or an emotional literacy support assistant (ELSA), they reported feeling more confident, understood and advocated for. When staff took time to know pupils on an individual level, pupils felt more seen and supported, including in how their learning needs were met. For example, in similar research, participants shared that simple strategies, such as having written down instructions, were more likely to be implemented for them when adults listened to their preferences (Colat-Parros, 2023).

As with many areas of support, the provision of key adult relationships is shared by the availability of SEND funding and skilled staff capacity. Schools with greater resources are better positioned to offer the flexible, individualised approaches necessary to support autistic pupils' re-engagement. This study also highlighted gendered differences in the reception of key adult support. Boys frequently valued this support during lessons, particularly when it involved shared interests, such as football, which facilitated rapport and connection. In contrast, girls often reported disliking the visibility of such support, particularly in classroom settings. This aligns with Moyse (2020), who found that autistic girls "hated" having a LSA due to the stigma, social exclusion or embarrassment it could provoke. These findings reflect a complex tension in which autistic girls sought to remain unseen by peers while simultaneously wanting meaningful, discreet support from adults. They wanted their needs recognised and validated, but in ways that preserved their social dignity and agency.

Finally, participants' accounts also suggested that a sense of belonging in school was often closely associated with the development of positive peer relationships. Many young people in this study described an ideal school environment as one where they could form a number of close, trusted friendships. While prevailing discourses often portray autistic pupils as preferring solitude, avoiding peer connection, or struggling to form friendships is criticised in more recent literature (Edwards & Love, 2024), the findings here may challenge these narratives. Instead, they highlight the importance of peer connection as a potential protective factor for those experiencing EBSA. This aligns with previous research

linking positive peer relationships to improved school attendance and engagement (Higgins, 2022; Humphrey & Lewis, 2008; O'Hagan et al., 2022). Participants particularly valued enduring, trusted friendships which offered consistency in often overwhelming school environments. To support this, there is a clear need for schools to actively create regular opportunities for autistic pupils to form and sustain peer relationships. This includes adult support in identifying potential friends, facilitating introductions, and helping pupils navigate the complexities of social connection (O'Hagan, 2022). Although ongoing support for social skills development has been widely cited as beneficial in previous studies (Cook et al., 2018; O'Hagan et al., 2022), it was less explicitly mentioned by participants in the current research. However, this absence should not be interpreted as a lack of need. Rather it may reflect the specific framing of the 'Ideal school' methodology used in this study, with this less likely to prime participants' thinking around supports which are less immediate or tangible aspects of the school environment.

### 5.2 Research Question 2: What are the views and perceptions of the AV1 robotic telepresence device for supporting autistic secondary-age young people experiencing emotional barriers to school attendance (EBSA)?

The findings of this study indicate that AV1 is generally perceived as being a potentially valuable tool for supporting school inclusion during absent periods for autistic pupils. Young people, in particular, responded positively to the robot, describing it as a useful "alternative" to physical attendance if school attendance becomes challenging. Their video-elicited perspectives reflected a broader acceptance of AV1's potential to foster educational and social engagement; an attitude echoed in previous research (Chubb et al., 2021; Fletcher et al., 2023; Lister, 2020; Newhart et al., 2016; Spoden & Ema, 2024).

However, much of the existing research has focused exclusively on the perspectives of users with prior experience of the robot. This introduces a potential bias in the evidence base, as those who continue to use AV1 may already hold favourable views and be more inclined to participate in studies evaluating its utility. in contrast, the present study offers a uniquely balanced view by exploring the perspectives of pupils, for whom AV1 was entirely novel, through video elicitation. Their insights, unshaped by prior experience or emotional investment, provide valuable reflections on the robot's perceived potential benefits and limitations, thereby helping to mitigate this potential positive response bias and address an important gap in the current research.

Most young people in this study were either enthusiastic, or at the very least, optimistically curious about the robot's potential, with more than half of them stating they would consider using AV1

to support their school inclusion. However, this interest was tempered by thoughtful reservations, suggesting that while AV1's potential was recognised, its full acceptance was approached with caution.

One of the key themes emerging from these discussions, echoing earlier findings in this chapter, was the importance of choice and flexibility in AV1's implementation and use. Many participants stressed that they did not want to feel coerced or have decisions made for them by adults. Rather, they wanted their consent to be actively sought, reinforcing a need for agency and autonomy over whether and how the AV1 device is used. This emphasis on self-determination aligns with previous studies that advocate for flexible pupil-led use of AV1 (Ahumada-Newhard & Olson, 2019; Page, 2020), and resonates with broader findings that highlight how support is more effective when it is responsive to young people's preferences and designed to increase their autonomy (Nuttall & Woods; O'Hagan et al., 2022; Ryan & Deci, 2000). These findings reaffirm the critical importance of ensuring that interventions like AV1 are grounded in principles of consent, choice and flexibility; an approach that is ethically essential as well as central to successful engagement.

Furthermore, when situated within a framework that prioritised pupil voice and autonomy, participants identified flexibility and choice as key affordances of the AV1 robot itself. Several young people noted that AV1 could allow them to engage with school from the safety of home, on their own terms, making school participation feel significantly more manageable. This finding is consistent with prior research (Newhart & Olson, 2017; Weibel et al., 2023b), which highlighted how pupils felt fully capable when using the robot, particularly because they retained control over how they participated and to what extent. For example, they could activate the LED light to signal passive observation and control the robot's movements, which granted them a sense of autonomy. Similarly, staff in Fletcher et al.'s (2023) study observed that AV1 helped to increase pupils' confidence, attributing this to the enhanced control the robot afforded the pupils. This increased sense of agency appeared to contribute directly to pupils' capacity to engage more effectively in school life. Participants in the current study echoed these findings, particularly emphasising how AV1 could serve as a buffer against the overwhelming sensory input typically experienced in school environments, such as loud, crowded classrooms. Features like adjustable volume controls were seen as particularly helpful, enabling users to moderate their exposure and tailor their experience in a way that supported emotional and sensory regulation.

As previously discussed in this chapter, the ability to regulate sensory and emotional input, be that through accessing a safe space or other means, is foundational to feelings of psychological safety in school, which in turn is a prerequisite for meaningful engagement among autistic pupils. Given that difficulties in achieving this sense of safety are a major contributor to EBSA for many autistic young people,

these findings are especially significant. They further underscore the relevance of AV1 in this context, particularly considering that its primary application in the UK is for young people experiencing mental health-related reasons, including EBSA (Somerset County Council & No Isolation, 2022). Participants in this study generally saw AV1 as offering a form of low-pressure, flexible engagement that could help them feel more regulated and in control; features essential for those navigating overwhelming school environments.

However, despite this perceived potential, the emotional and psychological implications of using AV1 were not uniformly positive. One young person in the current study strongly rejected the idea of engaging through the robot, emphatically stating, “I’m not a robot,” This response highlights the complex issues of identity and representation that can arise with RTTs. Her reaction resonates with findings from Johannessen et al. (2023b), where several young people expressed that ‘being’ a robot feels fundamentally different from being physically present in school; a disjunction that can blur identity boundaries and introduce emotional complications for pupils. Similar concerns were raised in Lupton et al. (2022), who described instances where students’ identities became intertwined with the robot, creating ambiguity between the self and the technology intended to represent them. This blurring of identity is further complicated by how AV1 is positioned and perceived in school contexts. AV1 is often treated as a direct representation of the student; for instance, Weibel et al. (2023) observed that the robot is typically placed on the absent pupil’s desk as a visual stand-in. While this can enhance the student’s sense of presence and belonging, and has practical benefits for visibility and engagement, some studies have raised how viewing a student as synonymous with a robot may be problematic. As Nordtug et al. (2024) point out, if the robot is treated as equivalent to the student, acts of unintentional neglect from forgetting to turn it on or leaving it unattended, may seem inconsequential, but may in fact be experienced by the student as being personally invalidating. In these instances, being overlooked or mishandled may symbolise to the pupil that *they* are being forgotten or dismissed.

This concern was echoed by parents in the present study, who reflected on the emotional vulnerability of students relying on AV1 as their primary means of inclusion. They noted that if staff neglect the robot, whether intentionally or inadvertently, it may reinforce long-standing feelings of being “let down again”, intensify existing isolation, and communicate that the pupil’s needs are not important. This is especially troubling for pupils experiencing EBSA, many of whom already contend with significant mental health challenges (Humphrey & Lewis, 2008; Vincent et al., 2023). For autistic users of AV1, such experiences may be even more distressing, given evidence that autistic individuals often face heightened difficulties with emotion regulation compared to their non-autistic peers (Mills et al., 2022). In these

contexts, inadequately acknowledging the robot may not be perceived as a logistical oversight, but as profound emotional rejection, further undermining trust and connection at a time when pupils are particularly vulnerable. This echoes wider research on the psychological effects of avatar-based representation on self, which shows that individuals can become so closely enmeshed with their avatars, that harm or neglect directed at the avatar may be felt as a personal violation (Bloustien & Wood, 2013). This raises ethical questions about how robotic avatars like AV1 are perceived and treated in schools. The way AV1 is conceptualised matters as viewing it merely as a tool, rather than as an extension of the student, risks diminishing the pupil's sense of inclusion. These distinctions have significant implications for emotional safety and belonging, particularly for those who rely on AV1 to stay connected (Nordtug et al., 2024).

Building on this, AV1 was described by participants as a double-edged social tool, one that could both bridge and distance social connections. Many participants in the current study expressed that AV1 held promise for supporting social connection during periods of absence. This mirrors earlier research, which has consistently found that AV1 can serve as a powerful mediator of social inclusion and connectedness in qualitative studies (Nordtug et al., 2023; Newhart et al., 2016; Weibel et al., 2024). Similarly, Johannessen et al., (2023b) found that the robot helped to counteract feelings of isolation and estrangement among pupils who had been out of school for prolonged periods, ultimately easing their transition back into school and ability to reintegrate in the long run. These outcomes can be meaningfully understood through the principles of Self-Determination Theory (Ryan & Deci, 2000), which identifies 'relatedness' – the need to feel connected to others – as a core psychological driver of intrinsic motivation. For pupils who experience EBSA, sustaining social ties during absence may help meet this foundational need, thereby increasing their motivation and capacity to re-engage with school. These findings echo those discussed earlier in this study, where peer connection and a sense of belonging were consistently described as fundamental to effective support (Higgins, 2022) and successful school re-engagement (O'Hagan et al., 2022).

In addition to AV1's potential to offer regular opportunities for social interaction, it may also help to facilitate the social interaction itself. One pupil in the current study noted how AV1 might help to minimise the pressures of speaking in class as peers wouldn't be looking directly at him. This perceived benefit aligns with previous findings (Johannessen et al., 2023b), which emphasised how the absence of a visible screen on the AV1 allows users to not be visually exposed, potentially reducing social anxiety. This feature may be particularly advantageous for autistic young people, who frequently report that the social demands of school are overwhelming and often adopt coping strategies such as masking to manage.

Johannessen et al (2022) describe this as a form of “energy-efficient” interaction as not only are the users shielded from direct visual exposure, but they’re also able to conserve cognitive and emotional energy otherwise spent on commuting to and navigating physically and socially demanding school environments. Despite these promising indications, however, there is a notable gap in the present research where none of the previous studies examined here have focused specifically on the experiences of autistic pupils actively using RTT. Given that social communication differences are a common feature of autism (Goodall, 2018), there is still much to be understood about how RTTs like AV1 function for this population. This study therefore calls for further empirical research investigating whether AV1 can effectively mediate social interaction for autistic pupils, and how such technology might be best implemented to support their inclusion in a way that respects their needs and strengths.

Conversely, while some participants viewed AV1 as a potentially supportive tool for maintaining connection, others expressed concerns about its social visibility and perceived it in a more negative light. Several participants worried that using AV1 could leave them vulnerable to bullying, social stigma, or ridicule. While concerns around bullying have been largely absent from the existing AV1 and RTT literature - a gap that may reflect the selection bias discussed earlier - it is however, recognised in the autism literature that autistic pupils may be more susceptible to being bullied due to social communication differences (Goodall, 2018; Humphrey & Lewis, 2008). Previous studies have, however, acknowledged that AV1’s novelty can draw significant attention and enthusiasm from peers (Henriks, 2017; Johannessen et al., 2022), which may result in unwanted visibility for users. While such effects tend to diminish over time as familiarity with the device increases, the initial impact may still deter some students from engaging with the technology. Despite concerns about unwanted attention, participants also acknowledged that this might not be an issue for others, suggesting an awareness of individual differences in how AV1’s visibility is perceived.

Importantly, the same young people who voiced discomfort with AV1, primarily autistic girls, had previously shared their reluctance to use other supports that made them stand out, such as timeout passes. Their reasoning was consistent, with them having a strong desire to fit in and avoid appearing different from peers. In this context, AV1 was seen as a potential threat to their ability to socially camouflage. These responses may also reflect gendered patterns in how autistic pupils engage with visible support tools, as previously mentioned, with autistic girls perhaps more likely to adopt an 'internalising' social presentation characterised by masking and a heightened sensitivity to social difference (Wassell & Burke, 2022). In contrast, autistic boys, such as those in this study who were most enthusiastic in their perceptions of AV1, were typically more willing to tolerate or even embrace the visible distinction AV1

creates, consistent with this study's previous findings and affirming that what doesn't work for some, may work for others.

These social concerns point to broader systemic considerations for AV1's implementation and highlight the importance of applying an ecological lens. Bronfenbrenner's (2005) ecological systems theory provides a useful framework for understanding the interdependent layers involved in AV1's use. One of these layers is the school microsystem, in which successful implementation depends on a supportive network of peers and school staff. However, as highlighted by participants in both this and previous research (Johannessen et al., 2023b), AV1 presupposes a baseline of peer connection, yet for many pupils, particularly those with prolonged absences due to EBSA or mental health challenges, these networks may be small or entirely absent. In such cases, young people may feel uncomfortable or discouraged from using AV1, especially when they don't have peers to necessarily 're-connect' with, and may find it difficult or strange to initiate new friendships through the robot. This challenge may be particularly pronounced for autistic pupils, who are often reported to experience greater difficulties forming and maintaining friendships compared to their non-autistic peers (Cook et al., 2018; Goodall, 2018). Yet, this intersection of autism, social isolation, and AV1 use remains underexplored in the current literature. As Page et al. (2020) argue, further research is needed to investigate how RTTs function for pupils who lack existing social capital, in order to avoid the risk that technologies designed to support inclusion inadvertently exacerbate feelings of exclusion for the most vulnerable students.

In addition to its social dimensions, AV1 has been consistently recognised for its capacity to maintain educational access during periods of absence (Ahumada-Newhart & Olson, 2019; Fletcher et al., 2023; Weibel et al., 2024). In the case of the only known UK study on AV1's use in schools, Fletcher et al. (2023) found that use of the robot was associated with improvements in academic attainment, though it is important to note that these findings were based on teacher-reported data rather than formal assessment or curriculum-based measures. Similarly, Johannessen et al. (2023b) reported that many young people valued the AV1's educational utility, noting that it helped them to follow classroom activities and stay informed on what to study for assessments. However, as reflected in the current study, participants perceived AV1's usefulness to be more limited in certain subject areas, particularly practical lessons such as physical education, or those involving high levels of verbal interaction, which were viewed as more difficult to access via the robot.

Notably, however, participants in the current study placed considerably less emphasis on academic access than has been seen in previous RTT literature (e.g., Chubb et al., 2021; Weibel et al., 2024). This pattern extended beyond the AV1-specific findings and was also apparent in responses to the

first research question concerning support more broadly. Across both cases, a consistent, overarching narrative emerged, with participants emphasising that wellbeing takes precedence over academic learning. This reflects the broader sentiment that educational engagement is contingent upon emotional and psychological safety, aligning with Maslow's hierarchy of needs (1954), which posits the notion that basic psychological needs must be met before meaningful learning can occur.

This divergence from the academic focus observed in earlier AV1 studies may reflect the unique experiences of autistic pupils experiencing EBSA. Within this population, the priority often lies in addressing social, emotional, and sensory needs before academic outcomes can be meaningfully pursued. In contrast, much of the existing AV1 literature has centred on non-autistic pupils or those absent for other reasons, where continued access to learning was a primary concern. The present findings therefore point to the value of developing a more nuanced understanding of how AV1 is experienced by different groups of pupils. For autistic pupils experiencing EBSA, academic access was often positioned as a secondary benefit; one that may only become valuable once a sense of wellbeing and relational safety is more firmly established.

The findings of the current study align with the developer and policy consensus that AV1 should not be employed as a long-term or standalone solution for supporting pupils' access to education (No Isolation, 2021; Spoden & Ema, 2024). Parents in this study expressed scepticism about AV1's ability to effectively bridge social and educational access for their children. Instead, they stressed that AV1 should only be considered as part of a broader, holistic support package, and not as a substitute for an appropriate alternative provision placement. Their concerns reflect a broader apprehension that, in some contexts, AV1 is being used to compensate for systemic shortfalls, particularly the increasing lack of specialist placements within an overstretched SEND system. In the UK, some local authorities are trialling or rolling out AV1 as a cost-saving measure (No Isolation, 2021), aimed at reducing reliance on more expensive forms of support, such as alternative provision, amidst continued budget constraints. Within this context, AV1 risks being deployed as a "sticking plaster" solution; an intervention that masks rather than addresses the structural barriers underpinning EBSA, and the wider SEND system. It may inadvertently frame the autistic pupil, and their difficulty attending school, as the problem to be fixed, rather than confronting the environmental and systemic barriers to attendance that were discussed earlier in this chapter (Onslow & Cartmell, 2025). Such an approach reinforces the previously mentioned broader governmental narrative and neoliberal educational reform focused on attendance compliance and academic attainment as primary goals (Ball, 2003; Stanbridge, 2024), in contrast to the priorities voiced by families in this study, who consistently emphasised wellbeing and psychological safety.

However, participants' views suggested that AV1 may hold potential when implemented within a consent-driven, collaborative framework tailored to the individual's needs. These perspectives appear to align closely with existing literature that supports AV1's potential under these conditions, particularly when coordination across home, school, and professional contexts is robust (Ahumada-Newhart & Olson, 2019; Fletcher et al., 2023; Newhart & Olson, 2017; Weibel et al., 2023b). As indicated in this study and previous research, participants emphasised the importance of establishing clear, realistic expectations among all stakeholders prior to implementation, particularly around what the technology can reasonably offer in terms of social and academic engagement. Where expectations are ambiguous or overly idealised, there is a risk of disappointment or disengagement for both pupils and staff (Weibel et al., 2020).

To help address these challenges, Fletcher et al (2023) proposed an ecological implementation framework for AV1 that takes into account the individual, relational, and systemic factors necessary to guide effective and ethical use. This framework may prove valuable when considering AV1's use with autistic pupils, provided it is applied flexibly and with careful adaptation to the pupil's unique needs and circumstances. From this perspective, AV1 should not be viewed as a one-size-fits-all solution, but rather as a tool embedded within a wider system of support (Nordtug et al., 2023). In this way, AV1 may hold promise for supporting autistic pupils, particularly if the specific concerns highlighted in this study, such as emotional safety and social risk, are thoughtfully addressed within its implementation. However, further research is needed to evaluate how well this framework supports autistic pupils in real-world contexts and to ensure that the technology serves to empower, rather than marginalise, those it is intended to support.

## 6. Conclusion

Given the rising number of autistic pupils experiencing EBSA, this study explored the perspectives of both autistic young people and their parents regarding support, as well as their views on the AV1 robotic telepresence device as a potential intervention. With limited existing research focusing specifically on the intersection of autism and EBSA when exploring support, and few studies centring the voices of both autistic pupils and their parents, this study makes a distinctive and timely contribution.

The findings reveal the multifaceted nature of support required to foster a genuine sense of inclusion for autistic pupils experiencing EBSA, while simultaneously exposing the limitations of the current mainstream education system in adequately addressing their needs. Rather than advocating for specific tools or interventions, participants consistently emphasised the importance of core, foundational conditions for support. Central to these were calm, emotionally and sensory-safe school environments; consistent, trusting relationships with staff and peers; and individualised understanding grounded in autonomy, flexibility, and choice. These conditions were not viewed as supplementary, but as essential prerequisites for any form of meaningful and effective support to occur.

Importantly, participants' perceptions of the AV1 robot were closely tied to these broader relational and environmental conditions. While many recognised its potential to support autistic pupils experiencing EBSA with their social and educational engagement, this value was consistently framed as conditional. Its perceived effectiveness was seen to depend on implementation within a consent-driven, flexible, and supportive framework, tailored to the pupil's specific needs and used alongside, rather than as a replacement for, more appropriate or longer-term provision. Participants expressed concern about the risk of AV1 being used as a superficial, one-size-fits-all solution or as a standalone intervention. Instead, they emphasised that it should be used as one component within a broader, holistic system of support. Several parents also questioned the appropriateness of positioning AV1 as an alternative to high-quality specialist or alternative provision, particularly where such settings were felt to better support the wellbeing and engagement of autistic pupils. These perspectives appear to challenge governmental narratives that promote AV1 as a cost-effective substitute to specialist placements.

Collectively, these findings draw attention to ongoing structural challenges within the mainstream education system, particularly in relation to barriers to attendance that, according to participants, often remain insufficiently addressed. Rather than adapting to accommodate the diverse needs of autistic pupils, the findings of this study suggest that the system often positions the child as the problem, despite placing them within a SEND framework whose stated values and practices are often fundamentally

misaligned with their needs. This misalignment reflects deeper systemic issues within a system shaped by neoliberal reform, where priorities such as attendance, behavioural compliance, and academic attainment are often emphasised over emotional wellbeing, relational connection, and flexible, individualised support. For autistic pupils experiencing EBSA, these misalignments may contribute to environments that unintentionally compound, rather than alleviate, emotional distress. Addressing these concerns may require that foundational principles of inclusive support, such as safety, trust, flexibility and pupil agency, are embedded within the core ethos, culture and daily practice of schools, rather than treated as supplementary or conditional.

These findings offer a compelling mandate for change, particularly for education professionals, including EPs, whose work centres on promoting inclusive, child-centred approaches within education. The practical implications of these findings for EPs and other practitioners are explored in detail in the following section.

### 6.1 Implications for education practitioners

The findings of this study underscore the critical need for education practitioners to embed inclusive, neuro-affirming practices within mainstream settings that are grounded in the lived experiences of autistic pupils experiencing EBSA. Importantly, this requires a shift in perspective, moving away from locating the 'problem' within the child, and instead recognising the structural and systemic barriers that hinder genuine inclusion within the current SEND system. All these implications sit within a wider whole-school ethos that values inclusion, emotional wellbeing, and flexibility as core priorities. EPs are well-positioned to facilitate this shift through staff training, reflective practice groups, and consultation that embeds these principles effectively at the school level. In doing so, practitioners can move closer to providing educational environments where autistic pupils experiencing EBSA feel safe and empowered. In line with the study's findings, the following implications place emotional safety, autonomy, and relational connection at the heart of effective educational practice.

Firstly, **the pupil should be part of every stage of support planning**. Pupil voice should always be the starting point. Practitioners must move beyond tokenistic references to 'person-centred practice' and ensure it is actively realised. As an extension of this, co-constructing support plans with young people in a way that suits their communication needs and preferences (e.g., supportive aids of techniques, such as the 'Ideal School' technique used in this study), presumes competence and allows agency over decisions. Time and space for processing and for questions should be offered as standard. EPs can support

practitioners with this process, and advocate for the centrality of pupil voice in Education, Health and Care (EHC) assessments, contributing to the quality assurance of EHCPs.

**Autonomy and choice must be actively facilitated**. Pupils should be enabled to make informed decisions about how they manage their emotional needs throughout the school day, including the ability to independently withdraw from lessons to regulate without challenge or delay. Teaching staff must be given the flexibility to accommodate these individualised needs without fear of undermining school-wide expectations. To facilitate this, a clear and co-produced plan should be developed with the young person, outlining how they will communicate their need to access a regulation space in a way that feels safe and non-stigmatising. This may include using discreet tools such as a card system. However, it is essential that a contingency plan is also established, recognising that the young person may not always wish to use the card or that it may be misplaced. Planning for these scenarios ensures that autonomy is upheld consistently, and that the support remains robust and responsive to the young person's changing needs.

**Accessibility to dedicated calm, safe spaces or support rooms within schools should be viewed as standard**, in line with good autism practice (NAS, 2023). These spaces should be sensory-considerate (quiet, low-arousal, tidy etc), consistently available, and accessed unconditionally by autistic pupils when needed, including during unstructured times such as break and lunch times. A practical toolkit of support suggestions and tangible tools could be created with the young person to access during this time. Such provision should be supervised by emotionally-attuned adults trained in relational approaches, with the aim of fostering co-regulation, safety, and trust. Crucially, staffing and resourcing these support spaces must be prioritised over punitive environments in schools, such as isolation rooms, aligning more closely with trauma-informed, relational, and attachment-aware frameworks.

**Reasonable adjustments for sensory distress must be embedded into everyday practice** and delivered proactively, rather than reactively or conditionally. Access to timeout, exit, or toilet passes, noise-reducing tools, or flexible seating arrangements should be readily available, without requiring repeated justification from the young person or the parents advocating on their behalf, regardless of how the young person outwardly presents in school, or whether they 'appear' to need this support or not; in line with the autism literature on masking (e.g., Cook et al., 2018). Staff should have full trust in the young person's experience and honour their individual autistic needs; it should never be necessary for professional reports to validate sensory needs. EPs can work closely with schools to support the design and implementation of these adjustments through whole-school sensory audits and direct consultation with autistic pupils, parents and staff. See suggested reasonable adjustments in the Ambitious About Autism's *When Will We Learn: Lost Learning* report (2025).

**Ongoing staff development is critical to enable these practices**. Training on autism and wider SEND is essential so that staff are equipped with the right foundations. Professional development should prioritise drawing upon knowledge such as masking, autistic burnout, autistic flexibility of thinking and information processing, autistic social communication, and autistic sensory experiences. Such training could be delivered by EPs, or by recognised, neuro-affirmative providers, and be part of a broader professional development strategy. This should include training on supporting pupils' social, emotional, and mental health needs, EBSA, and on the effective and ethical use and implementation of RTTs, such as AV1, given their increasing use in the UK. EPs can support this work through an ecological lens, drawing on implementation frameworks (e.g., Fletcher et al., 2023) and modelling reflective, collaborative approaches to practice.

**Staff should assume relationship centred approaches to foster connections with autistic pupils**. Relational models to supporting young people, such as Emotion Coaching (Gottman & DeClaire, 1997), PACE (i.e., playfulness, acceptance, curiosity, and empathy), and restorative practices should be embedded in everyday interactions. The importance of adult relationships is well documented in the autism literature (Higgins, 2022), reinforcing the need for consistency and emotional attunement. Rather than relying on a single key adult who may not always be available, schools should work towards building a small, trusted team who can provide continuity and emotional support. These key adults should invest time in getting to know the pupil, with a collaboratively developed pupil profile capturing the young person's strengths, interests, hopes, sensory preferences, communication needs, emotional triggers, regulation strategies, and any co-occurring neurodivergence or diagnoses. Such profiles can be shared among the wider staff team supporting the pupil. Recruiting autistic staff can also contribute to a more neuro-affirmative culture, with lived experience offering valuable insight and empathy in fostering inclusive practice among school staff (Pavlopoulou et al., 2022).

**Peer relationships and social connections can be actively supported by staff, where wanted by the young person.** This may involve helping autistic pupils identify peers with shared interests, facilitate introductions, and ensuring access to safe, welcoming spaces for interaction during unstructured times. While structured groups focused on building social communication skills may benefit some pupils, they should only be offered with the informed consent of both the young person and their parent or carer and tailored to individual preferences and needs.

### 6.2 Implications for policymakers

Given the findings of this study, which highlight the limitations within the current education system and the structural foundations underpinning the SEND framework, there is a critical need for ideological change at the macro-level (Bronfenbrenner, 2005). This begins with a reframing of governmental priorities from the top down. The study makes clear that emotional wellbeing and psychological safety must be elevated to central priorities in education policy, aligning with key theoretical frameworks (Maslow, 1954; Ryan & Deci, 2000). At present, the messages communicated by government policy continue to reflect traditionalist, behaviourist, and neoliberal values, where compliance and academic performance are inherently prioritised over wellbeing.

Policymakers must begin to challenge and move away from these entrenched paradigms, instead **placing emotional and relational principles at the forefront of education policy and reform**. This would include a fundamental reconsideration of how success is defined and measured in schools. Rather than focusing predominantly on academic attainment and performance data, there should be a shift towards recognising and valuing wellbeing and inclusion as indicators of success. These alternative measures must be meaningfully developed and fully integrated into national accountability systems, including frameworks such as Ofsted. Current frameworks continue to emphasise measurable outcomes like attendance and attainment, inadvertently encouraging rigid and exclusionary practices (Bagley, 2023; Ball, 2003), with the marketisation of education fostering a culture of performativity, in which data-driven outcomes are prioritised over pupil wellbeing.

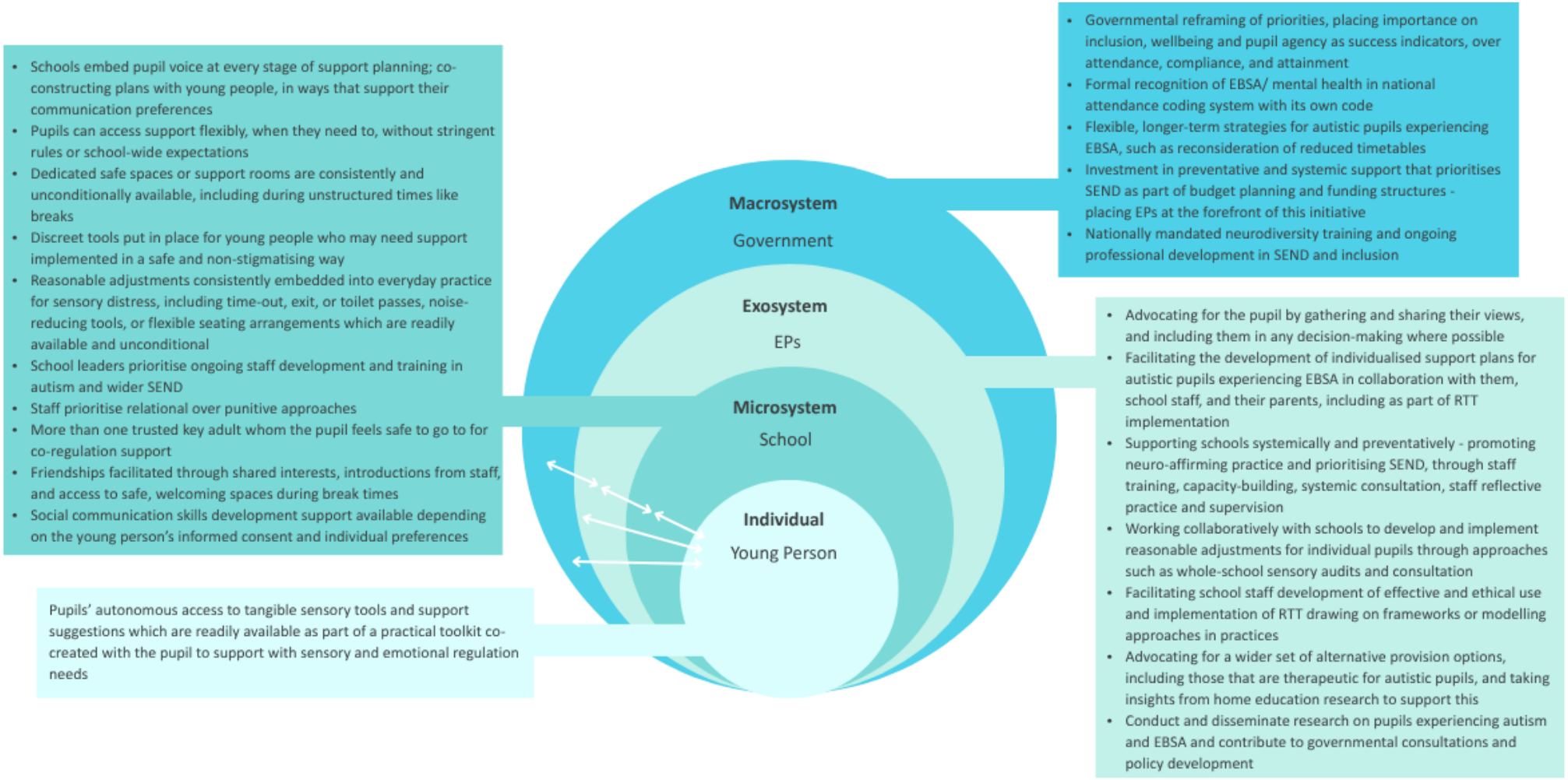
Aligned with this rethinking of success is the need **to reconsider how pupil attendance is legislated and monitored**. Current policy frameworks offer limited flexibility and fail to adequately account for the complex emotional, social and sensory needs of autistic pupils experiencing EBSA. For many, the experience of sustained masking in environments that are not suited to their needs can lead to autistic burnout, making full-time school attendance unmanageable. In such cases, recovery requires more than short-term adjustments, it calls for longer-term, flexible, and compassionate approaches to attendance. Reduced timetables, often framed by current policy as temporary interventions, should be reconceptualised as valid and, where necessary, ongoing strategies that enable young people to maintain connection with education while protecting their mental health. Crucially, such strategies must be situated within a broader recognition that the problem often lies not with the pupil, but within school environments that are misaligned with their needs. Policy must reflect this shift in perspective by alleviating the pressures placed on families and schools to conform to rigid models of attendance that fail to account for autistic pupils' lived experiences (Square Peg, 2022).

Moreover, **EBSA and mental-health related school absence should be formally recognised within the national attendance coding system with its own code**. As reflected in the voices of young people in this study, absence is often experienced by autistic young people not as a choice, but as a response to overwhelming anxiety to environmental barriers; young people often feel they *can't* go to school, rather than *won't*. Recognising this distinction is vital to shifting away from punitive approaches, such as fining parents for non-attendance, which place undue strain on families and contribute to a culture of blame (Not Fine in School, 2020). A more compassionate and context-sensitive policy framework would validate these experiences and foster an approach to attendance grounded in understanding, flexibility, and support, rather than compliance and enforcement.

To enable such a shift, **governmental investment in preventative and systemic support is critical**. Adequate and sustained funding should be prioritised to bolster SEND structures within mainstream schools. This includes resourcing and staffing levels that are sufficient to meet the growing complexity of need, as well as ensuring access to specialist knowledge. Nationally mandated neurodiversity training and ongoing professional development in SEND and inclusion for all school staff should form a core part of this strategy, helping to build a culture of understanding and belonging for neurodivergent pupils. Importantly, such training must go beyond awareness-raising and be embedded in day-to-day practice. EPs should be deployed as key agents in this preventative agenda, with more of their time dedicated to capacity-building, staff development, and whole-school consultation. Shifting EP involvement away from a predominantly statutory assessment role would enable their expertise to be used in supporting systemic change, promoting inclusive values, and developing sustainable models of early intervention. In this way, EPs can contribute meaningfully to the creation of school environments that are proactive, not reactive; environments where autistic pupils experiencing EBSA are genuinely supported to thrive. Figure 7 presents a visual mapping of all identified implications onto Bronfenbrenner's Ecological Systems Model (2005).

**Figure 7.**

*Implications for practice and policy applied to Bronfenbrenner's Ecological Systems Model (2005).*



### 6.3 Dissemination

Given this study's emphasis on the voices of autistic pupils and their parents, the findings will be shared in accessible and meaningful ways. Participants will receive a summary of key themes, with opportunities for follow-up discussions where appropriate. The researcher also intends to produce an accessible guide for education professionals based on the study's findings consisting of guiding principles and practical suggestions for supporting autistic young people in mainstream secondary schools.

The research will also be presented to my local authority Educational Psychology Service as part of ongoing professional development, and to trainee EPs and doctoral tutors through a UCL conference event. These sessions will provide opportunities for critical reflection and discussion around the practical implications of the findings for Educational Psychology practice.

To extend the study's reach, I intend to publish the findings in a peer-reviewed journal within educational psychology or inclusive education. This will support wider dissemination to academic, professional, and policy audiences concerned with autism, attendance, and inclusive practice.

Additionally, the research may be submitted to the House of Commons Library to inform parliamentary discussions on EBSA. I will remain alert to calls for evidence from government consultations and relevant policy bodies, and plan to share findings at national events such as the DECP conference to further engage professionals and policy-makers seeking research-informed strategies for supporting neurodivergent pupils.

### 6.4 Strengths and limitations

A key strength of this study lies in its multi-method, participatory, and dyadic design, which together supported co-constructed and reflexive exploration throughout data collection (Williams & Hanke, 2007). Conducting separate interviews with autistic young people and their parents allowed both individual and interconnected perspectives to be captured, enabling a layered understanding of EBSA support without conflating distinct voices. Parental accounts contributed valuable insight into systemic and structural dynamics, complementing the lived experiences shared by young people. The use of the adapted Ideal School activity strengthened the approach by enabling autistic participants to express their views in accessible and personally meaningful ways, while supporting real-time clarification, deeper reflection, and individual communication preferences.

Aligned with the SEND Code of Practice (DfE, 2015), the study upheld a clear commitment to valuing and amplifying the voices of autistic pupils and their families, generating insights directly relevant to those supporting pupils experiencing EBSA. To enhance transparency and rigour (Lincoln & Guba, 1985), I engaged in ongoing reflexive practice throughout the research process, including maintaining a reflexive journal and participating in regular critical supervision, including with peers.

Alongside its methodological strengths, the study also presents limitations that warrant consideration. Despite a geographically diverse sample, made possible by the virtual accessibility of interviews and social media recruitment, the relatively small and demographically homogeneous sample limits the transferability of findings, with most participants identifying as White British and all parent participants being mothers. This sample reflected the demographic composition of the online communities through which recruitment occurred.

In a small number of cases, young people chose to have a parent present during their interview, a decision made to support their comfort, in line with ethical considerations. While this facilitated participation, parents occasionally offered prompts or suggestions informed by their familiarity with their child's experiences. This may have subtly shaped the direction or depth of some responses, reflecting a relational complexity in real-world data generation. However, in line with Reflexive Thematic Analysis, the interview process remained flexible and responsive to these dynamics, valuing the richness of participants' accounts over rigid adherence to a structured schedule (Braun & Clarke, 2022).

Finally, participants' perceptions of the AV1 robot were shaped through video elicitation rather than direct engagement. While the use of a standardised video, particularly within a virtual research context, helped to ensure consistency and accessibility across participants, participants' views were limited to interpretive insights into its perceived potential rather than perceived lived experience. As suggested by previous research, studies involving direct interaction with AV1 may yield more ecologically valid insights into its usability and impact (Lee et al., 2017; Winkle et al., 2020). Further directions for future research are outlined below.

### 6.5 Future research

This study contributes to understanding how autistic pupils experiencing EBSA perceive support and intervention within an educational system facing significant and ongoing pressures. However, as policy, funding priorities, and societal attitudes toward neurodiversity continue to evolve (DfE, 2024b;

Schuck et al., 2024), ongoing research is needed to ensure support strategies remain responsive and grounded in the lived realities of autistic young people experiencing EBSA.

Expanding the range of perspectives included in EBSA research would be beneficial. Incorporating the views from Local Authority and wider educational professionals, could offer deeper insights into how interventions are implemented in practice, including RTT, and the systemic influences that enable or hinder effective responses to EBSA, particularly in the context of increasing demands and limited resources in schools (Children's Commissioner, 2022a).

Comparative studies across mainstream, specialist, and alternative provision settings are also warranted. These contexts differ significantly in ethos, flexibility, resource allocation, and staff expertise, all of which may shape both the delivery and perceived effectiveness of support (Thambirajah et al., 2008), including that of RTT. Research into home education models, including learning communities, could offer valuable insights into alternative approaches that better meet the needs of autistic pupils, particularly in relation to Self-Determination Theory (Deci & Ryan, 2000), and how their practices compare to those used in conventional educational settings.

Further research is also required to investigate the use and implementation of RTT in greater depth. While the current study mitigated positive selection bias, future empirical investigation involving active users, particularly autistic pupils with EBSA, would also enhance ecological validity. Comparative studies examining differences across gender, as well as between those with and without prior experience of RTT, could provide valuable insights. In particular, research involving autistic participants with more entrenched non-attendance or chronic experiences of EBSA than the participants in this study, may yield different perceptions on the feasibility and emotional impact of RTT when school attendance feels entirely inaccessible (Winkle et al., 2020).

### 6.6 Concluding reflections – foundations for support

A central thread running through the findings of this study was the need for strong, foundational support mechanisms as the basis for genuine inclusion of autistic pupils experiencing EBSA. Rather than calling for specific interventions or programmes, young people and their parents consistently described the importance of calm and safe environments, consistent and trusting relationships, and the freedom to make choices about how they learn and self-regulate. These were regarded as essential. Wellbeing emerged as the primary concern, taking precedence over academic progress, with participants' experiences suggesting that learning is unlikely to occur in the absence of psychological safety. This

principle also extended to perceptions of the AV1 device. What mattered most was that it, like any form of support, be introduced collaboratively, with flexibility and consent central to its use. These insights carry important implications. For policymakers, they reinforce the need to embed wellbeing and pupil autonomy within attendance and SEND frameworks, ensuring these principles are prioritised and protected within statutory guidance. More broadly, they serve as a powerful reminder to all stakeholders that the most effective support begins by meeting basic human needs and fostering the relational, emotional, and environmental conditions in which autistic young people feel safe, heard, respected, and genuinely included.

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# Appendices

## Appendix 1 - Details of systematic literature search

### *Review Question 1: What are the views and experiences of secondary-age autistic pupils in relation to school?*

**Subject headings and keyword search terms used for review question 1**

| Subject headings | Keyword search terms | Justification |
|---|---|---|
| 1 "Autism*" | "Autism*" OR "Autism Spectrum*" OR "autistic*" OR "neurodivergent" OR "asperger*" | The terminology around Autism has evolved over the years and several different terms continue to be used today. |
| AND | | |
| 2 "Experience*" | "Experience*" OR "perception*" OR "perspective*" OR "view*" OR "voice*" OR "opinion*" OR "attitude*" | Young people' experiences and views are prioritised in the search over statistics. |
| AND | | |
| 3 "School*" | "School*" OR "school setting*" OR "school experience*" OR "education*" | The review is concerned with autistic pupils' experiences of school. |

**Inclusion and exclusion criteria for review question 1**

| Inclusion | Exclusion | Justification |
|---|---|---|
| 1. Country<br>UK-based studies. | Research conducted in other countries. | Studies should be relevant to UK educational systems and contexts. |
| 2. Publication date | Publications prior to 2000. | Recent and current practice will be prioritised in this study. |

| | | |
|---|---|---|
| Studies published between 2000-2025. | | |
| 3. Participants<br>Publications that primarily report the voices of secondary-age autistic pupils (studies including parental and professional voice as well as pupil voice are included). | Studies including pupils who do not identify as autistic and are not of secondary-age. | The current study aims to elicit the voices of autistic secondary-age pupils, in accordance with the increasing need to obtain pupil voice as guided by the SEND Code of Practice (2015). |
| 4. Qualitative data<br>Studies that involve qualitative data collection and analysis. | Studies where quantitative methodology and data analysis are used only. | Studies should be in accordance with the researcher's epistemology which focuses on gaining the constructions of participants. |
| 5. Research type<br>The inclusion of peer-reviewed journal articles and doctoral dissertations / theses. | Opinion pieces, blogs, books or magazines. | Peer-review processes and doctoral level research requirements are important for ensuring that published research is of high quality. |

***Review Question 2: How do autistic secondary-age pupils experiencing EBSA perceive and experience the support they receive?***

**Subject headings and keyword search terms used for review question 2**

| Subject headings | Keyword search terms | Justification |
|---|---|---|
| 1 "Emotionally-based school*" | "emotional based school*" OR "emotionally-related school*" OR "anxiety-based school*" OR "emotional barriers to school*" OR "barriers to school*" OR "school refus*" OR "persistent non-attend*" OR "school non-attend*" OR "extended non- | The literature indicates that there are numerous terms used interchangeably for emotional barriers to school attendance. |

| | | |
|---|---|---|
| | attend*" OR "school phobia" OR "avoidance" OR "absen*" OR "EBSNA" OR "EBSA" OR "ABSA" OR "ERSA" OR "PSNA" | |
| AND | | |
| 2 "Autism*" | "Autism Spectrum*" OR "autistic*" OR "neurodivergent" OR "asperger*" | The terminology around Autism has evolved over the years and several different terms continue to be used today. |
| AND | | |
| 3 "Support*" | "intervention" OR "provision" OR "assistance" OR "supportive*" OR "help" OR "aid" OR "professional support" | Support in the broadest sense can be referred to in many different ways. |

**Inclusion and exclusion criteria for review question 2**

| Inclusion | Exclusion | Justification |
|---|---|---|
| 1. Country<br>UK-based studies. | Research conducted in other countries. | Studies should be relevant to UK educational systems and contexts. |
| 2. Publication date<br>Studies published between 2000-2025. | Publications prior to 2000. | Recent and current practice will be prioritised in this study. |

| | | |
|---|---|---|
| 3. Participants<br>Publications that primarily report the voices of secondary-age autistic pupils experiencing attendance challenges about the support they've received in mainstream schools (studies including parental and professional voice as well as pupil voice are included). | Studies including pupils experiencing attendance challenges who do not identify as autistic, are not of secondary-age and have not had any support for their attendance. | The current study aims to elicit the voices of autistic secondary-age pupils, in accordance with the increasing need to obtain pupil voice as guided by the SEND Code of Practice (2015). |
| 4. Qualitative data<br>Studies that involve qualitative data collection and analysis. | Studies where quantitative methodology and data analysis are used only. | Studies should be in accordance with the researcher's epistemology which focuses on gaining the constructions of participants. |
| 5. Research type<br>The inclusion of peer-reviewed journal articles and doctoral dissertations / theses. | Opinion pieces, blogs, books or magazines. | Peer-review processes and doctoral level research requirements are important for ensuring that published research is of high quality. |

***Review Question 3: How do users (i.e., young people, parents, and school staff) perceive the use of robotic telepresence avatars in schools?***

**Subject headings and keyword search terms used for review question 3**

| Subject headings | Keyword search terms | Justification |
|---|---|---|
| 1 "Telepresenc*" | "Telepresenc*" OR "Teleconferenc*" OR "Videoconferenc*" | There are different ways of referring to telepresence technology in the literature. |
| AND | | |

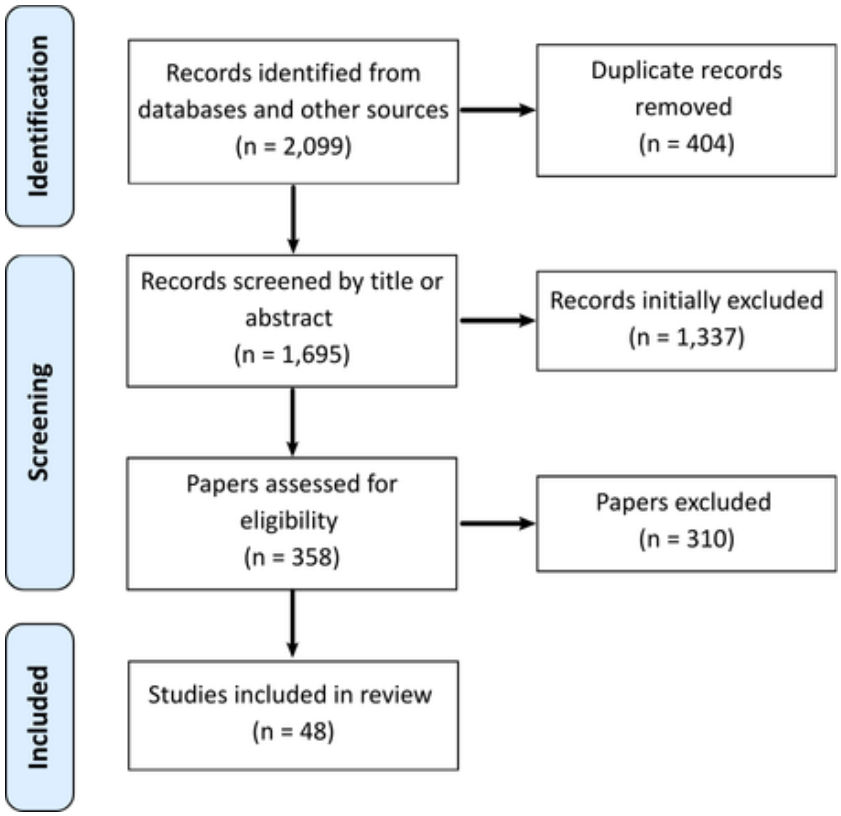
| | | |
|---|---|---|
| 2 “Robot*” | “Robot*” OR “Avatar*” OR “AV1*” | Many different terms can be used to describe the devices connecting pupils to their school education. |
| AND | | |
| 3 “School*” | “School*” OR “Classroom*” OR “Educat*” OR “Pupil*” OR “Student*” | The search is concerned with the use of telepresence robotics in schools. |

**Inclusion and exclusion criteria for review question 3**

| Inclusion | Exclusion | Justification |
|---|---|---|
| 1. Publication date<br>Studies published between 2015-2025. | Publications prior to 2015. | Studies published in the last 10 years will be prioritised as this timeframe is in line with the influx of use in telepresence technology. |
| 2. Direct views<br>Studies that gather the direct views of users (i.e., young people, parents or professionals). | Studies that do not elicit the direct views of participants. | The aims of the present study are to elicit the views of young people and their parents, reflecting the need for increased pupil and parental voice (DfE, 2015) on matters that directly concern them. |
| 3. Reason for technology<br>Studies that use robotic telepresence technology with young people for physical and/ or emotional health reasons. | Studies where the technology is used to support the whole class. | Reasons for pupil non-attendance are complex and specific to the young person and thus this study focuses on support at the individual level. There is a dearth of literature for the use of robotic telepresence technology for emotional reasons and so studies based on physical health reasons have been included. |

| | | |
|---|---|---|
| 4. Qualitative data<br>Studies that involve qualitative data collection and analysis. | Studies where quantitative methodology and data analysis are used only. | Studies should be in accordance with the researcher's epistemology which focuses on gaining the constructions of participants. |
| 5. Research type<br>The inclusion of peer-reviewed journals and doctoral dissertation/ theses only. | Opinion pieces, blogs, books or magazines. | Peer-review processes and doctoral level research requirements are important for ensuring that published research is of high quality. |

***Preferred Reporting Items for Systematic Reviews and Analyses (PRISMA) flow diagram for three systematic literature searches which included searches of databases and other sources***



***Worked example of using the Critical Appraisal Skills Programme (CASP) for the critical appraisal of qualitative studies included within the review***

<table>
<tr><td colspan="3">Paper for appraisal: “He’s shouting so loud but nobody’s hearing him”: A multi-informant study of autistic pupils’ experiences of school non-attendance and exclusion.<br><br>Gray et al. (2023)</td></tr>
<tr><td>1. Was there a clear statement of the aims of the research?</td><td>Yes</td><td rowspan="10">Comments: Aims were clearly set out at the beginning. The study sought to examine autistic young peoples’ school non-attendance and exclusion experiences from multiple perspectives. It wanted to examine the full range of proximal and distal barriers to ensuring the school attendance and the inclusion of autistic pupils.<br><br>Semi-structured interviews employed to collect data seemed appropriate for the aims. PCP approaches used including Life Grid and Ideal School.<br><br>The study design is not explicit in the paper. However, the methodology adopted appeared most appropriate to address the RQs.<br><br>Ethical considerations highlighted clearly, including how child consent was viewed as a “continuous process” throughout the study.<br><br>Reflexive Thematic Analysis was employed for rigorous data analysis with three researchers meeting multiple times to discuss codes and decide on final themes and subthemes.<br><br>A clear statement of findings is provided and highlights the importance of examining the broader context in which autistic pupils are embedded.</td></tr>
<tr><td>0. Is a qualitative methodology appropriate?</td><td>Yes</td></tr>
<tr><td>0. Was the research design appropriate to address the aims of the research?</td><td>Yes</td></tr>
<tr><td>0. Was the recruitment strategy appropriate to the aims of the research?</td><td>Yes</td></tr>
<tr><td>0. Was the data collected in a way that addressed the research issue?</td><td>Yes</td></tr>
<tr><td>0. Has the relationship between researcher and participants been adequately considered?</td><td>Yes</td></tr>
<tr><td>0. Have ethical issues been taken into consideration?</td><td>Yes</td></tr>
<tr><td>0. Was the data analysis sufficiently rigorous?</td><td>Yes</td></tr>
<tr><td>0. Is there a clear statement of findings?</td><td>Yes</td></tr>
<tr><td>0. How valuable is the research?</td><td>Valuable</td></tr>
</table>

***Overview of include studies in the literature review after applying the inclusion and exclusion criteria, and the CASP***

| **Review question 1** | | | | | | |
|---|---|---|---|---|---|---|
| | **UK-based** | **Published 2000-2025** | **Secondary-age autistic pupils' voices prioritised** | **Qualitative component of study** | **Peer reviewed journal article or doctoral dissertation / thesis** | **Methodological insights** |
| **1. Colat-Parros (2023)** | / | / | / | / | / | -Semi-structured interviews, some conducted virtually and some wrote responses to interview questions<br>-Use of PCP – Ideal School<br>-RTA<br>-Female pupil pps only, one specified as non-binary<br>-Multi-informant (five parents) |
| **2. Cook et al. (2018)** | / | / | / | / | / | Semi-structured interviews<br>-Female pps only<br>-Thematic analysis |
| **3. Dillon et al (2016)** | / | / | / | / | / | -Self report questionnaires and semi-structured interviews<br>-Content analysis |
| **4. Goodall (2018)** | / | / | / | / | / | -Semi-structured interviews<br>-Participatory methods e.g., 'design your own school', 'me at school' activities, diamond ranking etc.<br>-RTA |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | -Imbalance of male to female pps (10 boys to 2 girls) |
| **5. Goodall & Mackenzie (2019)** | / | / | / | / | / | -Semi-structured interviews<br>-Participatory methods e.g., 'design your own school', 'me at school' activities, diamond ranking etc.<br>-2 pps only<br>-Female pps only |
| **6. Gray et al., (2023)** | / | / | / | / | / | -Semi-structured interviews<br>-Life Grid method<br>-The ideal school<br>-RTA |
| **7. Hebron & Bond (2017)** | / | / | / | / | / | -Semi-structured interviews<br>-Thematic analysis<br>-3 students out of the 9 students who participated in total were of primary school age and thus their input was not coded per inclusion/exclusion criteria of the present study. |
| **8. Hebron & Humphrey (2014)** | / | / | / | / | / | -Semi-structured interviews<br>-IPA<br>-22 pps<br>-Imbalance of male to female pps (19 boys to 3 girls) |
| **9. Higgins (2022)** | / | / | / | / | / | -Semi-structured interviews<br>-The ideal school |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | -RTA<br>-Mainstream and alternative provision pps included |
| **10. Hummerstone & Parsons (2021)** | / | / | / | / | / | -Semi-structured interviews<br>-Photo elicitation<br>-Thematic analysis<br>-Imbalance of male to female pps (11 boys and 1 girl) |
| **11. Humphrey & Lewis (2008)** | / | / | / | / | / | -Semi-structured interviews<br>-Pupil diaries<br>-Pupil drawings<br>-IPA<br>-20 pps with Asperger's Syndrome' diagnosis<br>-Gender not disclosed |
| **12. Menzies (2013)** | / | / | / | / | / | -Semi-structured interviews<br>-Participatory methods<br>-4 autistic pps only |
| **13. Moyse (2020)** | / | / | / | / | / | -Semi-structured interviews<br>-Participatory methods, including the Ideal School, Life charts.<br>-Thematic analysis |
| **14. Myles et al. (2019)** | / | / | / | / | / | -Semi-structured interviews<br>-RTA<br>-8 female pps only |
| **15. Neal & Frederickson, (2016)** | / | / | / | / | / | Semi-structured interviews<br>-RTA<br>-Age of pps not disclosed – based on mainstream secondary pupils<br>-Imbalance of male to female pps (5 boys to 1 girl) |

| | | | | | | |
|---|---|---|---|---|---|---|
| **16. Sproston et al. (2017)** | / | / | / | / | / | -Semi-structured interviews<br>-8 Parent-child dyads, only pupils who had been excluded from mainstream secondary<br>-RTA |
| **17. Tobias (2009)** | / | / | / | / | / | -Focus groups<br>-Year 9 and 11 students only, and parents<br>-IPA |
| **18. Tomlinson et al. (2021)** | / | / | / | / | / | -Semi-structured interviews<br>-Photo elicitation, diary accounts, art-based methods<br>-RTA<br>-3 female case studies |

| **Review question 2** | | | | | | |
|---|---|---|---|---|---|---|
| | **UK-based** | **Published 2000-2025** | **Secondary-age autistic pupils' voices prioritised** | **Qualitative component of study** | **Peer reviewed journal article or doctoral dissertation / thesis** | **Methodological insights** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **1. Higgins (2022)** | / | / | / | / | / | -Semi-structured interviews<br>-Use of PCP – Ideal School<br>-RTA |
| **2. O'Hagan et al. (2022)** | / | / | / | / | / | -Semi-structured interviews<br>-RTA<br>-8 female pps only |

| **Review question 3** | | | | | |
|---|---|---|---|---|---|
| | **Published 2015-2025** | **Direct views of users sought** | **RTT used with young people for physical and / or emotional health** | **Peer reviewed journal article or doctoral dissertation / thesis** | **Methodological relevance (qualitative)** |
| **1. Ahumada-Newhart & Eccles (2020)** | / | / | / | / | / |
| **2. Ahumada-Newhart & Olson (2019)** | / | / | / | / | / |
| **3. Chubb et al. (2021)** | / | / | / | / | / |
| **4. Fletcher et al. (2023)** | / | / | / | / | / |

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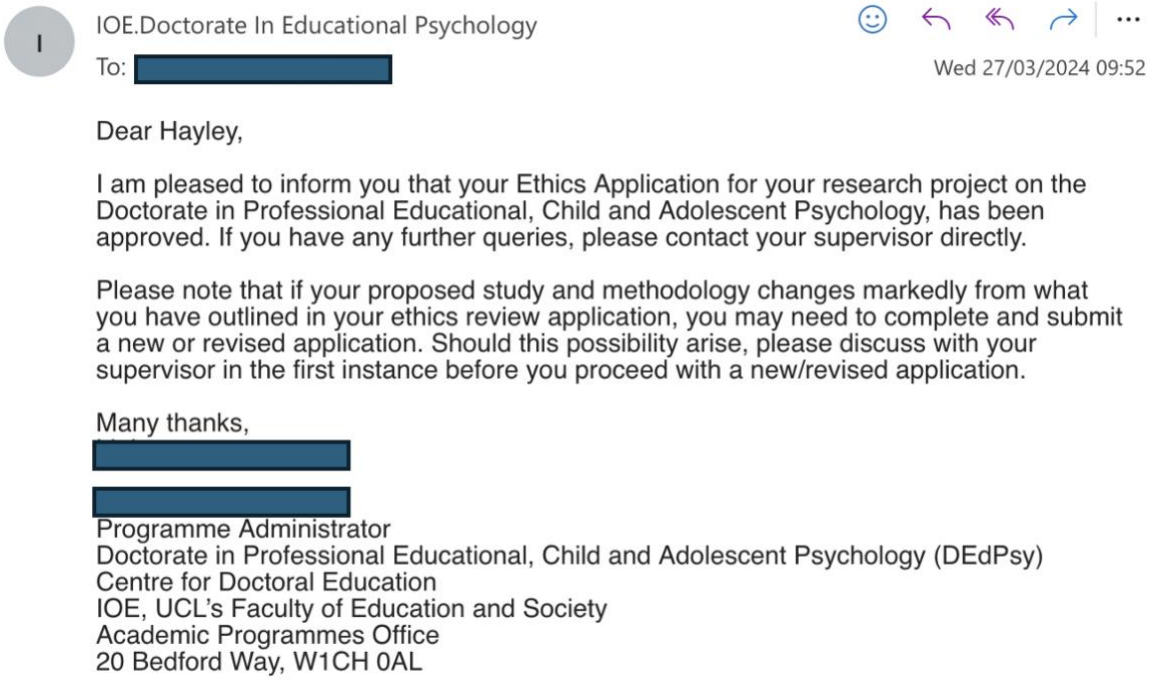
|---|---|---|---|---|---|
| **5. Henriks (2017)** | / | / | / | / | / |
| **6. Johannessen (2024)** | / | / | / | / | / |
| **7. Johannessen et al. (2023b)** | / | / | / | / | / |
| **8. Lister (2020)** | / | / | / | / | / |
| **9. Newhart et al. (2016)** | / | / | / | / | / |
| **10. Newhart & Olsen (2017)** | / | / | / | / | / |
| **11. Nordtug & Haldar (2024)** | / | / | / | / | / |
| **12. Nordtug & Johannessen (2023)** | / | / | / | / | / |
| **13. Spoden & Ema (2024)** | / | / | / | / | / |
| **14. Weibel et al. (2020)** | / | / | / | / | / |
| **15. Weibel et al. (2023b)** | / | / | / | / | / |
| **16. Weibel et al. (2024)** | / | / | / | / | / |
| **17. Weibel et al. (2023a)** | / | / | / | / | / |

## Appendix 2 – Ethics information



I

IOE.Doctorate In Educational Psychology

To: [redacted]

Wed 27/03/2024 09:52

Dear Hayley,

I am pleased to inform you that your Ethics Application for your research project on the Doctorate in Professional Educational, Child and Adolescent Psychology, has been approved. If you have any further queries, please contact your supervisor directly.

Please note that if your proposed study and methodology changes markedly from what you have outlined in your ethics review application, you may need to complete and submit a new or revised application. Should this possibility arise, please discuss with your supervisor in the first instance before you proceed with a new/revised application.

Many thanks,

[redacted]

[redacted]

Programme Administrator
Doctorate in Professional Educational, Child and Adolescent Psychology (DEdPsy)
Centre for Doctoral Education
IOE, UCL's Faculty of Education and Society
Academic Programmes Office
20 Bedford Way, W1CH 0AL

Hi,

Thank you for your application to register with the Data Protection Office. Every form of processing personal data carries a certain number of risks for the data subjects (means any person whose personal data is being collected, held or processed). It is therefore important to consider the risks prior to processing, and to take appropriate measures to limit them. Assessing the likelihood of any risk is part of the job of a DPIA.

A DPIA is required whenever processing is likely to result in a high risk to the rights and freedoms of individuals. However, in cases where it is not clear whether a DPIA is strictly mandatory, carrying out a DPIA is still good practice and a useful tool to help data controllers comply with data protection law.

The DPIA also provides evidence that the risks to data subjects have been considered and sufficient measures have been taken to protect those individuals. The DPIA should assess the activity to be carried out against all the principles of data protection and determine whether the processing of personal data is both necessary and proportionate or whether changes to the process or additional controls are required.

By starting a DPIA at the early stages risks and required controls to ensure legal compliance and security can be developed from outset. The earlier a DPIA is completed, the easier it is to address any privacy risks which may be identified.

The level of risk can sometimes be obvious. For example, Will the data be shared with third parties? If so, you will need to provide details including information on the contractual arrangements in place and confirm what due diligence has been carried out.

A DPIA is a live process, so should be periodically reviewed, (or sooner if there is substantial change to the way in which personal data is used or where new risks emerge), by the staff member (s) or team leading or owning, the form.

Conducting a DPIA will not eliminate all risk but should help you minimise and determine whether the level of risk is acceptable for a given circumstance.

If you decide that a DPIA is not necessary, then I think it would be sensible to record the supporting rationale for making this decision.

With this action in mind, I am pleased to confirm that this project is now registered under, reference No **Z6364106/2024/03/67 social research** in line with UCL's Data Protection Policy.

You may quote this reference on your Ethics Application Form, or any other related forms.

You should make arrangements as early as possible for the secure long-term storage of your data, taking into account any specific requirements of your department or funder. UCL staff and PhD students can use the UCL Research Data Repository while undergraduate and Masters students may want to ask their supervisors about the Open Education Repository. The Research Data Management team can be contacted at lib-researchsupport@ucl.ac.uk.

UCL staff can contact the Records Office records.office@ucl.ac.uk to arrange for the long-term secure storage of their research records.

For data protection enquiries, please contact the data protection team at data-protection@ucl.ac.uk

For ethics enquiries, please contact the ethics team at ethics@ucl.ac.uk.

**Please remember...**

Always use the latest forms from UCL's DPO website – earlier versions should no longer be submitted.

Regards,

[redacted]

Data Protection & Freedom of Information Administrator & Chief Web Editor
Data Protection Office
Office of General Counsel
University College London

**Appendix 3 – Recruitment poster**

Institute of Education

UCL

# Calling all parents and carers of a child who struggles to attend secondary school

## Your views could help improve school attendance support plans

**Information about the research**

I aim to gather the views of parents and their children who find it difficult to attend school. I'm interested in how they are supported, what they find helpful, and what could be better to help improve support plans. It will involve an online meeting with you and your child.

**You and your child can participate if your child:**

- Finds it difficult to attend school
- Has social communication needs and / or Autism (no diagnosis required)
- Is in a mainstream secondary school

**If you'd like to get involved, share your interest by scanning here...**

**Or contact Hayley Morgan**
**hayley.morgan.19@ucl.ac.uk**

## Appendix 4 – Research Expression of Interest Form

UCL
IOE – FACULTY OF EDUCATION AND SOCIETY

### Research Information Sheet

My name is Hayley Morgan and I am a Trainee Educational Psychologist in my third year of training on the Doctorate in Professional Educational, Child and Adolescent Psychology at the UCL Institute of Education. This research is being supervised by Dr Mel Romualdez (Assistant Professor of Psychology, Autism Researcher, and Research Supervisor) and Dr Joanna Stanbridge (Senior Educational and Child Psychologist, University Tutor, and Research Supervisor). I would like to invite you and your child to take part in this research. Please take your time to read the following information carefully.

**Why is this research important?**

Emotionally Based School Non-Attendance (EBSNA) is a broad umbrella term used to describe a group of children and young people who have persistent difficulty attending school due to anxiety and emotional factors, often resulting in prolonged absences from school. It is vital that professionals working with pupils with school attendance difficulties provide timely and appropriate support to mitigate the potential short and long-term effects on the child's social, emotional, and educational development. There is a lack of research exploring the effective support and intervention practices in mainstream schools to support students, and particularly students who have social communication needs and / or a diagnosis of Autism. While there has been significant progress in professional knowledge of EBSNA in school-aged pupils, finding the best support methods and practices are vital for EBSNA prevention and intervention. Findings from this research will be used to inform Local Authority, Educational Psychology, and school initiatives to support EBSNA.

**The aims of the research are to:**

- To empower and give young people with social communication and / or Autism a voice in helping Local Authorities (LAs), Educational Psychology Services (EPSs), and schools with the future planning of EBSNA support.
- To explore parents' views of EBSNA support for young people who have social communication needs and / or Autism.
- To understand whether robotic telepresence avatar interventions would be helpful for supporting young people with social communication and / or Autism experiencing EBSNA in mainstream secondary schools.

**Do you and your child have to take part?**

You and your child's participation are voluntary. If you would like to take part, please indicate your interest via the expression of interest form at the end of this information sheet.

**What would participation involve?**

- Interview with your child

I will meet with your child over one interview via a virtual meeting platform of your child's choice. The interview will last between 30-45 minutes, where I will ask them about their views and experiences of their EBSNA support. I will also ask them about their views of the robotic telepresence avatars, i.e., AV1 robots, which are being increasingly used to support young people who experience EBSNA. Your child and I will firstly play a game to build rapport and help them feel more comfortable talking with me. The interview process is designed to be collaborative and just like a conversation, which I hope your child will enjoy.

- Interview with you

I will meet with you over one interview via a virtual meeting platform of your choice. The interview will last for approximately 30-45 minutes, and I will ask you questions about your child's EBSNA and the support they receive, as well as your views on robotic telepresence technology, such as the AV1 robot intervention, to support young people experiencing EBSNA / school attendance challenges.

You and your child will be given opportunities to ask questions at any time. To ensure that I capture everything accurately, I will audio-record you and your child's individual interviews for transcription purposes only.

**Research process**

There are no foreseen discomforts, although I recognise that some research participants recalling certain events may cause some discomfort. You and your child will be reminded before your respective interviews that you can share as much or as little as you would like with me, and that you can take a break or skip any questions you don't want to answer. If any support is required during or after the individual interview, you and your child can let me know at any point, and I will end the interview immediately.

The individual interviews will be audio-recorded for data analysis. The audio-recording will be stored on a secure, password-protected and encrypted drive. Once each interview has been completed, the audio-recordings will be analysed and typed up word for word and then the audio will be deleted according to the university's guidelines. You and your child will have access to a summary of the report on the completion of this research should you request this.

**Rights to withdraw**

Participation is entirely voluntary, and you have the right to withdraw yourself or your child for any reason, at any point. Your child will also be able to withdraw from the study at any time. Data can be withdrawn up until the point of analysis (approximately one month after data collection).

**Confidentiality and anonymity**

To ensure confidentiality and anonymity, the research data will not include any identifiable information that could be linked directly to you, your child, or their school. You and your child will be allocated a unique code identifier each e.g., Young Person A, and all references to yours and their data will use your unique code identifiers only. All information will be treated with strict confidentiality. If this research is published, there will be no information identified with you, your child, and their school. It is important to make you aware that there are limitations to confidentiality and anonymity. In exceptional circumstances related to safeguarding and child protection (for example, your child discloses information that suggests they are at risk of physical harm), I must follow government guidelines related to safeguarding and/or child protection.

**Data protection privacy notice**

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk. This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information from research studies can be found in our 'general' privacy notice for participants in research studies here. The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices. The lawful basis that will be used to process any personal details: 'Public task' for personal data and 'Research purposes' for special category data. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

**What will happen to the results of the research study?**

A summary report of the findings will be written up and shared with you and your child. If you and your child were recruited through your child's school, a copy of the report will also be shared with the school, unless you request otherwise. The findings will also be written up as a research report, as part of the researcher's university course requirement, and this may be published. There will be no identifiable information included which is linked to you, your child or their school in any written reports or publications.

**Any questions?**

If you have further questions or concerns about the research, please contact me in the first instance at hayley.morgan.19@ucl.ac.uk. If I am unable to support you, one of my supervisors may be able to assist;
Dr Mel Romualdez, at [redacted] or Dr Joanna Stanbridge, at [redacted]

*Note: This research is unrelated to the work conducted by the Educational Psychology Service (EPS) in your Local Authority. Participation in this study is entirely voluntary and will not affect your child's support from the EPS (if any). Personal information gathered from this research will not be shared with the service.*

Thank you for reading this information sheet and for consideration of this research study.

**If you are interested in participating and sharing your views, please fill in the Expression of Interest Form below.**

**Expression of Interest Form**

If you would like to participate in the research, please indicate your interest by leaving your name and contact details below.

Hayley will be in touch to arrange a convenient time to speak with you further about you and your child's eligibility to participate.

*Please note that, by leaving your contact details, you are not giving your consent to participate in the research.*

◯ Please check here if you consent to the researcher contacting you.

Name

Email address

Telephone number

→

**Appendix 5 – Information sheets**

Institute of Education

UCL

**RESEARCH INFORMATION SHEET**

My name is Hayley Morgan and I am a Trainee Educational Psychologist in my third year of training on the Doctorate in Professional Educational, Child and Adolescent Psychology at the UCL Institute of Education. This research is being supervised by Dr Mel Romualdez (Assistant Professor of Psychology, Autism Researcher, and Research Supervisor) and Dr Joanna Stanbridge (Senior Educational and Child Psychologist, University Tutor, and Research Supervisor). I would like to invite you and your child to take part in this research. Please take your time to read the following information carefully.

**Why is this research important?**

Emotionally Based School Non-Attendance (EBSNA) is a broad umbrella term used to describe a group of children and young people who have persistent difficulty attending school due to anxiety and emotional factors, often resulting in prolonged absences from school. It is vital that professionals working with pupils with school attendance difficulties provide timely and appropriate support to mitigate the potential short and long-term effects on the child's social, emotional, and educational development. There is a lack of research exploring the effective support and intervention practices in mainstream schools to support students, and particularly students who have social communication needs and / or a diagnosis of Autism. While there has been significant progress in professional knowledge of EBSNA in school-aged pupils, finding the best support methods and practices are vital for EBSNA prevention and intervention. Findings from this research will be used to inform Local Authority, Educational Psychology, and school initiatives to support EBSNA.

**The aims of the research are to:**

- To empower and give young people with social communication and / or Autism a voice in helping Local Authorities (LAs), Educational Psychology Services (EPSs), and schools with the future planning of EBSNA support.
- To explore parents' views of EBSNA support for young people who have social communication needs and / or Autism.
- To understand whether robotic telepresence avatar interventions would be helpful for supporting young people with social communication and / or Autism experiencing EBSNA in mainstream secondary schools.

**Do you and your child have to take part?**

You and your child's participation are entirely voluntary.

**What would participation involve?**

- Interview with your child

I will meet with your child over one interview via a virtual meeting platform of your child's choice. The interview will last between 30-45 minutes, where I will ask them about their views and experiences of their EBSNA support. I will also ask them about their views of the robotic telepresence avatars, i.e., AV1 robots, which are being increasingly used to support young people who experience EBSNA. Your child and I will firstly play a game to build rapport and help them feel more comfortable talking with me. The interview process is designed to be collaborative and just like a conversation, which I hope your child will enjoy.

- Interview with you

I will meet with you over one interview via a virtual meeting platform of your choice. The interview will last for approximately 30-45 minutes, and I will ask you questions about your child's EBSNA and the support they receive, as well as your views on robotic telepresence technology, such as the AV1 robot intervention, to support young people experiencing EBSNA / school attendance challenges.

You and your child will be given opportunities to ask questions at any time. To ensure that I capture everything accurately, I will audio-record you and your child's individual interviews for transcription purposes only.

**Research process**

There are no foreseen discomforts, although I recognise that some research participants recalling certain events may cause some discomfort. You and your child will be reminded before your respective interviews that you can share as much or as little as you would like with me, and that you can take a break or skip any questions you don't want to answer. If any support is required during or after the individual interview, you and your child can let me know at any point, and I will end the interview immediately.

The individual interviews will be audio-recorded for data analysis. The audio-recording will be stored on a secure, password-protected and encrypted drive. Once each interview has been completed, the audio-recordings will be analysed and typed up word for word and then the

audio will be deleted according to the university's guidelines. You and your child will have access to a summary of the report on the completion of this research should you request this.

**Rights to withdraw**

Participation is entirely voluntary, and you have the right to withdraw yourself or your child for any reason, at any point. Your child will also be able to withdraw from the study at any time. Data can be withdrawn up until the point of analysis (approximately one month after data collection).

**Confidentiality and anonymity**

To ensure confidentiality and anonymity, the research data will not include any identifiable information that could be linked directly to you, your child, or their school. You and your child will be allocated a unique code identifier each e.g., Young Person A, and all references to yours and their data will use your unique code identifiers only. All information will be treated with strict confidentiality. If this research is published, there will be no information identified with you, your child, and their school. It is important to make you aware that there are limitations to confidentiality and anonymity. In exceptional circumstances related to safeguarding and child protection (for example, your child discloses information that suggests they are at risk of physical harm), I must follow government guidelines related to safeguarding and/or child protection.

**Data protection privacy notice**

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk. This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information from research studies can be found in our 'general' privacy notice for participants in research studies here. The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices. The lawful basis that will be used to process any personal details: 'Public task' for personal data and 'Research purposes' for special category data. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

**What will happen to the results of the research study?**

A summary report of the findings will be written up and shared with you, your child, and their school. The findings will also be written up as a research report, as part of the researcher's university course requirement, and this may be published. There will be no identifiable information included which is linked to you, your child or their school in any written reports or publications.

**Any questions?**

If you have further questions or concerns about the research, please contact me in the first instance at hayley.morgan.19@ucl.ac.uk. If I am unable to support you, one of my supervisors may be able to assist;

Dr Mel Romualdez, at [redacted] or Dr Joanna Stanbridge, at [redacted]

*Note: This research is unrelated to the work conducted by the Educational Psychology Service (EPS) in your Local Authority. Participation in this study is entirely voluntary and will not affect your child's support from the EPS (if any). Personal information gathered from this research will not be shared with the service.*

Thank you for reading this information sheet and for consideration of this research study.

## Information Sheet for Young Person

Hi my name is Hayley and I am a Trainee Educational Psychologist.

You might be wondering what a Trainee Educational Psychologist does? Basically, I work with young people just like you to help them learn and understand what they like or do not like at school.

You can use a computer and watch an introduction video. If you have any questions about the research and wish to speak with me, please let your parents know and we can meet all together virtually.

**Why are we meeting up?**

I am interested to learn more about you and your school experiences. I know that attending school has been difficult sometimes; therefore, I want to give you a chance to tell me how you feel and what has been helpful or not so helpful for you. Your sharing will allow me and your school to know how to best support pupils like you in the future.

**What are we going to do?**

We will meet once, and the interview will last for about 30-45 minutes. We will do some fun activities together (including games) and talk about your school experiences.

**How will our discussion be recorded?**

I will audio-record the interview. Everything you share with me is important to me, and I hope I do not miss out on anything!

I will delete the recording after I have typed out everything you have said on my computer. The recording will only be listened to by me, and it will be kept in a safe, password-protected drive.

The data that I write up, including your audio and attendance data, will be kept for 10 years, based on my university requirement.

**Confidentiality and anonymity**

To make sure that your identity is kept private, I will use a code e.g., Student A, to refer to anything you tell me in the interview and any of your data that I write up. All information you

share with me will be kept confidential, which means that I won't share this with anyone, unless you tell me something that suggests that you or someone else is at risk of harm, in which case, this information will need to be passed on to your parents and relevant professionals in line with safeguarding guidelines.

**Data Protection Privacy Notice**

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk.

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information from research studies can be found in our 'general' privacy notice for participants in research studies here.

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices. The lawful basis that will be used to process any personal details: 'Public task' for personal data and 'Research purposes' for special category data.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

**Do I have to take part?**

It is entirely up to you to decide to take part or not.

I will ask your parents and your school as well, but you should make up your own mind! Making your own choice is something you should always do. If you wish to be part of my research, **please sign the consent form.**

You also get to choose which virtual meeting platform you'd prefer to meet me on (e.g., Zoom / MS Teams) and whether you would like to meet with your camera switched on or switched off.

**What if I change my mind?**

We all change our mind sometimes, so if you wish to withdraw from the study, all you need to do is to let me know! You can withdraw your data until the point of analysis (approximately one month after taking part). At any point in the session, you can ask me questions. Also, if you do not wish to answer any questions I ask, just let me know.

**What will I get from taking part?**

You will get a chance to share your views and ideas if you participate in this research. Whatever you share is valuable as it will help schools plan and support students like you better in the future.

**Any questions?**

If you have any questions, feel free to email me at hayley.morgan.19@ucl.ac.uk

*Note: This research is unrelated to any work previously conducted by the Educational Psychology Service (EPS). Participation in this study is entirely voluntary and will not affect your support from the EPS (if any). Personal information gathered from this research will not be shared with the service.*

**Appendix 6 – Consent forms**

IOE – FACULTY OF EDUCATION AND SOCIETY

**Parent/ Carer Consent Form**

Please ensure you have read the Research Information Sheet before agreeing to participate.

*Please note that you are also providing consent on behalf of your child in the first instance.*

Your child can access a separate downloadable information sheet for them here: Information Sheet for Young Person. Once consent is received from you, your child will be asked to complete their own consent form.

Please check the boxes below if you agree:

| | I agree |
|---|---|
| I have read and understood the information about the research, as provided by the information sheet | ○ |
| I voluntarily agree to my child and I participating in the research | ○ |
| I have been able to ask the researcher any questions regarding the research and about mine and my child's participation | ○ |
| I fully understand that I can withdraw my child and I's data up until the point of data analysis (approximately one month after data collection) without explanation, and there will be no further implications | ○ |
| I understand that my child and I's identities will be kept anonymous, and all reference to my child and I's data will be associated with unique code identifiers | ○ |
| I understand that my child and I's interviews will be audio-recorded, and that this data will only be accessed by the researcher | ○ |

| | |
|---|---|
| I understand that the researcher will delete the audio-recording once the data has been transcribed. The transcription data will be anonymised and unidentifiable, and if the research is published, this data will be held for 10 years in accordance with the UCL Institute of Education's requirements | ○ |
| I have been given information on the UCL Institute of Education's data protection privacy notice | ○ |

○ Please check here if you consent to participate in the research

○ Please check here if you consent for your child to participate in the research

Please choose a preferred meeting platform:

○ Zoom

○ Microsoft Teams

Your Name

Your Child's Name

Your Child's Year Group

Is there anything Hayley should know before meeting with you and your child? (optional)

**Please provide your contact details below. After submitting this consent form, Hayley will be in touch to arrange a convenient meeting date for you and your child.**

**If you have already provided your contact details before, please do so again so Hayley can connect you with any previous correspondence.**

Email address

Telephone number

Thank you for completing the form.

Please press the blue arrow on the bottom right of the form to submit your answers.

→

IOE – FACULTY OF EDUCATION AND SOCIETY

**Young Person Consent Form**

If you have read the Information Sheet, please tick the boxes next to each statement you agree with:

| | I agree |
|---|---|
| I have read the information sheet and understand what the research is about. | ○ |
| I understand that I can change my mind about taking part any time before, during or after the interview, up until the point of data analysis. All I need to do is to let Hayley know that I don't want to participate anymore. | ○ |
| I understand that my identity will be kept a secret, and Hayley will use a code, e.g., Student A, to refer to anything I say in the interview. | ○ |
| I understand that the session will be audio-recorded so that Hayley does not miss anything I say because everything I say is important to Hayley. | ○ |
| I understand that my recording will only be listened to by Hayley and will be deleted after Hayley has written up the data. | ○ |
| I understand that the data Hayley writes up will be kept for 10 years, based on Hayley's university's requirement. | ○ |

| | |
|---|---|
| I have been given a chance to ask any questions about the research. I will also be allowed to ask questions before, during, and after the interview. I can ask Hayley by telephone or email her. | ○ |
| I have read the data protection privacy notice stated in the information sheet. | ○ |

○ Please check here if you consent to participate in the research

Your Name (Young Person)

Thank you for completing this form.

Please press the blue arrow on the bottom right of the form to submit your answers.

→

**Appendix 7 – The Ideal School Pre-Interview Resource**

## The 'Ideal School' Activity

### First step

During the interview, I will ask you to imagine the *worst school you can think of*. While imagining this school, we'll talk about **5 different aspects of it** (e.g., Classroom). I will ask you some questions about these aspects to understand your thoughts better. I have given some examples of what I might ask for each of the 5 aspects below.


**Worst School**

**1. Classroom**

- How it looks and sounds
- Your desk
- The other students

**2. Outside**

- How it looks and sounds
- How you enter
- Who you first see

**3. Adults**

- What they do/ say
- How they help, if at all
- How they look and talk

**4. Students**

- What they do/ say
- Your friendship group
- How they look and talk

**5. Me**

- How you feel there
- What others think of you/ say about you
- What you're doing

### Second step

Next, I will ask you to imagine the *best school you can think of*. We will again talk about the same **5 aspects** as before. The examples below are the same because I will ask you similar questions about each of the 5 aspects, but this time, it's about your best school.


**Best School**

**1. Classroom**

- How it looks and sounds
- Your desk
- The other students

**2. Outside**

- How it looks and sounds
- How you enter
- Who you first see

**3. Adults**

- What they do/ say
- How they help, if at all
- How they look and talk

**4. Students**

- What they do/ say
- Your friendship group
- How they look and talk

**5. Me**

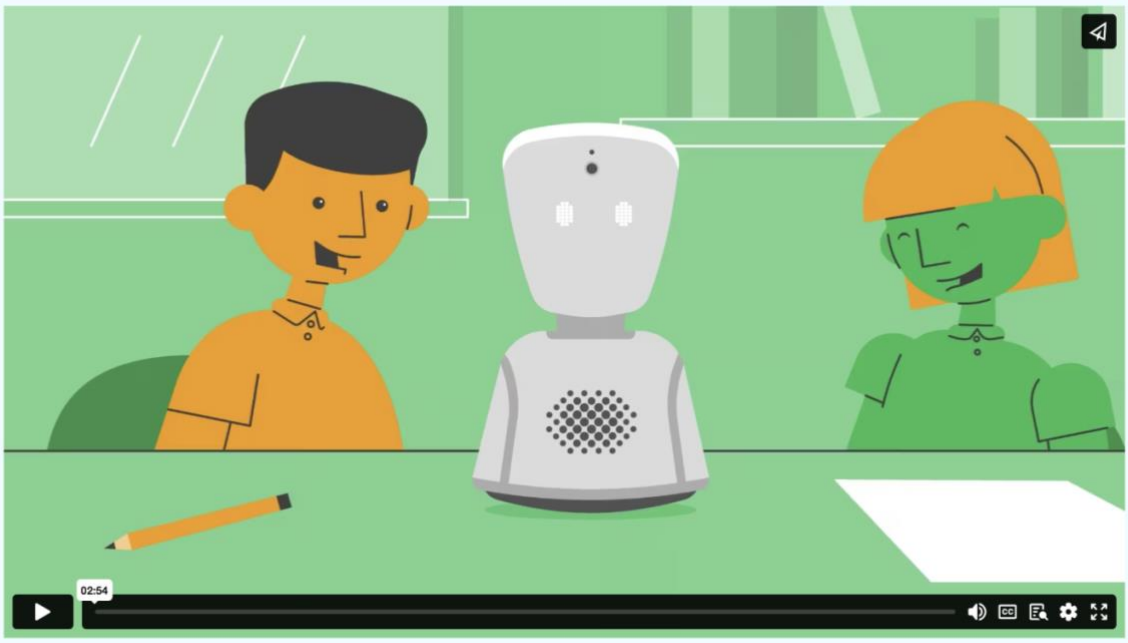
- How you feel there
- What others think of you/ say about you
- What you're doing

### What you need to know

- You don't need to prepare anything in advance
- There are no right or wrong answers
- If any part feels unclear, you can ask me for help during the intervew

**Appendix 8 – AV1 No Isolation video clip**

***Screen capture of the AV1 video clip from the No Isolation website***




***Hyperlink to the video clip***

**https://www.noisolation.com/av1/about-av1**

**Appendix 9 – Young Person Interview Plan**

**Appendix 10 – All About Me Page**

My name is...

# HAYLEY MORGAN

and I am a Trainee Educational Psychologist

## MY JOB & RESEARCH

I work with children and young people, like you, as I'm interested in their views and ideas, and the ways they feel they can be supported better.

I use this information to work with lots of different people to try and make the changes you would like to see.

## WHAT I ENJOY

- The beach
- Travelling
- Dogs and cats
- Dancing
- Curry
- Arty stuff

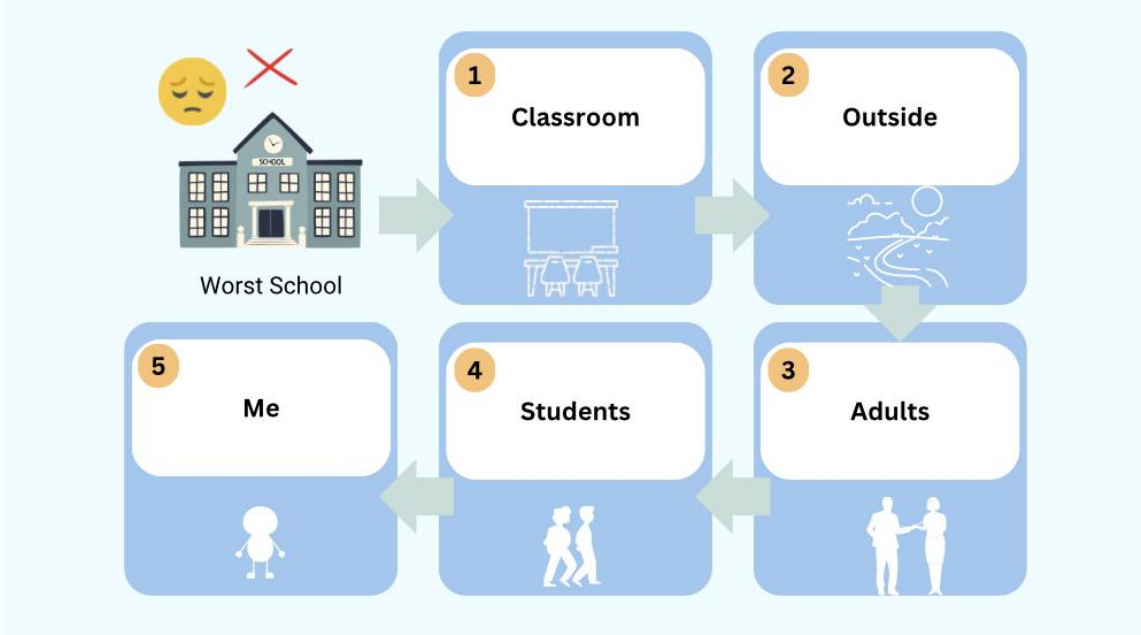
## WHAT WE WILL DO

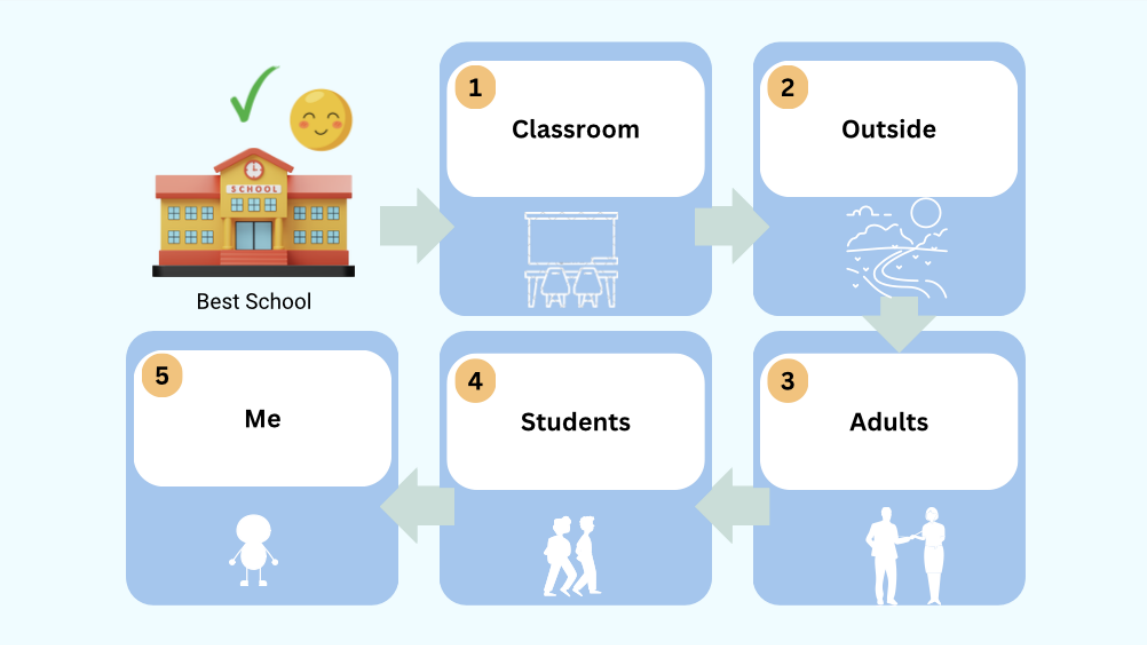
- Play a game
- Talk about and / or draw the school you would like to go to and not like to go to
- Watch a short video about support
- Think about your current school and what could make it more supportive for you

## WHAT I'D LIKE TO GET BETTER AT

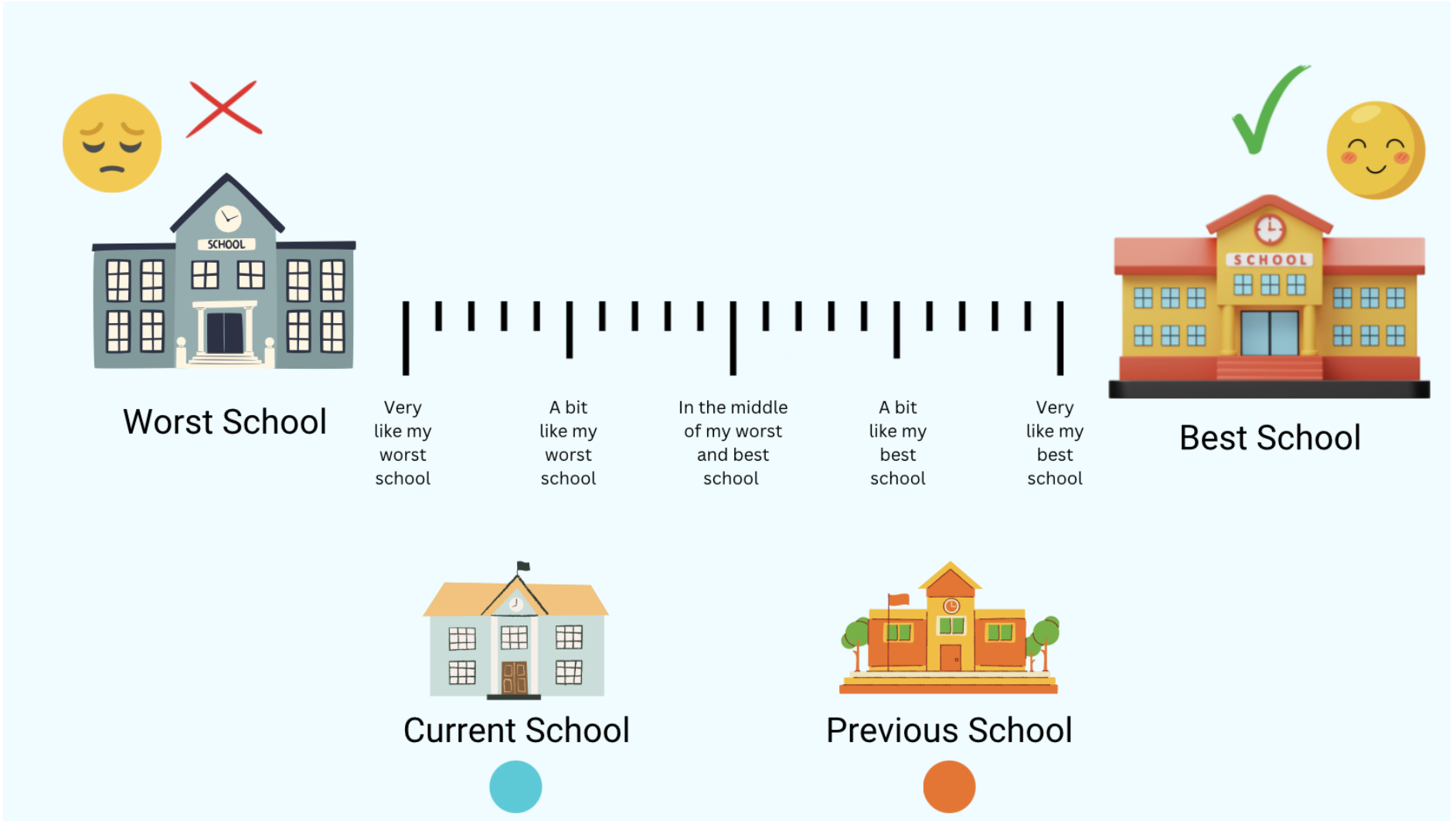
- Baking
- Yoga
- Exercise
- Learning new languages

**Appendix 11 – On-screen visual prompts for the Ideal School activity**



**Appendix 12 – The Ideal School scaling task**



**Appendix 13 – Reflexive Thematic Analysis (RTA) process**

Below depicts an excerpt of a coded transcript with the corresponding themes/ subthemes that were produced prior to further refining theme names. Firstly, initial codes were generated (RTA step 2), before constructing themes by collating codes (RTA step 3), and then reviewing potential themes and subthemes in relation to the coded data (RTA step 4). Initial codes from the young people's interviews were colour-coded into four code sub-categories (Non-ideal school; Ideal school; Support-specific; and AV1 codes) to help differentiate codes. The below table depicts an excerpt of RTA steps 2 and 4.

| YPE Transcript Passage | Initial code(s) | Corresponding themes / subthemes |
|---|---|---|
| Interviewer<br>Yeah… okay, so now we've discussed your worst school. We're now going to have a think about your best school. So on the other side of the spectrum… what would your best school be like generally… if you could describe it in just a couple of words or one word, what would it be like? | | |
| Young Person E<br>Yeah. It would be… it would be like free. It would be freeing… productive, and it would be like just a nice environment to be in… | Freedom linked to ability to complete academic work | Autonomy as foundational to learning |
| Interviewer<br>Yeah… | | |
| Young Person E<br>And that doesn't, that doesn't mean like a big change in the school like format of how you learn, but it would be a change in like the system's expectations... | System-level shift in expectations needed<br><br>Expectations as an influence on the enjoyment and learning in school | Rethinking school systems |
| Interviewer<br>Hmm… okay, so a lot there really… like freeing, it would be a much nicer environment and- | | |
| Young Person E<br>Yeah, it's more peaceful, more kind of productive… | Peaceful school environment, opposite to stressful worst school environment<br><br>Productivity enhanced with positive environment | Safe sensory environment |
| Interviewer<br>More peaceful and productive… and would that be reflected in the classroom as well? | | |
| Young Person E | Importance of positive student-teacher relationship | Relationships are key to |

Yeah, I think so in ways like… the students would be- the teacher and the student would have a much nicer relationship because the student isn't under such unhealthy pressure… I think it- like everything would be just so much healthier between the student and the teacher… therefore, like work is more productive and it's not seen as such a horrible thing to do… and that starts with teachers being nicer, of course, but teachers have the room to be nicer when there isn't so much pressure on them to… to be, you know, whatever… to be teaching like a small room of like 40 kids who are all struggling… who are all like very anxious and distressed.

Interviewer
Hmm… yeah, so it would basically be a classroom that is just a lot happier and a lot nicer and the relationships between the students and teachers are better…?

Young Person E
A lot nicer and the students are in there and they want to learn, and they know what they're doing and they feel more, more free…

Interviewer
Yeah, yeah…

Young Person E
And they have more control over what they're doing… not to an unhealthy extent, because that wouldn't be good either…

Interviewer
What kind of control would they have?

Young Person E
Like… what they did, how much they did of it, but there'd be… there'd be a form of honesty from them… because they'd be along with the idea that they're there to learn and they want to learn… but they know when they've been pushed to their limit or when they're at their limit… and when they should take a breath… and stop…

Interviewer
Yeah… so they'd have more control in the sense that they knew when they had kind of reached a sort of limit and could-

Young Person E
Yeah, yeah… I don't mean that too… specifically, but I'm just trying to get the point across that there'd be just a much nicer

with this as a prerequisite for academic work (Self-Determination Theory - Relatedness)

Relieving the unhealthy pressure on teachers as a starting point for change in the student-teacher relationship

Learning motivation related to competence and a sense of autonomy (Self-Determination Theory -Competence & autonomy)

Sense of control and autonomy

Pupils' trusted to know their own limits; having greater autonomy and self-awareness

Wellbeing as a greater priority / focus than learning

Positive interaction between students, teachers and the school environment / system as key; learning is secondary

school engagement

Systemic barriers to feeling supported

Autonomy as foundational to learning

Relationships are key to school engagement

vibe…between the students and the teachers and the system… I'm making it sound really academic as well... I'm not like super into the whole like learning thing and that you're there to learn, and that kind of s***, but like I just- I believe in it… I don't, I don't really like school. I don't like the idea of it, but if it had to be there and it would- it was the best it could be… then this is what it would be…

The table below depicts an example of how data were coded to create themes and subthemes as part of RTA step 3.

| **Codes** | **Subtheme** | **Theme** |
|---|---|---|
| YPA: Unhelpful staff - broken trust, failure of support systems (p1)<br>YPA: Adults talking lots - inattentiveness to students (p1)<br>YPA: Adults talking to each other - ignoring students (p1)<br>YPA: Lack of relational continuity - lack of dependable adult attachment figure (p2)<br>YPA: Kind and sweet staff; emotionally attuned & nurturing authority (p1)<br>YPB: Lack of student-teacher relationship (p2)<br>YPB: Negative assumptions from staff (p2)<br>YPB: Gentle adult presence (p3)<br>YPB: Relational security (p3)<br>YPB: Relationship with staff - shared interest and connection (p3)<br>YPC: Helpful adults - adults are available and supportive (p4)<br>YPC: Adult authority as punitive (p4)<br>YPD: Lack of open communication with staff (p5)<br>YPD: Overly strict and absurd reasons for detention from staff (p5)<br>YPD: Overemphasis on behaviour management (p5)<br>YPD: Supportive teachers (p5)<br>YPD: Staff not yelling - calm, non-punitive approach (p5)<br>YPD: Preference for fair and respectful teachers (p5)<br>YPD: Lack of stability in adult relationships - need for a trusted figure in school (p6)<br>YPD: Desire for more key adult approach (p6)<br>YPD: Desire for consistent adult support (p6)<br>YPD: Preference for strong teacher-student relationships in interventions and targeted support (p6)<br>YPD: Positive experience with 1:1 support (p5)<br>YPE: Negative perception of teachers and lack of trust (p6)<br>YPE: Perceived unfairness from teaching staff (p6)<br>YPE: Punitive teachers causing relational ruptures (p6)<br>YPE: Disempowerment in student-teacher relationship (p6)<br>YPE: Teacher-student relationship affecting engagement (p6)<br>YPE: Teachers lack emotional warmth (p6)<br>YPE: Frustration with punitive discipline from teachers (p6)<br>YPE: Emotionally unpredictable authority figures (p7)<br>YPE: Adult behaviour undermining trust (p7) | Student-teacher relationships are important | Relationships are key to school engagement |

| | | |
|---|---|---|
| YPE: Inappropriate power dynamic (p7)<br>YPE: Importance of positive student-teacher relationship with this as a prerequisite for academic work (Self-Determination Theory -Relatedness) (p8)<br>YPE: Positive interaction between students, teachers and the school environment / system as key; learning is secondary (p8)<br>YPE: Teacher-student relational repair (p8)<br>YPE: Trusting relationships as foundation for engagement (p8)<br>YPE: Positive interaction between students, teachers and the school environment / system as key; learning is secondary (p8)<br>YPE: Flattening the hierarchy between teachers and students (p8)<br>YPE: Mentorship over authority (p8)<br>YPE: Support as tone, not just intervention - smiling, laughing teachers = accessible, safe adults (p8)<br>YPE: Call for empathy in teacher-student interactions (p8)<br>YPE: Staff try to help, but it doesn't reach root causes (p8)<br>YPE: Teacher warmth and playfulness desired (p8)<br>YPF: Verbally unkind teachers (p9)<br>YPF: Poor communication from teachers (p9)<br>YPF: Confusion and disconnection of staff (p9)<br>YPF: Teacher disengagement and neglect (p9)<br>YPF: Staff disregard for care responsibilities (p9)<br>YPF: Caring, responsive adults (p9)<br>YPF: Ideal student-teacher relationships (p9)<br>YPF: Desire for emotional support from staff (p9)<br>YPF: Need for empathy from adults (p9)<br>YPF: Adults as collaborative problem-solvers (p9)<br>YPF: Perceived effectiveness of support (p9)<br>YPF: Relationship-based intervention is meaningful (p9)<br>YPF: Adults as support figures (p9)<br>YPF: Value of emotional literacy staff (p9)<br>YPF: Staff more understanding (p9)<br>YPF: Desire for emotional support from staff (p9)<br>YPF: Need for empathy from adults (p9)<br>PD: Teacher understanding - connection with neurodivergence (p5)<br>PD: Call for attachment-led approach - connection before correction (p7)<br>PD: Power of the adult-student relationship on academic motivation (p7)<br>PE: Dehumanised student-teacher relationships - emotional disengagement (p7) | | |
| YPA: Calm peers - safe social atmosphere (p1)<br>YPA: Friendly and approachable students - inclusion and psychological safety (p1)<br>YPA: Constant noise from students - enduring overstimulation (p1)<br>YPA: Loud student behaviour - loss of control (p1)<br>YPA: Student groups perceived as threatening - social fear, peer-driven anxiety (p1)<br>YPA: Physical conflicts between peers - unsafe social groups (p1)<br>YPB: Peer relationships as emotional security (p3)<br>YPB: Meaningful peer connection (p3)<br>YPC: Friends are short-tempered (p4)<br>YPC: Fragile peer relationships (p4) | Peer relationships are supportive | Relationships are key to school engagement |

| | | |
|---|---|---|
| YPC: Intense peer behaviour at current school - peer environment as dysregulating (p4)<br>YPD: Disruptive, chaotic pupils in school (p4)<br>YPD: Seating arrangement with disruptive peers (p5)<br>YPD: Immaturity of students (p5)<br>YPD: Peer behaviour frustration (p5)<br>YPD: Rejection of certain peer behaviours (p5)<br>YPD: Disappointment in peer relationships (p5)<br>YPD: Friendship instability (p5)<br>YPD: Avoidance of school due to peer dynamics (p5)<br>YPD: Emotional distress due to peers (p5)<br>YPD: Peer social comparison (p5)<br>YPD: Importance of trust and long-term relationships (p6)<br>YPD: Longevity as a measure of true friendships (p6)<br>YPE: Negative influence of peers on school (p6)<br>YPE: Toxic peer culture (p7)<br>YPE: Predatory student culture (p7)<br>YPE: Staff try to help, but it doesn't reach root causes (p8)<br>YPF: Social dynamics as core stressors (p9)<br>YPF: Loud, disruptive peers (p9)<br>YPF: Unsafe peer environment (p9)<br>YPF: Disruptive peer behaviour (p9)<br>YPF: Peer bullying (p9)<br>YPF: Disrespect toward the teachers (p9)<br>YPF: Absence of threat or bullies (p9)<br>YPF: Peer challenges (p9)<br>YPF: Peer behaviour safer and predictable (p9)<br>PA: Trust as foundation for future learning (p2)<br>PD: Continuity of peer group - the protective role of peer relationships (p5)<br>PD: Low-level peer hostility - microaggressions and toxic peer dynamics (p6)<br>PD: Social stress at breaktimes (p7)<br>PE: Social belonging need despite persistent distress (p7)<br>PE: Social interaction during break times to reduce isolation needed (p9)<br>PE: Clubs and groups can intensify social anxiety in autistic young people (p9)<br>PE: Fear of exclusion shapes social avoidance (p9)<br>PE: Small-scale, scaffolded social inclusion (p9)<br>PE: Structured peer matching - low pressure social contact (p9) | | |

**Appendix 14 – Young person interview schedule**

## Young Person's Interview Schedule

**Introduction**

The following key reminders were shared with the participants at the outset:

- **Audio Recording:** The interview will be audio-recorded so I can remember everything you tell me.
- **Length and Breaks:** The session will last approximately 45 minutes, including a brief icebreaker, but you can take a break at any time if you'd like to.
- **Voluntary Participation:** You don't have to answer any questions you're not comfortable with, and you don't need to give a reason for this.
- **Safeguarding:** If you say something that makes me concerned that you or someone else is at risk of harm, I have a duty to share this information with someone who can help.
- **Right to Withdraw:** You can withdraw from the interview at any time, whether before, during, or after the session, up until the point when the recording is analysed.

**Icebreaker**

To help young people feel more relaxed and comfortable at the start of the interview, a brief icebreaker was included, with a choice of two simple online games (Tic-Tac-Toe or Connect 4) or a low-pressure conversational activity (Question-Spinner). This was designed to build rapport and reduce any anxiety before beginning the interview.

**The Ideal School Activity**

The Ideal School activity encouraged young people to imagine and describe both their 'worst' and 'best' schools. This approach served as a conversational anchor, helping to prime their thinking about support experiences, needs, and preferences. The activity was introduced as follows:

> "*First, I will ask you to think about the kind of school you would not like to go to. This isn't a real school, but rather the worst school you can imagine. After that, I'd like you to think about the kind of school you would like to go to - again, not a real place, but the best school you can imagine."*

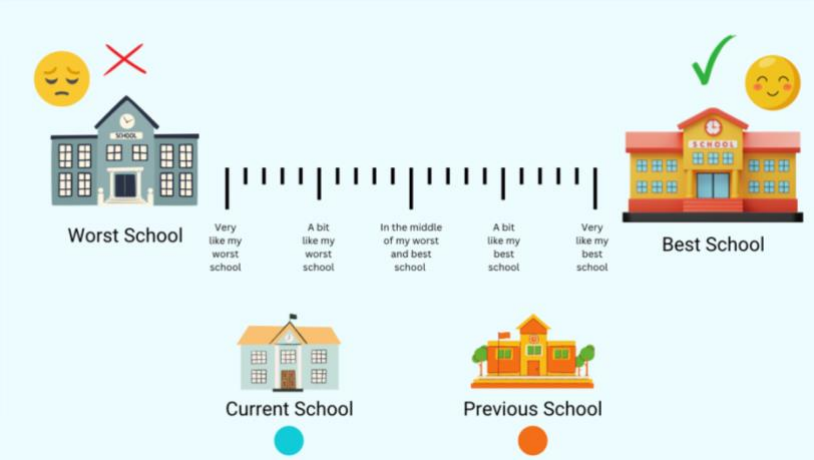
**Prompt Questions**

The interviews used a semi-structured format, allowing for flexibility based on the young person's responses. Typically, the activity included prompts covering the following themes for both the hypothetical 'worst school' and 'best school':

- **The School Environment** – physical spaces, layout, atmosphere
- **The Classroom** – learning environment, design, sensory aspects
- **Outside the School** – first impressions, school entrance, outdoor communal areas
- **The Adults** – teachers, support staff, and their roles
- **The Students** – peers, social dynamics, friendships
- **'Me'** – the young person's place, feeling, and identity within the environment

**Scaling**

The next step is an exploration of the young person's consideration of their current school in relation to their worst and best schools. This was conducted using scaling, which was shared on screen, allowing participants to reflect on their current and past schools.




**Prompt Questions**

A series of open-ended questions were typically asked during this task, including:

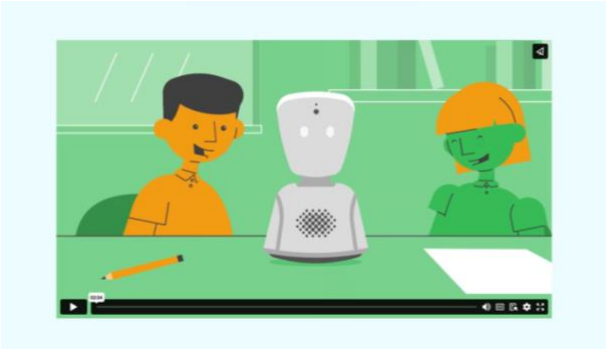
- Where would your current school most likely fit on this scale and why?
- Where would you like your current school to be on this line, in a perfect world?
- If your current school can't get to your best school, what would make it better?
- Where would you put your previous school on the scale and why?
    - Can you tell me about your previous school?
    - What are the differences between your previous school and current school?
- What kind of things does your current school already do to support you?
- Is there anything your current school used to do to support you that it doesn't do anymore?
- How would you like your current school to support you?
- If you could change something about the support you receive at school, what would it be?
- What kind of things do you do outside of school that help and support you?
- Can you tell me some things adults could do to help your current school be more like your best school?

**AV1 Video**

Young people were introduced to the AV1 robot through a short video. This exercise aimed to gather young people's perspectives on this emerging technology, which is increasingly used to support students who find it challenging to attend school in person, whether due to physical health, anxiety, or other reasons. The introduction to this activity typically included the following:

*"Now that we've completed the Ideal School activity, I'd like to show you a short video about new technology that some schools are using to support students who can't physically attend. It's called an AV1 robot, and it's designed to help students stay connected to their education, even when they need to learn from home. Have you heard of AV1 robots before?...*

*I want to hear what you genuinely think about this technology - I don't work for the company that makes them, and I have no connection to the robots or anything to do with them. I've just found that they're being used more and more, and I'm curious about what young people actually think and feel about them."*



**Prompt Questions**
After the video, the questions typically included:

- **First Impressions:**
    - What was your first impression of the robot?
    - What did you like about the robot and why?
    - What didn't you like about the robot and why?
- **Practicality and Use:**
    - What do you think about using robots to support students who struggle to attend school?
    - How do you think this might work for students who have autism?
    - If you were to use the robot, how do you think it could change your experience of school?
    - Would you want to use the robot yourself? Why or why not?
    - If you could design your own robot for school, what would it be like?
    - What kinds of things would you want it to help with?
- **Final Reflections:**
    - Is there anything else you'd like to share about your thoughts on this kind of technology?

## Closing

At the end of each interview, a series of closing questions were included to invite feedback on the overall experience and provide a space for young people to share any final thoughts. This stage also included a careful check-in regarding emotional wellbeing, with appropriate signposting if needed.

- How was this experience for you?
- How have you found completing these activities today?
    - Ideal School activity
    - AV1 video
- What did you like about the interview?
- What did you not like so much about the interview?
- What about this interview could have been better for you?

**Appendix 15 – Parent interview schedule**

**Parent/ Carer Interview Schedule**

**Introduction**

The following key reminders were shared with the participants at the outset:

- **Audio Recording:** The interview will be audio-recorded so I can remember everything you tell me.
- **Length and Breaks:** The session will last approximately 30-45 minutes, but you can take a break at any time if you'd like to.
- **Voluntary Participation:** You don't have to answer any questions you're not comfortable with, and you don't need to give a reason for this.
- **Safeguarding:** If you say something that makes me concerned that you or someone else is at risk of harm, I have a duty to share this information with someone who can help.
- **Right to Withdraw:** You can withdraw from the interview at any time, whether before, during, or after the session, up until the point when the recording is analysed.

**Support**

The questions about support in the semi-structured interviews were not prescribed and were adjusted to the responses from parents/ carers. The general questions asked included:

**Prompt Questions**

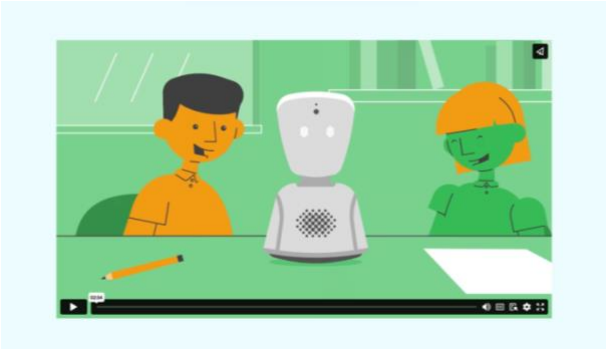
- Can you tell me a bit about your child's school experiences before they started struggling with attendance?
- What do you think contributed to your child's attendance difficulties?
- What support has the school provided to help your child attend?
- How do you feel school staff understand and respond to your child's needs?
- Have you received any support as a family, either from the school or external services?
- What kind of changes have you noticed as a result of the support put in place for your child?
- In your opinion, what support would have made the biggest difference for your child?
- What advice would you give to schools supporting autistic young people experiencing school attendance difficulties?
- What advice would you give to other parents going through similar experiences?
- Is there anything else you would like to share that we haven't covered?

**AV1 Robot**

Parents were introduced to the AV1 robot through a short video, with the aim of exploring their perspectives on this emerging technology. The AV1 robot is increasingly used to support students who find it challenging to attend school in person, whether due to physical health, anxiety, or other reasons. The introduction to this activity typically included the following:

*"I have a few questions to ask you about this new technology being used with children and young people who find it difficult to attend school. It's something I've come across in my research, and I'm genuinely interested in your thoughts on it. Have you heard of AV1 robots before?*

*I want to be clear that I have no connection to the company that makes these robots – I'm just curious about how they're being used and what parents like you think about them. I'll show you a short video about the technology, and then we can have a chat about your thoughts."*



**Prompt Questions**
After the video, the questions typically included:

- **First Impressions:**
  - What was your first impression of the robot?
  - What did you like about the robot and why?
  - What didn't you like about the robot and why?
- **Practicality and Use:**
  - What do you think about using robots to support students who struggle to attend school?
  - How do you think this might work for students who have autism?
  - If you could change anything about this robot, what would it be?
  - In your opinion, how could the robot impact your child's experience of school?
  - Would you be interested in your child using the robot, and if so, why or why not?
  - If you could redesign the robot specifically for your child, what would it be like?
  - What kinds of support or features would you want it to provide for your child?
- **Final Reflections:**
  - Is there anything else you would like to tell me about this?

## Closing

At the end of each interview, closing questions were included to invite feedback on the overall experience and provide a space for parents to share any final thoughts. This stage also included a careful check-in regarding emotional wellbeing, with appropriate signposting if needed.

- How was this experience for you?
- What did you like about the interview?
- What did you not like so much about the interview?
- How could this interview have been made better for you?

## Appendix 16 – Excerpts from reflective journal

**Friday 8th November**

Today's experiences with two participating families have prompted significant reflection on both the practical and psychological dimensions of conducting research with young people and their families. One family requested to reschedule their meeting this morning, which initially felt like a setback. It stirred concerns about their willingness to participate and led me to consider the potential barriers to engagement. I found myself reflecting on the child's yet unsigned consent form, wondering if this hesitation might have contributed to the cancellation. This moment highlighted the complex dynamics of consent and the sensitive nature of inviting young people into research spaces, particularly those who may already feel disconnected or ambivalent about education.

I also completed my first interview today, which provided a surprisingly rich and revealing experience. The child chose not to be on camera and preferred not to speak directly, instead opting to write down their responses, which their parent then read aloud on their behalf. I was initially concerned that this would limit the depth of the interaction, but instead, it revealed a novel way of facilitating communication that felt respectful and empowering. I was struck by how this approach created a sense of safety, allowing the child to engage on their terms. It felt meaningful that the young person chose to stay and participate for the full 60 minutes, a significant stretch given the challenges they likely face in conventional settings.

The parent expressed that it felt "nice" to speak to someone who understood the challenges they were facing, describing the experience as an opportunity to "get things off my chest." This resonated deeply with me, as it reinforced the potential for research interviews to offer a therapeutic space; not just a space for data collection but a forum for being genuinely heard. This blurred the lines between researcher and listener, prompting me to consider the emotional labour and ethical complexities of this dual role. It also reminded me of the potential impact of these conversations, not just on the research but on the lives of those participating.

Reflecting on the feedback from the interview, I was particularly taken by the parent's suggestion to provide written or visual prompts ahead of the meeting; a worksheet or word bank to scaffold the young person's thinking about the Ideal School activity. This idea felt immediately valuable, as it aligns with principles of accessible communication and neurodiversity, offering a more flexible, less pressurised way for young people to articulate their thoughts. It also raised broader considerations about how to reduce cognitive load and anxiety in research contexts, fostering an environment where all participants feel genuinely included and respected.

This experience also made me reflect on the inherent biases in participant recruitment for studies like this. Parents and young people who volunteer for research often do so because they feel particularly passionate about the topic or have had strong, often challenging, experiences within the education system. This raises questions about the representativeness of my sample and the potential for skewed findings, as those with more neutral or less intense views might be less inclined to participate. It's a reminder that the stories we capture in qualitative research are often those of individuals who have felt the strongest impacts, both positive and negative, and that this must be acknowledged when drawing conclusions.

Finally, the conversation today with the parent about systemic barriers reminded me of the broader context within which my research sits. Recent government announcements about increased support for pupils with SEND reflect a growing awareness of these challenges. The Education Secretary's comments on the need for a shift away from purely academic measures towards a broader focus on wellbeing felt particularly relevant. Her remark that the "absence epidemic is the canary in the coal mine for belonging in our country" struck a chord, resonating deeply with the themes emerging in my interviews, that a sense of belonging, safety, and inclusion is at the heart of educational engagement for young people with SEND.

These reflections have deepened my understanding of the nuanced, often emotionally charged nature of this work, reminding me of the profound responsibility I have as a researcher to create spaces where young people and their families feel genuinely heard, valued, and respected.

**Tuesday 12th November**

Today's interview provided another rich and reflective learning experience, reinforcing the importance of flexibility and pre-preparation when working with young people in research contexts. The young person participated well, engaging with the questions as much as they could, but it was clear that they still found it challenging to generate responses on the spot. This echoed the feedback from previous participants about the need for more preparation time for the Ideal School activity, which was also reiterated by the parent at the end of today's interview. She described the activities as "really good" but suggested that providing the young person with the questions in advance would allow for deeper reflection and more considered responses.

Reflecting on this, I have created an Ideal School activity pre-interview resource sheet, including visuals, to share with young people ahead of their interviews. This will act as a cognitive primer, reducing the pressure to produce immediate responses and providing an opportunity for more thoughtful engagement. It also aligns with a strengths-based approach, recognising that many young people with SEND benefit from additional processing time and clear, structured prompts. I hope this adjustment will not only make the interviews more comfortable for participants but also lead to richer, more enriched data.

Interestingly, the young person chose not to have their camera switched on, a recurring theme in my interviews so far. I have found this preference for reduced visual exposure to be quite common, which has made me reflect on the potential sensory and emotional impacts of video communication for autistic young people. It seems that creating a low-pressure, flexible communication environment is crucial, reinforcing the need for adaptable methodologies in this kind of research.

The Question Spinner icebreaker also received positive feedback, with the parent commenting that it helped her son feel more at ease before the more structured questions began. This validated my decision to incorporate light, non-demanding activities at the start of interviews, reinforcing the importance of building rapport and creating a safe space. It's a reminder that even small gestures, like short icebreakers can significantly shape the tone of an interview and influence the comfort levels of young participants.

The parent's feedback also prompted deeper reflection on the interconnected nature of support needs within families experiencing EBSA. During her interview, the parent took the opportunity to express frustration about current government policies and the penalisation of parents for non-attendance,

describing this as a significant source of stress. This reminded me of Bronfenbrenner's ecological systems theory, where a child's experiences are deeply intertwined with the broader contexts in which they exist – including family, community, and societal structures. It highlighted that addressing a young person's needs in isolation may overlook the critical influence of family wellbeing and systemic pressures. This has made me consider future research, which could utilise interview schedules that more explicitly address parental needs for support as well, recognising that a more holistic understanding of the family context could enrich findings.

**Monday 18th November**

I have still not heard back from the participants who previously requested to reschedule their interview, which has led me to reflect on potential barriers to participation and how I might address these for future families. This silence has made me consider the psychological and practical factors that might influence a family's decision to disengage, including the anxiety and unpredictability that can accompany participation in research, particularly for those already navigating the challenges of EBSA.

In reflecting on this, I realised that some of the hesitation might stem from uncertainties about the format of the interview itself. For young people who find verbal communication challenging, the prospect of a live, spoken interview may feel particularly daunting. This has prompted me to reconsider my approach to participant preparation and choice. From now on, I plan to make it explicitly clear in recruitment emails and introductory calls that there are multiple ways to share responses, including writing, typing, or drawing.

This experience has highlighted the importance of empathy and adaptability in participant recruitment and preparation, reinforcing the idea that creating genuinely supportive research spaces involves more than just ethical protocols; it requires a deep understanding of the diverse needs and contexts of the young people I hope to engage.

**Friday 13th December**

This afternoon, I met with a young person for their interview, and the experience provided valuable insights into both the content and structure of my research approach. The young person demonstrated a strong understanding of the broader issues within the education system, particularly around the concept of school belonging, even if they did not use this exact term. It was clear that their reflections touched on the foundational aspects of connection, identity, and inclusion, which are critical to a young person's sense of belonging within school. This made me reflect on the often implicit, yet deeply felt, ways in which young people express their need for acceptance and support within systems that can feel rigid and exclusionary.

Ahead of this interview, I had sent the Ideal School activity information resource a few days in advance, as part of my ongoing effort to reduce cognitive load and provide more processing time for participants. However, the young person had not seen it before our meeting. This raised an important consideration about the consistency and reliability of pre-interview preparation; a reminder that simply providing resources is not always enough to ensure they are engaged with. Despite this, the young person mentioned that they were comfortable being "put on the spot" in this instance, though they also acknowledged that this approach might be challenging for others.

This feedback prompted me to reflect on the framing of my questions. When I asked how I might make the interview process more accessible, the young person suggested that I rephrase certain prompts to be less direct and more open-ended. For instance, instead of asking, "What about that is unhelpful?" which could potentially feel confronting, they recommended a softer approach, like, "Do you think that is unhelpful, and why?" This subtle shift in phrasing not only makes the questions somewhat less intimidating but also provides a clearer, more concrete structure for reflection, reducing the risk of participants feeling put on the spot. Reflecting on this, I recognised that the language of my questions plays a critical role in the overall accessibility of the interviews. This is particularly important when working with neurodivergent young people, for whom precise and predictable language can significantly reduce anxiety and increase engagement. It reinforced the idea that my interviews should not only be structured around the content of what I want to learn, but also around the psychological comfort and cognitive preferences of the young people I am speaking with.

I also considered the importance of ensuring that participants have had the opportunity to genuinely engage with the preparatory materials if they'd like to. This has prompted me to be more proactive in confirming that young people have had the opportunity to review the information resource prior to their interview, perhaps through a gentle reminder or check-in. It also made me reflect on the importance of flexibility; recognising that while some young people may prefer to engage spontaneously, others might benefit significantly from more structured preparation. It has reminded me that the process of creating inclusive, accessible research environments requires ongoing reflection and adaptation, ensuring that the young people I work with feel genuinely heard, respected, and supported.

**Tuesday 18th February**

As I began transcribing my first interview, I became increasingly aware of the significant influence the parent had on the young person's responses. This dynamic, which felt less apparent in the moment, became clearer when listening back to the recording. The parent's voice was noticeably more dominant, often speaking on the young person's behalf, which raises important questions about the authenticity and independence of the data collected in these contexts. On reflection, I recognise that this approach likely provided essential support for the young person, particularly given their evident discomfort with speaking to unfamiliar people. In this sense, the parent's involvement acted as a necessary bridge, enabling the young person to participate in the interview at all. This aligns with my broader aim to reduce anxiety and create an emotionally safe space for young people to share their perspectives. However, it also highlighted the risk that the young person's authentic voice may have been overshadowed or filtered through the parent's perspective, potentially shaping or constraining their responses. This experience has therefore made me more aware of the potential for unconscious influence, where the presence and interpretations of a supportive adult might shape the young person's narrative in ways that are not always immediately obvious. Moving forward, I want to be more attentive to this dynamic, considering ways to gently guide parents towards a more facilitative, rather than directive, role in these interviews.

The transcript revealed that many of the young person's contributions were reduced to single words or simple yes/no answers, which I now see as a missed opportunity for potentially deeper insights. This has prompted me to reflect on the delicate balance between providing supportive structures and preserving the young person's independent voice. It has also reinforced the importance of finding creative

ways to empower young people to share their views directly, without the over-reliance on parental mediation.

Finally, this reflection has reinforced the importance of flexibility in my approach, recognising that while parental support can be invaluable, it also comes with its own set of ethical and methodological challenges. I hope that my ongoing adaptations, including pre-interview materials, rephrased questions, and a stronger emphasis on direct, open-ended prompts, will help to strike a better balance in future interviews, ensuring that the voices of the young people themselves remain at the heart of my research.