



# Developmental Language Disorder

## What is Developmental Language Disorder?

Developmental Language Disorder (DLD) refers to the condition where children fail to show typical language development when there are no obvious accompanying causative conditions such as intellectual disability, neurological damage, hearing impairment, serious emotional disorders or environmental deprivation. It is also referred to as Specific Language Impairment in many studies. DLD is one of the most common childhood disorders and is closely related to other learning and reading disorders, including dyslexia.

Children with DLD are delayed in the use of single words, acquiring their first words at an average age of 1 year 11 months in contrast to the average of 11 months in typically developing peers. Local and overseas research showed that preschool children with DLD use less word varieties than their typical peers. Children with DLD have well-documented problems in comprehension of wh-questions and sentences with relative clauses and passive voice structures. More tense-agreement errors are observed. In addition, children with DLD are more likely to show phonological errors and speech sound problems. Many show varying degrees of weakness in social and

pragmatic language skills. Children with DLD may have difficulty in following complex directions, reporting events and when participating in discussions and presentations.

## **How does Developmental Language Disorder affect children?**

With their impairments in verbal comprehension and expression, children with DLD face difficulties in initiating and maintaining every day conversations, which in turn affect their social development. As language is a major tool for knowledge acquisition, academic achievement will be affected. Problems with literacy acquisition and developmental dyslexia are more likely to arise in children with DLD. Other common co-occurring difficulties include attention deficit and developmental coordination problems.

## **How common is Developmental Language Disorder?**

In western countries, DLD is reported in approximately 7 out of 100 children. No formal epidemiological data is available to date in Hong Kong. Through a research completed in 2006 for the development of a locally normed and standardized tool for assessing Cantonese speaking school-age children (The Hong Kong Cantonese Oral Language Assessment Scale HKCOLAS), an estimated prevalence of approximately 5% was obtained.

## What causes Developmental Language Disorder?

New developments in research are shedding light on the role of genetic and environmental factors in developmental language disorder and its longitudinal course.

### *Biological factors:*

It is believed that DLD is associated with atypical development of brain systems responsible for language function. Underlying genetic factors have been demonstrated, with clustering shown in family and twin studies.

### *Process mechanisms:*

Various deficits in language processing mechanisms have been put forth to explain DLD. These include incomplete learning of particular rules and principles of language, and limitations in general and specific processing capacities leading to weakness in phonological short-term memory and retention of verbal information.

### *Environmental factors:*

While inadequate language input is not considered to be a cause of DLD by most investigators, it is believed that language input can be modified to facilitate growth in language ability. Bilingualism has been postulated as a cause of language delay, but this claim has been largely refuted by bilingual language acquisition research to date.

## **Does my child really have Developmental Language Disorder?**

Language difficulties that arise part and parcel of other conditions may appear similar to the presentations of DLD. These include language problems associated with developmental delay, autism spectrum disorder or hearing impairment. It is important that these possibilities are considered and clarified through comprehensive diagnostic assessment.

## **What can be done if my child is suspected to have Developmental Language Disorder?**

Early identification and treatment are important in the management of DLD. A thorough assessment of the overall development of the child is needed to exclude other causes of the language problems, as well as to identify any co-existing conditions. Rehabilitation for children with DLD is mainly provided by speech therapists. The goal of language intervention is to facilitate overall language development and to teach language skills in context of the children's lives, so as to enhance everyday communication and allow access to academic content. Goals are selected with consideration of developmental appropriateness and their potential for improving communication, academic and social success. Service delivery format (such as individual versus group training), provider (clinician-based, parent-based school/teacher-based), dosage, and timing will be decided to enhance treatment outcomes. Parental

involvement during the course of speech therapy is essential. They play a major role in helping these children transfer newly acquired language skills to daily needs and functioning.

## **What services are available in Hong Kong to help children with Developmental Language Disorder?**

Speech therapy for preschool children is available from the Hospital Authority and preschool rehabilitation services provided by the Social Welfare Department, while school-age children can receive speech therapy support in mainstream schools. Therapy is also provided in the private sector for both age groups.

## **Will children with Developmental Language Disorder improve with age?**

For most children with DLD, gains in language ability are seen over time. However depending on the number of language areas affected and the degree of impairment, weaknesses in language may still be present in later childhood, adolescence, and in some cases, adulthood. Some preschool children with DLD develop dyslexia when they face heavy reading and writing demands by school age. Children whose language significantly lags behind their peers are at increased risk of slower learning and academic underachievement. Parents and teachers need to be vigilant and supportive of the children's emotional-behavioural development, as problems may arise as a result of their language and communication problems.

## Relevant Websites:

Child Assessment Service, Department of Health	<a href="http://www.dhcas.gov.hk/">http://www.dhcas.gov.hk/</a>
Family Health Service, Department of Health	<a href="http://www.fhs.gov.hk/">http://www.fhs.gov.hk/</a>
Special Education Resource Centre, Education Bureau	<a href="http://www.edb.gov.hk/serc">http://www.edb.gov.hk/serc</a>
One Click	<a href="http://oneclick.hku.hk">http://oneclick.hku.hk</a>
What is Specific Language Impairment? (Cantonese version)	<a href="https://www.youtube.com/watch?v=6AEqa0aM-gw">https://www.youtube.com/watch?v=6AEqa0aM-gw</a>
RADLD	
RADLD	<a href="https://www.youtube.com/user/RALLI">https://www.youtube.com/user/RALLI</a> campaign
American Speech-Language-Hearing Association	<a href="http://www.asha.org">http://www.asha.org</a>
Afasic	<a href="http://www.afasic.org.uk/">http://www.afasic.org.uk/</a>
Talking Point	<a href="http://www.talkingpoint.org.uk/">http://www.talkingpoint.org.uk/</a>
The Hanen Centre	<a href="http://www.hanen.org">http://www.hanen.org</a>

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Hong Kong Special Administrative Region Government

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