SAC Resource Page

New Criteria and Terminology for Childhood Language Disorder in Canada

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Introduction

In 2015, researchers in the United Kingdom began a project called "Criteria and Terminology Applied to Language Impairments: Synthesizing the Evidence" (CATALISE) to address problems with identification criteria and terminology for children with language difficulties. They formed a consortium that included an international panel of 59 experts in childhood language development and disorders from ten disciplines, including speech-language pathology, education, psychology, pediatrics and psychiatry, as well as community stakeholders. Eight panel members were Canadian and 32 were speech-language pathologists (S-LPs). The CATALISE consortium conducted two consensus studies using the Delphi method to develop identification criteria and terminology for childhood language disorder.

CATALISE consortium recommended terminology and definitions

Language disorder:

A language problem that persists into middle childhood and beyond and affects educational and/or social functioning.

Language disorder is an umbrella term with two subcategories:

Developmental Language Disorder (DLD)*:

A language disorder that creates obstacles to communication or learning in everyday life and is not associated with a known biomedical condition.

***Note for French speaking S-LPs:** L'Ordre des orthophonistes et audiologistes du Québec has promoted the use of the term trouble développemental du langage (TDL). It is expected that France, Belgium and Ontario will adopt this terminology as well. Currently the term trouble du développement du langage is also used by some FR speaking S-LPs and researchers.*

Language Disorder Associated with (name of condition):

A language disorder that occurs in the context of a biomedical condition (e.g. genetic syndrome, hearing impairment, neurological disease, autism spectrum disorder (ASD), or intellectual disability).

***Note:** The term language disorder should be used for a child with a suspected, but undiagnosed, biomedical condition.*

International Context

A number of professional associations have also supported the CATALISE consortium's recommendations, including:

Irish Association of Speech and Language Therapists

United Kingdom's Royal College of Speech and Language Therapists

Speech Pathology Australia

A number of researchers in the United States continue to support the ongoing use of the term Specific Language Impairment (SLI). Consequently, SAC members and associates will continue to see SLI in research, publications and professional development offerings, particularly from the US.

Adoption of the CATALISE terminology and diagnostic criteria in research studies is still ongoing. SAC members and associates are encouraged to consult research using both DLD and SLI terminology, while considering how the two definitions are operationalized in each research study. The purpose, research question, inclusion/exclusion criteria and methodology will vary depending, in part, on the diagnostic terminology used. This information is important to note when interpreting research study findings and critically evaluating how the study results may inform clinical practice.

Additional Information

You may wish to review the following resources for clinicians to learn more about the CATALISE consortium's recommendations, as well as research into childhood language disorder:

1. CATALISE: A Multinational and Multidisciplinary Delphi Consensus Study. Identifying Language Impairments in Children
2. Phase 2 of CATALISE: a multinational and multidisciplinary Delphi consensus study of problems with language development: Terminology
3. SAC Official Statement on Childhood Language Disorder
4. SAC Communique Article: Developmental Language Disorder: Why You Should Add DLD to Your Vocabulary (Alex Rice)
5. SAC Webcasts:
    - Developmental Language Disorder (DLD): A Persistent Language Disorder of Unknown Aetiology (Lisa Archibald)
    - Bilingualism in Children With and Without Developmental Language Disorder: Main Factors That Impact Its Success (Elin Thordardottir)
6. The Consensus Explained Presentation Slides (Dorothy Bishop)
7. National Association of Professionals concerned with Language Impaired Children (NAPLIC) (curated DLD resources)
8. Summary of CATALISE: a multinational and multidisciplinary Delphi consensus study of problems with language development. Phase 2 (Susan Ebbels)
9. Royal College of Speech & Language Therapists (RCSLT) Webinar (Dorothy Bishop)
10. Explanatory Document CATALISE Phase 2: Terminology (Dorothy Bishop)
11. Developmental Language Disorder Summary (Caroline Bowen)
12. Supporting Children with Developmental Language Disorders in the Classroom (Alex Cross)
13. Factsheet: DLD (ICAN)

SAC recommends members and associates support the promotion and implementation of the CATALISE consortium consensus statements on identification criteria and terminology for childhood language disorder. SAC recognizes that clinicians may have questions or encounter challenges as they move to adopt the recommendations. This resource page was developed to assist members and associates in understanding the consensus statements and adopting the changes in clinical practice.

Frequently Asked Questions

1 Why are the CATALISE consortium's recommendations so important?

Using consistent terminology and evidence-based criteria for persistent childhood language disorder is an important step in advancing research and clinical practice. The CATALISE consortium's recommendations were developed after achieving systematic, international consensus amongst multiple professional and community stakeholders. While not all panel members supported use of the term Developmental Language Disorder (DLD), the CATALISE consortium agreed that this is the best option to resolve the issues around the variability in identification criteria and terminology for this under-serviced population.

For Further Information See: Royal College of Speech & Language Therapists (RCSLT) Webinar (Dorothy Bishop, 2018)

2 How do the CATALISE consortium's recommendations compare with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)? What recommendations does each make for children who have been diagnosed with an intellectual disability?

The diagnostic labels recommended by the CATALISE consortium and the DSM-5 are similar. However, the criteria used to diagnose language disorder differ in several important ways.

DSM-5 Terminology and Diagnostic Criteria	CATALISE Consortium Terminology and Diagnostic Criteria
Recommended the term disorder (versus impairment or other terms) in the diagnostic label.	
Acknowledged that language disorder must be persistent, have a functional impact on daily life, and cannot be attributed to hearing or sensory impairment, motor dysfunction, or other medical or mental health issues.	

Recommended the use of a single term - language disorder.	Recommended the term language disorder as an overarching term but further recommended two subsets of language disorder - *DLD* and *language disorder associated with biomedical condition X*. *Note: In the second case, the main diagnosis would be the genetic syndrome, hearing impairment, neurological disease, ASD, or intellectual disability, while the language disorder would be a component of the condition. See Bishop (2017) for more information.*
Children with a diagnosis of intellectual disability may be diagnosed with a language disorder only if "language deficits are clearly in excess of the intellectual limitations" (American Psychiatric Association, 2013, p. 43).	Recommended use of the term language disorder associated with intellectual disability to capture all language difficulties observed in those with intellectual disability diagnoses. *See Bishop (2017) for more information.*

Speech-language pathologists can use both the CATALISE recommendations and the DSM-5 when working on a multidisciplinary team. In settings where DSM-5 is used to diagnose language disorder, reports should include the source of terminology (e.g. *language disorder* as per the DSM-5; *language disorder associated with autism spectrum disorder* as per the CATALISE consortium) to ensure transparency, particularly during the initial transition period.

References:

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

Bishop, D.V.M. (2017). Why is it so hard to reach agreement on terminology? The case of developmental language disorder (DLD). *International Journal of Language & Communication Disorders, 52*(6), 671-680. https://doi.org/10.1111/1460-6984.12335

Hill, D.E., & King, C. (n.d.). A walk through the DSM-5: Communication disorders [PDF document]. Retrieved from https://www.ihs.gov/telebehavioral/includes/themes/newihstheme/display_objects/documents/slides/fasd/commdisordersfasd0421.pdf

3 What is the difference between specific language impairment (SLI) and DLD?

In addition to the obvious differences in the labelling terminology, there are a number of differences in the criteria used to diagnose SLI and DLD. Generally speaking, the diagnostic criteria for DLD are broader and are not based on standardized test scores or a mismatch between verbal and nonverbal abilities.

The CATALISE consortium was initiated to address some of the limitations associated with using SLI terminology and criteria (see the 2016 CATALISE paper for a brief summary of the evidence).

This chart outlines the main differences between the two classification systems:

SLI Diagnostic Criteria	DLD Diagnostic Criteria
Terminology and criteria were not determined or applied systematically. Mostly used in research contexts, with limited adoption in clinical settings.	Terminology and criteria were determined by Delphi consensus. There is a movement for clinicians in both research and clinical settings to universally adopt the terminology and criteria.
Standardized test score criteria vary depending on the research study, although participants must present with low standard scores in one or more standard language measure (Leonard, 2014).	The presence of a language disorder is not determined solely in terms of statistical cut-offs on language tests.
Requires a discrepancy between verbal and non-verbal ability or intelligence quotient (IQ) (as determined by a psychologist). Children with demonstrable deficits in nonverbal intelligence would not be included in this clinical category (Leonard, 2014).	Assessment of non-verbal intelligence quotient (IQ) by a psychologist is not required to diagnose DLD. Similarly, a mismatch between nonverbal IQ and language abilities is not required.
No functional impact requirement.	Language problems must impact daily functioning.
Exclusionary criteria include: low nonverbal intelligence, hearing loss, anomalies of the oral structure and oral motor function, other developmental or neurological diagnoses (e.g., autism spectrum disorder). Other factors that could contribute to language differences or difficulties may also be considered as exclusionary criteria in some studies (e.g., social disadvantage, recent evidence of repeated episodes of otitis media, bilingualism) (Leonard, 2014).	Recommended that childhood language disorders are defined using the term "language disorder", or, when possible, one of two subsets, developmental language disorder (DLD) and language disorder associated with (name of condition; e.g. hearing loss, autism spectrum disorder). Used "differentiating conditions" rather than "exclusionary criteria". Bishop, (2017).
Not compatible with DSM-5 terminology and diagnostic criteria or International Classification of Diseases-11 (ICD-11).	Generally compatible with DSM-5 and ICD-11 terminology and diagnostic criteria (see FAQ #2).

Notes: *Many research studies, particularly those originating in the United States of America, continue to use the term SLI. The CATALISE consortium recommended that children with an existing SLI diagnosis meet the criteria for DLD.*

References:

American Speech-Language-Hearing Association (n.d.). *Spoken Language Disorders*. Retrieved from https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935327&section=Overview

Bishop, D.V.M. (2004) Specific language impairment: Diagnostic dilemmas. In L. Verhoeven & H. van Balkom (Eds.). *Classification of developmental language disorders: Theoretical issues and clinical implications* (pp. 309-326). Mahwah, New Jersey Lawrence Erlbaum Associates.

Bishop, D. V. (2017). Why is it so hard to reach agreement on terminology? The case of developmental language disorder (DLD). *International Journal of Language & Communication Disorders, 52*(6), 671-680. doi: 10.1111/1460-6984.12335

Ebbels, S. (2014). Introducing the SLI debate. *International journal of language & communication disorders, 49*(4), 377-380. https://doi.org/10.1111/1460-6984.12119

Leonard, L. B. (2014). Language, Speech, and Communication : Children with Specific Language Impairment, MIT Press. ProQuest Ebook Central, https://ebookcentral.proquest.com/lib/ubc/detail.action?docID=3339820.

Reilly, S., Tomblin, B., Law, J., McKean, C., Mensah, F. K., Morgan, A., ... & Wake, M. (2014). Specific language impairment: A convenient label for whom? *International Journal of Language & Communication Disorders, 49*(4), 416-451. doi: 10.1111/1460-6984.12102

Rice, M. L. (2016). Specific language impairment, nonverbal IQ, attention-deficit/hyperactivity disorder, autism spectrum disorder, cochlear implants, bilingualism, and dialectal variants: Defining the boundaries, clarifying clinical conditions, and sorting out causes. *Journal of Speech, Language, and Hearing Research, 59*(1), 122-132. doi: 10.1044/2015_JSLHR-L-15-0255

Tomblin, J. B., Records, N. L., Buckwalter, P., Zhang, X., Smith, E., & O'Brien, M. (1997). Prevalence of specific language impairment in kindergarten children. *Journal of Speech, Language, and Hearing Research, 40*(6), 1245-1260. doi: 10.1044/jslhr.4006.1245

4 What terminology does the CATALISE consortium recommend using for adults with DLD?

The term *developmental* indicates that the language disorder emerged in the course of development rather than being acquired (as in head injury, for example). Many adults with *developmental dyslexia* refer to themselves as *dyslexic* or *having dyslexia*. Similarly, the CATALISE consortium recommended that adults may abbreviate their diagnosis to *language disorder*.

5 Did the CATALISE consortium recommend specific numerical criteria (e.g. scores on standardized tests) as an indicator for DLD?

No, the CATALISE consortium recommended the use of multiple sources of assessment information. Solely using criteria from standardized language testing was not recommended for identification of DLD. The CATALISE consortium recommended that clinicians need to identify the functional impact of the language disorder on activities of daily living, which is more important than performance on a particular test or test scores considered in isolation. Information from standardized assessment tools can help identify which areas of language are impaired and can be used, in conjunction with data gathered through observations and parent/teacher interviews, to determine a child's functioning in a variety of contexts and settings.

For Further Information See:

Bishop, D. V. (2014). Ten questions about terminology for children with unexplained language problems. *International Journal of Language & Communication Disorders, 49*(4), 381-415. doi: 10.1111/1460-6984.12101

Bishop, D.V. (2017, July). Developmental language disorder: The consensus explained [PowerPoint slides]. Retrieved from https://www.slideshare.net/RADLD/developmental-language-disorder-dld-the-consensus-explained

6 Are there any guidelines regarding the process of diagnosing DLD?

Bishop et al. (2017) presented a figure outlining a suggested pathway to diagnosing a language disorder (see Figure 1: Flow chart illustrating pathways to diagnosis of language disorder). The following steps are recommended:

STEP 1

Identify which areas of language are impaired, as well as relative strengths. Use diagnostic information obtained from multiple sources, over a period of time as emphasized in diagnostic/dynamic assessment and response to intervention approaches, such as:

- norm-referenced and criterion-referenced procedures (i.e., standardized tests),
- clinical observations (e.g. classroom observations, language samples),
- parent/teacher interviews

STEP 2

Document evidence, or lack of evidence, regarding the impact of the language difficulties on daily functioning.

Tip: Several tools are available to evaluate functional use of language, including Focus on the Outcomes of Children Under Six (FOCUS) and Children's Communication Checklist - 2 (CCC-2).

STEP 3

For very young children (under the age of five), determine whether or not there are risk factors associated with poor prognosis (see FAQ #11 for additional information).

STEP 4

Identify associated biomedical condition(s), if applicable.

STEP 5

Include a definition of the diagnosis as well as the criteria used for determining the diagnosis. This will ensure that S-LPs, other professionals, clients, and caregivers who are unfamiliar with CATALISE terminology will know the criteria used to make the diagnosis.

7 Can a student who compensates well for their language difficulties have DLD?

Yes. Teaching a child good compensatory strategies does not negate the presence of DLD. Even if compensatory strategies worked in every context the child encounters, DLD would still be a valid diagnosis. Children who compensate well for their disorder would still benefit from intervention to treat the underlying language difficulties.

8 Can a child who has difficulties in only one language domain have DLD?

DLD can be present whether a child has difficulties in one area of language or in more than one area of language (e.g. comprehension, expression, morphology, syntax, vocabulary, phonology, pragmatics, discourse, etc.). If the child's language difficulties in a single language domain affect their functioning, are unlikely to resolve or have not resolved by the age of five, then a diagnosis of DLD can be made.

Note: *Children with speech sound disorders, such as phonological disorders, typically respond well to intervention and their difficulties are not likely to persist into adulthood. Therefore, a child with only a phonological disorder would not meet criteria for DLD.*

9 What label (if any) did the CATALISE consortium recommend for children under the age of five?

The descriptive term "*language difficulty*" should generally be used for preschool-age children with language difficulties. Risk factors associated with an increased chance of a persistent language disorder (see FAQ #11) should also be identified when assessing children under the age of five. For example, a "late talker" under the age of five with no identified risk factors would be considered as having "language difficulties with few risk factors for DLD". A child under the age of five with significant language difficulties and multiple risk factors could be considered as having "language difficulties with several risk factors for DLD". Depending on the child's profile (i.e. risk factors and degree of functional impact), clinicians should use their professional judgment to determine whether a child under the age of five meets the criteria for DLD.

10 Can a child with low-average non-verbal intelligence quotient (NVIQ) have DLD?

Yes. Children who score more than one standard deviation below the mean but do not meet criteria for intellectual disability on NVIQ testing can have DLD, according to the CATALISE criteria.

Tip: An assessment of NVIQ (e.g. by a psychologist) is not required to diagnose DLD. A 2016 UK population survey indicated no differences between children with average and low-average NVIQ in terms of severity of language deficit, social, emotional and behavioural problems or academic achievement.

11 How do I determine which children are likely to have a language disorder that will persist into middle childhood and beyond?

Predicting which children will not outgrow language difficulties is not an exact science. After the age of three, however, prediction improves. Bishop et al (2017) and Ebbels et al (2017) highlight some of the risk factors that have been identified in currently available (longitudinal) research evidence:

1. Preschool language levels (the most reliable predictor of later language skills):
    a. 1 to 2 years of age: absence of babbling, not responding to speech and/or sounds, not interacting;
    b. 2-3 years of age: minimal interaction, no intention to communicate, no words, minimal reaction to spoken language, regression or stalling of language development;
    c. 3-4 years of age: at most two-word utterances (in child's first language), not understanding simple commands, unintelligible to family members.
2. Family history of language or literacy difficulties.
3. Pervasive language deficits that affect both receptive and expressive language (particularly in girls).
4. Lower non-verbal intelligence quotient (NVIQ).
5. Language difficulties still evident at 4-5 years of age (since these are less likely to resolve spontaneously).
6. Low socioeconomic status.
7. Lower parental education level.
8. Prenatal / perinatal problems.
9. Biological sex (male).

12 What recommendations did the CATALISE consortium make for assessing children who are not native speakers of the local language?

Evaluating children who are exposed to multiple languages and/or are non-native speakers of the dominant language requires additional care. There must be evidence of language difficulties that have a functional impact, across contexts, and assessed via multiple sources (e.g. classroom/environmental observations, parent/teacher interviews/observations, norm and criterion referenced assessments, etc.). It is also important to consider the exposure a child has had to the language being learned, including a detailed history of the child's development in each language they are exposed to and the typical language development expectations within their cultural community/communities.

Tip: Several questionnaires are available to help determine whether there may be evidence of delay or difficulties in a child's first language:

The Alberta Language Development Questionnaire

The Alberta Language Environment Questionnaire