

Embracing Neurodiversity in Autism Spectrum Disorder!

Introduction

The diagnosis and identification of autism spectrum disorder (ASD) a learning disability characterised by difficulties with social interaction, communication and cognition with varying symptoms in each person, are critically evaluated in this presentation. The need of early detection is emphasised and the substantial impact of the obstacles that people with ASD must overcome is examined, with particular attention paid to the difficulties brought on by communication impairments and a lack of professional training. These obstacles may make it difficult to interact with others and prevent efficient assistance. Ultimately, the poster examines the Picture Exchange Communication System (PECS) as a suitable and scientifically supported approach, analysing its approach and efficacy in enhancing communication abilities and reducing the impact of these recognised obstacles.

Communication

Children with ASD may struggle to socialise within mainstream classrooms (Honeybourne, 2018). Communication impairments are displayed due to limited social engagement and language development difficulties (Wood, 2018) speech and language therapy are fundamental (Cummins, Pellicano and Crane, 2020). Furthermore, children with autism may show development delays such as decreased eye contact, limited social smiles and limited interests (Souza, Balestro and Cáceres-Assenço, 2022). Additionally, language in individuals with autism is often unidirectional, primarily used for labelling or requesting (Saad, 2017).

The double empathy theory suggests that communication difficulties may arise from mismatches between neurotypical and autistic communication styles, implying autistic people might be stronger communicators when exposed to other children with ASD (Milton, 2018; Crompton *et al.*, 2020). Many children with ASD also struggle with nonverbal communication, finding it difficult to recognise facial expressions and body language (Alshurman and Alsreaa, 2015; Cadette *et al.*, 2016).

Speech development in autistic children varies some have typical or advanced speech, while others have delayed development (National Autistic Society (2025c). Communication problems could negatively affect children's mental health increasing anxiety and social isolation (Sumiya, Igarashi and Miyahara, 2018). However, non-face-to-face communication methods in the digital age offer unique opportunities for individuals with autism. Individualised communication based on needs can improve social inclusion and quality of life (Howard and Sedgewick, 2021).

Training

Providing high-quality care for children with ASD depends on trained professionals. A significant issue is the lack of depth in current training, often missing comprehensive knowledge of autism and evidence-based practices. This leaves teachers feeling unprepared and insecure in meeting the varied academic and social needs of autistic children (Dillenburger *et al.*, 2016; Silveira-Zaldivar and Curtis, 2019).

Teachers may be hesitant to implement necessary programmes due to insufficient expertise in evidence-based social skills treatments, directly impacting the support children receive (Silveira-Zaldivar and Curtis, 2019). Furthermore, the training gap contributes to poorer life, health and educational outcomes for autistic children (Henninger and Taylor, 2013 cited in Barry, Holloway and McMahon, 2020). While inclusive policies aim to include autistic students into regular classrooms, the system often seems unprepared to effectively manage children's requirements (Hasson *et al.*, 2022). Teachers frequently lack the necessary tools, opportunities for teamwork and specialized training in areas such as behaviour management, communication and service organization (Jaffal, 2022; Babalola *et al.*, 2024). This lack of knowledge could reduce staff morale and increase stress and anxiety for autistic children (Dillenburger *et al.*, 2016). Delayed diagnosis or insufficient support intensifies the situation by limiting access to interventions that could improve the developmental outcomes (Bivarchi, Kehyayan and Al-Kohji, 2021). While teachers acknowledge the wide range of academic achievements among autistic students, little is known about the factors influencing children's learning (McDougal, Riby and Hanley, 2020).

Identification

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition affecting social interaction, communication and cognition, with symptoms varying by age (Welsh Government, 2019; National Autistic Society, 2025a). Common features of ASD include unique sensory responses, attention to detail and transition challenges (World Health Organisation (WHO), 2023).

Inequalities in sensory processing often result in strange reactions in situations (Patil and Kaple, 2023). However, children with ASD have shown signs of having remarkable traits such as exceptional memory and sensory abilities, despite social difficulties (Cannon, 2018). Repetitive behaviours, narrow interests and challenges with communication and social interaction are common in children with ASD (Neurodivergence Wales, 2020a).

Diagnosing ASD can be complex due to the variety of symptoms, particularly in females (Young *et al.*, 2020). Moreover, due to diagnostic criteria's which favour male presentations, females are less likely to be diagnosed with autism (Happé and Frith, 2020). Access to therapy is limited by factors such as cost and experience level (Vo and Webb, 2024) emphasising the need for an improved diagnosis (Okoye *et al.*, 2023).

Strategy

The Picture Exchange Communication System (PECS), created by Bondy and Lori in 1985, is a popular communication tool for autistic children. PECS, which is based on applied behaviour analysis, attempts to improve communication abilities in children who have trouble speaking (Pyramid Educational Consultants, 2020). Through emphasising visual communication instead of just verbal communication, PECS aims to enable children to start discussions independently (Kennedy Krieger Institute, 2016). Moreover, PECS is a six-level system that progresses from simple chats to complex phrases. On top of that, picture cards are used to help children with ASD connect naturally, which improves their social and verbal communication skills (Welsh Government, 2019). According to research, children reported having better communication abilities with the use of PECS (Pyramid Educational Consultants, no date). Additionally, children's communication needs can be met by technology such as PECS Online which follows the PECS phases (Liu *et al.*, 2023). Through strengthening skills acquired in school, family involvement in PECS instruction at home enhances communication success further (Tamanaha *et al.*, 2023). Moreover, through addressing significant behaviours associated with frustration brought on by communication problems, PECS in the classroom can help nonverbal students (Kruger, 2022).

PECS facilitates communication for children with low verbal skills through visual exchanges (Children and Young People Health Services, 2024). It can be carried out with multiple participants in different locations and at different times of the day (Paris *et al.*, 2024; Koudys, Perry and McFee, 2022).

iHear (Pyramid Educational Consultants, no date)



Communication (Pyramid Educational Consultants, 2025)



Conclusion

In summary, this investigation into ASD highlights the pressing need for accurate diagnostic techniques and early detection to improve long-term outcomes for affected children. Specialised interventions such as speech and language therapy are fundamental for addressing communication difficulties, a common challenge for individuals with ASD. The significant training gaps among professionals working with autistic children underscore the need for improved professional development and resources to ensure appropriate support. PECS is a promising and evidence-based method for enhancing communication skills, particularly for non-verbal individuals. It demonstrates how focused interventions can benefit children with ASD and their families.