

The 10th Congress of Baltic States Speech  
and Language Therapists

**Stronger together**



# BOOK OF ABSTRACTS

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April 10 – 11, 2026, Riga, Latvia, Speech Therapists' Association of Latvia

Edited by **Egija Laganovska, Baiba Trinite**

The accuracy of the abstracts is the responsibility of the authors

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## ***Dear friends and colleagues,***

This year marks the tenth edition of our congress, a significant milestone reflecting the continuity and steady development of our professional and scientific traditions. Since 2013, it has brought together specialists from the Baltic countries, Europe, and beyond, strengthening collaboration and enhancing the Baltic region's visibility in international science. This sustained international engagement clearly demonstrates the relevance of our work and the region's increasing visibility within the global scientific community.

Compared with the first congresses, the field has grown substantially. Over the years, the number of submitted abstracts has increased markedly, with an ever-larger proportion representing research conducted within our own countries. These contributions span a wide range of topics, from child and school-based speech and language therapy to clinical practice, underscoring both the interdisciplinary nature of the field and its responsiveness to contemporary societal, educational, and healthcare needs.

Furthermore, this is a time when group interests are increasingly overshadowing the shared needs of society, risking the profession's common vision. If we cannot communicate effectively with each other, how can we help others find their own pathways to communication? Only through collaboration can we advance the profession and genuinely support those who depend on us. Respectful intraprofessional communication is therefore an ethical obligation.

This congress offers a space for dialogue, knowledge exchange, and collective growth. Our strength lies in unity – in shared values, expertise, and collaboration.

*Because only together are we truly stronger.*

**On behalf of the Congress Scientific Committee  
Baiba Trinite, PhD**

## ***Draugi un kolēģi!***

Desmitais Baltijas valstu logopēdu kongress apliecina profesionālās un zinātniskās tradīcijas nepārtrauktību un attīstību. Kopš 2013. gada tas pulcē Baltijas, Eiropas un citu valstu speciālistus, stiprinot sadarbību un veicinot Baltijas redzamību starptautiskajā zinātnē. Šī regulārā vēlme tikties pārliecinoši apliecina mūsu kopīgā darba nozīmīgumu un Baltijas valstu pieaugošo redzamību starptautiskajā zinātnē.

Salīdzinot ar pirmo kongresu, mēs esam izauguši. Gadu gaitā ir būtiski pieaudzis iesniegto tēžu skaits, un arvien lielāku daļu no tām veido pētījumi, kas īstenoti tieši mūsu pašu valstīs. Iesniegtās tēzes aptver plašu tematisko spektru – no bērnu un skolas logopēdijas līdz klīniskajai praksei, skaidri apliecinot nozares starpdisciplināro raksturu un tās spēju jēgpilni reaģēt uz aktuālajām sabiedrības vajadzībām.

Viena no galvenajām 10. Baltijas valstu logopēdu kongresa tēmām ir veltīta ētikai logopēda profesionālajā darbībā. Mēs dzīvojam laikā, kad par ētiku ir jārunā vairāk nekā jebkad agrāk. Straujās pārmaiņas zinātnē, tehnoloģijās un sabiedrībā rada jaunus izaicinājumus, kuros bez skaidriem ētiskajiem orientieriem ir viegli apmaldīties. Ētika nav tikai principu kopums, tā ir mūsu profesionālās identitātes pamats un ikdienas darbu nosakošā kompasa adata. Turklāt, šis ir laiks, kad mēs redzam, ka grupu intereses dominē pār sabiedrības kopīgajām vajadzībām, pakļaujot riskam kopējo vīziju par profesijas attīstību. Vai nespējot komunicēt savstarpēji mēs varam palīdzēt atrast ceļu uz komunikāciju citiem? Tikai strādājot kopā mēs varam pilnveidot profesiju un patiesi kalpot tiem, kuri rēķinās ar mūsu palīdzību. Cieņpilna iekšprofesionālā komunikācija arī ir ētikas dabas jautājums.

Mēs, katrs atsevišķi un visi kopā, esam atbildīgi par savu profesiju. Lai šis kongress kalpo dialogam, pieredzes apmaiņai un kopīgai izaugsmei, jo mūsu spēks ir kopā būšanā – zināšanās, vērtībās un sadarbībā.

*Jo tikai tā mēs patiesi esam stiprāki kopā.*



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# Programme

Friday, 10.04.2026.			
9:00 -10:00	<i>Registration</i>		
10.00-10.20	<i>Opening ceremony</i>		
10.20-11.20	<b>Jois Stansfield</b> “Coming Together is a Beginning, Staying Together is Progress, and Working Together is Success”		
11.20-11.40	<b>Sahra Mengal</b> “Preparing Speech and Language Therapists for Contemporary Practice in Europe”		
11.40-12.00	<b>Signe Mezinska</b> “Strengths and Limitations of National Ethical Codes for Speech and Language Therapists in the Baltic States”		
12.00-13.00	<i>Lunch</i>		
13.00-14.00	<b>Katherine Verdolini Abbott</b> “The Surprising World of Perceptual-Motor Learning in Speech and Voice Training”		
14.00-14.30	<b>Marja Liisa Mailend</b> “Navigating Diagnostic Challenges in Apraxia of Speech”		
14.30-15.00	<b>Johanna Thelma Einarsdottir</b> “Global Tales Protocol and Personal Narratives in Iceland”		
15.00-15.30	<i>Coffe Break</i>		
Parallel Session 1		Parallel Session 2	
15.30-15.45	<b>Bryndís Bergþórsdóttir, Gunnar Thor Örnólfsson, Hinrik Hafsteinsson, Iris Edda Nowenstein</b> “Developing Digital Tools for SLTs in Small Language Communities: ALDA in Iceland” (Free Paper, FP1)	15.30-15.45	<b>Baiba Trinite</b> “Voice ergonomic studies in Latvia”
15.45-16.00	<b>Iðunn Kristínardóttir, Thora Másdóttir, Kathryn Crowe, Sarah Masso</b> “Screening for Speech Sound Disorders: Validating the ICS in the Icelandic Context” (FP2)	15.45-16.00	<b>Una Roze</b> “Decoding Bilingual Voices” (FP5)
16.00-16.15	<b>Daiva Kairiene, Simona Daniute, Marju Lahtein-Kursa</b> “Profile of Childhood Apraxia of Speech: Lithuanian Speech and Language Therapists’ Perspective on Diagnostic Features” (FP3)	16.00-16.15	<b>Kaisa Pollisinski, Linda Söber, Lagle Lehes</b> “Estonian Swimming Coaches’ Voice Quality and Factors Affecting It” (FP6)
16.15-16.30	<b>Teele Kanarbik, Lagle Lehes</b> “Oral Diadochokinetic Rates Among Healthy Estonian-Speaking Children” (FP4)	16.15-17.00	<b>Katherine Verdolini Abbott</b> “Introduction to Lessac-Madsen Resonant Voice Therapy (LMRVT)”
16.30-17.00	<b>Maria Vlassopoulos</b> “Re-Thinking Working with Parents: New Strategies for Our Times”		
19.00-21.00	<i>Gala dinner</i>		

Saturday, 11.04. 2026.			
9.00-10.00	<b>Anna Liisa-Sutt Vowden</b> "Speech and Language Therapy in Estonian Hospitals – How Did We Get Here and Where to Next?"		
10.00-10.15	<b>Kathryn Crowe</b> "Children's Portrayal of Health and Health Services: Perspectives from Children with and without Disabilities"		
10.15-10.30	<b>Thora Masdottir</b> "Developing Speech and Language Assessments for Small Languages"		
10.30-11.30	<b>Rania Kassir</b> "Generative Artificial Intelligence in Speech and Language Therapy: Opportunities, Limitations, and Regulatory Perspectives"		
11.30-12.30	<i>Lunch</i>		
12.30-13.30	<b>Sahra Mengal, Victoria Joffe</b> "Working Together: Practical Approaches to Collaboration Between Teachers and Speech and Language Therapists"		
<b>Parallel Session 3</b>		<b>Parallel Session 4</b>	
13.30-14.00	<b>Anna Maria Ülviste</b> "Joint Attention – A Journey Towards Communication and Speech"	13.30-14.00	<b>Liga Savicka, Dainis Rudovics</b> "Global Standard for Texture Modification: Theoretical and Evidence-Based Foundations of IDDSI"
14.00-14.30	<b>Kathryn Crowe</b> "Supporting Multilingual Children's Language Development in Icelandic Preschools: A Journey in Using and Creating Evidence in New Contexts"	14.00-14.15	<b>Aile Juur, Kirsi Lankinen, Veronika Raudsalu</b> "An Overview of SLP-Led FEES Service in Estonia: Clinical Experience from West Tallinn Central Hospital" (FP7)
		14.15-14.30	<b>Meeri Kompus, Kristel Kalling</b> "Exercise Induced Laryngeal Obstruction (EILO): Speech Therapist's Role in Assessment and Management" (FP8)
14.30-15.00	<i>Coffee Break</i>		
<b>Parallel Session 5</b>		<b>Parallel Session 6</b>	
15.00-15.15	<b>Halla Jónsdóttir, Björg Einarsdóttir, Susan B. Neuman, Kathryn Crowe</b> "Fidelity of a Vocabulary Intervention for Multilingual Pre-School Children" (FP9)	15.00-15.15	<b>Andres Köster</b> "Voice, Communication, and Psychosocial Outcomes of a Singing-Based Intervention in Parkinson's Disease" (FP11)
15.15-15.30	<b>Siiri Niine, Marika Padrik, Piret Soodla</b> "From Theory to Practice: Developing a Sentence Comprehension Assessment Tool for Estonian Children with DLD" (FP10)	15.15-15.30	<b>Tatjana Anaņjeva, Inese Svikliņa, Dace Stirāne, Flera Martinova, Anastasija Jermolajeva</b> "Multiprofessional Functional Assessment Model for Non-Progressive CNS Disorders: Pilot Project Implementation" (FP12)
15.30-16.00	<b>Liis Themas, Katre Kandimaa, Ly Laane</b> "Hanan Caregiver- and Teacher-Implemented Intervention for Early Communication Development"	15.30-16.30	<b>Anna-Liisa Sutt Vowden</b> "Speech and Language Therapy Work with Tracheostomies – A Practical Workshop"
16.00-16.30	<b>Gabriella Baracsy</b> "Orofacial Function as a Central Organizing Factor: an Integrative Clinical Perspective in Speech and Language Therapy"		
16.35-17.00	<i>Closing ceremony</i>		

## Coming Together is a Beginning, Staying Together is Progress, and Working Together is Success



**Jois Stansfield**

Emeritus Professor of Speech Pathology at Manchester Metropolitan University, UK

Speech and language therapy is a relatively young profession, with its roots in both the science and art of speech, including medicine, phonetics and linguistics, psychology and education. This presentation begins by exploring the ways in which the objectives of the profession have developed and changed over time, with especial attention being paid to the histories of SLT in the Baltic states and in Britain. While the roots of the professions differ, all have at the heart the wellbeing of people with communication and swallowing disorders.

Ethical practice is at the core of our work. This relies on each of us to have a sound values which guide our professional actions. They include: promoting and protecting the interests of service users and carers; communicating appropriately and effectively; working within the limits of our knowledge and skills; respecting confidentiality; managing risk; being open when things go wrong; and, not least, being honest and trustworthy.

The paper applies the principles to case examples to argue that these standards are common to each of us, regardless of the country, type of qualification or the locations and clientele with whom we work. As a profession we are best able to meet the needs of our service users if we come together, stay together and work together to establish sound evidence and sound ethical standards for our professional work.

## The Surprising World of Perceptual-Motor Learning in Speech and Voice Training



**Katherine Verdolini Abbott**

PhD, Professor of Communication Disorders and Linguistics of Cognitive Science at the University of Delaware, United States

A general model of physical training says that ideally, in training, we address the “What” (biomechanical target), the “How” (learning), and the “If” (factors affecting patient engagement). In this talk, the “How” of training will be addressed. A theoretical model that distinguishes declarative and procedural learning will be used to organize findings from cognitive science, cognitive neuroscience, and sports literature in perceptual-motor learning. Surprising findings will challenge traditional voice and speech therapy models, with several twists and turns. A particular emphasis is attention and the role of conscious and non-conscious processes in learning. Applications to voice and speech therapy models will be described.

# Speech and Language Therapy in Estonian Hospitals – How Did We Get Here and Where to Next?



**Anna Liisa-Sutt Vowden**

PhD, Critical Care Research Group, Institute of Molecular Bioscience, University of Queensland, Brisbane, Australia; Speech and Language Therapy, The Royal London Hospital, Barts Health NHS Trust, London, UK; Estonian Logopedists' Union, Estonia

When I started working as an SLT in an adult hospital in Estonia back in 2004, things were quite different compared to today. I worked with speech and language difficulties, and swallowing was not something we even looked towards in the adult world. There were no modified diets or fluids, no instrumental assessments for swallowing, no SLT input in intensive care, and very little in acute care. Rehabilitation was the buzz word, not prevention or early intervention. Where are we now, only 22 years later? How did we get here? What has happened along the way? Where are we or should we be heading? I aim to give you a journey through time, tied with actual events and latest research. Time to reflect, and hopefully walk away inspired.

*Keywords:* speech and language therapy, tracheostomy

# Generative Artificial Intelligence in Speech and Language Therapy: Opportunities, Limitations, and Regulatory Perspectives



**Rania Kassir**

PhD, Speech and Language Pathologist, Neuropsychologist, Founder of Happy Brain Training and Co-Founder of TheraNova AI, Lebanon/France

Generative artificial intelligence (AI) is rapidly reshaping speech and language therapy by introducing tools that extend far beyond traditional AI applications. While conventional AI focuses on classifying or predicting outcomes, generative AI creates new outputs such as text, images, or interactive resources, offering unique opportunities for clinicians. Its recent boom is driven by advances in large-scale language models and multimodal systems, which are now accessible to practitioners in everyday settings.

This presentation will explore the potential of generative AI to support therapists in their practice. A brief literature review will highlight recent studies describing AI-driven applications in speech and language pathology. Examples include reducing administrative workload through automated report drafting, creating individualized therapy materials in seconds, and simulating communicative interactions for clinical training. Demonstrations will highlight how these tools can adapt to patient profiles, facilitate multilingual practice, and stimulate creativity in therapy design.

At the same time, generative AI raises important challenges. Risks include data privacy concerns, algorithmic bias, overreliance on automated outputs, and the risk of eroding the human connection central to therapy. These concerns are particularly relevant in the context of emerging regulatory frameworks, such as the European AI Act, which sets guidelines for safe and ethical implementation.

**Conclusion:** Generative AI is not a substitute for professional expertise but a collaborator that can enhance therapeutic practice when used responsibly. By balancing innovation with ethical safeguards, speech and language therapists can harness the promise of generative AI to enrich clinical work while preserving the human values that remain at the heart of care.

**Keywords:** generative AI, regulation, speech and language therapy

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# Preparing Speech and Language Therapists for Contemporary Practice in Europe

**Sahra Mengal**

European Speech and Language Association (ESLA)  
Danish Association of Speech and Language Therapists, Denmark

Speech and Language Therapy is an evidence-based profession that carries significant ethical responsibility and a high degree of professional autonomy. Across Europe, Speech and Language Therapists are required to work safely and effectively with communication and swallowing needs, within diverse healthcare, education, and social care systems. Initial professional education plays a critical role in ensuring that graduates are prepared to meet these responsibilities.

This presentation will offer a European perspective on the SLT profession in contemporary practice, focusing on initial education as the foundation for professional competence, ethical decision-making, and public protection. Drawing on shared European principles, it will outline the core areas of knowledge, clinical skills, and professional values expected of entry-level practitioners, and consider how these are supported through robust and comprehensive educational preparation.

In the context of ongoing discussions about different models and durations of initial training across Europe, the presentation will reflect on the importance of ensuring that educational pathways remain proportionate to the complexity and scope of professional practice. Emphasis will be placed on the need for high-quality preparation that supports safe practice, professional mobility, and public confidence in the SLT profession.

The presentation aims to contribute constructively to European dialogue on the future of SLT education, highlighting initial education as a shared responsibility and a key safeguard for the profession and those it serves.

# Strengths and Limitations of National Ethical Codes for Speech and Language Therapists in the Baltic States

**Signe Mezinska**

Institute of Clinical and Preventive Medicine, University of Latvia, Riga, Latvia

**Objective.** This presentation will examine the national ethical codes guiding speech and language therapists in the Baltic states, in the context of the European Speech and Language Therapy Association (ESLA) Code of Ethical Practice (2021). The objective of this presentation is to critically examine the functions of national ethical codes, with a particular focus on their strengths and shortcomings in fulfilling their functions across both healthcare and educational contexts in the Baltic states.

**Methods.** A qualitative document analysis was conducted, comparing the ESLA Code of Ethical Practice (2021) with the national codes currently used in Latvia, Lithuania, and Estonia. The analytical approach follows Essex et al. (2025), enabling an interpretive examination of how ethical values, professional expectations, and sector specific assumptions are articulated within the documents.

**Results.** The analysis reveals notable differences in orientation between European level and national ethical frameworks. The ESLA code reflects a strong healthcare based perspective, emphasizing clinical responsibilities and patient centred care. In contrast, the Baltic national codes embed a broader view of professional responsibilities applicable to both healthcare and education. Despite these differences, all documents share core ethical values, including respect, professional integrity, responsibility, and a commitment to person's well-being. However, sector specific terminology and assumptions contribute to persistent fragmentation between healthcare and educational speech and language therapists, for example, in Latvia, where two parallel professions operate with overlapping competencies.

**Conclusions.** Ethical codes offer a shared foundation that can help bridge institutional divides and clarify common values across sectors. Nonetheless, successful integration of the ESLA code requires advanced dialogue and work towards a unified ethical framework that reflects both European guidance and professional contexts in the Baltic states.

*Keywords:* ethical codes, ethics governance, values.

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# Global Tales Protocol and Personal Narratives in Iceland

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**Objectives:** Recent studies have shown that analyzing children's personal narratives can serve as a useful language assessment tool, as it provides a comprehensive and rich sample of a child's functional language skills, reflecting daily communication. However, few tools and methods are available for speech-language pathologists to evaluate these skills in culturally and linguistically diverse children. The Global TALES Network currently involves more than 50 researchers from 26 countries worldwide, investigating personal narratives in school-age children using the Global TALES protocol (Westerveld et al., 2022). The objective of this study was to use the Global TALES protocol to compare language skills and discussion topics between a group of multilingual children and a group of monolingual children in Iceland.

**Methods:** The study involved 42 children, including 27 monolingual and 15 multilingual participants, aged 9;3 to 10;9 years. Most of the multilingual children were born in Iceland (all except one) and had attended Icelandic preschools and primary schools.

**Results:** The results revealed that multilingual children expressed themselves in significantly fewer sentences, used fewer words, and had a less diverse vocabulary compared to their monolingual peers. They also made proportionally more grammatical errors. Both groups frequently discussed happiness derived from spending time with family, recalled instances of conflict or bullying when talking about events that made them angry, and expressed pride in personal accomplishments.

**Conclusion:** These findings indicate that the Global TALES protocol is effective for comparing personal narratives between monolingual and multilingual children in Iceland.

*Keywords:* global tales, multilingual children, personal narratives

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# Navigating Diagnostic Challenges in Apraxia of Speech

**Marja Liisa Mailend**

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Thomas Jefferson University, Jefferson Moss Rehabilitation Research Institute, Elkins Park, United States;

Thomas Jefferson University, Department of Rehabilitation Medicine, Philadelphia, United States

Accurate diagnosis of apraxia of speech remains a central challenge in clinical practice and research. Diagnostic processes and criteria are heterogeneous with variability across etiologies, age groups, research labs and clinical settings. Overlap in symptomatology with other speech syndromes further complicates differential diagnosis. Furthermore, in countries with relatively few speakers of the native language, the diagnosis is complicated also by the shortage of language-specific research. This talk will examine several options for strengthening the diagnosis of apraxia of speech in face of these challenges and offer some suggestions for considering language-specific aspects of the syndrome when scientific evidence is sparse.

*Keywords:* apraxia of speech, diagnosis, motor speech disorders

# Developing Digital Tools for SLTs in Small Language Communities: ALDA in Iceland (FP1)

**Bryndís Bergþórsdóttir, Gunnar Thor Örnólfsson, Hinrik Hafsteinsson, Iðunn Kristínardótti, Iris Edda Nowenstein**

University of Iceland, Institute of Linguistics, Reykjavík, Iceland

**Objectives:** Speech and language therapists (SLTs) in small language communities often lack access to language-specific digital tools and clinical norms. We introduce the Icelandic Language Biobank (ILB) and ALDA (Automatic Linguistic Data Analysis), a web-based platform for automated language sample analysis. The main objectives are to establish a secure infrastructure for collecting and semi-automatically analysing language data from the Icelandic community and to develop language-specific clinical norms to support assessment and monitoring of communication disorders across the lifespan.

**Methods:** The ILB is being developed at the University of Iceland using a secure data management system with pseudonymisation and a tiered opt-in consent model. Participants specify how their data may be used for research or development purposes. Data collection will be conducted via the ALDA platform starting in January 2027, within typically developing/healthy controls and clinical populations 2;6 years and older. ALDA is co-created with SLTs to ensure clinical relevance and usability. Language samples are recorded through the platform and processed using automatic speech and language analysis tools adapted for Icelandic, including AI tools such as Whisper and a neural part-of-speech tagger. ALDA is currently in user testing.

**Results:** ALDA automates transcription of language samples and extracts linguistic measures, significantly reducing manual analysis time. By collecting language samples from typical and clinical populations, we are building a normative reference database within the ILB to develop Icelandic clinical benchmarks. This will allow Icelandic SLTs to compare individual performance against population-specific norms.

**Conclusions:** Collaboration between SLTs and language technology specialists allows digital tools to be designed for real clinical needs. Providing SLTs with clinical value through practical diagnostic tools encourages sustained use, which in turn facilitates long-term data collection. This approach addresses data scarcity in smaller languages and promotes equitable access to advanced, technology-augmented assessment and monitoring of speech and language.

**Keywords:** language biobank, language sample analysis, small languages

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# Screening for Speech Sound Disorders: Validating the ICS in the Icelandic Context (FP2)

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**Objectives:** Screening offers an opportunity for early detection of speech sound disorder (SSD); however, no formal screening is currently being implemented in Iceland. The Intelligibility in Context Scale: Iceland (ICS-ÍS) is a simple parent-report questionnaire, correlated with intelligibility and speech sound production in Icelandic-speaking preschool children. This study aimed to determine the utility of ICS-ÍS as a screening tool for SSD in monolingual Icelandic-speaking preschool children aged 4;0-5;5. In particular, the study assessed the relationship of ICS-ÍS scores with percentage of consonants correct (PCC) and Sjúkratryggingar Íslands (Icelandic National Health Insurance [SÍ]) error count, a metric defining intervention available for children with SSD within the Icelandic healthcare system.

**Methods:** Data included parent reported ICS-ÍS and Málhljóðapróf þM (þM's Test of Speech Sound Disorders [MHP]). Correlation between children's ICS-ÍS scores and (a) PCC scores (N=179) and (b) SÍ error count (N=118) were analyzed.

Furthermore, receiver operating characteristic (ROC) curve analysis was performed to determine an ICS-ÍS cut-off for the optimal screening accuracy for SSD considering PCC criteria (below 2 SD) and for reimbursement eligibility considering SÍ criteria.

**Results:** ICS-ÍS was significantly correlated with PCC ( $r=0.63$ ) and SÍ error count ( $r=-0.67$ ), as well as with each other ( $r=-0.91$ ). An ICS-ÍS cut-off of 4.0 was determined to yield the optimal sensitivity and specificity both for SSD by PCC criteria (77% and 71% respectively) and reimbursement eligibility by SÍ criteria (88% and 72% respectively). However, the positive predictive value (PPV) of ICS-ÍS was low resulting in a high number of false positives.

**Conclusions:** ICS-ÍS has criterion validity as a screening tool for SSD in Icelandic speaking preschool children. However, the low PPV found in this study suggests that, if used alone, screening for SSD with ICS-ÍS could result in multiple unnecessary SLP referrals in an already strained system.

**Keywords:** children, screening, speech sound disorder

# Profile of Childhood Apraxia of Speech: Lithuanian Speech and Language Therapists' Perspective on Diagnostic Features (FP3)

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**Objective:** The aim of this study was to identify the profile, i.e. the structure, of diagnostic features that Lithuanian speech and language therapists (SLTs) consider essential for diagnosing childhood apraxia of speech (CAS), based on their clinical expertise and perceptions.

**Methods.** This paper forms part of the broader study Assessment of Childhood Apraxia of Speech: A Cross-Linguistic Survey of Speech-Language Therapists. An online survey of CAS diagnostic features was developed to examine how strongly SLTs from Estonia, Finland, and Lithuania associate specific features with a CAS diagnosis. The present analysis focuses exclusively on responses provided by Lithuanian SLTs (N = 69). Quantitative data were analysed using cluster analysis to identify homogeneous groups of diagnostic features, followed by exploratory factor analysis to examine the underlying dimensions of feature ratings based on clinicians' perceptions.

**Results:** Three main clusters of CAS diagnostic features were identified. The first cluster, Core phonological and articulatory errors with inconsistency, comprised consonant, syllable, vowel, and diphthong errors, as well as inconsistent speech output, reflecting disrupted motor planning and difficulties with voluntary speech initiation. The second cluster, Broader co-morbid (oral) motor, language, and literacy difficulties, included oral motor planning deficits, reduced speech volition, and impaired diadochokinetic performance, often accompanied by gross and fine motor involvement, indicating a more generalized motor profile in children. The third cluster, Prosodic, oral motor, and suprasegmental characteristics, encompassed atypical stress patterns, syllable segmentation, inappropriate pauses, slowed or variable speech rate, and reduced intonation variability.

**Conclusions:** Lithuanian SLTs perceive CAS as a multidimensional disorder encompassing core segmental inconsistencies, broader motor and language-literacy comorbidities, and prosodic and temporal disruptions. These findings largely align with ASHA (2007) criteria for CAS while extending them by emphasizing contextual sensitivity, oral motor challenges, and associated developmental and cognitive factors, highlighting the complexity of CAS in clinical practice.

**Keywords:** childhood apraxia of speech, Lithuanian speech and language therapists' perspective, profile of diagnostic features

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# Oral Diadochokinetic Rates Among Healthy Estonian-Speaking Children (FP4)

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Diadochokinesis (DDK) task performance is influenced by the phonological structure of the language and articulatory habits (Ben-David & Icht, 2016; Camargo-Mendoza et al., 2023); however, international norms developed for different languages are not directly applicable to Estonian-speaking individuals. In addition, DDK rate is influenced by age (Kent et al., 2022). The current study aims to provide data for the rate of DDK in healthy Estonian-speaking children and the factors that may affect it. The development of normative data would enable a more objective evaluation of the effectiveness of speech-language therapy.

**Method:** A group of 127 typically developing children aged 4.6 to 17.11 years performed the DDK task (mono- and trisyllabic sequences /pa/, /ta/, /ka/, /pataka/ and real words stimuli /koputa/ and /pikuta/). In addition to that, children aged 4.6 to 12.11 years performed numbers counting from 1 to 10 and children aged 13.0 to 17.11 read a text. All performances were recorded so that the researcher could later evaluate a 5-second segment using Praat software (version 6.2.22). A quantitative research method was used to analyze collected data. Statistical analysis was performed using JASP software (version 0.19.3).

**Result:** The data analysis indicated a general improvement in DDK performances with increasing age. No significant effect of gender on DDK rates was observed. Significant differences in repetition rates between the two types of stimuli were identified in the youngest age group (SMR vs word\_1; SMR vs word\_2) and in the second age group (SMR vs word\_1). In addition, a weak positive correlation was found between repetition speeds for the SMR, word\_1, word\_2, and the overall reading rate.

**Conclusion:** The normative data established in this study provides a valuable foundation for future research and offers a necessary reference for the clinical assessment of speech motor function in Estonian-speaking children.

**Keywords:** Estonian, healthy children, oral-diadochokinesis (oral-ddk)

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# Re-thinking Working with Parents: New Strategies for our Times

## **Maria Vlassopoulos**

University of Athens, Medical School

This workshop's aim is to discuss innovative strategies to work with parents of young children with communication disorders. Over the years, speech and language therapy practice has proved to be especially open to new ideas, a fact which may be seen in the evolving therapeutic formats used by therapists. In these fast-moving times, where AI's presence is cataclysmic, we will suggest ways to work with parents that will take advantage of this new framework but also lean heavily into well-trying and tested "old-school" techniques. In this way, new and original techniques may be used by the therapist in his/her practice, which will be both meaningful for a new generation of parents, but also be founded on strategies and methodologies which have been proven to be effective.

In this practical workshop, the presenter will suggest techniques and strategies but will also use interactive learning techniques to elicit original ideas.

*Keywords:* child language disorders, parents, therapeutic techniques

# Voice Ergonomic Studies in Latvia

**Baiba Trinite**

Voice and Speech Research Laboratory, Riga Technical University Liepaja Academy, Liepaja, Latvia

This presentation provides a retrospective overview of research on voice ergonomics conducted in Latvia since 2010 and summarizes the main findings. Early studies focused on schoolteachers and revealed that approximately 66% experienced voice-related problems, with the highest prevalence among music and physical education teachers. These findings highlighted a strong association between vocal health and increased vocal demand response. Prolonged and intensive voice use was identified as the primary risk factor, while unfavorable classroom conditions, particularly external noise, noise from information technology equipment, and activity-related classroom noise, were shown to further exacerbate vocal strain. Subsequent research expanded to other occupational voice users, including choir conductors and healthcare workers. Analysis of choir conductors' vocal load during a 40-minute session revealed no significant deterioration in acoustic voice parameters, underscoring the protective role of efficient vocal technique despite high vocal demands. Comparative studies demonstrated differences in several acoustic and aerodynamic voice parameters, indicating better vocal quality in healthcare workers than in teachers classified as normophonic. These findings suggest that some voice professionals may exhibit reduced voice quality even in the absence of clinically defined pathology. Beyond voice production, perceptual and neurocognitive aspects were also examined. Evidence from event-related potential studies indicates that exposure to severe dysphonia significantly alters both behavioral responses and neural processing in listeners, highlighting the broader communicative and cognitive impact of voice disorders.

Overall, the findings indicate that intensive and prolonged voice use, combined with unfavorable acoustic environments, places occupational voice users at increased risk of vocal deterioration. While voice ergonomics remains essential, technical interventions such as classroom sound amplification systems have been shown to reduce vocal demand and improve speech perception among students. These results emphasize the need for an integrated approach to voice ergonomics that combines vocal training, ergonomic workplace design, and technological support to promote sustainable voice use.

*Keywords:* occupational voice, risk factors, voice ergonomics

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# Decoding Bilingual Voices (FP5)

## Una Roze

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**Objectives:** Fundamental frequency (F0) variation in bilingual speakers is influenced not only by physiological factors but also by language specific prosody, sociocultural context, and individual identity. Building on findings from a scoping review of bilingual F0 research, this study aims to (1) examine how bilingual adults modulate F0 level across their two languages, and (2) explore how individual factors like age of acquisition, language dominance, gender identity, and self-reported language confidence, relate to cross-linguistic F0 patterns.

**Methods:** A scoping review was conducted following the Arksey & O'Malley (2005) framework and PRISMA-ScR guidelines. Peer reviewed studies reporting quantitative acoustic analyses of F0 in bilingual speakers were identified through searches of PubMed, PsycINFO, Scopus, and Google Scholar. Studies were charted by language pair, participant characteristics, speech tasks, and F0 dimensions.

The accompanying empirical study employs a within subject design with bilingual adults. Participants complete a language background survey, conversational task, picture description, and reading in both languages. Speech samples are recorded in a controlled laboratory environment, and F0 measures are extracted using Praat. Statistical analyses include within subject comparisons and correlations with individual variables.

**Results:** The scoping review revealed consistent cross linguistic differences in F0 among bilinguals, shaped by gender norms, language dominance, and sociocultural factors. Preliminary observations from ongoing data collection reflect similar patterns. Full acoustic and statistical analyses will be completed prior to the conference.

**Conclusions:** Findings from the scoping review and preliminary study results suggest that bilingual F0 production reflects a complex interaction of linguistic, social, and identity-based factors. These insights underscore the need for culturally and linguistically responsive approaches in voice assessment, as monolingual norms may not fully represent typical bilingual pitch variation. The study contributes early normative data and highlights key variables relevant to clinical practice in multilingual populations.

*Keywords:* bilingual, fundamental frequency, voice

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# Estonian Swimming Coaches' Voice Quality and Factors Affecting It (FP6)

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**Objectives:** Swimming coaches are occupational voice users, who have received limited scientific attention. Indoor pool environment involves several unique vocal risk factors, including air temperature, humidity, exposure to chemicals (NCL 3), and elevated background noise, which may increase the risk for dysphonia. The aim of this study was to describe the voice quality of Estonian swimming coaches, to examine factors influencing vocal function, and to identify potential causes for dysphonia.

**Methods:** Fifty-nine swimming coaches (8 males, 51 females) completed a questionnaire including background information and the Voice Handicap Index (VHI-30\_EST). Coaches reporting voice-related complaints (n=34; 58%) were invited for further clinical assessment; 21 of them participated in it. Further assessment included transnasal fiberoptic laryngoscopy and voice analysis. Acoustic analyses were performed using PRAAT software and included the Acoustic Voice Quality Index (AVQI), Cepstral Peak Prominence Smoothed (CPPS), and Maximum Phonation Time (MPT).

**Results:** Work experience in years and the number of weekly training hours were not significantly ( $p > .05$ ) associated with the occurrence of voice problems, although coaches with voice complaints tended to report slightly longer work experience and higher training loads ( $U = 484.5$ ,  $p = 0.526$ ;  $m=18\text{hrs}$  vs  $m=12,5\text{hrs}$ ). Coaching qualification and training group sizes were not significantly associated with voice fatigue or pain and hoarseness; pool size showed a marginal but non-significant trend towards an association with voice fatigue. Statistically significant difference was revealed with composite voice load indices. Those reporting complaints had higher physical, emotional, functional, and total voice load ( $U = 789.0$ ,  $p < 0.001$ ). Acoustic analyses demonstrated mild to moderate alterations in voice quality (AVQI, HNR, MFK). Laryngoscopic findings predominantly indicated functional voice disorders characterized by supraglottic hyperfunction (A-P=13; M-L=7), with complete glottal closure (n=11) and generally preserved regular mucosal wave (n=20); mild inflammatory (n=9) findings were observed.

**Conclusion:** Estonian swimming coaches show a high prevalence of voice problems primarily associated with increased voice load and functional laryngeal findings, while workload and environmental factors were not significantly associated with dysphonia.

**Keywords:** occupational voice users, swimming coaches, voice

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# Introduction to Lessac-Madson Voice Therapy for Speech Language Therapy

**Katherine Verdolini Abbott**

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Lessac-Madsen Resonant Voice Therapy (LMRVT) was developed by Dr. Katherine Verdolini Abbott as a voice therapy approach for people with a wide range of pathologies affecting voice, including those affecting mucosal structure as well as functional and neurological impairments. The program has its origins in performing voice, in particular theatre voice and speech as articulated by Dr. Arthur Lessac (theatre) drawing also on experiential learning models implemented by Dr. Mark Madsen (singing). Dr. Verdolini Abbott has received funding for research from the National Institutes of Health since 1997, on the basic science and applied aspects of LMRVT since 1997, establishing it as among the few voice therapies worldwide to be firmly grounded in evidence-based medicine.

LMRVT differs from traditional voice therapy models in three critical aspects. First, in difference to traditional approaches, LMRVT does not emphasize voice conservation for vocal injury or malfunction. Rather, the approach emphasizes the production of strong voice, and voice for extended periods, in a way that is both safe and expressive. Second, the approach is deeply grounded in well vetted principles of perceptual-motor learning, favoring experiential rather than analytical training. Third, the approach integrates findings from the literature on patient compliance, adherence, and engagement.

In this mini-presentation, the basic foundations of LMRVT will be described and participants will be invited to experience “resonant voice” as trained in this program, at a preliminary level. Information about more comprehensive courses will be provided.

*Keywords:* child language disorders, parents, therapeutic techniques

# Children's Portrayal of Health and Health Services: Perspectives from Children with and without Disabilities

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**Objectives:** To understand the perspectives of children with disabilities (including speech, language, and communication needs: SLCN) about health and access to healthcare. Child-focused participatory action research was used to design and analyse children's perspectives.

**Methods:** Firstly, a group of children ( $n=24$ ), including children with SLCN and other disabilities, co-designed and piloted questions that would be used in this study: What makes you healthy? Who helps you be healthy? Where do you go to get healthier? and What would your ideal hospital or health service look like? Secondly, children across the world were invited create and describe an artwork in response to one or more of these questions. Thirdly, a children's advisory group ( $n=8$ ) at the Children's Voices Centre (CVC) analysed each of the artworks and their accompanying text. The children created themes and advice based on these sources.

**Results:** 126 artworks were received from children in 18 countries, including 60 from children with disabilities, chronic health conditions, and/or health concern (e.g., SLCN). The children's analysis concluded that having good health required food, friends, doctors, rainbows, hospitals, abilities, workout and sports, energy, and stuff. Artwork created by children with disabilities more often focused on hospitals and doctors. Children with disabilities were more likely to describe being afraid at health facilities and wanting their parents with them, and wanting staff to listen to them and to be kind. Children with disabilities indicated areas in which health professionals' could better help children by improving how they communicate with children, healthcare environments, and pre- and post-appointment.

**Conclusions:** Including children in research design, participation and analysis contributed greatly to this research. Seeking the perspectives of children, particularly children with disability is both important and possible, and provides meaning insights into how children conceptualise health and health care experiences. Children's artworks can be seen here: <https://www.csu.edu.au/research/childrens-voices-centre/research/childrens-voices>.

**Keywords:** children, disability, health

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# Developing Speech and Language Assessments for Small Languages

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Tests that assess linguistic functioning and establish the presence of communication disorders must possess strong psychometric properties, regardless of the number of users a language has. In accordance with Article 19 of the Universal Declaration of Human Rights, which protects the right to freedom of opinion and expression, linguistic distinction should not preclude access to appropriate speech and language evaluations, regardless of demographic considerations, such as population or language size. To ensure proper diagnostic accuracy, implementation, and analysis within clinical contexts, it is imperative to develop standardized, norm-referenced instruments for minoritized and small-population languages. Despite of only about 390,000 speakers of Icelandic, SLTs in Iceland, and Icelandic-speaking children, have access to several standardized or norm-referenced tools for speech and language assessment. In the last 11 years, six standardized assessments have been developed, based on linguistic research, both for speech/phonology and for language assessment. This presentation examines the methodological, theoretical, and practical challenges inherent in standardizing linguistic assessments for small language communities, with particular attention to issues of norming, cultural-linguistic validity, and resource constraints.

*Keywords:* psychometric properties, small languages, standardized assessments

## **Working Together: Practical Approaches to Collaboration Between Teachers and Speech and Language Therapists**

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<sup>2</sup>Integrated Health and Care Partnerships, University of Essex, United Kingdom

In this session, Sahra Mengal and Professor Victoria Joffe share practical ways for speech and language therapists (SLTs) to build strong, effective partnerships with teachers and other teaching support staff to support children with speech, language, and communication needs (SLCN). The talk will incorporate different models of service delivery including universal whole class provision, and pull-out targeted and specialist provision. Drawing on real-world examples, we explore how co-planning, shared goals, and classroom-based strategies can make intervention more integrated and impactful. Views from pupils, teaching and support staff and SLTs will be shared to inform how best to meet the needs of children and young people with SLCN through collaboration and partnership working in schools. The talk will highlight common challenges, practical solutions, and key ingredients for successful collaboration that benefits pupils, teachers, and SLTs alike. Facilitators and obstacles to collaborative practice will be discussed and a framework for enhancing language and communication for all students in schools, through partnership working, is shared.

# Joint Attention – A Journey Towards Communication and Speech

**Anna Maria Ülviste**

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A child's ability to share attention between an object of interest and an adult's response is essential for their communicative development, including language acquisition (Adamson *et al.*, 2019; Bruner, 1975; Loy *et al.*, 2018). Therefore, during the prelinguistic period, both assessment and intervention targeting children with language disorders should focus on joint attention and the development of prerequisite skills necessary for its emergence. Since communication is inherently at least a dyadic process, the child's communication partners must also be actively involved both in assessment and intervention. Joint attention is most profoundly impaired in children with autism spectrum disorder (Adamson *et al.*, 2019); however, early intervention through the adaptation of the communicative environment can help mitigate the impact of the disorder on the child's subsequent development.

The ongoing doctoral research project aims to describe the nature and developmental dynamics of joint attention; to examine its associations with children's speech, socio-emotional, and overall development; and to explore its connections with parental emotional well-being and perceived self-efficacy. The study sample includes two-year-old children at risk of autism spectrum disorder and typically developing children. The data is being collected using parent-report (completed by parents about their child's development) and parent self-report (reflecting parents' own emotional state and perceived self-efficacy) questionnaires and videotaping parent-child interactions in clinical and home settings. The preliminary results of the ongoing study will be presented at the 10th Congress of Baltic States SLTs.

*Keywords:* assessment, joint attention, parent-child interaction

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# Supporting Multilingual Children’s Language Development in Icelandic Preschools: A Journey in Using and Creating Evidence in New Contexts

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**Objectives:** Many preschool-aged children speak different language/s to their teachers and the language of the wider community. Educators and speech-language therapists (SLT) often collaborate to support multilingual children’s speech and language development using evidence-informed methods. While effective interventions exist, these rarely have sufficient evidence use their efficacy when they are used in new language and cultural contexts. This presentation describes how World of Words, an evidence-based intervention that was developed for English-language learners in the United States, was culturally and linguistically adapted to a new intervention called Orðaheimurinn to support preschool-aged children’s learning of Icelandic in Iceland. The process used to culturally and linguistically adapt this intervention and to examine its effectiveness in the new context will be presented to illustrate this as well as results from trial of Orðaheimurinn in Iceland.

**Methods:** The methods used in this adaptation included intervention selection, direct translation, adapted translation, translation optimisation, theme/unit adjustments, target vocabulary review, new material development, feasibility study, a cluster randomised-controlled trial, fidelity measurement, and social validity assessment. The cluster randomised-controlled trial involved 207 4-year-old children at 15 preschools in Iceland and was conducted over a period of 18 weeks. Pre-, immediate post-, and delayed post-intervention assessment data were collected for children’s language skills using vocabulary and global language measures.

**Results:** The methods described above have led to the development of an intervention that is linguistically and culturally appropriate and socially valid in the context of Icelandic preschools. Initial data from the first version of Orðaheimurinn showed promising results for improving the vocabulary knowledge of both monolingual and multilingual children. Orðaheimurinn continues to be refined and revised using new sources of evidence.

**Conclusions:** This method demonstrates how multilingual children’s language development can be supported in preschool settings in ways that are culturally and linguistically responsive.

*Keywords:* children, intervention, multilingual

# Global Standard for Texture Modification: Theoretical and Evidence-Based Foundations of IDDSI

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**Objectives:** To provide an overview of the theoretical and conceptual foundations of the International Dysphagia Diet Standardisation Initiative (IDDSI) framework. It will explore how IDDSI establishes a common, evidence-based language for texture modification and swallowing safety, supporting interdisciplinary communication and global consistency in dysphagia management.

**Methods:** Drawing on theoretical models and examples of cross-cultural adaptation, the presentation will highlight how the IDDSI framework and related tools have been evaluated for reliability and clinical applicability. A recent Latvian adaptation of the IDDSI Functional Diet Scale (IDDSI-FDS) will be presented as a practical example of the translation and validation process.

**Results:** Evidence supports the IDDSI framework's clinical utility across diverse healthcare contexts. The Latvian IDDSI-FDS adaptation similarly demonstrated high reliability, very strong criterion validity and very high consensus validity, confirming the scales adaptability.

**Conclusions:** IDDSI provides a unified, evidence-based system for texture modification and dysphagia assessment. Understanding its theoretical underpinnings and psychometric support is crucial for its continued global implementation and for promoting safe, standardized dysphagia care.

*Keywords:* dysphagia, IDDSI, texture modification

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# An Overview of SLP-Led FEES Service in Estonia: Clinical Experience from West Tallinn Central Hospital (FP7)

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**Background:** Fiberoptic endoscopic evaluation of swallowing (FEES) is a gold-standard instrumental method for the assessment and management of swallowing disorders. Although FEES is considered safe to be performed by speech-language pathologists (SLP), its routine use by SLPs in Estonia remains limited.

**Objectives:** The aim of this presentation is to share our experience with FEES performed by SLPs in West Tallinn Central Hospital (WTCH) Neurology Department. The presentation describes clinical implementation of FEES, workflow, practical considerations and feasibility in a hospital setting. We also include a brief retrospective analysis of patients' primary diagnoses, procedure duration, dysphagia severity, and underlying mechanisms of dysphagia.

**Methods:** Patients needing FEES are identified by SLPs and referred to the assessment. The procedure is conducted by two SLPs with specialized training following the Langmore protocol. The FEES lab is next door to the neurological intensive care ward and medically fragile patients were studied in the intensive care ward. Also, a nurse expert in swallowing disorders is ready to assist if needed. The details of the assessment are discussed with the treating neurologist. Retrospective data analysis from September and October 2025 was performed for 56 examinations.

**Results:** The mean duration of the procedure was 30min, while analysis and documentation took on average 1,5h. The predominant dysphagia impairment mechanism was sensory impairment. The examinations mainly took place on the same day as the clinical assessment. No procedure-related complications were documented. FEES was the most important input to determine the dysphagia management (safe consistencies for swallowing, nasogastric tube feeding, gastrostomy) in patients with neurological disorders.

**Conclusion:** FEES is an essential instrument in the assessment and management of dysphagia, and its execution by specially trained SLPs renders it a readily accessible and routinely integrated tool in everyday clinical practice at WTCH. There remain difficulties with wider rollout of FEES across Estonia due to legislative and funding issues.

**Keywords:** dysphagia, FEES, neurology

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# Exercise Induced Laryngeal Obstruction (EILO): Speech Therapist's Role in Assessment and Management (FP8)

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**Background:** EILO is defined as transient, exertion-related obstruction at the supraglottic and/or glottic level and is diagnosed using continuous laryngoscopy during exercise (CLE), enabling real-time visualization of laryngeal behavior at symptom onset. Speech-language therapist (SLT) assists with CLE, evaluates breathing disorder, assesses and analyzes the presence of voice issues, and plans the treatment accordingly.

EILO most commonly affects individuals under 20 years of age, with a female predominance. Prevalence in young people is 5-8% (1; 2), increasing to 34% amongst the same age group of athletes (3). Patients present with acute inspiratory or mixed dyspnea, throat tightness, and chest pressure during high-intensity exercise, resolving rapidly at rest. Laryngoscopic findings include abnormal medialization of supraglottic structures (epiglottis, arytenoid cartilages) and/or incomplete vocal fold abduction. Emotional stress and heightened laryngeal tension are frequently observed. Pulmonary function is typically normal and asthma medication ineffective.

**Methods:** To describe the interventions for EILO in East-Tallinn Central Hospital

**Results:** In the East-Tallinn Central Hospital our interdisciplinary team led by an ENT doctor includes a rehabilitation physician, SLT and a nurse. We have provided CLE with our current team since 2020. The CLE itself takes under 10 min on average. Patients's age range from 11 to 22yrs. Patients have been from different sports disciplines including cross-country skiing, football, cycling, swimming, track and field athletes.

Our patients have praised our CLE service highlighting input from different professionals. Working with the posture, breathing pattern and already applying some of the techniques before the first therapy session has been reported extremely useful by the patients.

**Conclusion:** Awareness of EILO among medical specialists and speech therapists is essential. Early diagnosis using exercise laryngoscopy and targeted therapy are key to effective management.

**Keywords:** exercise-induced laryngeal obstruction (eilo), speech therapy, young athletes

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# Fidelity of Vocabulary Intervention for Multilingual Pre-School Children (FP9)

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**Objectives:** Without understanding fidelity in intervention studies, we can't know if the intervention worked or not. This requires knowing the dose, adherence, quality and responsiveness with which the intervention was implemented and how this relates to intervention outcomes. This study examined the fidelity of Orðaheimurinn, a teacher-led vocabulary intervention for Icelandic-speaking children in preschools.

**Methods:** In a cluster-randomized controlled trial (CRCT) of Orðaheimurinn, five pre-schools were randomly assigned to the intervention, involving 62 students and 11 teachers. The fidelity of 104 sessions was analyzed (21.5%). Dose was measured by the number of sessions children attended. Adherence was measured by number of lesson elements delivered (teacher self-report and researcher observation). Quality was a rating of how well teachers' behaviors aligned with the purpose and principles of the program. Responsiveness was the engagement and attention the children had. Children's language was assessed before and after the intervention.

**Results:** On average children's attended 80.2% of the intended lessons (dose). Teacher's self-reported adherence was a mean of 91.3% and researcher observed adherence was 56.5%. Mean quality was 3.9 out of a possible 5 points and mean responsiveness was 3.9 of a possible 5 points. Findings revealed significant improvements in OH-specific vocabulary and category knowledge for children who participated in the intervention compared to those who did not, but not in intervention-specific concept knowledge or global language skills. Monolingual children exhibited greater gains than their multilingual peers.

**Conclusion:** Fidelity showed mixed results. Overall dose was relatively high, but variable. Adherence was moderate but teacher self-report was consistently higher than researcher observed adherence. Both quality and responsiveness were moderately high, but both showed considerable variability across sessions. Large variability in all four components of fidelity mean it is difficult to draw definitive conclusions about the effectiveness of Orðaheimurinn from this CRCT.

**Keywords:** fidelity, intervention, vocabulary

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# From Theory to Practice: Developing a Sentence Comprehension Assessment Tool for Estonian Children with DLD (FP10)

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Developmental Language Disorder (DLD) is one of the most common neurodevelopmental disorders, affecting approximately 7% of children. Unlike earlier distinctions, DLD is no longer defined by separate expressive and receptive forms, as difficulties in these children manifest in both speech production and comprehension. Difficulties in speech comprehension negatively affect the academic success of children with DLD. Identifying difficulties in spoken language comprehension is significantly more complex than noticing production difficulties. Consequently, speech production in children with DLD has historically been studied more extensively, and speech therapists have focused on it more in daily practice. Noticing and identifying spoken language comprehension difficulties is the foundation of therapy for children with DLD, which is why practicing speech therapists need tools to assess comprehension deficits. In Estonia, there are no standardized original tools designed specifically for assessing speech comprehension. While standardized language tests for ages 3–7 exist, they pay little attention to assessing comprehension. The aim of the current study is to develop a measurement tool based on the Estonian language to assess spoken language comprehension difficulties at the sentence level in 6–7-year-old children.

Montgomery et al. (2021) propose a model describing the sentence comprehension process, which includes fluid reasoning, controlled attention, working memory, and language knowledge in long-term memory. Developing sentence comprehension assessment tool, we have selected 30 Estonian simple and complex sentence constructions, the comprehension of which we are evaluating in both typically developing children and children with developmental language disorder. The aim of the presentation is to deepen speech therapists' understanding of speech comprehension problems in children with DLD and to establish connections with assessment. The principles and process of developing the sentence comprehension assessment tool will be introduced, along with examples of task types and sentence patterns used in assessment that are evidence-based in DLD diagnostics.

**Keywords:** assessment, developmental language disorder, sentence comprehension

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# Hanen Caregiver- and Teacher-Implemented Intervention for Early Communication Development

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Early communication development plays a critical role in children's long-term language and social outcomes. Parent-implemented interventions, particularly those designed to engage caregivers in facilitating communicative interactions within daily routines, have been increasingly emphasized in early childhood speech-language practice (Roberts & Kaiser, 2011). Additionally, as children spend a considerable amount of time in kindergartens, similar teacher-targeted interventions are crucial for supporting child development.

Four aspects of caregiver–child interaction are associated with child language development: (a) amount of caregiver–child interaction, (b) responsiveness to child communication, (c) amount and quality of linguistic input, and (d) use of language learning support strategies. Variations in these features are associated with differences in children's language development both within the population of typically developing children and between children with and without language impairments (Bartlett & McLeod, 2024). All of these four aspects are a part of Hanen® programs, widely recognized models of caregiver-mediated early intervention. In the current presentation, we will provide an overview of four Hanen® programs designed for children with social communication disorders and/or language delays, with parents or teachers as the primary target groups. The Hanen® programs are grounded in the principle that parents and teachers can learn responsive interaction strategies that enhance opportunities for natural communicative exchanges with children. The findings in literature indicate that Hanen approaches are supported by a growing body of evidence demonstrating positive outcomes in caregiver–child interaction behaviours, child language development, and caregiver perceptions such as self-efficacy. The final section of our presentation will offer a critical reflection on the implementation of Hanen programmes in Estonia, addressing both strengths and barriers identified in practice. Topics for discussion will include funding models, participants' time and resource constraints, and compliance with data protection regulations, with the aim of outlining directions for future development.

**Keywords:** caregiver-mediated approach, early intervention, naturalistic

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# Orofacial Function as a Central Organizing Factor: An Integrative Clinical Perspective in Speech and Language Therapy

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**Objectives:** Orofacial myofunctional disorders (OMDs) are traditionally addressed in speech and language therapy as isolated disturbances of oral motor control, swallowing, or articulation. Clinical observations increasingly suggest, however, that altered orofacial function often co-occurs with dysfunctional breathing patterns, postural imbalance, and reduced motor coordination. The objective of this presentation is to introduce an integrative clinical perspective in which orofacial function is viewed as a central organizing component within the postural – respiratory system, with particular relevance to early childhood development.

**Methods:** The presentation draws on long-term interdisciplinary clinical observation and ongoing PhD research using the BaMS – Baracsy Myofunctional–Postural Screening System, a structured protocol integrating orofacial myofunctional assessment, breathing observation, and posture screening. Functional tasks such as lip closure endurance, structured swallowing observation, and posture-related motor tests are applied to identify recurring functional constellations rather than isolated symptoms. Case patterns are presented descriptively to illustrate typical relationships among orofacial function, breathing behaviour, and postural organization.

**Results:** Across clinical populations, recurring functional patterns are observed in which impaired tongue posture, reduced lip closure endurance, and atypical swallowing co-occur with altered breathing behaviour and postural instability. These constellations appear consistently across age groups, with early manifestations observable in preschool-aged children. The applied screening approach supports early recognition of such patterns and highlights the role of daily environmental motor input and habitual functional behaviours in maintaining or modifying these systems.

**Conclusions:** Viewing orofacial myofunctional disorders within an integrative postural–respiratory framework may enhance clinical reasoning in speech and language therapy. Rather than focusing exclusively on isolated oral functions, this perspective supports early functional screening, interdisciplinary collaboration, and intervention strategies targeting foundational motor organization and daily habit formation.

*Keywords:* breathing, orofacial myofunctional disorders, posture

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# Voice, Communication, and Psychosocial Outcomes of a Singing-Based Intervention in Parkinson's Disease (FP11)

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**Background:** Parkinson's disease (PD) is commonly associated with speech and voice disorders, such as reduced vocal loudness and monotony, which negatively affect communication, quality of life, and social participation. Respiratory and swallowing changes are also frequent. Intensive speech therapy approaches, including LSVT LOUD, are effective in improving vocal loudness and functional communication. In recent years, interest in singing-based interventions has increased; however, the evidence base remains limited. Singing is a multifactorial activity involving speech breathing, rhythmic and articulatory control, laryngeal muscle engagement, and regulation of melody and intonation, suggesting potential benefits for voice and communication in PD.

**Objective:** To establish a singing-based group intervention for people with PD, collect participant feedback, and explore its perceived impact on voice, communication, and psychosocial well-being.

**Methods:** A review of evidence-based literature on singing interventions in PD and their effects on voice, breathing, communication, and quality of life was conducted. In parallel, a choir specifically designed for people with PD was established and run over a one-year period. Choir sessions were held twice monthly, each lasting 1.5 hours, and included individual and group-based singing activities. Formal outcome measures were not applied; however, open-ended subjective feedback from participants was systematically collected.

**Results:** Ten individuals with PD enrolled in the choir, with nine participating regularly throughout the year. One participant discontinued due to declining health and reduced independence. Despite practical barriers such as transportation difficulties, attendance remained high. Participants reported improved voice intelligibility, particularly in noisy environments, reduced vocal fatigue, decreased fear of using a loud voice, improved articulation, reduced tension in facial, neck, and mandibular muscles, and increased confidence in communication and performance. Psychosocial benefits included peer support, shared experiences related to PD treatment, and the importance of a safe, non-judgmental singing environment.

**Conclusion:** Both participant experiences and emerging evidence support group singing as a promising, safe, and accessible complementary intervention for people with PD. Further research using standardized subjective and objective voice measures is needed to evaluate its long-term impact on vocal function and overall well-being.

**Keywords:** group singing, Parkinson's disease, voice disorders

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# Multiprofessional Functional Assessment Model for Non-Progressive CNS Disorders: Pilot Project Implementation (FP12)

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**Objective:** Adults with chronic, non-progressive CNS lesions often lack structured, sequential assessment and implementation of personalized recommendations (Boehme C, 2021; Chen T, 2019). In particular, there may be a lack of assessment by a speech and language pathologist (SLP), which is associated with the lack of funding and long waiting lists (World Bank & Ministry of Welfare of Latvia, 2020). The main objective is (1) to develop a digital, multi-professional rehabilitation program for chronic non-progressive functional disorders, using functional assessments and patient-engagement tools, involving multiple specialists. (2) to clarify the usability and usefulness of the rehabilitation program, provide proposals for the further implementation of such a rehabilitation program.

**Methods:** The pilot project and pilot study involve 192 patients, 30 healthcare professionals. At the start of the pilot program, participants complete self-assessment questionnaires, followed by an inpatient phase where their functional impairments are evaluated. Within three days after this phase, they repeat the questionnaires. During assessment, the SLP evaluates spoken and written language, communication difficulties, and swallowing disorders. Over the next three months, patients receive regular reminders to follow recommendations, and at the end, they complete the same self-assessment questionnaires again.

**Results:** A pilot program with standardized functional assessment documentation and digital tools has been developed and is being tested. After the full cycle, quantitative indicators and qualitative data on usability, usefulness and impact on daily functioning will be collected.

**Conclusions:** The model assesses functional impairments in patients with chronic, non-progressive CNS lesions using the ICF framework and standardized tools and provides individualized recommendations and digital resources to support adherence after the program. It enables monitoring of patients with limited access to SLP services, such as those with Cerebral Palsy. For SLPs, this is essential for supporting effective communication, improving language skills, ensuring safe feeding, promoting independence, and guiding sustainable progress.

*Keywords:* digital tools, multiprofessional team, rehabilitation

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# Speech and Language Therapy Work with Tracheostomies – A Practical Workshop

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Do you come across patients with tracheostomies in your workplace? Would you like to know more? Do you perhaps have burning questions about tracheostomies that you would like answers for? Come and join this practical workshop with hands-on opportunities to get to know the equipment and clarify SLT role with this population. I am there to answer all your questions and queries from tracheostomy insertion to decannulation.

*Keywords:* speech and language therapy, tracheostomy

# Gestures as a Compensatory Strategy in Late Talkers: Supportive Mechanism or Masking Risk Indicators? (P1)

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**Objectives:** Gestures are a central component of early communication and play a significant role in predicting later language development. Late talkers often rely on gestures to compensate for limited expressive vocabulary, yet it remains essential to distinguish when gesture use reflects a developmental strength and when it may signal underlying risk for persistent language difficulties. This theoretical analysis aims to (1) synthesise recent findings on gesture use in late talkers, (2) differentiate supportive versus risk-related gesture profiles, and (3) provide implications for early identification and intervention within speech and language therapy (SLT) practice.

**Methods:** This work draws on a theoretical literature review of peer-reviewed research published between 2019 and 2024. Studies were identified through APA PsycINFO, SAGE Journals, Frontiers, and EBSCOhost databases using keywords related to early gestures, preverbal communication, and late language emergence.

Included studies examined children aged 0 – 3 years and explored the relationship between gesture use and later language development. Excluded were studies where language delay was primarily associated with neurogenetic conditions, hearing impairment or motor disorders.

**Results:** Current evidence demonstrates that gesture frequency, diversity and gesture–word combinations are robust predictors of later vocabulary and syntactic outcomes. Many late talkers exhibit rich gesture repertoires that support word learning and enhance communicative intent, functioning as a protective factor. Conversely, restricted gesture use, limited gesture–word coordination or a lack of developmental progression may indicate elevated risk for persistent language difficulties. Gesture-based interventions—such as Enhanced Milieu Teaching, Hanen™ parent-coaching strategies and dialogic reading—have been shown to facilitate early communication by pairing gestures with language models and increasing adult–child interaction quality.

**Conclusions:** Gestures provide valuable diagnostic insight into the communication profiles of late talkers. Distinguishing between supportive and risk-related gesture patterns is essential for effective early identification. Incorporating gesture-based strategies into early intervention may enhance language outcomes, particularly when embedded in naturalistic, parent-mediated approaches.

**Keywords:** early communications, gestures, late talkers

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# Language Development Characteristics and Therapy Strategies for a Primary School Student with Williams Syndrome (P2)

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**Objectives:** Williams syndrome is a neurodevelopmental disorder characterized by a specific cognitive and linguistic profile. The aim of this research was to investigate the language development characteristics and speech and language therapy intervention strategies for a primary school student with Williams syndrome.

**Methods:** The research employed both theoretical and empirical methods. Theoretical methods included the analysis of scientific literature related to Williams syndrome and language development. Empirical methods consisted of observation, analysis of documents (language and medical records), a parent interview, language assessment, and the implementation of speech and language therapy.

**Results:** The results of the study indicate positive dynamics in the student's language development following speech and language therapy intervention. Relative improvements were observed in language comprehension, reading comprehension, and in the amplitude and strength of articulatory movements. Additionally, a reduction in echolalia and an expansion of vocabulary were noted after the intervention. The findings confirm that in Williams syndrome, vocabulary and phonological skills represent relative strengths, while receptive language and pragmatic skills remain areas of weakness. Although individuals with Williams syndrome are generally highly social and communicative, pragmatic language difficulties interfere with effective communication, including understanding spoken language, responding appropriately to questions, and maintaining coherent conversations. Children frequently use previously heard phrases, which may be misleading during language assessment, particularly when echolalia is present.

**Conclusions:** Speech and language therapy should be continued at least three to four times per week to achieve more positive outcomes. The intervention incorporated evidence-based methods, including reading comprehension strategies developed by the National Reading Panel. The observed improvements suggest that these strategies may be applicable and effective for students with Williams syndrome. Overall, the study highlights the importance of a holistic and individualized approach to speech and language therapy.

**Keywords:** language development, speech therapy, Williams syndrome

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# Development of Communication, Language, and Speech in Preschool-Aged Children Through the Application of Artificial Intelligence: An Educational Institutional Perspective (P3)

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**Objective:** The development of communication, speech, and language disorders in preschool and pre-primary children faces fundamental challenges that are relevant to the international discourse on speech therapy. These challenges include the rapid advancement of AI and digital technologies, as well as the need for effective collaboration and continuity of support. This presentation introduces the practical experience of a speech therapist and a teacher at the Kaunas kindergarten „Smalsutis“ in applying AI in speech therapy practice with pre-primary children.

**Methods:** AI-based tools are utilized in speech therapy practice as assistive technologies, allowing for the individualization of communication, speech, and language training, systematic monitoring of a child's progress, and increased effectiveness of the training process. Empirical evidence demonstrates that AI solutions facilitate the creation of adaptive tasks that are tailored to the child's abilities and individual needs, with these tasks being adjusted according to the child's achievements (ASHA, 2023; Raghavendra et al., 2024).

**Results:** This facilitates the development of more targeted tasks for teaching phonemic awareness, articulation, vocabulary, sentence structure, and myofunctional skills. A major application of AI is in designing motivating, game-like tasks within educational settings. Interactive, digitally-based applications offer children immediate feedback, visual indicators of achievement, and experiences of success, thereby significantly increasing their engagement and intrinsic motivation in developing communication, language, and speaking skills (Deci & Ryan, 2020; Neumann et al., 2024).

**Conclusions:** Integrating AI in speech therapy also improves professional collaboration among speech therapists, teachers, and specialists by enabling the sharing of tasks, progress data, and recommendations, ensuring continuity of activities. AI functions as a complementary tool, enhancing individualization, fostering child motivation, and supporting cooperation-based development of communication, language, and speech skills. This practical experience may be relevant for preschool education specialists seeking to responsibly integrate AI into daily speech therapy practices and strengthen collaboration with teachers.

**Keywords:** artificial intelligence (AI) in speech therapy practice, collaboration-based speech therapy and educational practice, communication, individualized, speech and language development

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# Historical Perspectives on the Terminology of Childhood Language Disorders of Unknown Etiology: Towards DLD (P4)

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Approximately 7% of the population exhibits significant language difficulties not secondary to another aetiology (Norbury et al., 2016). Different, inconsistent terms were used to describe children with language disorders of unknown origin over the past 200 years. Across countries, contexts, institutions, functions, and even individual SLPs, terminology may vary (Kornelis et al., 2025).

**Objective:** To foster discussion of the terminology for childhood language disorder of unknown aetiology in the Baltic countries.

**Methods:** A review of scientific literature in English and Lithuanian was the method used.

**Results:** This presentation reviews the history of the most widely used terms for primary language disorder of unknown origin, such as “developmental aphasia”, “specific language impairment” (SLI), “developmental language disorder” (DLD), etc., and discusses the pros and cons of various labels. References to children with significant yet unexplained deficits in language ability have been part of the scientific literature since the early half of the 19th century (Leonard, 2014; 2020). Since then, terminology has been inconsistent across the field of speech and language therapy, i.e., terms have changed from a neurological emphasis to those that do not imply a cause for the language disorder (Reilly et al., 2014; Leonardo, 2020). Also, many of these changes in English influence the terminology of other countries that speak languages other than English. SLI has been the prevailing term in the research literature from 1981 until 2017 (Iverson & Williams, 2025). In 2017, DLD was the term recommended by the CATALISE expert group from six different English-speaking countries (Bishop et al. & CATALISE-2 Consortium, 2017). A scoping review of 265 journals between 2017 and 2024 by Kornelis et al. (2025) demonstrates the adoption and implementation of the term “DLD” in ASHA publications.

**Conclusions:** While experts from different countries have been discussing the terms “SLI” and “DLD” or have agreed on the term “DLD” for almost a decade, the old diagnostic label “kalbos neišsivystymas” (*language underdevelopment*) is still used in Lithuania. Time to move forward.

**Keywords:** childhood language disorder of unknown aetiology, labels, terminology

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# Theory of Mind Development in 5-6-Year-Old Children with Developmental Language Disorder (P5)

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**Objectives:** Research highlights a strong relationship between language development and the theory of mind (ToM), particularly the ability to understand false beliefs. Children with developmental language disorder (DLD) often present with social-cognitive difficulties alongside linguistic impairments, which may affect their social participation and learning. In the Latvian clinical context, empirical data on this relationship remain scarce. This study aimed to examine ToM development in 5-to-6-year-old children with DLD and to compare their performance with that of typically developing peers.

**Methods:** The study was conducted in two municipal preschool institutions. Participants were 24 Latvian-speaking children aged 5 to 6 years: 12 children with diagnosed DLD (9 boys and 3 girls) and 12 typically developing children (7 boys and 5 girls). The groups were matched by age. Theory of mind was assessed individually using two well-established false-belief tasks: the change-of-location task and the unexpected contents task. Performance was scored using standardised criteria (maximum total score = 3). Data analysis included descriptive statistics and independent-samples t-tests with significance set at  $p < .05$ .

**Results:** Children with DLD achieved significantly lower overall ToM scores than typically developing peers ( $M = 1.58$  vs.  $2.67$ ;  $p = .008$ ). No significant difference was found in the change-of-location task ( $p = .22$ ). In contrast, performance on the unexpected contents task differed significantly between groups ( $p = .009$ ), indicating pronounced difficulties in understanding third-person false beliefs among children with developmental language disorder.

**Conclusions:** The findings demonstrate delayed ToM development in preschool children with DLD, particularly in tasks requiring more complex linguistic processing. These results underline the importance of addressing social-cognitive skills alongside language abilities in speech and language therapy. Integrating ToM-focused activities into intervention programs may enhance both communicative competence and social understanding in this population.

**Keywords:** developmental language disorder (DLD), preschool children, theory of mind (TOM)

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# Language in Formation: Parental Knowledge of Evidence-based Information about (P6)

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**Objectives:** In an era characterized by information overload, caregivers face significant challenges in discerning what information is accurate, reliable, and relevant when making decisions about how to support their child's development. One step in generating pathways for caregivers to access accurate and reliable information is first to examine what knowledge and beliefs caregivers already know about a topic. This study investigated maternal beliefs and knowledge concerning early language acquisition and development as a first step in developing accurate, reliable and contextually relevant information about how caregivers can support children's early language development.

**Methods:** Semi-structured interviews were conducted with five mothers of singleton children under five years of age. The interview protocol encompassed questions regarding participants' knowledge of typical language milestones, stimulation strategies, environmental factors, the relationship between oral language and emergent literacy, and developmental language disorder (DLD). Participants were also asked about their perspectives on digital media exposure. Three mothers had tertiary education and two did not. Interviews were audio-recorded, transcribed, and analysed using inductive thematic analysis.

**Results:** Preliminary findings reveal considerable heterogeneity in participants' knowledge. Overall, these mothers demonstrated limited awareness of early communication milestones. The relationship between oral language proficiency and reading acquisition was unfamiliar to most participants, and none knew about DLD. While all participants expressed concern regarding the effects of screentime on language development, they varied in their views regarding appropriate timing for introducing digital devices.

**Conclusions:** These preliminary findings underscore a critical gap in parental knowledge of evidence-based information about early language development. Despite potential exposure to necessary information through health and education systems, such information appears not to have been effectively retained. These results will inform the development of a documentary designed to translate knowledge on language development, stimulation strategies, and optimal language-learning environments into accessible formats for general audiences, particularly parents and caregivers of young children.

**Keywords:** children, digital devices and children, mother's knowledge of language development

# Development of Listening and Communication Skills of a Child with an Auditory Brainstem Implant: A Case Study (P7)

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**Objectives:** Auditory brainstem implant (ABI) is a rare auditory rehabilitation method for individuals whose hearing cannot be restored with cochlear implants.

Evidence on ABI outcomes in children remains limited, particularly regarding language development in naturalistic settings. The aim was to describe the communication skills of an Estonian speaking 7 year old ABI user and identify areas of strength and difficulties.

**Methods:** A qualitative single-case study was conducted with a 7 year old girl using an ABI. Data came from parental questionnaires, spontaneous conversations and adapted tasks assessing auditory perception, speech comprehension, expressive language and written language. The child was met and assessed during eight individual sessions, enabling repeated observation of communication behaviours in different interactional contexts. All materials were analysed qualitatively to develop a comprehensive communication profile.

**Results:** The child using ABI only achieved limited speech perception and production skills supported by lip reading, gestures and sign language. Child got better results in speech comprehension and speech production in the areas of vocabulary and syntax. The comprehension and production of morphology turned out to be more difficult due to a lack of auditory perception of grammatical endings. The intelligibility of the child's speech deteriorated as the complexity of the language unit increased to a level where the communication partner had to rely on signs to understand. Based on the findings of my research, recommendations for further studies and recommendations for the rehabilitation process of ABI-children were given.

**Conclusions:** The findings demonstrate that while ABI may support the acquisition of some linguistic components, auditory input alone is insufficient to establish functional spoken language without substantial visual and gestural support.

Therefore, children using ABI benefit from multimodal or total communication approaches. This study underscores the need for further longitudinal research and contributes practical recommendations for rehabilitation planning for ABI using children.

**Keywords:** auditory brainstem implant, means of communication, total communication

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# Challenging Behavior in Children with Autism Spectrum Disorder: HAASTE Model in Speech Language Therapy (P8)

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Challenging behaviours (CB) in young children with autism spectrum disorder (ASD) occur with greater frequency than in typically developing peers. Speech and language therapists (SLT) encounter behaviours such as aggression, internalisation and defiance in children with ASD (Chow et al., 2022). However, pedagogues and educational support specialists face difficulties in understanding the CB of young children with ASD and applying effective management strategies in the educational process (Chown & Beardon, 2017). The HAASTE method has been demonstrated to facilitate the analysis of behaviour, the prevention of its manifestation, the reduction of its intensity and frequency, and the provision of timely and targeted support (*HAASTE-materiaalia ja tietoa*, 2024). Nevertheless, there is a lack of research on the implementation of the HAASTE method in the domain of speech language therapy.

**Objectives:** The study aims to reveal the possibilities of applying the Haaste model in speech language therapy in collaboration with pedagogues, parents and teacher assistants while educating children with ASD with CB.

**Methods:** There will be represented 3 case studies of children with ASD with CB. Speech and language therapists (N=2), teachers (N=4), parents (N=3), and teacher assistants (N=2) were involved in the research. Data about children were collected by using questionnaires based on HAASTE model. Results analyzed using content analysis.

**Results:** The results revealed that HAASTE model is beneficial for SLT's comprehensively analyse CB of the child and effectively collaborate with parents, teachers and teacher assistants. The method also helps for SLT's to organize personalized activities and use more visual, sensory and alternative and augmentative communication tools which significantly contributes to reducing challenging behavior and developing social skills and independence of the child.

**Conclusions:** To sum up, using HAASTE is a beneficial model for SLT to comprehend and effectively manage challenging behavior of children with ASD with CB.

**Keywords:** challenging behaviour, HAASTE model, speech language therapy

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# Rapid Automatized Naming in Preschool-Age Children with Developmental Language Disorder (P9)

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**Introduction:** Rapid automatized naming (RAN) is a type of phonological skill, defined as a child's ability to quickly and accurately name visually presented, familiar stimuli (Daniūtė & Staliūnienė, 2022; Gray & Powell-Smith, 2025). Preschool age is considered a sensitive period for RAN development, and children with developmental language disorder (DLD) often have difficulties in this specific area. However, empirical research on RAN in the context of language development remains limited, highlighting the importance of further examining this skill in preschool children.

**Objective:** The aim of the study is to reveal rapid automatized naming skills in preschool children with developmental language disorders.

**Methods:** A mixed-methods research approach was chosen, using a case study strategy. Data was collected through document analysis and the assessment of children's RAN using informal tasks (color and object naming). The study involved seven preschool-aged children with DLD. Data analysis was conducted using descriptive quantitative analysis, based on naming time and number of errors.

**Results:** Analysis of the RAN task performance showed that children demonstrated slower naming speed and variability in the number of errors. Results showed that color-naming tasks were performed more slowly and with more errors than object-naming tasks. The main types of errors were pauses, distorted word forms, and incorrect responses. These error types occurred more frequently in object-naming tasks than in color-naming tasks.

**Conclusions:** The results of the study indicated that RAN in preschool-aged children with DLD is characterized by considerable individual differences. Performance in rapid automatized naming became more challenging with increasing task complexity and naming speed demands. Future research with larger samples in the Lithuanian language is needed to further examine this skill.

**Keywords:** developmental language disorder, preschool age, rapid automatized naming

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# A Game in Speech Therapy Corrective Development Model to Reduce Phonetic Phonemic Deficiency (P10)

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**Objectives:** To study and practically test a corrective developmental activity model that includes games for reducing phonological insufficiency.

**Methods:** Theoretical – analysis of theoretical literature in the context of the problem under study.

Empirical – surveying speech therapists working in preschool educational institutions; testing children's phonemic perception, thematic analysis of qualitative data, sequential explanatory method.

**Results:** Phonological insufficiency is one of the most common speech disorders in preschool children. It involves difficulties with correct pronunciation, hearing and distinguishing speech sounds, and analyzing and synthesizing syllables and words. Well-developed phonological awareness is essential for overall child development and forms the foundation for reading and writing skills. To prevent later learning difficulties, 5–6-year-old children should engage in corrective developmental activities that support phonological awareness.

These activities are based on speech therapy assessment results and follow a structured sequence: collecting anamnesis, assessing speech development, carrying out corrective work, reassessing progress, and analyzing outcomes. Speech therapists use a variety of methods, especially play-based approaches, to reduce phonological insufficiency.

Games are purposeful, guided activities that build on the child's existing knowledge and skills. They support social, physical, and cognitive development while enhancing speech, language, listening skills, creativity, emotional well-being, and problem-solving abilities.

**Conclusions:** Practical action research was conducted to promote the participation of end users or beneficiaries in various stages of the project, as well as participatory learning and co-creation of knowledge to bring about desired social change in the target communities. When testing the corrective developmental activity model, in which the game set "I did it!" was included as an additional technique for reducing phonetic-phonemic insufficiency, it was concluded that the set of techniques used promotes the development of phonemic perception.

**Keywords:** game, phonological insufficiency, speech therapy

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# Grammatical Errors in the Diagnosis of Language Impairment in Russian-Estonian Bilingual Children (P11)

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**Objective:** Assessing bilingual children acquiring Estonian as a second language is challenging due to the heterogeneity of this group, creating a risk of under- or overdiagnosing developmental language disorder. The current study investigated grammatical error patterns in sentence repetition tasks in Russian – Estonian sequential bilingual preschool children with and without developmental language disorder in both languages. The aim was to distinguish bilingual children with typical language development from those with developmental language disorder by examining both the quantity and quality of grammatical errors.

**Methods:** The participants were 59 Russian–Estonian bilingual children aged 4;6 – 6;11, including 31 with typical language development and 28 with developmental language disorder. Sentence repetition was assessed using the Estonian KaLaKe sentence repetition test and the Russian LiTMUS-Russian-Short test, which included sentence structures of varying length and morphosyntactic complexity. The children’s responses were transcribed and coded according to predefined error categories, including lexical, morphological and structural errors.

**Results:** Children with developmental language disorder made significantly more errors than their typically developing peers in both languages. In Russian, group differences were observed across all error types, whereas in Estonian differences appeared in specific categories. In both languages, children with language impairment frequently simplified sentence structures, produced sentence fragments, and provided responses difficult to analyse morphologically or structurally. Across the two languages, bilingual children with developmental language disorder showed more morphological simplification in Russian, distinguishing them from peers, while in Estonian, morphological substitution was common in all children and did not differentiate the groups.

**Conclusion:** The findings support the diagnostic value of analyzing grammatical errors in tasks like sentence repetition for identifying developmental language disorder in bilingual children. Certain error patterns seem to be general markers of impairment, while others reflect distinct language characteristics. Error analysis can thus aid more accurate diagnoses and help plan effective speech and language interventions for bilingual children.

**Keywords:** bilingualism, developmental language disorder, grammatical errors

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# Experiences of Autistic Parents in Developing Social Communication Skills in Their Autistic Children (P12)

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Even evidence based social communication methods could be ineffective or do not meet needs of autistic children as the neurodiversity approach is ignored when making decisions in educational practice (Gillespie-Lynch et al., 2017). Evidence that autistic people often build upon unique insights derived from the lived experiences of being autistic and meaningfully contributes to designing the best intervention. Autistic adults can convey information about social communication training strategies that have been useful in their own social relationships from childhood to the present (Gillespie-Lynch et al., 2017; Kiblen et al., 2024).

**Objective:** The study aims to reveal the experiences of autistic parents for developing social skills for their autistic children.

**Methods:** The presented study is grounded in a qualitative methodology, employing an individual semi-structured interview approach with autistic parents raising autistic children (N=9). The data was analyzed using thematic analysis (Braun, Clarke, 2006) Results: The study showed that autistic parents usually develop social communication skills in their children based on the child's natural development, unique child profile and interpersonal relationships. Parents emphasize the importance of the child's special interests, sensory profile, routines, visual modeling, cooperation between parents and specialists, and promote relationships between individuals of the same neurotype.

**Conclusions:** In conclusion, the study showed that self-advocacy by autistic parents helps speech therapists gain valuable insights into what helps develop the social communication skills of autistic children with respect to the neurodiversity approach.

**Keywords:** autism spectrum disorders, self-advocacy, social communication skills

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# Specific Features of Orofacial Myofunctional Disorders in Preschool-age Children with Speech Sound Disorder: Exploratory Research (P13)

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**Short introduction:** Orofacial myofunctional disorders (OMDs) are the focus of numerous dental, orthodontic, laryngological and speech and language therapy studies in foreign countries. OMDs are abnormal patterns involving the oral and orofacial musculature that can subsequently interfere with the normal growth, development, or function of orofacial structures, including speech production (Merkel-Walsh et al., 2025; D'Onofrio, 2018; Mason & Frankin, 2014, etc.). According to ASHA, OMDs can co-occur across the lifespan with a variety of speech and swallowing disorders, including speech sound disorder (SSD). Signs of OMDs and their association with SSDs in children have been investigated in several studies (Grudziąž-Sękowska et al., 2018; Kellum et al., 1994; Mogren et al., 2020, 2022). Nevertheless, there is still a lack of scientific evidence.

The research aims of this presentation are: 1) to reveal the manifestation of specific features of OMDs in 6-7 years old children; 2) to compare and describe differences in orofacial domains between groups of children with and without SSDs.

**Methods and sample:** The research employed a quantitative research approach. The following methods of data collection and analysis were employed: testing of children, a questionnaire-based survey of children's parents, and statistical analysis (descriptive statistics, Chi-square and Fisher's exact tests, the Phi correlation coefficient, and binary logistic regression). The Interdisciplinary Orofacial Examination Protocol for Children and Adolescents (Bottini et al., 2012) was used to collect empirical data. A total of 56 children, aged 6,1-7,0 years old, participated in the study: 29 with speech sound disorders (dyslalia) and 27 with typical speech development. Ethical approval for the study was obtained from the KU Bioethics Committee (Approval No. 46 Sv-HMR-06).

**Main results and conclusions:** More than half of the children who participated in the empirical research most frequently presented with nasal valve (nostril) shape changes during inspiration and a short lingual frenulum. When comparing the orofacial domains, the findings indicated that these specific features occurred more frequently in children with SSDs (dyslalia), particularly short lingual frenulum, malocclusion, and swallowing alterations. Statistically significant associations were identified among the following: breathing function alterations and open lips at rest; swallowing alterations and open lips at rest; swallowing function alterations and malocclusion. A significant association was also found between the presence of SSD (dyslalia) and malocclusion. The binary logistic regression model indicated that children with malocclusion had a 7.7-fold higher likelihood of exhibiting SSDs.

**Keywords:** features of orofacial myofunctional disorders, preschool-aged children, speech sound disorder (dyslalia)

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# The Impact of Mouth Breathing on the Articulation of /s/ and /z/ in 4-6-Year-Old Children (P14)

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**Introduction:** Breathing is a priority function in life and is normally made through the nose. In typical development, nasal breathing constitutes the physiological norm in children. Mouth breathing impacts around 10–15% of all children, however the prevalence varies depending on the region. Mouth breathing results in muscle imbalance, which may lead to oral and craniofacial alterations. Studies have shown that 31% of children diagnosed with chronic mouth breathing exhibit articulation disorders.

**Objectives:** The aim of this study was to determine the effect of mouth breathing on the articulation of /s/ and /z/ in children aged 4–6 years.

**Methods:** A quantitative cross-sectional study was conducted. Sixty-two 4-6-year-old children were divided into mouth and nasal breathers' groups (n = 33, n = 29) based on observational screening. Each participant underwent an assessment comprising researcher-developed /s/ and /z/ articulation tasks (64 picture cards featuring the sounds /s/ and /z/ in all word positions). Descriptive statistics and two-sample t-tests (p-values) were computed in Microsoft Excel.

**Results:** The mean number of correctly articulated words for the sound /s/ in mouth breathers were 16.9 (out of 32) versus 31.4 in the group of nasal breathers (p < 0.001). The mean number of correctly articulated words for the sound /z/ in mouth breathers was 20.1 (out of 32) versus 31.0 in nasal breathers (p < 0.001).

**Conclusions:** The hypothesis was supported by statistically significant between-group differences (p < 0.001). These findings suggest that mouth breathing may negatively affect the articulation of fricative sounds /s/ and /z/.

*Keywords:* /s/ and /z/ sounds, articulation, mouth breathing

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# Integrating MyotonPro as a Digital Tool for Optimizing Speech-Language Therapy Practice: A Research Protocol on Orofacial Muscle Assessment in Children (P15)

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**Objectives:** Speech-language therapy (SLT) assessment in pediatric practice is predominantly based on clinical observation and perceptual judgment, which may limit objectivity, reproducibility, and comparability of findings. Digital tools and emerging technologies offer new opportunities to support evidence-based clinical decision-making. Although myotonometry has been widely validated for assessing passive mechanical properties of skeletal muscles, its application to orofacial muscles relevant to speech production—particularly in children with speech and language disorders—remains largely unexplored.

The aim of this study is to present a research protocol evaluating the clinical relevance of objective myotonometric data obtained with the MyotonPro device for optimizing SLT assessment, individualized intervention planning, and therapy outcome monitoring.

**Methods:** The study will include children aged 5–10 years diagnosed with developmental speech and language disorders. Passive mechanical properties of the tongue, orbicularis oris, masseter, and temporalis muscles will be assessed using the MyotonPro device under standardized resting conditions. Parameters including muscle tone, stiffness, and elasticity will be recorded following established measurement and safety guidelines. The collected data will be analyzed descriptively to explore clinically relevant patterns that may complement traditional SLT assessment.

**Results:** The study is expected to provide objective, quantifiable indicators of passive orofacial muscle properties that are not readily accessible through perceptual evaluation alone. These data may support more precise therapy prioritization, goal setting, and progress monitoring in clinical SLT practice.

**Conclusions:** This research protocol addresses a critical gap between validated biomechanical assessment technologies and their limited integration into everyday speech-language therapy practice. Incorporating non-invasive myotonometric assessment as a digital tool may enhance diagnostic precision, support individualized and data-informed intervention planning, and strengthen the translation of emerging technologies into pediatric SLT practice.

**Keywords:** digital tools in speech-language therapy, myotonpro, orofacial muscle assessment

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# Speech Intelligibility in Children with Submucous Cleft Palate: A Case Study (P16)

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Submucous cleft palate (SMCP) is a congenital condition affecting the underlying muscular and bony structure of the palate, often diagnosed later in development and frequently impacting speech intelligibility (Kummer, 2020).

**Objective:** To evaluate the speech intelligibility of a 4;6-year-old child with SMCP before and after surgical intervention and following six months of speech therapy.

**Methods:** Speech assessment included the Latvian Phoneme Test (LAMBAs; Markus et al., 2016), and the Intelligibility in Context Scale (ICS) (McLeod et al., 2012). Speech samples were recorded and analyzed using PRAAT. Percent Intelligibility of Words (PIW) was calculated based on transcriptions by unfamiliar listeners (n = 5) and teachers (n = 3). Additional measures included Percentage of Correctly Produced Consonants (PCC), and percentage of compensatory articulation errors. Speech therapy targeted velopharyngeal function through soft palate activation, diaphragmatic and differentiated breathing exercises, non-speech oral motor tasks, phoneme acquisition, phonological awareness, and voice exercises.

**Results:** After surgery, nasality was notably reduced. PIW scores improved from 20.2% to 26.6% for teachers and from 13.3% to 23.6% for unfamiliar listeners. Following speech therapy, both groups scored 49% of PIW. ICS scores (parent-reported) improved from 2.7 (pre-surgery) to 3.5 (post-surgery), and 3.8 after therapy. Pharyngeal fricatives and pharyngeal stop substitutions were the most frequent compensatory error. Articulation disorders decreased by 5% after surgery and by 29% after therapy. PPC remained at 21% after surgery 21% but improved to 40% post-therapy.

**Conclusions:** Combined surgical and speech therapy intervention significantly improved speech intelligibility in a child with SMCP. Therapy reduced compensatory errors, increased consonant accuracy, and improved perceptual clarity, as confirmed by acoustic analysis and listener ratings. Targeted air pressure and resonance-focused exercises contributed to improved velopharyngeal function.

**Keywords:** articulation, speech intelligibility, submucous cleft palate (smcp)

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# Assessment of Pre-School Children Who Stutter: The Perspective of Polish and Lithuanian Speech and Language Therapists (P17)

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**Objectives:** The aim of this study was to assess the level of knowledge and clinical competence of Polish and Lithuanian speech and language therapists (SLTs) in the assessment and management of stuttering in pre-school children. The analysis focused on stuttering risk assessment, familiarity with risk factors for stuttering persistence, and awareness of international clinical recommendations. This study is preliminary in nature, and the obtained results provide a starting point for further, more in-depth analyses involving a larger and more diverse group of speech and language therapists.

**Methods:** This preliminary cross-sectional study was conducted using an online questionnaire. Participants included 55 Polish and 37 Lithuanian SLTs.

**Results:** Only 35% of Polish SLTs and about one fifth of Lithuanian SLTs reported moderate to extensive experience working with pre-school children who stutter. Among Polish respondents, 78% reported familiarity with stuttering risk assessment tools, yet only 47% used them in practice. Similarly, 81.1% of Lithuanian SLTs reported full or partial familiarity with such tools, while only 40.5% applied them clinically.

Both Polish and Lithuanian speech and language therapists most frequently identified key evidence-based risk factors for stuttering persistence, including increasing severity over time (Poland: 92.7%; Lithuania: 91.9%), stuttering duration exceeding six months (Poland: 100%; Lithuania: 89.2%), family history of chronic stuttering (Poland: 85.5%; Lithuania: 81.1%), parental concern (Poland: 87.3%; Lithuania: 83.8%), and the presence of secondary stuttering behaviors (Poland: 100%; Lithuania: 81.1%).

Awareness of formal guidelines was limited in both groups. Only 19% of Polish and 10.8% of Lithuanian SLTs confirmed the existence of national guidelines. Familiarity with ASHA recommendations was reported by 37% of Polish and 24.3% of Lithuanian respondents, while knowledge of the Dutch clinical guidelines (2014) was declared by 22% and 5.4%, respectively.

**Conclusions:** The findings indicate that although Polish and Lithuanian speech and language therapists generally recognize key evidence-based risk factors for stuttering persistence, significant gaps remain between declared knowledge and its practical application, particularly in the use of standardized risk assessment tools. Limited awareness of national and international clinical guidelines further highlights the need for targeted professional training and wider dissemination of evidence-based recommendations to support early, consistent, and effective intervention for pre-school children who stutter.

**Keywords:** risk assessment, speech and language therapists, stuttering

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# Leveraging Expert-Knowledge-Aware Machine Learning, Multi-objective Optimization and GenAI for Discovery of Personalized Path to Speech Fluency in Hard-to-Treat Cases (P18)

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**Objectives:** Proposal and testing of a multi-expert framework for discovery of personalized path to persistent speech fluency in hard-to-treat cases leveraging expert-knowledge-aware machine learning (EKAML), multi-objective optimization and generative AI (GenAI)

**Methods and Results:** Stuttering is a complex phenomenon with no known single cause that can be linked to multiple physical, psychological and psychosomatic factors [1]. Despite ongoing research and significant improvements in practical therapies, there is still no reliable, research-backed “cure” that consistently works over long periods and for all people who stutter [1,2]. Nevertheless, there are many practical techniques to alleviate stuttering, including variety of speech modification approaches [2].

However, existing approaches cannot guarantee fast and persistent improvements in all cases. For example, although “Fluency Shaping” techniques demonstrated the ability for a long-term impact on the auditory-to-motor pathways inside the human brain that is necessary for fluency, a positive and persistent outcome is not always warranted. The effectiveness of most speech modification and similar techniques strongly depends on multi-factor personalization especially in hard-to-treat cases; however, there are no systematic objective methods for their optimization. While strong speech modifications, e.g. singing, are effective but not practical, objective techniques for personalized discovery of targeted minimal speech modifications to achieve natural fluency are not available.

For resolving these gaps, we propose a multi-expert framework for discovery of personalized path to persistent speech fluency leveraging expert-knowledge-aware machine learning (EKAML) [3], multi-objective optimization and generative AI (GenAI). The key edge of our framework is quantification and combination of the best speech modification techniques and data-driven discovery of new effective extensions using provided speech recordings as well as classification of evolving emotional states and estimation of their correlation with detected stuttering periods.

**Conclusions:** Multi-expert AI-driven framework for the discovery of a personalized path to persistent speech fluency is proposed and encouraging results are demonstrated.

**Keywords:** algorithmic personalization of speech therapy, expert-knowledge-aware machine learning (EKAML), multi-objective optimization

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# Psychological Challenges in Adults Who Stutter (P19)

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**Objectives:** Adults who stutter frequently experience persistent social anxiety, fear of negative evaluation, and avoidance of communication, which can significantly affect participation in daily, social, and professional contexts. Even when speech fluency improves, psychological distress and maladaptive coping strategies may remain. This e-poster aims to highlight key psychological phenomena associated with adult stuttering and to discuss their relevance for speech and language therapy and interdisciplinary care.

**Methods:** The e-poster is based on clinical observations from psychological practice with adults who stutter. Psychological experiences and behavioral patterns are described using established theoretical frameworks related to social anxiety, avoidance, and safety behaviors.

**Results:** Clinical observations indicate that adults who stutter often demonstrate heightened anticipatory anxiety, increased self-monitoring during speech, social withdrawal, and reduced quality of life. To manage distress, individuals may develop various avoidance and safety behaviors aimed at minimizing perceived social exposure. These behavioral patterns can include restricting participation in speaking situations, altering communication styles, or, in some cases, using external means such as wearing a medical face mask to feel less visible during speech. While such strategies may provide short-term relief, they tend to reinforce anxiety and limit opportunities for adaptive communication experiences.

**Conclusions:** Psychological factors play an important role in the experience of adults who stutter and may substantially influence the outcomes of speech and language therapy. Awareness of anxiety-driven avoidance and safety behaviors is essential for identifying clients who may benefit from interdisciplinary support. Collaboration between speech and language therapists and psychologists can help address underlying anxiety, reduce avoidance patterns, and promote more sustainable improvements in communication and overall quality of life.

*Keywords:* avoidance behaviors, social anxiety, stuttering

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# When Language Betrays: Aphasia From a Linguistic Perspective (P20)

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Linguistic literature most frequently addresses motor and sensory aphasias, which manifest in distinct linguistic behaviours. Aphasia has long been a subject of interest in linguistics; however, most documented language impairment patterns and therapeutic approaches reported in the scientific literature are based on English-language data (Beveridge and Bak, 2011). Consequently, aphasia in Lithuanian remains insufficiently explored.

**The aim** of this paper is to examine the linguistic characteristics of motor and sensory aphasia in Lithuanian-speaking individuals after stroke, drawing on empirical data.

The study involved eight participants, including four right-handed native speakers of Lithuanian diagnosed with aphasia. The control group consisted of four individuals without aphasia. Both quantitative and qualitative methods were employed. The analysis focused on the productivity of linguistic expression, including word count, mean length of meaningful utterances, verbosity, speech fluency, and patterns in parts-of-speech usage, as well as on the nature of language disorders observed in individuals with aphasia.

**The results** indicate that the productivity of linguistic expression varies according to the type and severity of aphasia. Meaningful utterances in motor aphasia are typically shorter, whereas in sensory aphasia, they may be of normal length or even relatively long. The findings further demonstrate that greater severity of aphasia is associated with reduced lexical richness. The verbosity index was found to be particularly low in sensory aphasia.

Qualitative analysis revealed that the most common language-related difficulties include repetitions and self-corrections of words and initial syllables. Pronunciation errors are characterised by sound additions and omissions, sound substitutions, syllable transpositions, and atypical sound combinations. Morphosyntactic difficulties involve errors in grammatical gender agreement, verb and preposition usage, and incorrect selection of verb tense.

*Keywords:* aphasia, Lithuanian language, stroke

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Beveridge M., Bak T. (2011). The languages of aphasia research: Bias and diversity, *Aphasiology*, 25:12, p. 1451-1468.

# Optimizing Verbal Communication in Tracheostomized Patients: Development of a Clinical Decision Matrix for One-Way Valve Use and Above-Cuff Vocalisation (P21)

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**Objectives:** Effective communication with tracheostomized patients requires selecting appropriate communication techniques. The most natural way of communicating a message or a thought to a person is by speaking. For tracheostomized patients, this possibility is limited or completely absent when the tracheostomy tube cuff is inflated. To better facilitate communication, tracheostomy tubes with a subglottic suction port should be preferred. Voice is achievable whilst tracheostomized patients, both mechanically ventilated or breathing spontaneously, using a One-Way Valve (OWV) with cuff deflation and Above Cuff Vocalisation (ACV) with cuff inflation. Before these techniques are applied by physicians, physiotherapists, or nurses, a Speech and Language Therapist (SLT) should assess upper airway and laryngeal function to ensure safe use of voice and swallowing.

**Methods:** A literature search was conducted in October 2025. Studies were eligible if they compared the use of an OWV/ACV against no OWV/ACV, across any physiological or clinical parameter. To construct the algorithm for using an OWV or ACV we used the algorithm as a starting point for selecting alternative communication methods by ten Hoorn et al in 2016<sup>2</sup> and Toivonen in 2026<sup>3</sup>

**Results:** Ten eligible studies were included to develop a comprehensive, step-by-step protocol for physicians, physiotherapists, and nurses regarding the application of OWV and ACV, with the objective of improving verbal communication opportunities for tracheostomized patients.

**Conclusion:** Emerging evidence highlights clear benefits of OWV and ACV in restoring speech and upper airway physiology. Their implementation requires coordinated multidisciplinary collaboration. Before initiating OWV or ACV, consultation with the physician regarding the patient's overall clinical condition and an SLT-led upper airway assessment are recommended to ensure safety. Cuff-deflated OWV use should be the first-line communication option. ACV with cuff inflation is an appropriate alternative when cuff deflation is limited or delayed.

*Keywords:* above cuff vocalisation, one-way valve

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# Interpersonal Communication in Older Adults with Risks of Voice and Swallowing Disorders in Residential Care (P22)

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Voice and swallowing disorders are known to affect older adults and may negatively influence communication and quality of life (Ekberg et al, 2002; Lindstrom et al., 2023). However, this issue has not been investigated among residents of residential care institutions in Latvia.

**Objectives:** The aim of the study was to determine the incidence of a risk of voice and swallowing disorders among older adults living in residential care facilities and to examine the relationship between these risks and interpersonal communication.

**Methods:** The study included 60 Latvian-speaking residents of social care institutions, aged 65-94 years old (70% female) with no diagnosed history of stroke, aphasia or dysphagia. Participants were assessed using the Eating Assessment Tool-10 (EAT-10), the Voice Handicap Index-10 (VHI-10), and the Interpersonal Communication Inventory (ICI; Bienvenu, 1971). As part of the study, the ICI was translated and culturally adapted into Latvian. Associations between swallowing and voice disorder risks, and interpersonal communication were examined using Spearman's rank correlation analysis.

**Results:** Based on EAT-10 scores 26.6% of participants reached or exceeded the cut-off value ( $\geq 3$ ), indicating an increased risk of swallowing disorders. In contrast, 11.7% screened positive for voice disorders according to the VHI-10. A statistically significant negative correlation was found between EAT-10 and total ICI scores ( $r = -0.386$ ,  $p = 0.002$ ), indicating that greater swallowing difficulty was associated with lower interpersonal communication scores. No statistically significant association was observed between VHI-10 and ICI scores ( $r = -0.159$ ,  $p = 0.226$ ). A small-to-moderate positive correlation was identified between VHI-10 and EAT-10 scores ( $r = 0.388$ ,  $p < 0.01$ ), suggesting that increased swallowing difficulty was associated with greater perceived voice-related handicap.

**Conclusions:** Among older adults living in residential care, the risk of swallowing disorders appears to be more prevalent than the risk of voice disorders and is significantly associated with interpersonal communication. Low VHI-10 scores may reflect limited awareness of voice problems rather than their absence, as clinical signs of voice disorders (e. g., weak, breathy, or rough voice quality) were observed in several participants despite negative self-reports. These findings highlight the importance of comprehensive screening and increased awareness of voice and swallowing difficulties in residential care settings. The study also supports the ecological validity of the ICI, indicating the need for continued validation.

*Keywords:* EAT-10, interpersonal communication (ICC), seniors, VHI-10

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# Patient Guide for Peripheral Facial Nerve Palsy in Flaccid Phase (P23)

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**Objectives:** To provide patients with peripheral facial nerve palsy and their relatives a guidance in Estonian for the first phase of recovery (flaccid paralysis), supporting nerve healing, maintaining facial functions, and preventing complications.

**Methods:** The guide describes the causes, severity levels, and recovery phases of peripheral facial nerve palsy and presents practical recommendations for daily management. The focus is on eye protection and lubrication, oral hygiene, facilitation of speaking and eating, support of facial symmetry through massage and stretching, and mental health support. Activities that should be avoided during this phase, such as facial exercises and electrical stimulation, are also emphasized.

**Results:** Following these recommendations helps maintain eye and oral health, reduce facial asymmetry and overactivity of the unaffected side, improve daily functioning, and prevent the development of abnormal movement patterns and synkinesis.

**Conclusions:** In the flaccid paralysis phase, recovery relies primarily on allowing time and rest for the facial nerve. Appropriate supportive care promotes natural recovery and reduces the risk of complications. If no signs of improvement appear within 4 weeks, medical consultation is recommended for further evaluation and referral to rehabilitation.

*Keywords:* patient guide, peripheral facial nerve palsy

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# Language Assessment in Awake Brain Surgery: SLT Role and Toolbox Within the Estonian Intraoperative Protocol (P24)

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**Objectives:** Awake craniotomy with intraoperative direct electrical stimulation (DES) is a reliable method to minimize the risk of permanent deficit during surgery for low-grade glioma located within eloquent areas classically considered inoperable. It is increasingly common for SLTs to be present during surgery to test the patient's language skills whilst the surgeon is stimulating areas for precise margins of critical language zones in detail. The SLT tasks include assessing patients pre-, intra- and post-operatively using a linguistic test battery covering phonology, semantics, and syntax.

**Methods:** A wide range of test batteries for awake surgery in critical language areas were collated via international colleagues. The Estonian neurolinguistic test battery was designed in accordance with and mostly informed by the principles of the DuLIP (Dutch Linguistic Intraoperative Protocol)2.

**Results:** This operative technique has been implemented in Estonia for over 5 years. At the North Estonia Medical Centre, a total of 15 awake craniotomies with a speech and language therapist (SLT) have been performed to date.

There are nine tasks that cover a wide range of linguistic levels and allow for a detailed assessment of various linguistic functions: repetition of words, reading with phonological odd-one-out, reading with semantic odd-one-out, naming with semantic odd-one-out, semantic association, verb generation, action naming, verbal diadochokinesis, and object naming. These tasks have enabled systematic preoperative linguistic evaluation of patients and based on these assessments, the selection of stimulus materials most suitable for intraoperative language mapping. Consequently, the intraoperative language assessment battery is individually and precisely tailored for each patient.

**Conclusions:** A set of tests can be selected for each patient depending on the tumour location and degree of linguistic impairment. The Estonian neurolinguistic test battery for awake surgery in critical language areas is scheduled to undergo pilot testing.

*Keywords:* awake craniotomy, direct electrical stimulation, language mapping

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# Warm-Up Exercises for Choir Singers: The Effects of Warm-Ups on Community Choir Singers' Vocal Quality and Experience (P25)

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**Objectives:** Most choir conductors routinely start rehearsals with warm-up exercises intended to improve singers' vocal quality, but little is known about their efficacy for amateur, mature singers. The aim of this study was to understand if and how an evidence-informed warm-up impacted participants' vocal quality and their subjective experience of singing related to warm-up exercises. This study also examined correlations between perceptual and instrumented measurements for these singers.

**Methods:** The participants in the current study were 41 choir singers, 11 sopranos, 10 altos, 10 tenors, and 10 basses with various singing backgrounds. Half of the singers were allocated to the experimental warm-up group and the other half acted as controls and did not warm-up prior to their rehearsal. The warm-up involved breathing exercises, voice stability, Semi-occluded vocal tract exercises, etc. Perceptual and instrumented measurements were made before and after the warm-up/silent period and after participation in a typical rehearsal for their choir.

**Results:** No statistically significant differences were observed between the warm-up and control groups. There was, however, a statistically significant correlation between perceived vocal comfort and five of the eight instrumented variables:  $f_0$  (both continuous speech and sustained vowel), upper end of frequency range (and thus frequency range) and shimmer. Statistically significant correlations ranged from  $r=-0.194$  (shimmer) to  $r=0.334$  (upper end of frequency range).

**Conclusions:** Typical outcome measures (instrumented and perceptual) at all points indicated that mature, amateur choir singers generally have typical voices. It could be speculated whether vocal warm-up exercises are necessary, at least if the purpose is to increase vocal performance and avoid vocal damage. However, the types of acoustic measurements used in this study are insufficient to make conclusive statements about the long-term benefits of warm-up exercises.

**Keywords:** choir singing, voice, warm-up exercises.

# Undergraduate Students' Experience Receiving a Three-Week Professional Voice Development Program (P26)

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**Objectives:** Caring for one's professional speaking voice is just as important as treating patients with voice disorders. Yet many voice clinicians focus solely on managing their patients' vocal health, while receiving inadequate training in protecting their own voices. Voice clinicians often complete their speech pathology education with little to no instruction on preserving their own vocal well-being.

**Methods:** 2nd-year Speech and Language Therapy students enrolled in the Voice Disorders class in spring 2025 received an intensive Professional Voice Development Program. The three-week program included nine hours of in-class instruction to raise awareness of one's voice and vocal environment, encourage changes in vocal habits, and enhance students' ability to change their surrounding environment. The training further aimed to develop skills that promote physical relaxation and body awareness, support presence in the moment, and enable the use of a breath-supported (abdominal) voice for speech tasks. In addition, the programme included an eight-hour, two-day workshop and follow-up supervision of the students trained in the technique, enabling them to teach the method to their peers.

**Results:** Students demonstrated increased awareness of their own voices and vocal environments, along with positive changes in vocal habits. Despite challenges during the intensive training, participants reported improved skills and confidence in healthy voice use.

**Conclusions:** The Professional Voice Development Program demonstrated a positive impact on students' vocal awareness and professional voice use. The results support the integration of structured voice care training into the education of future voice clinicians and indicate that the program may be applicable to other voice-dependent professions, such as speech-language therapists and teachers.

*Keywords:* student's experience, student's training, Professional Voice Development Program

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# Preparing Future Clinicians: Student Evaluation of Progress in the Smith Accent Technique (P27)

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**Objectives:** The Smith Accent Technique (SAT) is a holistic voice training and therapy approach that optimises the physiological, communicative, and performance processes involved in breathing, phonation, and speech. It follows a hierarchical structure that supports gradual progression from basic to advanced skills and provides clear guidance for both clinicians and clients. Each stage targets specific performance skills that must be continuously assessed to determine readiness for progression. However, most SAT research focuses on pre- and post-training outcomes, with limited description of how individual performance skills are evaluated during training. Khidr's (2010) itemised Smith Accent Technique Progress Form addresses this gap by outlining five groups of performance skills: (I) abdomino-phonatory control, (II) engagement and copying skills, (III) control of voicing characteristics, (IV) control of speech characteristics, and (V) self-monitoring and modification skills, rated according to their frequency of correct demonstration.

**Methods:** Two undergraduate speech and language therapy students at Riga Technical University, Liepaja Academy received face-to-face and online training in using Khidr's progress form. The students and an expert SAT phoniatrician independently evaluated the performance skills demonstrated by two trainees across eight recorded SAT sessions.

**Results:** This poster examines the students' experiences of learning to evaluate SAT progress, particularly in relation to breath support. Although initial uncertainty was reported, both students demonstrated improved consistency and confidence with practice, collaboration, and repeated exposure to the rating process.

**Conclusions:** Structured training and peer support appear to facilitate the development of reliable SAT rating skills in novice clinicians. Integrating instruction in both the SAT method and its rating criteria, once sufficient familiarity with the technique is established, may enhance learning. Confidence in evaluation develops gradually and should not be rushed.

**Keywords:** clinical skill assessment, Smith Accent Technique, voice therapy

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# Validation of the Acoustic Voice Quality Index Version 03.01 in Latvian (P28)

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## Background

The Acoustic Voice Quality Index (AVQI) has recently gained recognition as a reliable tool for evaluating voice quality using multiple acoustic parameters (Batthyany et al, 2024). Research indicates that combining sustained vowel phonation with connected speech enhances the reliability of the voice assessment (Maryn et al, 2010). Although AVQI has not yet been validated in the Latvian-speaking population, it is the first tool to integrate both speech types in analysis, providing an objective and valuable measure for diagnosing voice disorders and monitoring therapy outcomes.

**Objective:** The aim of this study was to validate the Acoustic Voice Quality Index version 03.01 in the Latvian speaking population.

**Methods:** A total of 179 participants were enrolled, with 90 assigned to the study group and 89 to the control group. All participants completed Voice Handicap Index - 30 (VHI-30) and then voice recordings were performed, during which the phonation of the sustained vowel /a/ and connected speech passage were recorded. The most appropriate number of syllables for analyzing connected speech in Latvian was identified. Auditory-perceptual voice evaluation was conducted using the “G” parameter of the GRBAS scale and performed by three speech-language pathologists. An interrater reliability assessment, the criterion validity, and diagnostic accuracy (sensitivity, specificity, and cut-off point between normophonic and dysphonic voice) of the AVQI were determined.

**Results:** It was found that in Latvian, 25 syllables is the most appropriate number to ensure a balanced analysis of sustained vowel and connected speech recordings. The results indicated moderate inter-rater agreement for the auditory-perceptual assessment ( $F_k = 0.414$ , CI [0.412, 0.416],  $P < 0.001$ ). Spearman’s rank correlation results showed a strong, positive relationship between AVQI scores and auditory-perceptual ratings ( $R_s = 0.716$ ,  $P < 0.001$ ). Finally, Receiver Operating Characteristic (ROC) curve analysis identified an optimal AVQI cut-off value of 2.08 for distinguishing normophonic and dysphonic voices in Latvian, with a sensitivity of 75% and specificity of 83%.

**Conclusions:** The results of the study demonstrate that AVQIv.03.01 is an ecologically valid tool for objective differentiation between dysphonic and normal voices in the Latvian language.

**Keywords:** acoustic evaluation of voice, AVQI, voice quality

## References:

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# Functioning and Quality of Life outcomes after Total Laryngectomy with Primary Voice Prosthesis: a Case Study (P29)

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**Objectives:** The study aimed to (1) compare functioning and quality of life outcomes in two cases following total laryngectomy with primary tracheoesophageal puncture and voice prosthesis (VP) insertion by linking assessment results to the International Classification of Functioning, Disability and Health (ICF) framework; (2) develop ICF-based functioning profiles (World Health Organization, 2001).

**Methods:** A mixed-method study comparing two advanced-stage laryngeal cancer cases (A and B) post-total laryngectomy with primary VP. Assessments: The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0), World Health Organization Quality of Life-BREF (WHOQOL-BREF), Voice Handicap Index (VHI-30), Patient Health Questionnaire- 9 (PHQ-9), the Generalized Anxiety Disorder Scale (GAD-7) and semi-structured interviews. Life partners of both cases completed the Intelligibility in Context Scale: Latvian (ICS). Data were analysed within the ICF framework to compare outcomes and develop functioning profiles.

**Results:** Case A demonstrated successful outcomes across multiple domains (WHODAS 2.0: 33/160); no anxiety (GAD-7: 0/21) or depression (PHQ-9: 1/27); mild self-perceived voice impairment (VHI-30: 3/120), preserved quality of life in psychological, social, environmental domains, with slight physical reduction (WHOQOL-BREF physical: 96.4/100). Voice use was mainly effective and activities, participation were maintained with some mild limitations. Environmental factors were mostly facilitators. Speech was usually intelligible (ICS: 29/35). In contrast, case B demonstrated varied limitations of functioning (WHODAS 2.0: 84/160), impaired quality of life across all domains (WHOQOL-BREF physical: 57.1, psychological: 41.7, social: 50, environmental: 59.4). Severe anxiety (GAD-7: 20/21), moderate depression (PHQ-9: 14/27). Self-perceived voice impairment was severe (VHI-30: 79/120). Speech was rarely intelligible (ICS:18/35). Environmental factors predominantly acted as barriers.

**Conclusions:** Despite similar medical interventions, outcomes differed significantly. Key differentiating factors included the type and severity of complications, psychological wellbeing, and environmental support. These interactions between multiple domains influenced effective voice production, functioning, and quality of life.

**Keywords:** functioning, primary voice prosthesis, quality of life

**Reference:** World Health Organization (2001). International classification of functioning, disability and health: ICF. World Health Organization. World Health Organization. <https://iris.who.int/items/ffa4b5b5-378c-46a1-acdc-7ef20506a3f8>

# Recognition and Prevention of Voice Disorders Among Primary School Teachers (P30)

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Voice is actively used in everyday life professionally by singers, actors, politicians, lawyers, and teachers (Stemple, Roy, Klaben, 2018). Teachers actively use their voice for approximately 4–5 hours per day and belong to a risk group for voice disorders. Primary school teachers use their voice particularly intensively, as they conduct 4–6 lessons per day and do not have the opportunity to take time for vocal rest. Van Houtte, Claeys, Wuyts, and Van Lierde (2010) indicate that a large proportion of teachers encounter voice disorders at least once during their professional career. The role of the speech and language therapist within the school community is becoming increasingly important; therefore, speech and language therapists could provide teachers with knowledge about vocal hygiene, voice quality, and the prevention of voice disorders. Knowledge about the signs and risk factors of voice disorders may help educational institution communities to actively implement voice disorder prevention.

**Objectives:** The aim of this research was to identify the characteristics of primary education teachers by analysing their voice recordings, taken before and after one week Easter holiday, using Praat programme.

**Methods:** The method for this research was qualitative approach: interview was used to find out what kind of knowledge teachers have about voice disorders, voice recordings analysis using Praat was used to find out the numerical values that describes the quality of voice.

**Results:** After comparing the obtained numerical values, it is evident that the acoustic voice data of the study participants, which indicated vocal fatigue before the holidays, changed, and the acoustic data of the recordings made after the holidays improved.

**Conclusions:** Rest and reduced vocal load have a positive effect on teachers' voices. Interview showed that primary school teachers are lacking knowledge about the voice hygiene and voice disorders and how to avoid them.

*Keywords:* acoustic analysis, primary education teachers, voice disorders

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# Intensive Voice Treatment (the Lee Silverman Voice Treatment-LSVT LOUD-) for Individuals with Wilson's Disease and Adult Cerebral Palsy: Two Case Reports (P31)

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**Objective:** This case report aimed to examine the effects of an intensive voice intervention, Lee Silverman Voice Treatment (LSVT® LOUD), in individuals with Wilson's disease (WD) and adult cerebral palsy (CP) presenting with dysarthria.

**Methods:** Two participants received LSVT® LOUD therapy four times per week for four weeks. Acoustic and perceptual voice analyses were conducted before and after treatment. Acoustic measures included fundamental frequency (Hz), jitter (%), shimmer (%), and harmonics-to-noise ratio (HNR, dB). Perceptual voice quality was assessed using the Grade, Roughness, Breathiness, Asthenia, Strain (GRBAS) scale. Voice-related self-perception was evaluated using the Voice Handicap Index (VHI).

**Results:** Post-treatment results demonstrated significant improvements ( $p < .05$ ) in fundamental frequency, jitter, and shimmer values for both participants, with the exception of HNR values in the participant with WD. Both participants showed significant increases ( $p < .05$ ) in the duration (s) and sound pressure level (SPL, dB) of sustained vowel phonation (/a/), as well as significant increases ( $p < .01$ ) in SPL during pitch range tasks (high and low /a/), reading, and conversational speech. High-frequency pitch values (Hz) improved in both participants, whereas low-frequency pitch values did not improve in the participant with WD. Perceptual GRBAS ratings for sustained vowel phonation and paragraph reading indicated overall improvements in voice quality for both participants. Additionally, perceived vocal loudness increased following therapy.

**Conclusions:** These findings provide preliminary evidence that individuals with Wilson's disease and adults with cerebral palsy may respond positively to intensive speech treatments such as LSVT® LOUD. Further research with larger samples is warranted to establish evidence-based speech intervention protocols specific to WD and adult CP populations.

**Keywords:** dysarthria, LSVT-loud, voice therapy

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# Developing a Multidisciplinary Collaboration Protocol Between Special Education Teachers and Speech-Language Therapists for Children with Severe Intellectual Disabilities and Complex Communication Needs (P32)

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Children with severe intellectual disabilities and complex communication needs (CCN) depend on well coordinated, consistent, and individualized support in order to develop functional communication and early speech skills. In practice cooperation between special education teachers and speech-language therapists is often irregular or based on informal arrangements rather than clearly defined, evidence based frameworks. Although both professionals work toward similar developmental outcomes, the absence of a shared structure can weaken the effectiveness of intervention, limit the transfer of communication skills across settings, and place additional demands on families and professionals.

This study aims to explore existing models of multidisciplinary collaboration in Latvia and in international practice, with particular attention to how professional roles are defined and overlap in work with children who have CCN. Based on this analysis, the study seeks to develop a structured collaboration protocol that supports joint decision making, aligns intervention goals, and strengthens coordinated planning for children with severe intellectual disabilities.

The study is guided by three main objectives:

(1) to review current multidisciplinary and transdisciplinary collaboration frameworks used in Europe and beyond;

(2) to examine the communication and developmental needs of children with CCN through established speech-language, pedagogical, and psychological assessment approaches;

(3) to develop a practical collaboration protocol and a team based intervention workflow that integrates the complementary expertise of SLTs and special education teachers.

Preliminary findings indicate that effective collaboration depends on shared professional terminology, joint assessment practices, coordinated goal setting, systematic data collection, and clearly defined responsibilities across different environments, including therapy sessions, classroom activities, and the home. In response to these needs, the proposed protocol includes tools for joint assessment, regular planning meetings, a structured hierarchy of communication goals, and a unified AAC supported intervention plan.

The expected outcome of this project is a transferable and practice oriented collaboration model suitable for adoption in educational institutions serving children with severe intellectual disabilities. By promoting consistency in intervention, enhancing professional communication, and supporting team based decision making, the model aims to improve functional communication outcomes and overall developmental progress for children with CCN.

**Keywords:** complex communication needs, multidisciplinary collaboration, special education

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# Assessing Pragmatic Skills in School-Aged Children: Adaptation of the Estonian TOPICC Assessment Scale (P33)

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Pragmatic language skills are essential for children's social participation and academic success, yet speech and language therapists in Estonia have limited access to practical assessment tools for evaluating these skills. Although pragmatic difficulties may emerge already around the age of 4 – 5 years, more detailed assessment becomes particularly important from the early school years, when communicative demands increase and pragmatic difficulties become more apparent across interactional contexts. This poster presents the adaptation, piloting, and practical evaluation of the Estonian version of the TOPICC (Targeted Observation of Pragmatics in Children's Conversation) assessment tool (Adams, 2011). Within two research, semi-structured conversations supported by picture stimuli were used to assess conversational skills which are a core component of pragmatic competence.

In the first phase (Pöder, 2025), the TOPICC assessment scale was translated and adapted into Estonian and piloted with 30 first and second grade students, including typically developing children and children with special educational needs (e.g. autism spectrum disorder, attention deficit hyperactivity disorder, developmental language disorder, intellectual disability). Based on the study, the wording of several items on the assessment scale was refined, and illustrative examples were added to support clearer interpretation and more consistent scoring. The adapted assessment scale demonstrated good internal consistency and inter-rater reliability.

In the second phase (Jalakas, 2025), the practical applicability and concurrent validity of the Estonian TOPICC were examined. Six practising speech and language therapists used the scale to assess the conversational skills of 30 children aged 6–9 years with pragmatic difficulties. Results showed a statistically significant moderate correlation between TOPICC total scores and the pragmatic subscale of the Children's Communication Checklist–Second Edition (CCC-2). Expert feedback highlighted the assessment tool's clarity, structured format, and usefulness for everyday practice, particularly for supporting intervention planning and documenting change over time.

Overall, the results indicate that the Estonian TOPICC is a feasible, informative, and practically applicable tool for assessing conversational skills in school-aged children. For comprehensive evaluation, its use is recommended in combination with other assessment methods.

*Keywords:* assessment of conversational skills, pragmatic skills, TOPICC assessment tool

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# Adaptation of the British Dyslexia Association Checklist and its Potential for Use as a Dyslexia Identification Tool in Latvia (P34)

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**Objectives:** to adapt and evaluate the possibilities of using the British Dyslexia Association Checklist for children up to the age of 11 in Latvia, by comparing checklist outcomes with children's literacy test results.

**Methods:** questionnaire (checklist), Acadience™ early literacy test Acadience™, Word Chains Test, data processing (Microsoft Office Excel), descriptive data analysis.

**Results:** The study was initiated following permission from the British Dyslexia Association to translate and adapt their primary school dyslexia checklist. The research was conducted in several stages: 1. Adaptation and Pilot Study: Translation and terminological refinement were carried out, including feedback from 10 parents (non-experts) to ensure clarity of technical terms. 2. Screening Phase: In early 2024, the first version of the electronic checklist was distributed via social media, receiving 131 responses. Following the initial data collection, a total of 114 respondents met the inclusion criteria for the study (up to age 11 from various regions of Latvia) - 61% boys and 39% girls. The highest response rate came from parents of 4th-grade students (32%), indicating the persistence of literacy challenges. Based on the findings, the tool was refined into a second version featuring a 5-point Likert scale. 3.

**Comparative Study:** The second version was administered to both the main research group (n=39, students with persistent literacy difficulties who underwent direct standardized testing) and a control group (n=26, students with no reported literacy challenges, used for comparative data analysis). 4. In-depth Assessment: The main group underwent comprehensive literacy testing using Acadience™ and Word Chain tests to confirm or rule out the presence of dyslexia.

**Conclusion:** The British Dyslexia Association checklist provides a rapid preliminary screening of dyslexia risk but does not replace professional assessment. For a comprehensive evaluation, parental subjective data must be interpreted alongside teacher observations and standardized test results, ensuring a multi-informant approach to the child's literacy skills.

**Keywords:** dyslexia, primary school children, screening tools for reading difficulties

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# Preparation of Future and Practicing Lithuanian SLTs for Working with Reading Disorders in Children (P35)

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**Short introduction:** Reading and writing are language-based abilities (Snowling & Hulme, 2021) and are also critical to long-term academic success, health, and employment outcomes (World Literacy Foundation, 2015). According to the American Speech-Language-Hearing Association, speech and language therapists (SLTs) play a critical and direct role in the development of literacy in children and adolescents and in the diagnosis, assessment, and treatment of written language disorders" (ASHA, n.d.). Since 2001, ASHA's position statement on literacy, numerous scientists have continued to advocate for the SLT role and responsibilities in school-based literacy teams: Bridges & Kelley (2025); Stephenson, Serry, and Snow (2025), Yi & Erickson (2024), Hogan (2018), etc. Despite that, it is still a subject of discussion in the Baltic and other countries.

The aim of this research was to examine opinions about the role and responsibilities, training in reading, confidence in defining, assessing and treating reading disorders among future SLTs and practicing SLTs in Lithuania.

**Methods:** Research was based on a quantitative approach. Data were collected using an online survey of future SLTs (N = 35) and practicing SLTs (N = 67) adapted with the authors' Loveall et al. (2022) permission. The obtained research data were analyzed using descriptive statistics (mean, percentages, standard deviation).

**Results:** The results revealed some differences between opinions of practicing therapists (SLTs) and future SLTs regarding their roles, responsibilities, training, and confidence related to reading disorders. Practicing SLTs more often assumed primary responsibility for diagnosing reading disorders, whereas future SLTs emphasized shared responsibility and the importance of interdisciplinary collaboration. Both groups reported the highest confidence in defining, assessing, and supporting language-related subskills. In contrast, confidence was lower in more complex areas, particularly in scaffolding and providing support for children with reading disorders. The results will be discussed in more detail in the presentation.

**Conclusions:** Nearly all participants strongly recognize their important role and responsibilities in working with reading disorders in children, especially in diagnosis and treatment. Despite that, there is a need to strengthen the preparation of the (future) SLTs in some specific areas.

*Keywords:* future and practicing speech, language therapists, preparation, reading disorders

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# Profile of the Primary Language School VALODIŅA (P36)

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The aim of the study is to create and analyze a profile for the primary language school. The main focus is on the composition of students and their referral diagnoses.

The main method is case analysis. School documents and speech therapist reports are used.

As a result, obtained data are offered for illustration and a small analysis.

In the 2025/26 academic year, 177 students' study at the school, of which 36 are girls and 141 are boys.

The school is primarily attended by children with certain language development disorders of varying severity, which may also be combined with other developmental disorders.

69 students have moderate language impairments; 62 students have severe language impairments. 15 students have a cochlear implant, one is hard of hearing; 10 students have ASD, 13 have learning disabilities, and 18 students have been diagnosed with ADHD.

The school collects data on school graduates, what their most likely educational paths are after graduating from grade 4.

In the 2023/24 academic year 36 students graduated from school; 30 students continue their studies in grade 5 of general education institutions; two in the program for students with language development disorders; three for students with learning disabilities, one student continues his studies in a special school for children with intellectual disabilities.

In the 2024/25 school year, 29 students graduated the school. 27 continue their studies in general education institutions in the 5th grade, two in the program for students with learning disabilities.

**Conclusions:** The profile of the primary language school from the perspective of students has been created, listing the diversity of students.

Data on school graduates shows that the main goal has been achieved - the majority of students continue their studies in general education institutions.

In the next study it would be necessary to supplement this profile with an analysis of teachers and speech therapists.

*Keywords:* children with language disorders, primary language school

# Prevention of Reading and Writing Difficulties in the Pre-School Years (P37)

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**Objectives:** The aim of this study is to identify the essential preparation needed for pre-primary children to successfully learn reading and writing, with particular emphasis on the development of phonological awareness.

**Methods:** The study was conducted during the academic years 2023–2024 and 2024–2025 in pre-primary classes at Šiauliai Gytariai Progymnasium. Phonological awareness was assessed using a self-developed assessment tool created by an expert speech therapist. Based on assessment results, a preventive phonological awareness development programme, Language Games (Kalbos žaidimai), was designed and implemented. The programme was applied to 103 pre-primary pupils. In addition, the educational resource I Am Learning to Write (Aš mokausi rašyti) was used during speech therapy sessions for children with language disorders.

**Results:** The results showed a significant improvement in pupils' phonological awareness skills, including sound discrimination, syllable segmentation, rhyming, and phonemic analysis. When pupils reached grade 1, those who had participated in the preventive programme demonstrated stronger reading and writing abilities compared to pupils who had not received targeted phonological awareness instruction.

**Conclusions:** Well-developed phonological awareness is a crucial prerequisite for successful reading and writing acquisition. Preventive, systematic development of phonological awareness in pre-primary education, supported by structured programmes and appropriate teaching tools, contributes positively to later literacy skills.

*Keywords:* phonological awareness, prevention

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# Teachers' Experience, Knowledge, and Needs in using Text-to-Speech (TTS) Technologies for Students with Developmental Dyslexia (P38)

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**Methods:** A quantitative research method was employed using an online questionnaire developed by the author. The survey was distributed to teachers working in general and inclusive education settings. It included questions addressing teachers' prior experience with text-to-speech (TTS) technologies, self-assessed knowledge, frequency of use, perceived benefits and challenges, and professional development needs related to the implementation of TTS tools for students with developmental dyslexia. Data were collected anonymously. At the time of abstract submission, data collection is ongoing, and descriptive statistical analysis will be conducted after the completion of data collection.

**Results:** The results will reveal teachers' levels of experience and knowledge regarding TTS technologies, the extent to which these tools are currently used in educational practice, and the main challenges encountered in their implementation. The findings will also identify teachers' expressed needs for training and support in the effective use of TTS technologies for students with developmental dyslexia.

**Conclusions:** The study will provide insight into teachers' readiness to implement TTS technologies in inclusive education and will identify areas where additional support and professional development are required to enhance the effective use of assistive technologies for students with developmental dyslexia.

**Keywords:** assistive technology, developmental dyslexia, text-to-speech technology

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# Difficulties in Differentiating Acoustically and Articulatorily Close Consonants in the Writing Tasks Among Children with Writing Difficulties (P39)

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**Objectives:** The aim of this study was to identify and quantify difficulties in differentiating the acoustically and articulatorily close consonants in Latvian /tʃ/, /c/, /ɟ/ and /dʒ/ across different types of written tasks performed by second-grade pupils with written language disorders.

**Methods:** The ability to discriminate target consonants was assessed in 42 second-grade pupils with written language disorders using three task types: dictation, copying, and picture-based independent writing. Each task consisted of 24 target words, with no overlap between word lists across tasks. The target sounds occurred in both word-initial and word-medial positions. There was an equal number of each target sound in each task. Errors involving the target sounds were categorized as omissions or phoneme substitutions. Data were compiled in Microsoft Excel and analysed using repeated-measures ANOVA and non-parametric repeated-measures procedures (Friedman test with Durbin–Conover pairwise comparisons).

**Results:** Across all task types, phoneme substitution errors occurred more frequently than omissions (263 vs 27). The highest error proportion was observed for the sound /dʒ/ (147 errors), accounting for 50.9% of all target-sound errors. The frequency of substitution errors differed significantly by task type (ANOVA:  $F=4.03$ ,  $p=0.021$ ; Friedman:  $\chi^2=37.7$ ,  $p<0.001$ ). Post hoc analyses revealed significantly fewer substitution errors in copying tasks than in both dictation and picture-based independent writing tasks (both  $p<0.001$ ). No statistically significant difference was found between dictations and picture-based independent writing tasks ( $p=0.369$ ).

**Conclusions:** Copying tasks, which provide direct visual orthographic support, were associated with a substantial reduction in phoneme substitution errors. In contrast, dictations and picture-based independent writing tasks that place higher demands on phonemic processing resulted in markedly higher error rates, with the sound /dʒ/ showing the greatest vulnerability. These findings indicate that orthographic support facilitates more accurate phoneme-grapheme mapping in pupils with written language disorders and should be considered in both assessment and intervention planning.

**Keywords:** acoustically and articulatorily close consonants, phonological processing, writing difficulties

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Tūbele, S., & Lūse, J. (2012). Ja skolēns raksta nepareizi. Riga: RaKa.

# Enhancing Preposition and Conjunction Acquisition through Remote Interactive Learning: A Case Study (P40)

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**Objectives:** The primary objective of this study was to evaluate the efficacy of a fully remote language intervention utilizing interactive video lessons and moving visualizations. The intervention targeted the acquisition of complex grammatical structures—specifically prepositions and conjunctions—in a child with auditory processing disorders and language development delays who previously struggled with these concepts.

**Methods:** The study involved a 6-year-old child living abroad, receiving therapy entirely via a remote platform. The 3-week intervention utilized a novel technological realization: interactive video lessons in a storytelling format. These lessons featured "moving visualizations" created by filming real-world toys and everyday objects in action (e.g., "the broom is by the closet"), combined with targeted audio emphasis on the linguistic goals. To maintain engagement, short gamification elements were integrated between exercises. Clinical evaluation was conducted online at three intervals: baseline (Day 0), a control assessment (Day 10), and a final assessment (Day 21).

**Results:** The intervention resulted in the successful acquisition of four new linguistic targets. The preposition "Ar" (with) and the conjunction "Un" (and) became absolutely stable in the child's spontaneous speech. Furthermore, significant clinical improvements were recorded for the preposition "Pie" (at/by) and the adverb "pāri" (over/across), marking a substantial breakthrough in the patient's grammatical development.

**Conclusions:** The results demonstrate that interactive, visually-driven storytelling with audio-visual emphasis can effectively facilitate the stabilization of grammatical structures in a remote setting. This technological approach provides a highly motivating environment for children with auditory processing challenges, proving that remote intervention can achieve significant functional outcomes in speech and language therapy.

*Keywords:* digital tools, innovation, remote grammar acquisition

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