

Introduction

As highlighted by Jones *et al.*, (2014); Lord, Bishop and Anderson, (2015); Shaw *et al.*, (2020) Autism spectrum disorder is a neurodevelopment condition defined by repetitive and restricted habits as well as difficulties with social interaction and communication. Autism spectrum disorder also known as (ASD). It is a condition that develops in childhood and affects a person for the rest of their lives (Christensen and Baio, 2016; Coulter, 2013; Leonard and Smith, 2020).

Within the relatively broad group of Autism spectrum disorders are enduring neuro-physiological anomalies known as perinatal developmental disorders. According to The National Autistic Society (2024) every diagnosis on the autism spectrum, including high-functioning autism, Asperger syndrome, and classic autism, is referred to as Autism (ASD). As stated by Canavan (2016) ASD children require extensive assistance for the treatment of several co-occurring disorders in addition to the core symptoms of their additional learning needs (Zablotsky and colleagues, 2015).

Moreover, The National Autistic Society (2024) reports approximately 700,000 adults and children in the UK are affected by Autism, representing more than one in every 100 people (Welsh Government, 2019). According to the Centres for Disease Control and Prevention (2022) Autism spectrum disorder affects one in 68 children and impairs social-emotional abilities as well as the ability to take perspective (Ghanoumi *et al.*, 2018; Wingate *et al.*, 2014).

Furthermore, as pointed out by Nah and Tan, (2020) social communication and interaction challenges as well as limited, repetitive patterns of behaviour, interests, and hobbies are the two primary areas of difficulty for children who have been diagnosed with autism spectrum disorder (Chung *et al.*, 2015).



(Source:UWTSDD,2019)

Spectrum Disorder Autism

ECE6006 2200562



(Source: Trust, 2020)

Diagnosis

According to Xanthopoulou, Kokalia and Drigas (2019) there is no medical diagnosis for Autism spectrum disorder (ASD). As highlighted by Canavan (2016); Hyman, Levy and Myers (2020) one tool used for diagnosing ASD is CHAT Checklist for Autism in Toddlers. Close collaboration between parents and experts is necessary for early diagnosis to ensure the child receives the right assistance promptly as they develop, and mature, and their requirements change (Mathieson, 2015). The Diagnosis of ASD requires input from the Multi-Disciplinary Team which consists of:

- A paediatrician,
- An educational psychologist
- A speech and language therapist

The diagnostic criteria for ASD, the proper etiologic examination, and co-occurring behavioural and medical disorders should all be known to primary care providers (Hyman, Levy and Myers, 2020)

Referrals for a diagnosis of ASD come from many different professionals including:

- Health visitors
- School nurses
- Speech therapists
- Paediatricians
- Medical experts (Coulter, 2013; Mathieson, 2015; NHS, 2022)

Referrals are discussed at routine meetings and, where necessary, sent to a consultant paediatrician for additional research. Considering the parents during the evaluation and diagnosis process will have a significant impact on how the diagnosis is accepted (Mathieson, 2015).

Barriers

Sensory processing - As stated by to Dr Ayres (1972) the brain mechanism known as sensory processing is responsible for organising feelings from the body and surroundings and enabling efficient body-environment interaction (Galiana-Simal *et al.*, 2020; Suarez, 2012). Children with sensory processing disorder exhibit compromised reactions to the organisation and processing of sensory data, which impacts their ability to engage in activities and routines that are necessary for a functioning daily life (Passarello *et al.*, 2022) Moreover, due to the possibility of simultaneous impairment of one or more of the sensory systems including tactile, auditory, taste, smell, proprioception, and interoception. Sensory processing is particularly challenging to comprehend and diagnose. The clinical diagnosis of ASD has included sensory processing as a key component Galiana-Simal *et al.*, (2020).

Executive functioning disorder - Naglieri (2014) defined executive functioning as a single phenomenon that includes people's ability to learn and solve problems efficiently and effectively in a variety of contexts (Meltzer, 2018). According to Najdowski, (2017) every action you to control your own behaviour is part of executive functioning. According to Tse *et al.*, (2021) the cognitive construct of executive function is complex and comprises several interacting but possibly dissociable components, including planning, flexibility, working memory, and inhibition. Deficiencies in the executive function components are responsible for a number of behaviours associated with autism, including limited and repetitive behaviour patterns, impaired social interactions, and communication difficulties (Tse *et al.*, 2021).

Strategies

One strategy to help children with additional learning needs to communicate is a visual timetable. According to Rutherford *et al.*, (2020) visual timetables are frequently employed to improve communication. As highlighted by Spriggs *et al.*, (2017); Watson and Di Carlo, (2016) visual timetables display the schedule of events for a certain amount of time. It has been shown in research from Foster- cohen and Mirfin- Veitch, (2017); Knight, Sartini and Spriggs, (2015) how a visual timetable helps children with autism achieve better results by providing clarity and lowering memory demands. Furthermore, children's anxiety, irritation, and attention are lessened when using visual timetables by:

- boosting task completion
- foster peer connection
- facilitate transitions
- foster independence

According to Rutherford *et al.*,(2020); Zimmerman, Ledford and Barton (2017) regular use of visual timetables in settings has been shown to positively improve children's communication abilities. Improve engagement, transitions, and recreational behaviour. However, the is limited evidence about the limitations of visual timetables used at home to support children with Autism. Furthermore, the effective use of visual timetables can help improve the development of social skills and address behaviours that hinder children and their peer's learning (Cohen and Demchak, 2018).

Conclusion

The term autism refers to a broad spectrum of difficulties that are characterised by challenges with speech, repetitive activities, and social abilities (Autism Talks, 2024). For children to receive the greatest care and intervention a referral from a health professional needs to be made. Parents, carers, and medical professionals need to communicate effectively to assist a child to receive early intervention and diagnosis. Children with autism are capable of learning new skills and interacting well with others. They may need more or different types of care to thrive in a school setting (Hood, 2019). Employing suitable strategies to optimally cater to the children's needs would enable them to flourish, realise their whole capabilities, and overcome some barriers they may come across.