

Script

Good evening, my name is Rhydian Davies and today I will be discussing Dyspraxia. Dyspraxia appears more prevalent in today's world due to increased awareness, better diagnostic tools, and improved screening process. In the past many children were said to be miss-diagnosed or misunderstood, often just seen as clumsy or inattentive.

It is estimated that Dyspraxia affects around 5–6% of school-aged children and 10% of the population, with boys more commonly diagnosed than girls (Meachon, 2012). Although the exact cause of dyspraxia is not fully understood, it is believed to result from immature development or function in the brain areas responsible for planning and executing movement (Vahia, 2013). Research suggests that factors such as premature birth, low birth weight, or a family history of motor difficulties may increase the likelihood of developing dyspraxia (Wilson, 2017). Early identification and intervention are critical, as untreated dyspraxia can lead to secondary challenges such as low self-esteem, academic struggles, and social difficulties.

Dyspraxia, also referred to as Developmental Coordination Disorder (DCD), is a neurological condition that affects a child's motor coordination, making it challenging to perform everyday tasks. Early identification is important as symptoms often appear in early childhood and can impact academic achievement, self-esteem, and social development. Children with dyspraxia may exhibit difficulties with tasks requiring motor skills, such as holding a pencil, dressing, or using cutlery, as well as problems with balance and coordination (Sugden & Kirby, 2007). Teachers and caregivers are often the first to notice these signs, which is why observational assessment in educational settings is essential for early detection (Blank et al., 2019).

Diagnosing dyspraxia typically involves a multidisciplinary team, including paediatricians, occupational therapists, and educational psychologists. The process follows established diagnostic criteria, such as those outlined in the DSM-5, which

require persistent motor coordination difficulties that interfere significantly with daily living and academic performance (Vahia, 2013). The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition) is a classification system published by the American Psychiatric Association, used globally by clinicians and researchers to diagnose and classify a variety of health disorders. It provides standardised criteria for mental health conditions based on clinical evidence and consensus (Vahia, 2013). The DSM-5 aids in diagnosis, treatment planning, and research by ensuring consistency across practitioners and settings (Regier et al., 2013). It includes changes from previous editions, such as the integration of dimensional assessments and the reclassification of certain disorders to reflect contemporary understanding.

Assessment tools like the Movement Assessment Battery for Children and the Developmental Coordination Disorder Questionnaire are commonly used to support diagnosis through objective evaluation (Wilson et al., 2013; Blank et al., 2019). These tools, combined with detailed developmental history and reports from teachers and parents, help professionals differentiate dyspraxia from other developmental disorders, such as ADHD or autism spectrum conditions.

Early diagnosis is key to implementing tailored interventions that support a child's motor development, confidence, and engagement in learning. Without early support, children with dyspraxia may face long-term difficulties in academic and social settings. Therefore, raising awareness among educators and parents about the signs and referral processes is fundamental to improving outcomes for affected children (Portwood, 2018). Teacher input is essential in supporting a child with dyspraxia as they play a central role in adapting the learning environment and delivering targeted support. Teachers can implement differentiated instruction, use visual aids, and break tasks into manageable steps to reduce motor planning demands, which improves participation and reduces frustration (Pedro & Goldschmidt 2019).

Regular classroom observation allows teachers to identify specific challenges and collaborate with specialists to implement appropriate interventions. Their continuous presence enables consistent reinforcement of strategies recommended by occupational therapists or the school ALNCo (Fletcher et al., 2018). Also, positive

teacher attitudes and understanding can significantly boost a child's self-esteem and social inclusion, which are often negatively impacted by dyspraxia. Teachers also support communication with parents and other professionals, ensuring a holistic, coordinated approach to the child's development. Well-informed and proactive teacher input is critical to a dyspraxic child's academic and emotional success.

As discussed already, children with dyspraxia, or Developmental Coordination Disorder, face a range of issues that affect their motor, cognitive, and social development. One of the most significant challenges involves gross and fine motor skills, which impact activities like handwriting, dressing, using cutlery, and participating in sports. These motor delays can lead to poor academic performance and lower engagement in physical education, as children often struggle to keep up with peers (Blank et al., 2012; Camden et al., 2015).

In addition to motor skills, children with dyspraxia often experience executive functioning difficulties, such as challenges with planning, sequencing, and organisation. These issues can make classroom tasks such as following multi-step instructions or managing time particularly difficult, affecting both academic achievement and independence (Kirby et al., 2011; Portwood, 2018). These cognitive challenges can lead to emotional and behavioural difficulties, including anxiety, frustration, and lack of confidence. Children may be labelled as inattentive or lazy, which further worsens their sense of belonging.

A non-inclusive early years setting can significantly hinder the development and well-being of a child with dyspraxia. In non-inclusive environments, the absence of tailored support, adaptive resources, and understanding from staff can lead to frustration, low self-esteem, and social isolation (American Occupational Therapy, 2021). Without inclusive practices, children with dyspraxia may struggle to engage in many daily classroom activities such as handwriting, sports, or self-care tasks, which can impact their academic achievement and peer relationships (Beach et al., 2023). In addition to this, non-inclusive settings may increase anxiety and reduce motivation, as children feel unable to meet expectations or participate fully. On the other hand, inclusive approaches such as differentiated instruction and

environmental adjustments are essential to promote confidence, engagement, and independence (Wright and Sugden, 1998). Therefore, failing to provide an inclusive setting not only impedes developmental progress but also risks long-term emotional and educational disadvantage.

Socially, dyspraxia can lead to peer relationship difficulties. Children may avoid group activities or be excluded due to clumsiness or slow response times in games and conversations. These difficulties can lead to social isolation and emotional distress (Lingam et al., 2012; Summer et al., 2016). The combination of motor, cognitive, and social challenges makes early identification and multi-disciplinary support important. This includes occupational therapy, tailored educational strategies, and strong communication between professionals and families to mitigate long-term impacts.

Children with dyspraxia, often face challenges with motor skills, spatial awareness, and coordination that can affect their participation in daily school activities. Early interventions are essential to support their physical, cognitive, and emotional development. One effective approach is occupational therapy, which targets the development of fine and gross motor skills through structured, play-based activities. Occupational therapists often use task-specific training and motor learning strategies to help children improve coordination and self-care skills (Blank et al., 2019; Camden et al., 2015). These interventions are typically individualised and goal-focused, ensuring that therapy is tailored to each child's unique needs and developmental level.

Another key intervention involves integrating physical activity programs within the school setting. Structured physical education sessions and movement-based learning can enhance muscle tone, balance, and motor planning. Interactive movement games, obstacle courses, and dance-based exercises can support children with dyspraxia in improving their body awareness and coordination while also promoting social interaction (Wilson et al., 2017; Sit et al., 2019). Additionally, using assistive technology and classroom tools such as pencil grips, typing tools, or

additional time for tasks can help children access learning more independently and reduce frustration.

Also, collaboration between educators, parents, and specialists is essential for a coordinated support system. Teachers can adapt classroom tasks to be more manageable and provide clear instructions, visual aids, and positive reinforcement to boost confidence and engagement (Wright & Sugden 1998). Regular communication ensures consistency in strategies between home and school, promoting progress and emotional resilience. Overall, a multidisciplinary, inclusive approach ensures that children with dyspraxia receive the comprehensive support they need to thrive.

Teachers and special educational needs coordinators are crucial in embedding inclusive practices within the classroom. By adapting the curriculum and using assistive technology, they help children access learning more effectively. Differentiated instruction, visual aids, and task sequencing enhance the child's participation and reduce frustration, contributing to better academic outcomes (Missiuna, 2013). Parents and caregivers also play a vital role by reinforcing therapeutic strategies at home and fostering a supportive emotional environment.

The benefits of this collaborative support include enhanced motor and cognitive functioning, improved self-esteem, and better social participation. Early and consistent intervention helps children develop coping strategies, boosts their confidence, and reduces the risk of secondary issues such as anxiety or academic underachievement (Rihtman et al., 2022; Khairati et al., 2024). Ultimately, coordinated support enables children with dyspraxia to thrive in both educational and social contexts.

In conclusion, dyspraxia, is a lifelong neurodevelopmental condition that significantly affects a child's ability to plan and execute coordinated movements. It can impact academic performance, daily living skills, and social interactions, often leading to emotional, physical and academic challenges if left unsupported. Increased awareness, early diagnosis, and collaborative interventions involving occupational therapists, educators, and families are essential to improving outcomes (Portwood, 2018). Inclusive educational practices and tailored support help children with dyspraxia participate fully in learning and play, promoting confidence, independence,

and overall well-being. With the right understanding and accommodations, children with dyspraxia can thrive both academically and socially, highlighting the importance of continued training, policy support, and investment in early intervention strategies.

I hope this information has made you all aware of the challenges and difficulties children with dyspraxia face. Thank you for listening are there any questions?

QUESTION 1- Do children with Dyspraxia struggle with reading, writing and spelling?

Thank you for the question. As discussed in the presentation dyspraxia does effect children with their ability to write, as they find it difficult to grip the pencil properly and get the correct amount of pressure from the pencil on the paper. Children with dyspraxia also struggle with reading and spelling, although these challenges are typically secondary to their motor coordination difficulties. Dyspraxia primarily affects motor planning, but its impact on fine motor control, sequencing, and working memory can interfere with literacy development. These difficulties can be very difficult for a child suffering with dyspraxia, especially if not given the support they need. Therefore, it's essential that children with dyspraxia are given an inclusive environment to work in to improve their reading, witing and spelling skills.

QUESTION 2- How is a child that is suspected of suffering from dyspraxia get the help they need?

Parents, teachers, or early years practitioners may notice signs such as clumsiness, difficulty with handwriting, or problems with daily tasks. A general practitioner (GP) or health visitor is usually the first point of contact. They can refer the child to a paediatrician or community child health team for assessment. The other route that can be taken is contact the schools ALNCo. The school ALNCo will contact an occupational therapist and with parents and teachers support they will form a plan of

action to support the needs of the child, adapting the learning environment using assistive tools, differentiated instruction, and extra time for tasks. Not every child that is suspected of suffering with dyspraxia is diagnosed as healthcare professionals need a substantial amount of evidence to support the child's case. If a child is not diagnosed, schools can work independently with parents to implement personal and individualised interventions from a day-to-day basis. This will ensure the child is looked after and doesn't fall through the ALN net.

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