

New frontiers in speech and language therapy: advancing practice, research and education



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'Top 10' research priorities for dysphagia, learning disabilities (LD) and developmental language disorder (DLD)

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Objective: To identify the 'Top 10' research priorities in Dysphagia, LD and DLD using innovative methods and collaboration with all key stakeholder groups.

Methods: An established collaborative method for identifying research priorities was adapted and used. An initial survey of speech and language therapists identified gaps in the evidence-base impacting on delivery of quality care and priorities for research funding. Priorities for each clinical area were taken in turn, with methods for each phase of the project refined to reflect prior learning.

- 1. Dysphagia priorities Research questions of importance were generated through a multistakeholder workshop with service users, carers, and healthcare professionals. Subsequently, research questions were rated by stakeholders via online surveys.
- 2. LD priorities Following a multistakeholder workshop, service users with LD ranked research uncertainties themed into topics. Research areas were rated by stakeholders via online surveys. A weighting calculation was used to incorporate service user views into overall survey results.
- 3. DLD priorities Individuals with DLD, their families and carers ranked uncertainties themed into topics. Research areas within the prioritised topics were subsequently identified in multi-stakeholder workshops. Research areas were rated by stakeholders via an online survey and online card sort activity adapted for individuals with communication difficulties.

Results: This process resulted in a publicly accessible report of the 'Top 10' research priorities as identified across all key stakeholders.

Conclusions: The innovative methods used show how service users with communication and swallowing needs can be supported to participate in priority setting projects. The 'Top 10' research priorities provide a clear, shared understanding of key gaps in the current evidence-base and can be used to target future research. The next phase of this project will support the translation of research priorities into fundable research questions to influence the research agenda and future work of funding bodies and researchers.



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New frontiers in speech and language therapy: advancing practice, research and education

"When to discharge? I could keep them in therapy forever!" - Exploring therapists' decision making on discharge of children with Developmental Language Disorder from Speech and Language Therapy

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Background

Deciding about discharge is one of the biggest challenges in speech and language therapy practice. However, literature about discharge from SLT is scarce: there is little empirical data, and the issue of discharge specifically with reference to children with Developmental Language Disorder (DLD) is not widely explored.

Aim

The aim of this study was to examine factors influencing therapists' discharge decision in the health-care context, as well as their definitions, understanding and experiences of discharge.

Methods

This study was part of a larger project to investigate practitioner decision making processes within the COST ACTION IS1406. We used a qualitative, phenomenological design. Participants were Croatian SLTs of different ages and years of professional experience, all working with children with DLD. Research was conducted in two phases: individual semi-structured interviews and the focus group. Interviews and focus group were recorded and transcribed. The analysis was both inductive and deductive.

Results

The analysis revealed four factors that were considered when making decisions: plateauing, child's achievements, motivation for therapy and support. Three key themes were identified in therapists' descriptions of their discharge decisions. Therapists described discharge as a process, not an abrupt decision; the implied finality of discharge raises conflict for therapists; the emotional impact of discharge for parents and children was recognised by therapists.

Conclusions

The term 'discharge' is a challenge for therapists in the context of DLD as a life-long condition. Rather than any sudden termination of intervention, based on notions of 'cure', Croatian therapists are looking to support a child's functioning in their school and social lives and recognize that children will have ongoing and changing needs in the longer term. The term risks misinterpretation and consideration of the longer term trajectory of the child's needs is needed though not popular in terms of managing caseloads and service systems.



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A new cross-cultural preschool assessment for the early identification of social communication needs

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Background

A 'late' diagnosis of social communication and ASD amongst preschool children initially diagnosed with language disorder is not uncommon. These children miss opportunities for appropriate support afforded by early identification, indicating the need for an effective pre-school assessment tool. Language and cultural differences present additional challenges for Speech and Language Therapists assessing young children, underscoring the need for such a tool to be suitable for use with children from diverse backgrounds.

The Early Sociocognitive Battery (ESB) is a standardized preschool assessment developed to address these challenges.

Aims

To present cross-cultural evidence on the validity of the ESB

Methods

The Early Sociocognitive Battery (ESB) was developed to assess very early skills in social engagement and understanding known to underpin communication and to be impaired in children with ASD. Evidence is drawn from the following datasets:

- UK standardisation of the ESB
- a follow-up of pre-school UK children referred to speech and language therapy services
- preschoolers in Saudi Arabia
- UK children, aged 2-11 years, diagnosed with ASD

In addition, take-up of the ESB in several European countries will be reported.

Results

Analysis revealed that the ESB was psychometrically robust, unaffected by language or cultural background, and achieved a high level of compliance in preschool children and older children with complex needs. Follow-up of the clinically-referred children at 9-11 years demonstrated the predictive validity of the ESB, most children (89%) with a clinical diagnosis of ASD/social communication difficulties at follow-up had low scores on the ESB when first assessed.

Conclusion/take home message

The ESB enables early identification of communication difficulties and guides early and appropriately targeted intervention Performance is unaffected by ethnicity or multilingualism. It is appropriate for the assessment and monitoring of children whose language or communication have raised concern, irrespective of their cultural or linguistic background.



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A systematic review of the impacts of social distancing measures during the Covid-19 pandemic on the mental health and wellbeing of people living with dementia (PLWD)

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Background: As part of the public health response to the Covid-19 pandemic, social distancing measures were implemented to slow the spread of the novel virus, as advised by the World Health Organisation (WHO). The effects of these measures on people living with dementia (PLWD) are still unfolding and warrant focused attention to improve outcomes and recovery.

Objectives: We aim to provide an overview of the evidence on the impacts of public health measures on mental health and wellbeing of PLWD. To inform recommendations for allied health professions and future research, the following questions are addressed:

- 1) How did PLWD and carers experience their wellbeing during the different stages of the pandemic?
- 2) What have been the main factors contributing to changes in wellbeing during the different stages of the pandemic?
- 3) Did demographic factors influence self-reported experiences of wellbeing for PLWD and carers?

Methods: A systematic search of online databases was conducted using the search terms "dementia AND covid-19 AND "mental health" OR wellbeing ". Inclusion and exclusion criteria were applied, followed by thematic analysis. The Critical Appraisal Skills Programme (CASP) Checklist was used for quality appraisal.

Results: Thematic analysis identified common themes of concern, such as: service access; technology use; increased mental health difficulties; loss of routine, identity, and independence; and carer strain. Some positive outcomes, such as newly acquired skills and activities, and some protective factors, such as well-established family relationships and routines, were identified.

Conclusions: Consistent with previous research (i.a. Liu et al., 2021), our paper provides an updated review and indicates wide-ranging, ongoing impacts of lockdown on the wellbeing of PLWD. Further research focusing on first-hand perspectives of PLWD from a diverse range of social groups is needed.

Keywords: people living with dementia (PLWD), Covid-19, mental health, wellbeing, lockdown



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A systematic scoping review on contextual factors associated with communicative participation among children with Developmental Language Disorder

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Background: Variations in communicative participation of children with developmental language disorder (DLD) cannot be wholly explained by their language difficulties alone, and may be influenced by contextual factors. Insight into contextual factors may help to identify children at risk, and inform family and child-centred therapy.

Aims: To investigate which contextual (environmental and personal) factors in early childhood are protective, risk or neutral factors for communicative participation among school aged children with DLD, and to identify possible gaps in knowledge on this subject.

Methods: A scoping review was conducted based on a systematic search of studies published from 2007 to 2020 in Pubmed, Embase (without MEDLINE), CINAHL and PsycINFO. In total, 6805 studies were reviewed using predefined eligibility criteria, of which 27 studies were included for data extraction.

Main Contribution: Personal protective factors are being a preschool girl, reaching school age, and being prosocial, while personal risk factors are becoming a teenager or adolescent, having low sociocognitive skills, and experiencing comorbid mobility impairment or behavioural problems. Gender after the preschool years, and non-verbal abilities were not found to be of influence, and the role of socio-emotional skills is inconclusive. Receiving therapy is an environmental protective factor, while the association between socio-economical family characteristics with communicative participation is inconclusive. Knowledge gaps exist about how important others in the child's life influence communicative participation, and how personal and environmental factors interact.

Conclusions: Limited knowledge exists about which personal and environmental factors are associated with later communicative participation of children with DLD. In order to help to identify children with increased risk for communicative participation problems, and to inform family and child-centred therapy for all children with DLD, more research is needed on the identification of relevant personal and environmental factors and the interactions between them in relation to communicative participation outcomes.



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A thematic analysis of speech and language services provided to children with language disorder in Cyprus

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Childhood language disorders are prevalent. If the language difficulties have no known etiology, the disorder is classified as a Developmental Language Disorder. If the disorder is associated with an additional condition, such as neurological impairment, autistic spectrum disorder, hearing impairment, behavioral, or emotional difficulties, it is classified as a Language Disorder associated with a comorbid condition. Since the 1980s, speech and language therapists (SLTs) have provided speech and language intervention to children with language disorders in Cyprus, but these services are not well-defined and/or evaluated.

The current study aims to describe service provision for children with (Developmental) Language Disorders. Eleven SLTs, one male; ten females, between the ages of 24 to 57 years, participated in semi-structured interviews on the topic.

Thematic analysis reveals common areas of concern relating to the referral process, diagnosis, intervention, and the child's environment. The findings show that clinicians utilize various diagnostic criteria to diagnose language disorders, and the terminology used is very inconsistent. Very few SLTs use standardized assessments, while the majority rely on clinical experience to guide service provision. SLTs provide direct intervention to language-impaired children, but no criteria for decision-making regarding the frequency, duration and type of therapy are reported. Furthermore, SLTs do not rely on the evidence-based literature for intervention; instead, they design therapy plans based on the outcomes of their informal assessments. Finally, the importance of parents and teachers in the management of language disorders and their contribution is acknowledged, although the exact nature of their involvement is unknown.

Overall, key aspects of service provision remain underspecified, and additional professional development is required. Moreover, the findings underscore the necessity for the development of national clinical guidelines for best practice in the field.



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An investigation of the communicative functions of delayed echolalia in children with autism.

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The objective of the current study was to investigate the functions of delayed echolalia in two boys with autism, aged 3 years (Participant A) and 6 years (Participant B). The use of digital video recording was employed to collect audio-visual data on three separate meetings for both participants. A parent questionnaire was also used to gather the parents' impressions of their sons' delayed echolalia.

The functions of Prizant & Rydell (1984) were used in order to evaluate the functionality of the participants' delayed echolalia. The collective body of functions was also examined in terms of its interactive and non-interactive properties. Furthermore, a structural exploration of the delayed echolalia utterances was made through calculation of the Mean Length of Utterance in Morphemes (MLUm, Brown, 1973) and the Index of Productive Syntax (ipSYN, Scarborough, 1990).

Of the 14 functions of Prizant & Rydell (1984), Participant A made use of 12 whilst Participant B made use of 11. Both participants made more prevalent use of non-interactive functions rather than interactive ones. Additionally, the MLU(m) scores and ipSYN indices of both participants revealed that the delayed echolalia utterances were structurally superior to the non-echolalic utterances. Lastly, it was also interesting to note that both participants made use of a further five functions that their parents had anticipated in the parent questionnaire.

Although the small scale of the study is indeed a limitation, it is hoped that the current investigation has given an insightful perspective of the functional potential of delayed echolalia.

Key Words: delayed echolalia, functions, autism.



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An RCT into the impact of parent based intervention on the language of socially disadvantaged 2 to 3 year old children

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Background: Early language delay is exacerbated by social disadvantage. Factors such as parents' low levels of literacy, confidence and self-perception can affect capacity to act on advice received, critical to empowerment. Methods used to achieve successful health outcomes in socially disadvantaged populations may need enhancing.

Aims: To evaluate the impact of parent based intervention on the language of 2 to 3 year old children from socially disadvantaged populations.

Methods: A multicentre clustered blind randomised controlled trial was used to evaluate the effect of parent based group interventions to improve early language development with children in socially disadvantaged areas with a vocabulary of 40 or less single words. The intervention sessions were delivered by a speech and language therapist, over a 20 week period. Participants received one of two interventions (1) Standard Care: indirect group parent based intervention - PBI (2) Enhanced Care: indirect group enhanced parent based intervention - EPBI.

Results: 155 participants were randomised at baseline. Children in both groups made improvements on some outcome measures and not others. We also found individual variation; some children made excellent progress, whilst others did not. There was evidence that children achieve better outcomes with EPBI.

There was an increase in lexical contingencies used by parents from baseline to post intervention. Parents' activation levels increased over time in both groups, with the increase twice as big for EPBI. Qualitative interviews with parents, provided insight into parents' experiences, and the potential value of an enhanced intervention.

Conclusions: This trial provides evidence that it is possible to facilitate the language development of children from socially disadvantaged areas through supporting their caregivers. Future research is required to identify factors that indicate which parents and children may respond most positively to this type of intervention.



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Approaches to tracheoesophageal voice rehabilitation: A survey of UK and Republic of Ireland (ROI) SLT practice

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Background

After total laryngectomy surgical voice restoration is used to establish communication via tracheoesophageal voice prosthesis. Once voice is established, there is a paucity of information on what SLTs should do to improve tracheoesophageal voice quality. No existing surveys or studies investigate this specific question. There is also a disconnect between guidelines, knowledge and clinical practice, whereby clinical guidelines stipulate the requirement for SLT intervention, but do not detail what this entails in the rehabilitation context.

Aims

This survey aims to:

Explore what rehabilitative approaches are being implemented across the UK and ROI. This is in the context of tracheoesophageal voice therapy as a rehabilitative behavioural intervention to improve voice quality, such as by transference of clinical skills commonly applied to laryngeal voice therapy.

Investigate the barriers and facilitators to provision of tracheoesophageal voice therapy.

Advance understanding of current clinical practice beyond voice prosthesis insertion, management and care

Methods

An online 28 item survey was developed to investigate the above aims and piloted with seven SLTs. The survey was informed by the Theoretical Domains Framework. Descriptive and statistical analyses will be used for closed answer questions. Open question responses will be analysed using content analysis. Dependent on survey findings, correlational analyses may be used.

Results

The survey will close on 07/11/2021. We will present participant characteristics and detail tracheoesophageal voice therapy approaches used. Barriers and facilitators to implementation of these approaches will be mapped against the Theoretical Domains Framework. Implications for clinical practice and further research will be raised.

Conclusions

This survey will provide a picture of current UK and ROI clinical practice within the under-researched area of tracheoesophageal voice therapy. The findings of the survey will form part of the VITAL project, which centres on development of a novel Voice Therapy Approach for People with Laryngectomy.



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Awareness of DLD existence, characteristics and causes – data from a public survey conducted in Portugal

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Introduction: Although there are no formal prevalence studies of Developmental Language Disorder (DLD) in Portugal, an estimation based on the most recent country population (Census 2011) points to, at least, between 80 and 111 children per thousand have DLD in Portugal. DLD is acknowledged by practitioners to have a great impact in the life of children and adults, but there seems to exist less knowledge by population in general.

Objectives: To characterize the awareness of DLD in Portugal, compared with other conditions such as Autism, Dyslexia and ADD/ADHD, and other countries in Europe and beyond.

Methods: Data were collected through a survey developed by an international team under the COST Action IS1406, that included questions respecting whether people have heard about DLD, their thoughts about their causes and manifestations, as well as the means of disseminating the information about DLD. The questionnaire was administered to 90 people, from different ages, education and income levels.

Results: show generally a low to medium level of awareness of DLD if compared with other conditions, such as Autism, Dyslexia and ADD/ADHD.

Nevertheless, regarding practitioners, causes and treatments involved in DLD, answers vary to some extent among respondents. The means identified for diffusion of information about DLD are campaigns and Internet websites, as well as some actions in schools.

Conclusions: The study points to a need to raise public awareness of DLD, which would lead to significant progress in the delivery of services to the youngest population.



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Blocking the school-to-prison pipeline: Speech and Language Therapy and Violence Reduction

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BACKGROUND

Approximately 60% of young offenders have often unidentified Speech, Language and Communication Needs (SLCN – RCSLT, 2008) with a lack of identification and support associated with extensive negative life outcomes (Bercow 10 years on, 2018).

Violence in the UK is rising. Violence Reduction Units (VRUs) are new partnership organisations designed to tackle the root cause via a public health approach. West Midlands VRU (WMVRU) is the second largest and serves a population of 3 million people (https://westmidlands-vru.org/). Speech and Language Therapy (SALT) was commissioned 1 day a week into WMVRU from January 2021.

AIM

To put blockers into the school-to-prison pipeline by empowering professionals to identify and support SLCN at the earliest available opportunities.

METHODS

Phase 1: Scoping review

A baseline was established using online questionnaires and focus groups to understand SLCN awareness within education, criminal justice, exploitation and policing services.

Phase 2: Training

The aforementioned services all received or have planned SLCN training.

Phase 3: Tiered approach

From mid-2021, the next phase focuses on a tiered approach.

Tier 1 - ongoing training for multi-agency stakeholders

Tier 2 - supporting services to be more communication-accessible e.g. adapting resources for exploitation services and auditing accessibility of environments e.g. at custody blocks.

Tier 3 - pilot projects such as bespoke screening tools at key trigger points e.g. entry to foster care or return from missing.

RESULTS

So far, the results of phases 1 and 2 indicate 100% of services involved not being aware of SLCN previously showing the need for SLT input in this space. Post-training feedback showed increased confidence levels of staff in knowing what SLCN is, and identifying and supporting young people with SLCN.

CONCLUSIONS

SALT is entirely new to the world of VRUs despite the established link between SLCN and offending. This innovative service aims to enable SLCN to be identified at the earliest available opportunity by frontline workers. This will allow young people's needs to be recognised at the earliest stage to support diversion from crime and aim to increase life chances.

KEYWORDS

Adolescence, youth offending, SLCN, training, service development



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Building capacity to support children with SLCN: Lessons from implementing targeted & universal programmes in schools.

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Effective school-based programmes for language (e.g. Joffe et al 2018, Murphy et al 2017, Starling et al 2012), require appropriately skilled practitioners to support implementation through CPD, and coaching-based collaboration (Starling et al 2012). Successful outcomes are a product of usable interventions, effective implementation and enabling contexts (Fixsen et al 2015) but research examining implementation in school settings is required (Lendrum & Humphreys 2012). We aimed to examine the factors supporting successful implementation of universal and targeted supports for children with SLCN (speech, language and communication needs) involving speech and language therapist and teacher collaboration across a multi-phased study in primary and secondary schools.

Over the course of three years, data were gathered from key stakeholders including teachers, speech and language therapists, children and others using interviews, focus groups and supported conversations. Therapists documented implementation barriers, enablers and steps through the pre-planning phase, and documented subsequent delivery and follow-up of universal and targeted interventions. We employed an implementation science framework with qualitative analysis to examine implementation contexts, strategies and outcomes.

We generated a number of themes from data gathered across the secondary and primary phases of the study, where despite considerable disruptions to planning and implementation arising in the second phase from the COVID pandemic, there were key indicators of implementation success. Positive experiences of collaboration and programme delivery and outcomes for children, were underpinned by coaching and modelling opportunities, joint learning opportunities and access to easily implemented and structured programmes. Having core knowledge to support SLCN and supportive management structures were also identified as key contexts for success and maintenance but implementation challenges were also recorded.

We present a model for implementation of SLCN supports in schools, which describes the contexts, mechanisms and outcomes of efforts to build capacity.



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Building research capacity for UK SLTs: the SLT Research Practitioner Framework Resource Map

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Background

In the UK, there are several initiatives facilitating research capacity building in the allied-health professions, and specifically for speech and language therapists (SLTs).

This includes, among others: university collaborations (e.g. Whitworth et al., 2021), grass-roots support groups (e.g. Deane & Clunie, 2021), and initiatives from the professional body (Royal College of Speech and Language Therapists, RCSLT).

Whilst this positive culture exists, initiatives operating in isolation risk duplication of resources and may inadvertently create navigational challenges for aspiring research practitioners.

Aim

The RCSLT aimed to bring together these networks, to:

- Identify their individual contributions, highlight gaps, and strengthen links
- Collaboratively develop a novel resource supporting SLTs to navigate their research careers and build research capacity

Methods

The UK-based Council for Allied Health Professions Research (CAHPR) had recently developed the 'Research Practitioner Framework' (Harris et al., 2020).

This framework formed the basis of an audit of each network's role in supporting research skill development and capacity. RCSLT staff and network representatives met on five occasions across 13 months to complete the activity.

Results

The audit led to the development of the SLT Research Practitioner Framework Resource Map, a novel tool supporting SLTs to:

- •navigate CAHPR's Research Practitioner Framework,
- •identify their own research career stage and areas for development,
- •identify the most relevant networks to support them in achieving specific goals,
- •locate additional supporting resources.

Conclusion

The SLT Research Practitioner Framework Resource Map is an innovative open-access resource supporting research practitioners and research capacity in the profession. Feedback on its utility will inform future iterations. In future, its scope will be broadened to involve similarly principled networks beyond the UK.

This activity has also proven fruitful in locating gaps and overlaps in current support and will be used to inform future RCSLT research strategy.

Key words

Research capacity, networks, workforce



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Can high-frequency hearing loss be detected in frequency-domain speech representation?

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Introduction

According to Kurkowski (2013), describing the auditory stimulation therapy method from Tomatis, speech can only contain those frequencies that can be heard. In the present preliminary study, we investigated this statement by comparing the long-term average spectra-based energy levels in the one-third octave bands surrounding the audiometric octave frequencies between subjects with high-frequency hearing loss and matched subjects with normal hearing.

Methods

Audiometric data and audio recordings of readings of a phonetically balanced text were collected from ten subjects (4 females, 6 males; mean age of 56.7 years) with high-frequency hearing loss (with a so-called ski-slope audiogram) and ten normal hearing subjects matched for gender and age (mean age of 56.8 years). In the long-term average spectra (LTAS) of the speech recordings, the energy levels in the one-third octave bands around seven audiometric octave frequencies (125 Hz, 250 Hz, 500 Hz, 1000 Hz, 2000 Hz, 4000 Hz and 8000 Hz) were determined. After normalization based on the mean across the three lower octave frequencies, the slope of the logarithmic fit line through the four higher octave frequencies was determined as the dependent variable.

Results

Compared to normal hearing subjects, the LTAS-based slope of the hearing-impaired subjects was significantly steeper (U = 5; p < .001). Receiver operating characteristics (ROC) analysis revealed an area under ROC of 0.950, indicating high diagnostic accuracy. Slope = -12.695 was accompanied with sensitivity = 1.0 and specificity = 0.9.

Conclusion

Steeper higher-frequency slopes in the audiogram of the hearing-impaired subjects were represented by steeper higher-frequency slopes in the frequency-domain speech configuration. This finding may illustrates that what is less/not perceived is also less produced in speech.

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Can speech and language therapists and parents of children who use Augmentative and Alternative Communication work collaboratively?

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Working in collaboration is vital for successful outcomes in healthcare, however little is known about how professionals form successful partnerships with parents, particularly in the context of speech and language therapy and specifically in AAC therapy.

Objectives

To explore collaborative practice between SLTs and parents of children who would benefit from AAC.

This project aimed to answer the question:

How do parents of children with minimal speech & speech and language therapists experience collaboration?

Methods

A three-stage methodology was used to answer the research question. A literature review to identify theoretical perspectives which underpin work in collaborative practice within healthcare. Semi-structured interviews with five parents of pre-school children, seven parents of school aged children and fourteen SLTs. Interview data were analysed using Interpretative Phenomenological Analysis. Consensus work, consisting of focus groups following the nominal group technique took place within the study day of a clinical excellence network. Themes from the interview data and nominal group were compared to theoretical perspectives.

Results

Collaborative practice between professionals and parents is under researched. Themes which form the concept and construct of collaboration were adapted from studies of interprofessional teams. Two superordinate themes were generated from the interview data: issues around identity and experiences of relationship. These themes relate to SLTs relational and participatory practices which contribute to the concept of collaboration. Both parents and SLTs value collaborative practice. Parents emphasised relational practices which spoke to the themes of identity and experiences of relationship. SLTs placed more emphasis on participatory practices.

Conclusions

Collaborative relationships are an essential part of AAC therapy. Collaborative practice depends on a combination of relational and participatory practices. Parents value therapeutic relationships as a pre-requisite for engagement in therapy. SLTs would benefit from additional training in relational practices to address issues around parent identity.

Key Words: Collaboration, AAC, Complex Communication



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Collaborating with care providers to effectively support people living with dementia and dysphagia

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Introduction:

Relationships between healthcare professionals and care staff can be complex and challenging as a result of the different professional and personal characteristics each person brings to the situation. These differences of opinion can be exacerbated by a disconnect between the information required and the information shared between the different parties. A lack of role clarity and the impact of perceived authority and power can further contribute to the challenges of collaborative working.

Aim of the study:

To determine the perspectives and roles of those supporting people living with dementia and dysphagia in care homes and the barriers and facilitators to maintaining positive experiences of eating and drinking.

Methods:

This qualitative study involved using interviews, focus groups and structured observations to explore the perspectives of care home residents; people living with dementia; care home staff, family carers and SLTs. Themes were derived from the data using inductive thematic analysis.

Results:

A total of 70 individuals participated in the study, made up of 20 care home residents from across 7 care homes, 7 family carers, 13 care home staff and 31 Speech and Language Therapists. Thematic analysis highlighted the tensions between the different people involved and the impact of these on the eating and drinking experiences of people living with dementia and dysphagia.

Conclusions:

The number of different people involved in supporting people living with dementia adds significant complexity and leads to difficulty in providing consistent high quality care. Role uncertainty results in ineffective collaborations and conflict. These conflicting opinions and the impact of power hierarchies impacts the quality of life of people living with dementia and dysphagia and reduces choices afforded to them. Unresolved challenges result in each party acting independently according to their own perception of optimal care.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Collaborating with parents to identify outcomes for a pre-school speech and language intervention

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Background

Stakeholder involvement within the intervention development process is integral to successful implementation. This patient and public involvement (PPI) project forms part of a larger body of National Institute of Health Research (NIHR) funded research, which aims to develop a novel intervention for pre-school children with co-occurring features of speech sound disorder (SSD) and developmental language disorder (DLD). As experts by experience, parents of pre-school children who have accessed Speech and Language Therapy (SLT) services are ideally placed to support the research team in identifying meaningful intervention outcomes.

Aim/objectives

At the first stage within the intervention development process, this project aimed to identify intervention outcomes based on the views of families with lived experience. These outcomes will be used to inform the content and delivery of the intervention, as well as the selection of outcome measures.

Methods

Three parents with relevant lived experience took part in a one-hour online consultation with the researcher. Prior to the consultation, they were asked to rank intervention outcomes from a pre-defined list based on previous research findings. The rankings were then used to support qualitative discussion around outcome prioritisation.

Results

Participation and activity-based outcomes were prioritised, with all parents selecting "increase in the child's confidence" as very important. Parents discussed how a child's confidence may influence many areas, including their engagement in the therapy process. It was agreed that Therapy Outcome Measures (TOMs) and the Focus on the Outcomes of Communication Under Six (FOCUS) could be suitable when measuring effectiveness, as they both include elements of child confidence and participation.

Conclusions/take home message

When developing new pre-school interventions, collaboration with parents is essential to ensuring that intervention outcomes have meaning and relevance. For parents of pre-school children with co-occurring SSD and DLD, outcomes should relate to everyday functioning as well as linguistic impairment.



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New frontiers in speech and language therapy: advancing practice, research and education

Comparison of the Speech and Language Characteristics of Children Aged 3;00-6;11 with Childhood Apraxia of Speech and Their Peers with Phonology-Articulation Disorder

<u>Dr Aşena Karamete¹</u>, Assoc. Prof. Dr. Bülent Toğram ¹Nisantasi University, Istanbul, Turkey

Objective: Childhood apraxia of speech (CAS) is a subgroup of speech sound disorders and is a motor speech disorder seen in motor planning/programming of speech. The aim of this study is to compare the language and speech characteristics of children aged 3;00-6;11 years with CAS with their peers with phonological articulation disorders.

Method: 82 children aged 3;00-6;11 with speech sound disorder (16:66, F:M) have been evaluated with Dynamic Evaluation of Motor Speech Skills Turkish Version (Karamete and Togram, 2021; DEMSS-TR); Turkish Articulation and Phonology Test (Topbas et. Al. 2006; SST); Test of Early Language Development-3 Turkish Version (Guven and Topbas, 2011; TEDIL); Ankara Development Screening Inventory (Sezgin et. Al., 1996; AGTE) and oral peripheral screening inventory. Children were grouped as CAS (n=28) and non CAS (n=54) according to the scores they obtained from DEMSS-TR. The groups were compared according to the percentages of the characteristic features of the CAS they have shown. Gender and age demographic characteristics of the participants were compared with chi-square analysis. The scores obtained from the groups in articulation, receptive and expressive language and general development tests were examined with Pearson Product-Moment Correlations.

Results: Children diagnosed with CAS showed significantly lower scores in receptive and expressive language skills, articulation skills, general developmental performance compared to children with articulation and phonological disorder. There was no difference between children with and without CAS in terms of age and gender. As a result of comparing the characteristics of CAS among the groups, it was observed that all the characteristics were present in both groups except vowel distortion, prosodic errors and shwa insertion. The most common characteristics in the groups are awkward movement transitions between articulation figurations, slow speech rate, increasing difficulty as the number of syllables increases, groping and voicing errors. The CAS group is the group that most frequently exhibits all of these characteristics. In particular, awkward movement transitions and slow speech rate seem to be a common characteristic in children without CAS.

Conclusion: Children with CAS showed lower performance in all tests compared to the articulation-phonological disorder group. There was no difference between the groups in terms of age and gender. It was observed that Turkish-speaking children with CAS showed all of the CAS characteristics accepted in the literature.



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New frontiers in speech and language therapy: advancing practice, research and education

Complex Syntax Abilities of French Monolingual and French-English Bilingual Adolescents

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Background: In English monolinguals, complex syntactic abilities have been found to grow beyond adolescence; further, that expository discourse yields more complex syntax than conversation (Brimo & Hall-Mills, 2019; Nippold et al., 2005). For bilinguals, syntactic abilities in spontaneous language have been studied in school-age children with a focus on English only (Paradis et al., 2017). However, studies are lacking on bilingual adolescents' complex syntactic abilities in both languages. It is not known when and if bilingual adolescents reach monolingual proficiency after years of exposure nor whether their production varies by context.

Aim: This study investigated the long-term proficiency of monolingual and bilingual adolescents in French and English complex syntactic abilities.

Methods: French and English conversational and expository discourse oral language samples were collected from 12- to 17-year-old French-English bilinguals (n=27) and French monolinguals (n=14). Complex syntax was investigated in terms of sentence length, clausal density (number of subordinate clauses per main clause), and diversity (number and types of subordinate clauses).

Results: All participants produced more complex syntax in expository discourse than conversation, extending findings from monolingual studies. In addition, the study showed that the groups did not significantly differ for sentence length and clausal density in French, however, monolinguals used a greater diversity of complex sentences. Regression analysis showed that exposure is still a better predictor of syntactic abilities than age in adolescence.

Conclusions: These results confirm that exposure is still influencing later language development in a second language in adolescence. At age 17, significant differences are still detected between monolinguals and bilinguals. Clinicians should use the measure of diversity as an indicator of complex syntax proficiency in addition to length and clausal density.

Keywords: Adolescent, bilingualism, syntax, expository discourse, conversation, French, English



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Cultural and linguistic competence of professionals working with children with DLD

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BACKGROUND: Speech therapists often master a number of culturally competent practices to work with children and families from different cultural groups, but additional tools, diversifying the profession are needed to ensure equality for all children.

OBJECTIVES: The study explores practitioners' perceptions of cultural and linguistic differences in the work with children with DLD. A comparison was made of the results from different countries.

METHODS: A Practitioner Survey Within COST Action IS1406 entitled: Enhancing Children's Oral Language Skills across Europe and beyond was used. A total number of 1,358 answers of respondents from 10 countries – Ireland, UK, Bulgaria, Poland, Croatia, Spain, Norway, Sweden, Turkey, Lebanon was used for the present analyses.

RESULTS: The results show that participants from all the countries did not have enough knowledge in the field of cultural competence and most practitioners only worked in their country's primary language.

Professionals from Bulgaria, Poland and Croatia had similar responses to the questions about the cultural differences in the responsibility and behavior of parents related to the child's language development. The professionals from Spain and Lebanon showed greater confidence in their cultural and language competence. The practitioners from Turkey and Lebanon had similar attitudes to parental behaviors typical of different cultural groups.

CONCLUSIONS: The study points to the need for cultural and linguistic competence development and consideration by professional associations of the similarities and differences between countries. There is a need for gradual inclusion of more and more representatives of other cultures and speakers of other languages in the teams that work with children with DLD.



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New frontiers in speech and language therapy: advancing practice, research and education

Dynamic assessment: a new tool for assessing the phonological awareness of bilingual and monolingual French-speaking children

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Background: Dynamic assessment (DA) is a tool used for assessing children's language learning potential. It is considered a non-biased approach for evaluating bilingual children. Research with English-speaking children indeed indicates that DA is effective in diagnosing language disorders in both monolingual and bilingual children. Nevertheless, no DA has yet been developed to diagnose language disorders in French-speaking children.

Aim: This study aimed to examine the validity of a French dynamic task of phonological awareness to differentiate children - monolingual and bilingual - with and without developmental language disorder (DLD).

Methods: Forty-six children, aged 4 to 9 years, 24 with typical development (TD) and 21 with DLD, participated in the study. There were 22 monolinguals and 23 bilinguals. They performed a dynamic task of phoneme segmentation: when the child was unable to segment the target word into phonemes, graduated prompting was provided (e.g., pronounce the target word slowly - identify the first sound - provide the number of sounds - model the segmentation using tokens). A modifiability scale, in which the examiner rated the child's response, control and attention during the task, was also included. Data were analyzed using mixed effect logistic regression.

Results: Four factors emerged as significant in the regression model: age, number of phonemes, group (TD, DLD), and modifiability. Children, who were older, typically developing, and who had higher modifiability scores had better segmentation abilities than the other children. Words with fewer phonemes were also easier to segment. The influence of bilingualism, sex and education of parents were not significant.

Conclusions: DA of phonological awareness has the potential to be used as a diagnostic tool for differentiating DLD and TD - monolingual and bilingual - children. The next step is to investigate whether our task predicts reading success and informs us on intervention practices in speech-language therapy.



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New frontiers in speech and language therapy: advancing practice, research and education

Effects of Pragmatic Intervention Programme in Children with Autism Spectrum Disorder and Developmental Language Disorder

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Background: Children with Autism Spectrum Disorder (ASD) and Developmental Language Disorder (DLD) frequently face pragmatic difficulties that negatively affect learning, socialization and mental health and may persist into adulthood, so early and timely intervention is crucial. The international literature reports several programmes that can be used to improve these skills. However, research on the effects of pragmatic interventions for preschool aged children, especially with DLD, are scarce. In Portugal, the Pragmatic Intervention Programme was recently developed and validated, but its effects are unknown and need to be studied.

Aim: To determine the effectiveness of an intensive, manualized intervention programme for 12 children aged 3;6-6;11with pragmatic difficulties (ASD and DLD).

Methods: An experimental study design was conducted. The children with ASD and DLD separately were assigned to one of the four groups (2 experimental groups and 2 delayed control groups). Each child received 24 sessions of intervention from a Speech and Language Therapist. All therapy content was derived from the Pragmatic Intervention Programme and adapted to the individual needs of each child. A primary outcome measure of pragmatic language was used, and a secondary outcome of structural/content language and parent/teacher-reported communication was also collected before and immediately after intervention.

Results: The preliminary results indicate that the children in the experimental groups made significantly better progress during the intervention period. The pragmatic skills of the children in the control groups remained neutral during this period and only improved when the same intervention was provided to the control groups.

Conclusions: These results suggest that the pragmatic intervention programme proved to be an effective programme of improving pragmatic skills in children with DLD and ASD. Being the first experimental study in the field of pragmatics in Portugal, these results are crucial and will contribute to future evidence-based practice.



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New frontiers in speech and language therapy: advancing practice, research and education

Evaluating the effects of a structured questioning training for speech and language therapy students

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Introduction: Structured Questioning (SQ) approaches have been used to support learning and self-development, including with people experiencing difficult circumstances. One SQ-based approach that has been used widely by a range of professions is the GROW model, which offers a helpful tool for speech and language therapist (SLT), for their own development and for use with clients. GROW has generated widespread interest within different disciplines, with many descriptive and prescriptive publications. However, there are fewer empirical investigations (such as Grant, 2011) of the effectiveness of GROW, either for professional users or their clients.

Objectives: This project aims to explore SLT trainees' experiences of a SQ training programme, investigating whether changes in their academic and personal life are enabled. The purpose of the study is to explore training for SLT students in SQs with a GROW format, investigating the following research questions: (1). How do trainee SLTs describe their experiences as participants in the SQ and GROW training sessions, related to their own learning and development? (2). How do they perceive the possible application of this approach to their work with SLT clients? (3). Are reported beneficial effects associated with time spent practising and/or the students' readiness for change?

Methods: A mixed methods approach provides evaluation of a brief training SQ and GROW for SLT students in two universities in Cyprus and the UK. Repeated baseline assessments include measurements for readiness for change, levels of anxiety and semi-structured interviews.

Discussion: The project is ongoing, and results will be reported at the Conference. The findings will expand our understanding of trainee users' experience and skills with GROW, and what can be done to support their learning.



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New frontiers in speech and language therapy: advancing practice, research and education

Examining the Sensitivity of a New Social Pragmatic Communication Assessment Battery

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BACKGROUND:

Social pragmatic communication (SPC) refers to interdependent skills that facilitate the use of language and communication in diverse contexts with a variety of communication partners. A SPC disability may prevent a child from developing and maintaining positive peer relationships; interpreting and understanding the motivations of others; successfully carrying out communication goals, solving problems, engaging in discourse, employing autobiographical memory and self-advocacy – skills important for being successful in school and in daily life. The context-bound nature of SPC requires assessments to occur in settings such as the home or classroom while the child is interacting with peers.

AIMS/OBJECTIVES

This study examined the sensitivity of the Assessment of Pragmatic Language and Social Communication - Greek (APLSC-G) parent and teacher assessment forms' ability to differentiate neurotypical children from children with ASD.

METHODS:

The (APLSC-G) includes two screening instruments, two diagnostic instruments and a discourse analysis. This study focuses on the two screening instruments - the parent and teacher questionnaires. Items were created based on a theoretical model of SPC. Content validity was determined by a scientific committee. Parent and teacher questionnaire ratings were collected on 338 neurotypical children and 36 children with autism, all aged 3.5 to 9-years old. Sensitivity analyses were examined for both parent and teacher forms for different sample definitions and age bands.

RESULTS:

Results indicated there were statistically significant differences in responses between neurotypical and ASD groups when using the entire sample as well as a randomized sub-sample. Results also indicated statistically significant differences in responses between age bands.

CONCLUSION

There is a significant need for instruments to assess SPC skills of young children and differentiate typically developing children from those with SPC disabilities such as children with autism. This Greek sample has shown promise in meeting this need to advance practice in the field.



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New frontiers in speech and language therapy: advancing practice, research and education

Exploring how speech and language therapists work with parents and families: Overview of Collaboration for Communication Network

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Background

In 2019 we established a new 'Collaboration for Communication' (CfC) Network made up of an international team of researchers. Our mission is to examine practice and to explore ways of working collaboratively with parents/families/caregivers to maximise outcomes for children with speech, language, and communication needs. We plan to establish a research agenda with a strong practical/clinical focus in order to support the continued development of current practice and to support both practitioners and students to reflect and think creatively about how to work together with parents and families.

Aims

To describe theoretical frameworks of collaborative practice in health, social care, and education settings that could be applied to speech and language therapy practice in early childhood settings.

To explore the teaching practices used in higher education settings to prepare allied health, education and social care students to work collaboratively with families of children with SLCN aged 0-8 years.

Methods

We are conducting two scoping reviews to map the available evidence. We have discussed and refined search terms and conducted searches across five databases. A total of 7,519 unique papers were retrieved in the scoping review to address the first aim and a total of 11,350 papers were retrieved to address the second aim. All papers were imported to Covidence for screening and data extraction.

Results

The Titles and Abstracts of all retrieved articles are currently being screened by the research team to determine if they meet inclusion criteria.

Conclusions

Collaborative approaches to practice have the potential to improve child and family outcomes by valuing and incorporating the knowledge and experiences of children and their families into therapy and therapeutic decisions. Although our work is still in the early stages, Collaboration for Communication network aims to progress collaborative working with families.



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New frontiers in speech and language therapy: advancing practice, research and education

Exploring New Frontiers: The Use of Exploratory Factor Analysis for Social Pragmatic Communication Instrument Development

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Background

The need for early identification and intervention of social pragmatic communication development is essential for success. However, there are very limited instruments available for young children and particularly instruments that offer a holistic examination of social pragmatic communication skills across settings. Therefore, the need for instrument development is essential to advancing clinical practice.

Aim/Objectives

The aim of this project was to develop an instrument using multiple informants across both home and school environments. A multiple informant approach is common in behavioral and cognitive measures and is commonly used within the K-12 setting (Achenbach, 2019). The use of a multiple informant approach allows for a wider range of possible communication expression as information is collected across multiple environments (i.e., school and home).

Methods

The dataset used included two reports from The Assessment of Pragmatic Language and Social Communication – Greek (APLSC-G) with a total of 374 observations. The sample included 338 neurotypical individuals and 36 individuals with autism spectrum disorder (ASD); all individuals were between the ages of 3.5-9. The Parent/Caregiver Report consisted of 30 items with eight reverse-scored items and the Teacher/Professional Report consisted of 35 items with nine reverse-scored items. All items consisted of categorical responses using a 6-point rating scale from 5 (the behavior occurs or is observed almost always) to 0 (the rater has never seen the behavior). An exploratory factor analysis was conducted to explore possible common and differential structures between both parent and teacher forms. Fit statistics, item factor loadings, and interfactor correlations were used to determine the best factor solution.

Results

Results concluded that the parent factor structure and the teacher factor structure work towards a "common structure."

Conclusion

These results are important as we look to new ways to advance clinical practice around social pragmatic communication development through research and measurement.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Exploring referral rates and patterns in an inpatient psychiatric speech and language therapy service.

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Background

There is a growing recognition for the role of speech and language therapists in adult inpatient psychiatric settings. However, little is known about the referral rates and patterns for adults accessing specialist inpatient mental health speech and language therapy services. Whilst there is some evidence which explores the prevalence rates of speech language and communication needs (SLCN) and dysphagia, there continues to be limited evidence which explores how people access speech and language therapy services during an inpatient admission.

Aim / Objectives

To understand the prevalence and patterns of referrals into a specialist psychiatric inpatient speech and language therapy service who offer services to 424 beds.

Methods

Data analysis using a pre-existing information database over a six-month period which is held by an inpatient psychiatric speech and language therapy service. This considers a range of pathways; adult acute assessment, adult rehabilitation, older persons functional and older persons organic.

Results

Between 01/01/2021 and 30/06/2021, 218 referrals were made to one inpatient psychiatric speech and language therapy service. 104 of those referrals were based on suspected SLCN, whilst the other 114 were due to queried dysphagia. SLCN referrals were made by a wide range of professional groups such as occupational therapists, psychology and nursing. Whilst Dysphagia referrals predominantly were made nu nursing colleagues. Both SLCN and dysphagia referrals were highest in adult acute assessment wards.

Conclusions / take home message

Speech and language therapy provision is accessed across a range of pathways within inpatient psychiatric settings for both SLCN and dysphagia. This review provides further evidence for the need of speech and language therapy services for people receiving assessment and treatment in mental health hospitals. Further considerations include training for specific staff groups and increasing patient knowledge and confidence in how to self-refer.

Keywords

Mental health / psychiatry / referrals



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Exposing a child with Autism Spectrum Disorder to more than one language in the home: Is it beneficial?

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There is currently little research that addresses the effects of dual language exposure on the language abilities of children with Autism Spectrum Disorder (ASD). The purpose of this study was to compare the language abilities of children with ASD who are exposed to predominantly one language at home to the language abilities of children with ASD who are exposed to two relatively equal proportions of languages at home. 60 children diagnosed with ASD between the ages of three and five, participated in this study. The children were divided into two language groups: the one-dominant-language exposed group and the balanced- exposure language group, based on the parents' answers given in the consent forms and the questionnaires. Information relating to the child's language background was obtained through a parental questionnaire. The participants' pre-verbal skills were assessed during free-play using the Rossetti-Infant Toddler Language Scale (Rossetti, 2006), while their receptive and expressive language skills were assessed using the Mac-Arthur Bates Communicative Development Inventory: Words and Gestures (Fenson, Marchman, Thal, Dale & Reznick, 2007) and the Maltese adaptation of the Mac-Arthur Bates Communicative Development Inventory: Words and Sentences (Gatt, 2010). An interview was also conducted with five of the participants' parents who were randomly selected from the sample. The balanced- exposure language group showed better developed pointing, imitation and symbolic play than the one-dominant-language exposed group. The receptive and expressive vocabulary scores were comparable across both language groups. Findings from the interviews indicated that the majority of the parents feared that dual language exposure will confuse their child and delay their language further. Findings also indicated that while some professionals did not discourage dual language exposure, other professionals advised parents to expose their child to only one language so as to avoid further language delays.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Features of indirect approaches in DLD interventions: the involvement of parents and families

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Family dynamics and language input are related to children's language development. There is empirical evidence that indirect work with the child with DLD is an important component of interventions offered by professionals.

This talk is a part of a group of talks on DLD and intervention. Its aim is to discuss the features of indirect approaches in different EU countries, i.e. to explore which professionals deliver it, which family members are involved, and which characteristics of SLPs can be associated with the implementation of indirect approaches.

The talk is based on a Practitioner Survey developed within the COST Action IS1406. The majority of analyses stems from the questions exploring the role of parents. There were 4024 respondents - SLPs - from 60 countries (mainly EU Member States). Statistical analyses included Pearson's chi-square and t-tests.

Respondents indicated that indirect therapy is provided via parents and teachers, with the latter becoming more involved as children grow and progress through the education system. This approach is implemented by a range of professionals who involve mothers, fathers and other family members. The characteristics of SLPs are not related to the use of indirect techniques, suggesting a general and gradual adoption of these approaches.

The importance of indirect approaches to intervention seems to be recognized worldwide, despite differences in cultural, clinical, and research traditions across countries. Since mothers are not the only ones involved, it seems that conventional family roles are slowly being abandoned. Despite the research and clinical implication of the study, future work should investigate the exact nature of the most effective intervention approaches.

Keywords: Indirect Approaches; Family Involvement; Developmental Language Disorder; Practitioner Survey; COST Action IS1406



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New frontiers in speech and language therapy: advancing practice, research and education

Glottal stop production in unilateral vocal fold paresis patients: acoustic measures

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Glottal stop production is impaired for a majority of unilateral vocal fold paresis patients (UVFP). The first purpose for this session will be to present data on a new set of acoustic measures, onset and offset intensity differences and slopes between voicing and glottal stops, to assess degree of impairment. This also includes demonstration of how these acoustic measures were obtained using the program Praat. The diagnostic accuracy (specificity, sensitivity and receiver operating characteristics) of these measures will be presented. The second purpose for this session will be to compare offset and onset intensity differences and slopes using different tokens separated by glottal stops to demonstrate replicability and generalizability of the new acoustic measures. The third purpose of this session will be to correlate these acoustic measures with the Acoustic Voice Quality Index to determine if they also reflect the severity of the voice disorder in UVFP patients. The fourth purpose of this session is to study two mechanisms of vocal fold vibration cessation, glottal stop production and producing voiceless consonants in patients with UVFP to determine how documented nerve injury affects these two mechanisms.

This study supported the clinical use of these acoustic measures as they demonstrated good specificity and sensitivity, were generalizable across different tokens, and were moderately correlated with AVQI. Intensity differences for voicing cessation for voiceless consonants was not affected by UVFP, where voicing cessation for glottal stops was affected, suggesting different mechanisms.



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New frontiers in speech and language therapy: advancing practice, research and education

Has Corona changed voice therapy in the long term? Teletherapy vs. face-to-face voice therapy

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Background

Due to the global corona pandemic, teletherapy as a service model has experienced a major upswing. Health protection and the continued offering of therapy despite the regulation of "social distancing" were thus the driving force. In addition to the plus and minus aspects of teletherapy, the legal aspect must also be clarified. Can voice therapy be effective via teletherapy?

Aim/Objectives

This presentation gives an overview of the legal requirements for teletherapy and explains the advantages and disadvantages. Furthermore, there is an overview of the guidelines for behavior in voice therapy in face-to-face settings. The mode of action of teletherapy should be proven and whether it is feasible in the voice therapy setting.

Methods

Literature research is used for this presentation.

Results

The effectiveness of teletherapy has been proven in many studies. Patient and therapist compliance was examined, as well as the advantages and disadvantages of this setting. The authors conclude that teletherapy is an effective treatment setting that should not only be performed during the corona pandemic. In this setting, even longer distances can be overcome, specialists can be visited more easily, and underserved regions can be developed. Voice therapy is one of the most frequently studied disorders in the teletherapeutic setting. Many studies prove their effectiveness as well as the significant mode of action of various therapy methods. This presentation gives an overview of the advantages and disadvantages while using voice teletherapy.

Conclusions/take home message

"Telepractice is clearly here to stay and needs to move into the mainstream of clinical practice." (Law, et al., 2020)

Keywords

Teletherapy, Voice Therapy, advantages and disadvantages, compliance, guidelines, Corona



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New frontiers in speech and language therapy: advancing practice, research and education

Iconicity characteristics of the ARASAAC symbol systemicon

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Background: Iconicity is regarded as the most important feature of pictographic systems used in Augmentative and Alternative Communication, since pictographic symbols with high iconicity are easier to learn. In this regard, it has been recommended that every pictographic symbol system should have empirical data about its iconicity to guide clinicians. The current study focuses on the ARASAAC symbol system, since despite its widespread use, currently there are no systematic data about its iconicity.

Objectives: This study focuses on (1) analyzing the iconicity of the ARASAAC symbol set in three different populations: undergraduate adults, normally-developing children, and children diagnosed with ASD; and (2) comparing it with PCS and Bliss symbol sets.

Methods: 158 individuals participated in the study, divided into three groups: 98 undergraduate students (mean age 21.5±2.3 years), 45 normally-developing children (mean age 6.49±1.28 years), and 15 children diagnosed with ASD (mean age 7±2.8 years). All participants were exposed to a computerized task in which four pictograms appeared on the computer screen and the participant had to indicate which one corresponded to a particular meaning.

Results: In all three groups of participants, the ARASAAC symbols obtained the higher iconicity values, with statistical analysis indicating they were more transparent than both the PCS and the Bliss symbols. Differences in iconicity were found to be related to the grammatical category (i.e., names, verbs or adjectives).

Conclusion: This study found that pictograms from the ARASAAC symbol system had a high level of iconicity, which in fact was superior to the iconicity of the PCS and Bliss symbol systems. These findings, coupled with the fact that they are freely available, provide the empirical basis to recommend this symbol set in individuals who need AAC interventions.



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New frontiers in speech and language therapy: advancing practice, research and education

Improving parent-child interactions through interactive reading workshops

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Many authors agree on the importance of providing parents with training for emergent literacy and reading strategies. This study analyses the effects of an intervention to improve parent-child interactions during reading sessions, using interactive reading techniques.

The design is exploratory and includes a treatment group (N = 22), which benefited from four interactive reading workshops, and a control group (N = 18), which did not benefit from specific training. Both groups read the same books, three times a week, for 10 weeks. The children come from middle socio-economic backgrounds and attend preschool or kindergarten (Grades 1 to 3). The analyses were conducted on the basis of pre- and post-intervention video observations, coded using the Adult-Child Interactive Reading Inventory (ACIRI - DeBruin-Parecki, A., 2007).

Results from an ANCOVA show that parental behavior, and in turn child behavior, improves in post-intervention: parents improve their children's attention to the text and implement literacy strategies, while the children become more involved in the interactions.

This study offers insights into the effective stimulation of parenting behaviours during book reading and, potentially, the prevention of language difficulties.



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New frontiers in speech and language therapy: advancing practice, research and education

Instant messenger as a communication tool in parental work in institutions during speech and language therapy - a qualitative study

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Background: Speech and language therapists often find parental work in institutions unsatisfactory due to insufficient personal contact. Currently, this takes place analogously, while more than 80% of Germans regularly use instant messengers for private communication.

Objective: The aim is to determine to what extent the use of the instant messenger ginlo leads to changes in parental work in institutions.

Method: During a five-week application period, two tandems, each consisting of a parent and a therapist, used ginlo to exchange information about therapies taking place in an institution. Afterwards, all four users were interviewed individually. The episodic interviews were transcribed and analyzed according to Grounded Theory methodology.

Results: Using the messenger led to a more intensive communication between therapists and parents. The communication frequency was higher, mutual accessibility was facilitated and the therapists' explanations were more detailed. In some cases, an increase of time and work was described. Various strategies for dealing with this were identified. Additionally, the cooperation quality increased and the therapeutic homework became more effective. Every user perceived the messenger communication as enrichment.

Conclusion: The instant messenger ginlo suits parental work in institutions. For optimal use, all parties should be informed about the messenger's functions and data protection. Therapists should be taught strategies e.g. for maintaining the work-life-balance.

Keywords: parental work, speech and language therapy, therapy in institu-tions, digital communication, instant messenger, qualitative research



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New frontiers in speech and language therapy: advancing practice, research and education

International differences in the relationship between direct or indirect therapy and language profiles

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Background: The present study is based on findings from a survey, developed by working groups of COST ACTION (1406) EU network.

Aim/Objectives: The study aimed:

- 1. To investigate whether the economic grouping of countries predict the therapy delivery model (direct, indirect, and mixed), received by the child with developmental language disorder (DLD) and
- 2. To explore the association between the country category, therapy delivery model, and DLD language profile (receptive, expressive, and mixed DLD).

Methods: Using Sapir's social welfare model, countries were clustered into Nordic, Anglo-Saxon, Continental, Mediterranean, Central/Eastern and Non-European categories. In total, 5024 European practitioners provided answers to the survey.

Results: The results showed that the choice of service delivery model for children with DLD differs between countries. Although country category and type of DLD were associated, therapy choice was more strongly predicted by country category than type of DLD.

Conclusions: Country-specific aspects i.e., differences in organizing policies in relation to therapy allocation processes, social expectations, and probably other culture-related factors, may play more an important role in choosing therapy type than specific language disorder profiles.

Keywords: Developmental Language Disorder; Receptive Developmental Language Disorder; Expressive Developmental Language Disorder; Direct therapy; Indirect therapy; Mixed Therapy; Speech and Language Therapy



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Interventions for children with DLD that target pragmatic abilities: systematic reviews and narrative synthesis

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Background: It is widely believed that children with DLD predominantly have difficulties with grammar and vocabulary, with preserved pragmatic skills. Consequently, few intervention studies focus on the pragmatic skills of children with DLD, and there is a distinct lack of studies examining the effectiveness of pragmatic interventions.

Aim: To investigate interventions targeting pragmatic language abilities in children (DLD) and establish an overview of the efficacy, model of delivery, intensity, outcome measures, ingredients, and quality of the studies.

Method: Two systematic reviews adhering to PRISMA guidelines were carried out. Search terms were included in seven electronic databases and included papers and reported on participants in the age of 3 to 9 years that were formally diagnosed with DLD. All types of designs were included.

Results: 23 studies reported on oral language interventions for children with DLD and most focused on supporting narrative and conversational skills, often through parent-child interaction or shared book reading activities. There was a high degree of variability between the included studies especially regarding dosage, intensity, intervention targets and outcomes. Prompting was often used to enhance change regarding initiation, response, turn-taking, topic management, adaption to listener knowledge and the ability to build sequences. The evidence suggested that pragmatic intervention is feasible for all models of delivery (individual, small and large group).

Conclusion: Due to the great diversity among the studies it was difficult to draw precise conclusions regarding efficacy. Although several papers suggest moderate changes in conversational and narrative skills, the findings are weakened by the lack of ecological validity. In addition to direct intervention, indirect intervention can also contribute to improving oral pragmatic skills of children with DLD. This study highlights the importance of promoting and explicitly teaching pragmatic skills to children with DLD in structured interventions.



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New frontiers in speech and language therapy: advancing practice, research and education

Lingual frenulum screening in healthy newborns: early identification of alterations and impact on breastfeeding

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Introduction: The tongue-tie is a congenital anomaly that can cause breastfeeding difficulties with pain and nipples fissures.

Objectives: The aim of the study was to identify alterations of the lingual frenulum early in healthy newborns and their correlation with breastfeeding difficulties and also to investigate the importance of speech therapy counseling since the first day of the newborn's life.

Materials and methods: From September 2020 to August 2021, all healthy full-term infants were recruited in the Department of Obstetrics and Gynecology of the Castelli Hospital-ASL RM6. Lingual Frenulum neonatal screening (Martinelli-2015) was administered and according to the score obtained, the frenulum was classified as normal, doubtful or altered. Breastfeeding difficulties were assessed and a speech therapist counseling was performed in order to facilitate its initiation and stabilization.

Results: 472 infants, 239 males (51%) and 233 females (49%) were recruited with a mean age of 1.41 days. At screening, lingual frenulum was normal in 291 (62%), doubtful in 131 (28%) and impaired in 50 (10%) newborns. A coexistence of alteration of the lingual and upper labial frenulum was found in 13% of the total newborns. A total of 204 infants presented with breastfeeding difficulties and of these, 54 had normal, 102 doubtful and 48 impaired frenulum. Among mothers with breastfeeding problems, 77% benefited from changing the breastfeeding position using the rugby hold position.

Conclusions: The speech therapist assessment allowed for early detection of cases of altered lingual frenum and their impact on the onset of breastfeeding. Alterated lingual frenulum was associated with breastfeeding difficulties. and most mothers benefited from the change in breastfeeding position. From the preliminary data collected so far, the speech therapist intervention, together with other professionals, clearly supports the management of these issues.



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New frontiers in speech and language therapy: advancing practice, research and education

Measurement of stress perception in parents of children with dyslexia. How to use it in clinical practice and to deal with it in treatment?

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Background: stress occurs physically and can manifest itself behaviorally. Several life events, situations and personal characteristics can contribute to stress. When stress becomes generalized, the ability to cope with situations can be restricted. Dyslexia in a child and the need for therapy contribute to parents' perception of stress.

Aim: (a) To present the results of research with a standardized and validated questionnaire (VOKID) measuring the stress levels of parents of children with and without dyslexia. (b) To discuss the implications for clinical practice including a parental guidance program.

Methods

A questionnaire with 33 questions and 3 sub-scales (competence, support and concerns) was constructed in order to measure stress of parents with (n = 43) or without a child with dyslexia (n = 150). Age 6 to 10 years. Gender proportion M:F 1.5:1. Speech-language therapists (SLT) reported their observation of the level of stress in a parent. Statistical analyses included internal consistency, principal components and discriminant analysis, sensitivity and specificity, effects of specific variables.

Results

The responses varied individually. Generally the questionnaire detected the child's reading condition with 84% accuracy. The sub-scales measured different aspects of the reported stress. Missing competence and support to deal with dyslexia and a high level of concern contributed to higher levels of stress. The stress level observed by a SLT did not reveal the stress level reported by a parent.

Conclusions / take home message

Measuring the stress level of a parent of a child with dyslexia can be integrated clinically. In order to reduce the stress level i.e. to increase competence, to reduce concerns and to strengthen support, the SLT can offer counseling to parents, getting them to participate in therapy, offering a structured parental guidance course and dealing with and guiding school teachers.



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New frontiers in speech and language therapy: advancing practice, research and education

Multilingual families living in Spain: opinions on professional practices

<u>Phd Candidate Paula Bellón</u>¹, Multilingual Families living in Spain: opinions on professional practices Silvia Nieva¹ <u>Complutense University Of Madrid, Madrid, Spain</u>

Speech-language pathologists (SLPs) in Spain are currently facing a growth of multilingual patients in their caseloads due to the increase of migration. This situation can often be a challenge for professionals whose role might have a direct impact on these people's quality of life. Spain is a country where multiple languages are spoken, and different cultures coexist, so the place of settlement is a variable that must be considered. The aim of this research is to observe the possible recommendations families have received from professionals regarding language management and see the potential differences when they live in a bilingual or monolingual community. Qualitative semi-structured interviews and surveys were conducted to parents of multilingual children who live in Spain, aged between 5-10 years of age, and who might or might not have language difficulties, regardless of the languages spoken. The information gathered will be analyzed qualitatively using thematic analysis (Braun & Clarke, 2006). Preliminary results show differences in the recommendations and parental views in the different geographical areas. The practicality of this study is to help SLPs and other professionals have a better understanding of bilingual families' perspectives and needs. It is important to learn and be open about different cultures and the diversity of priorities these families have, so professional practices could be adjusted to their linguistic and cultural demands. The results obtained in this research might inspire future lines of research on the development of tools that could be helpful for professionals to understand and support the situation of each one of the families they work with.



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New frontiers in speech and language therapy: advancing practice, research and education

New frontiers: establishing new roles and recognition in mental health settings #SLTsinMH

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The SLT role in supporting working age adults with Mental Health (MH) is important given that diagnosis, intervention, and wider recovery depend on communication skills. Risks associated with dysphagia and choking remain under-reported. However, our SLT role is often not recognised by other clinicians or indeed our own profession. SLTs have a key role in enabling patients to understand and express their choices and concerns across inpatient and community settings. As a relatively new specialism, SLTs are often working in multidisciplinary MH teams but isolated from their own profession. Few studies exist describing SLT assessment and intervention in this patient group.

Objectives

To understand current provision and practice across UK for SLTs working with MH To provide support and information to SLTsinMH in UK To appraise and add to the evidence base supporting SLT practice in MH

Methods

Set up email network to link SLTs across the UK and conduct a survey to explore current provision and practices of SLTs working with adults with MH conditions aged 18 to 65.

Develop links with RCSLT exploring practical ways to appraise and build the evidence base.

Results

The survey attracted 99 SLT respondents describing current provision and practice across the UK. Replies described assessment and intervention showing that SLT practice in dysphagia and communication varies in this specialism. There was enthusiasm for sharing practice and developing SLT professional skills in MH settings. The network has now expanded to 160 SLTs offering support, information and learning. We continue to work with RCSLT as a repository adding to the evidence base, promoting topics for research and raising wider awareness.

Conclusions

SLT role in MH is under-recognised within and outside the profession. We have linked SLTs across the UK to share practice, develop the evidence base and promote wider awareness of our role in MH.



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New frontiers in speech and language therapy: advancing practice, research and education

Parental self-efficacy and stress in children with autism spectrum disorders, developmental language disorder, and typical development: A preliminary study

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Background: Parents of children with autism spectrum disorder (ASD) report higher levels of stress and lower levels of parental self-efficacy than parents of children with other developmental disorders or typically developing children. It is well established that parents' stress levels are positively related to the severity of their child's ASD symptoms and behavioral patterns.

Aim/Objectives: The purpose of this study is to compare the stress and self-efficacy levels of parents of children with ASD and children with developmental language disorder (DLD) to those of parents of typically developing (TD) children.

Methods: The study included children aged 2-4 with ASD (n=15), DLD (n=15), and TD (n=15), as well as their parents. The 'Test of Early Language Development Turkish Version (TELD-3)' and 'Language Development Survey (LDS)' was used to assess children's receptive and expressive language development. The Aberrant Behavior Checklist (ABC) was used to examine behavior problems. While the Turkish version of the Parenting Stress Index-Short Form (PSI-SF) was used to assess parental stress, the Turkish Version of Self-Efficacy for Parenting Tasks Index-Toddler Scale was used to assess parental self-efficacy.

Results: It was found that parents of children with ASD had significantly lower self-efficacy and a higher level of stress than parents of children with DLD and TD. Furthermore, parents of DLD children had lower self-efficacy than parents of TD children, yet their stress levels were higher. Children with ASD had a smaller vocabulary size than children with DLD and showed more behavioral problems.

Conclusions: This study shows that parents of children with atypical development had different levels of stress and self-efficacy. This condition could be linked to the intensity of children's behavioral issues, and their language development levels.

Keywords: autism spectrum disorder, developmental language disorder, parental stress, parental self-efficacy, behavioral problems



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New frontiers in speech and language therapy: advancing practice, research and education

Parents of bilingual children with and without DLD interviewed: language use, expected and experienced outcomes

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BACKGROUND: In the past, professionals, including speech-language therapists, frequently advised parents against exposing their children to two languages, in particular if the children had language delays or disorders. Consistent with scientific findings, current recommendations focus on the benefits of bilingualism and the negative consequences of bilingual families abandoning their home language. However, it is not known to what extent parents of bilingual children seek out or follow professional advice.

OBJECTIVES: Qualitative interviews were conducted with parents of bilingual children age 5 to 8 (age chosen because bilingual situations frequently change at school entry).

METHODS: Within COST Action IS1406, an international research network, data were collected in 6 countries (Bulgaria, Canada, Iceland, Italy, Lebanon and Spain). A total of 205 semi-structured interviews were collected with parents of children with and without Developmental Language Disorder and analyzed qualitatively. In addition, quantitative information was derived on selected issues such as what language is used, whether specific strategies are used, whether advice was sought, whether the advice was followed and whether parents found that difficulties were associated with raising a bilingual child.

RESULTS: The results underscore the wide variety of bilingual situations. Most parents were highly supportive of their child's bilingualism and used various activities and strategies to support their languages. Many reported positive experiences, but feelings of stress were also reported as well as of regret and guilt at not being able to do more. Some parents abandoned their home language use due to a high workload in trying to maintain it. The percentage of parents seeking professional advice was fairly low.

CONCLUSIONS: The results point to the complexity facing bilingual families and to a need for professional advice that takes this diversity into account.



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New frontiers in speech and language therapy: advancing practice, research and education

PROsyntax: an intervention program for European Portuguese children

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Background: The intervention in children with syntactic impairment should be evidence-based to ensure treatment effectiveness and efficacy. However, there are no specific syntax intervention programs, validated for European Portuguese, which affects the clinical practice of speech and language therapists.

Aim: Develop and validate the PROsyntax for children with syntactic impairment.

Methods: After the development of the PROsyntax, a content validation study was carried out throught a panel of 6 experts.

The content validity was analysed using the Content Validity Index (CVI) and the suggestions of the expert panel (qualitative data) were explored through content analysis. Then, a pilot study (of acceptability) was carried out with children with typical development.

Results: The PROsyntax is based on metalinguistic approaches and includes syntactic structures that are pointed out as clinical markers of language disorders, such as relative clauses, wh-questions and different types of complement clauses. The CVI obtained in the content validation study was 0.97. In the pilot study, the results indicated that all children enjoyed the program, understood the instructions and would like to continue and repeat the program.

Conclusions: The CVI obtained is higher than the reference values indicated in the literature. This result suggests that the program content is valid. The reformulations carried out based on the expert panel's suggestions led to an improvement of the program, which is considered essential for its applicability in clinical practice. The responses provided by children in the pilot study were positive and unanimous, which indicates that the program has good characteristics of acceptability.



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New frontiers in speech and language therapy: advancing practice, research and education

Providing vocational training opportunities to caregivers of people who have survived a stroke

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Objectives: Direct care workers are a key category in all care settings due to their essential role of providing personal care to patients who have suffered from a stroke (e.g. hygiene, feeding) and giving practical help (e.g. mobility, communication, socialisation). Despite their essential work, they often lack formal training, given no specific qualification for their position is required and vocational training is limited in the contexts in which they work. The Erasmus+ project titled: "iTRAIN: Mobile Training for Direct Care Workers Dealing with Stroke Survivors" aims to make evidence-based knowledge available for low-skilled direct care workers involved in stroke care and rehabilitation in home care, hospital and nursing home settings.

Methods: During the first phase of the project, partners from the five participating EU countries (Cyprus, Italy, Lithuania, Portugal, Sweden) collected data focusing on the experiences of caregivers who support stroke survivors. A total of 113 direct care workers participated in the online survey and 24 in the focus groups.

Results: Focusing on communication, about half of the participants in the five countries feel that they have poor or somewhat poor knowledge about how to interact with patients with communication difficulties, such as aphasia. They seek knowledge on the kind of support they can provide stroke survivors with communication, cognitive and emotional difficulties.

Conclusions: The findings from the first phase of the iTRAIN project highlight the importance of vocational training as well as the content that such training should include. Based on the findings, the research team has prepared an accessible, engaging and innovative vocational training on stroke for direct care workers, which is available online as a Massive Open Online Course (MOOC). In addition, ongoing mobile-based digital training is being developed during the project, providing additional practical exercises for caregivers of stroke survivors.



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New frontiers in speech and language therapy: advancing practice, research and education

Psycholinguistic study of children with ASD using the DLPF-A parental survey: lexical morphosyntactic and pragmatic analysis.

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Psycholinguistic studies on the development of expressive language in young French-speaking children with Autism Spectrum Disorders are still too few. However, lexical, morphosyntactic and pragmatic language features have been highlighted in their productions (Lavielle, Bassano, Adrien and Barthelemy, 2003, Lavielle-Guida, 2007, Foudon, 2008, Lavielle-Guida, 2016). The present transversal and descriptive study, seeks to characterize finely the lexical, morphosyntactic and pragmatical characteristics using the parental report DLPF (Development of the French Production Language, Bassano et al, 2005), in its new version named "DLPF-A, 18 to 42 months" (Bassano et Lavielle-Guida, 2017, 2020). This study analyzes the productions of fifteen autistics children aged 18 to 40 months of verbal development. We proposed the online survey to parents and then compared the results to the baseline study. The results are as follows: an over-representation of paralexical items, an equivalent proportion of content words and an under-representation of grammatical words in the lexicon. We also observed an under-representation of regular verbal forms, as well as complex structures and sentences in morphosyntax. In the pragmatic field, we studied three main areas of the "communication and language use" part: language exchanges, message organization and language use. The results show that children with autism do indeed have particularities in their pragmatic development. Nevertheless, the differences are not as marked as expected. These results, beyond the research, open remedial perspectives allowing to concretely target the lexical, morphosyntactic and pragmatical domains to be strengthened. This study also highlights how a strong collaboration between professionals and parents is a solid way to improve the work on language and communication especially in ASD.



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New frontiers in speech and language therapy: advancing practice, research and education

Quality of teacher/children interactions in Belgian preschool classrooms: what is needed to support individualized professional development

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Background: A child's language develops through social interactions. Among the various places of socialization, preschools would be a suitable setting to offer many high-quality interactions between teachers and children. Analyzing the quality of interactions in preschool classrooms makes it possible, where appropriate, to identify the level of language support needed from teachers to support language. Moreover, knowing the interaction profile of teachers allows us to know specifically what each teacher needs in terms of language support. This helps optimize an individualized support for each teacher.

Objectives: This study aimed to assess the quality of preschool teachers' interactions in French-speaking Belgian preschools. The second objective was to establish the interaction profiles among preschool teachers.

Methods: Classroom Assessment Scoring System® (CLASS PreK) (Pianta et al., 2008) was used to determine the quality of teacher-child interactions in 92 preschool classrooms.

Results: Emotional support and classroom organization are characterized by middle-high quality. In contrast, only 10% of teachers scored at this level regarding instructional support. The majority of participants had low scores on this domain, which is closely related to teachers' language practices. Our study identified five different interaction profiles among teachers: the first two were defined by high quality scores in emotional support and classroom organization, while the last three were characterized by very low scores in instructional support, with variable scores for the other two domains.

Conclusions: This study suggests that Belgian teachers need support to improve their language practices toward better outcomes in instructional support. Individualized professional development based on the interaction profiles of teachers, would be an effective way to individualize interventions in order to improve teachers' language practices and, finally, to support children's language skills.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Screening Vocabulary Development in Bilingual Toddlers: Comparing Parent Reports and Language Environmental Analysis Recording System

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Multilingualism and multiple births have increased in recent years. Language development in twins is associated with an increased likelihood of late emergence and communication difficulties. Multilingual children are assumed to be at higher risk of being misdiagnosed of demonstrating language disorder, i.e. due to a distributive lexical development, when assessed in one language only. In this case study hypothesis, a doubled twinning effect leading to reduced verbal input due to divided attention between two infants and split vocabulary exposure was examined.

In this pilot study, the Language Environment Analysis System (LENA) was used to facilitate the repeated collection and analysis of audio recordings from a set of German-Spanish bilingual male twins when aged 12-18 months. Each child was contemporaneously recorded about 8 hours per day in its daily natural environment. Collected data encompassed audio environment, adult word count, child vocalizations and conversational turns. Dyads are considered a central variable in early language development. The interpreted time segments samples were examined with the LENA software analysis and the quantitative outcome compared to qualitative information from case history forms in addition to comprehensive information on language usage and developmental milestones using the Bilingual Patient's Profile and parental estimates using the ELFRA, a German adaptation of the Infant Form of the MacArthur-Bates Communicative Development Inventories. When aged 3 years, twins were post-tested using a German Language Development Test.

Results demonstrated high internal consistency with parental estimate and analyzable collected data including later assessment outcomes. Twinning effects were confirmed. Despite the pilot nature and the need for more research regarding the used technology, results are promising for cross-linguistic applications as a useful non-biased screening measure in clinically early prevention contexts to aid decision-making on whether a thorough language assessment should be undertaken in multilingual toddlers



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Shared reading and stuttering: an indirect treatment in preschool children who stutter

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Background: Research has demonstrated that including parents in stuttering therapy is important for the effectiveness of the treatment itself. In particular, there are several studies that have highlighted the effectiveness of indirect treatments with parents of children who stutter in preschool age. Shared Reading Practices have proved to be a valuable tool to support communicative exchanges between children and adults.

This study used shared reading sessions as an indirect treatment tool with parents of preschool children who stutter

Aims: To investigate the efficacy of a shared reading program as an indirect treatment for stuttering in preschool-aged children who stutter.

Method: The participants were 6 children aged 3-5y who had been stuttering for more than 6 months. Therapy consisted of 7 sessions of clinical therapy and 6 weeks of home consolidation. Speech samples were videotaped during shared reading sessions with parents at home and analyzed to obtain stuttering data for each child before therapy, during therapy and up to 12 months after therapy.

Results: Pre- and post-therapy stuttering frequency data were compared with baseline stuttering frequency and variability. Four of the 6 children significantly reduced stuttering with both parents by the end of the therapy phase.

Conclusions: The results highlighted how the proposed activity can reduce stuttering in preschool children. The study highlights the individual response to therapy. Suggestions for future research directions are provided.

Keywords: stuttering, indirect therapy, shared book reading, parents, preschool



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

SonoSpeech Cleft Pilot: A pilot randomised control trial of ultrasound visual biofeedback versus standard intervention for children with cleft lip and palate

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Background

Children with cleft lip and palate often have speech production and intelligibility difficulties that may affect their educational outcomes (Grewal et al. 2021). Speech therapy treatment usually involves articulatory intervention, which teaches the child the correct position and movement of their articulators. This type of intervention may be challenging as large portions of the articulators are hidden from view and may be hard to describe. Recent ultrasound tongue imaging studies have shown promising results but only one study has focused on children with cleft lip and palate (Roxburgh et al. 2016).

Aim

This pilot randomised control trial will assess the feasibility of running a large-scale randomised control trial comparing a new treatment, speech therapy involving ultrasound visual biofeedback, to traditional articulatory therapy for children with cleft lip and palate. The study aims to determine the recruitment, attrition, and outcome measure completion rates, as well as the acceptability of the new treatment and of randomisation to the children and their families.

Methods

Forty children, aged 4;6-16, will be randomised to either 6 sessions of ultrasound intervention or articulatory intervention, stratified by age. Their percentage of correct consonants will be measured by assessors blind to their treatment groups, based on auditory recordings, taken before, during, and after treatment. Patient reported outcome measures on quality of life and experience of service will also be used.

Results

The study is in its recruitment stage and preliminary results will be presented at the conference, including case studies of children in both groups.

Conclusions

Ultrasound visual biofeedback is a potentially useful tool in speech sound therapy of children with cleft lip and palate and more research is required to test its effectiveness.

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26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Speech and Language Therapists as Health Promoters - Insights and Perspectives.

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Background: The aim of this study is to determine how Speech and Language Therapists (SLTs) working in any healthcare setting in a community health service area perceive their current and future role in relation to health promotion practice, and to explore their perceptions of the factors that may inhibit and or enable them to fulfill this role. The lack of literature in this topic, contributes to an undefined SLT role without explicit guidance.

Methodology: A mixed-method, sequential explanatory study comprised an online mixed-mode questionnaire (n=26), followed by two virtual focus groups (n=10). Non-probability purposive sampling recruited from a 38 SLT service area population, via their network ICT registry. Descriptive statistics and Thematic Analysis generated triangulated findings.

Results: SLT practices inherently integrate IUHPE health promotion competencies and the Ottawa Charter framework for health promotion. SLTs demonstrated poor role cognizance, though valued their "evolving" health promotion practices, citing service "shifts" incorporating universal population initiatives. SLTs defined their role primarily in education and advocacy practices for speech, language and communication needs (SLCN), deeming they overlook the "bigger umbrella" of health promotion. SLT "partnerships" and "management support" enable, while "time," resources and workload, poor explicit training and guidance impede public health practices.

Conclusion: SLTs' role ambiguities and limited understanding as health promoters, necessitates educational and guidance updates. Future SLT "mind-set" shifts, with role "reflection" and "discussion," will nurture their future role. Accentuated SLT "leadership" with representative and regulatory bodies, channeled into policy (meso) and research (macro) levels may enhance role clarity, mobilize resources, and enable actualization of their expansive scope.



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New frontiers in speech and language therapy: advancing practice, research and education

Strategies to improve oral language comprehension in children and adolescents with language disorders or difficulties

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Background: Difficulties in comprehending spoken language affect everyday life causing problems in social relations, learning, and participation. Interventions for improving oral language comprehension are needed. It has been suggested that teaching strategies may be more efficient than direct teaching. This emphasizes the rationale for examining strategies to enhance oral language comprehension. However, there are no summaries on strategies for improving oral language comprehension in children and adolescents with language disorders or difficulties.

Aim: The aim of this presentation is to introduce evidence-based strategies for improving oral language comprehension in children and adolescents with language disorders or difficulties.

Methods: Two systematic scoping reviews were conducted to identify interventions for improving oral language comprehension in children and adolescents with language disorders or difficulties. Further articles identified outside the literature search were included as references to this presentation to give an overview of possible evidence-based strategies to be used for improving oral language comprehension.

Results: The strategies identified in the reviews aimed to help children function better with their current skills. Further articles identified outside the search suggest that strategies can also be used to help children in 'learning to learn'. Six evidence-based strategies for improving oral language comprehension skills will be introduced in this presentation along with the efficacy of individual strategies and level of evidence of the research conducted on each strategy.

Conclusions: Strategies can be used to enhance oral language comprehension in children and adolescents with language difficulties or disorders. However, more research on the topic is needed.

Keywords: Developmental language disorder, oral language comprehension, intervention, strategies



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Supporting language development in early childhood education settings: comparing teacher-child interaction quality in Belgium and Lebanon

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Background: Language development is considered as a key factor for school readiness. In early educational contexts, it is closely related to the quality of teacher-child interaction. Professional development (PD) programs, involving Speech and Language Therapists (SLTs) alongside teachers, in situ, are highly recommended towards language practice change in teachers. However, positive outcomes of PD programs require a deep understanding of context realities as well as the identification of factors that affect teacher-child interactions.

Aims: To compare the quality levels of adult-child interactions and to identify factors that influence quality in two early childhood education contexts, in Belgium and Lebanon, with cultural and socioeconomic differences.

Methods: Interaction quality was evaluated by applying the standardized tool Classroom Assessment Scoring System (Pianta et al., 2008) to 55 Lebanese teachers and 92 Belgian teachers. A socio-demographic questionnaire was used to identify data related to factors that might explain the level of interaction quality.

Results: In Lebanon, socio-economic indicators emerge as explanatory factors for all three CLASS domains, i.e. emotional support, classroom organization, and instructional support. Beyond the socio-economic level, the number of years of experience influences classroom organization. In terms of instructional support, the teacher's initial education and the teacher's first language are also decisive variables. In Belgium, socio-economic level was also found to be a strong determinant of emotional support and classroom organization, while instructional support was mainly influenced by the number of years of professional experience.

Conclusion: The study highlights concerns related to the quality of interactions in low Socio-Economic Contexts in both Belgium and Lebanon, despite the differences between the two contexts. Efforts should be expanded to support teachers in low SSE environments as a priority. Thus, SLTs should reconsider their practice within the frame of preventive actions to help develop positive language practices in early educational contexts.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Talk With Me: Welsh Government's plan to Build Back Better

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Introduction

The Welsh Government has published a cross-Government Speech, Language and Communication (SLC) Delivery Plan for children aged 0-4;11.

Aim

To ensure that children throughout Wales have access to high quality, universal, population, targeted and specialised support in the early years to develop their SLC skills.

Evidence

The plan was developed in consultation with RCSLT and stakeholders to identify what works to support children with SLC needs (SLCN) through reviewing the evidence. It is set within the strategic context relevant to Wales, the UK and globally.

Outcomes

The delivery plan consists of 5 objectives:

Objective 1: Raising Public Awareness: how parents and communities will be reached with key messages about the importance of talking with their children.

Objective 2: Improve identification of SLCN in children aged 0 to 4;11: how the assessment process will be standardised and SLCN will be identified early.

Objective 3: Provide evidence-based interventions: ensure timely interventions are implemented for children with SLCN.

Objective 4: Upskill the childcare, health and social care workforce in Wales to address SLCN: the workforce will be highly trained and equipped with the skills to support interventions for children with SLCN.

Objective 5: Embed SLC in Welsh Government policies: how policies will highlight the importance of SLC in the early years and beyond to promote that SLC is 'everyone's business'.

Conclusion

The delivery plan has strongly influenced the Welsh Government's response to the Covid-19 pandemic, with early years funding focussing on supporting SLC development.

Implications and Future Directions

The delivery plan is now in the implementation phase with baseline data having been collected. Work has started on an evidence-based, co-produced publicity campaign; a rapid evidence review regarding early identification tools in English and Welsh language and a review of interventions relating to parenting, infant mental health and SLC; as well as the development of impact based outcome measures.

The Welsh Government acknowledges that putting children and young people at the centre of the recovery plans is an essential part of building back better in order to achieve immediate, long-term and intergenerational benefits for children and families in Wales.



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Teachers' knowledge, attitudes and beliefs about Developmental Language Disorder

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Despite this widespread prevalence of Developmental Language Disorder, only a few affected children are detected and receive appropriate services. When they enter school, untreated children are at higher risk for academic and social problems in their formative and later school years. Therefore, teachers play an essential role in identifying and supporting children with DLD teaching within the classroom with regards to their literacy skills as well as social participation and emotional wellbeing. Due to this understanding, teachers' knowledge, attitudes and beliefs about DLD are of paramount importance, and this current study aims to explore these parameters.

This study aims to investigate pre-primary and primary school teachers' knowledge about DLD, the educators' views and attitudes regarding the nature of the disorder, and the current support provided.

A questionnaire was utilized for data collection, which mainly consisted of closed-ended questions. The questionnaire was made available to potential participants online. One hundred and ten pre-primary and primary school teachers participated in the survey.

The results showed significant misconceptions and a lack of basic knowledge about DLD by the teachers. Also, the participants knew little about the disorder's effects. Positive attitudes on the part of participants were identified concerning their willingness to receive further training and involvement in the management of children with DLD. The participants reported that they received insufficient training during their studies and after as professionals.

The results highlight the need for continuing professional development training for teachers to provide screening and support for children with DLD in classrooms. Universities and professional associations need to develop training programs to enhance knowledge and skills in order to improve the quality of the teaching and learning process. Awareness campaigns on language disorders in educational settings are a priority and should involve all necessary stakeholders (parents, policymakers, ministers, charities, etc.).



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New frontiers in speech and language therapy: advancing practice, research and education

The Cleft Collective Cohort Studies – a novel approach using big data to advance practice, research and education.

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Background: Children born with cleft palate with or without cleft lip are at high risk of problems with speech which can persist beyond childhood. Our understanding of who is at risk and how speech and language therapy (SLT) can help is challenged by difficulties in carrying out research in this field. Studies are often underpowered, consisting of small samples and limited data.

Aim/Objectives: To build a resource comprising a large sample of children born with cleft lip and/or palate which can be accessed by the international community to address clinically relevant research questions.

Methods: Two cohort studies with longitudinal data collection have been established involving all 16 UK cleft centres. Data are collected from clinical reports, parent and child questionnaires, audio recordings and biological samples. The resource contains information on multidisciplinary care, outcomes and confounding factors.

Results: Over 3000 affected children have been recruited to date together with their parents. Investigations using data related to speech have so far reported on the following: mean scores for intelligibility using the Intelligibility in Context Scale across cleft types; the relationship between conductive hearing loss and cleft speech characteristics; early communication behaviours in infants with cleft palate with and without Robin Sequence; and parent perspectives of SLT provision for children born with cleft palate during COVID-19.

Conclusions: The Cleft Collective Cohort Studies is a growing resource. Data from the resource have been used to address questions which can influence practice and more data are being collected to address questions relating to intervention and outcomes. The resource is available for the international clinical academic and research communities to access and use to address questions which have previously been impossible due to small sample sizes and limited datasets. Information on how to access the resource will be included in the presentation (http://www.bristol.ac.uk/cleft-collective/).



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New frontiers in speech and language therapy: advancing practice, research and education

The Development of a New Social Pragmatic Communication Assessment Battery

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BACKGROUND

Social pragmatic communication (SPC) refers to interdependent skills that facilitate an ability to use language and communication in diverse contexts with a variety of communication partners. An SPC disability may prevent a child from developing and maintaining positive peer relationships, and skills important for academic success and daily life. SPC is embedded in context, which requires assessments of SPC to take place in contextualized settings such as the home, or classroom where the child is interacting with peers. This proposed presentation focuses on the development of a new assessment battery designed to assess SPC of young children in contextualized settings such as the home or classroom and while interacting with peers.

AIM/OBJECTIVES

The objectives of this presentation are to

Introduce the Assessment of Pragmatic Language and Social Communication – Greek (APLSC-G) assessment battery for assessing SPC abilities in young children;

Justify the multi-informant design of the assessment battery; and

Discuss how the APLSC-G advances speech, language, and hearing sciences.

METHODS FOR APLSC-G DESIGN

Items of the APLSC-G were created based on a theoretical model of SPC. Originally developed in English, the items were translated from English to Greek and back-translated. Items were reviewed for cultural consistency, accuracy, and content by a group of professors with Greek heritage.

RESULTS

The APLSC-G is a culturally responsive multi-informant battery resulting in a total of five instruments for a multi-informant design with a range of 29 to 36 items each. The measures include two screening instruments (a parent and teacher report), two diagnostic instruments (a child self-report and a context-bound observation report) and a discourse analysis assessment.

CONCLUSIONS

There is a significant need for instruments that can assess SPC skills of young children. The APLSC-G has the potential to offer new opportunities for assessing social pragmatic communication.



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New frontiers in speech and language therapy: advancing practice, research and education

The Global TALES protocols for extracting personal narratives from children across the world

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Background: We share personal stories in everyday social interactions. Even though story-telling is universal, little is known about the similarities and variances in children's narratives worldwide. Aiming to address this gap, the Child Language Committee of the International Association of Communication Sciences and Disorders (known as IALP), where representatives from four European countries participate, developed the Global TALES protocol, consisting of six question prompts. The protocol allows clinicians and researchers to collect and analyze personal narratives by school-aged children from different languages and cultures.

Aim: The ultimate goal is the development of a global tool to support assessment and intervention for narrative skills in children with challenges in language development.

Methods: The protocol was translated and adapted in eight languages by native speakers. Then qualified speech pathologists, speech pathology students under supervision, or linguists elicited narratives by children aged 9;6 to 10;11 years old. Children were tested individually in a quiet setting. In response to the six questions, all youngsters were invited to 'tell a story' (e.g. Tell me a story about a time when you felt proud of yourself). A total of 248 typically developing children (ages 9;6–10;11) from ten different nations (eight languages) took part in the study.

Results: Initial analysis focused on the themes of the children's responses and their performance in response to the six questions on measures of verbal production. In answer to the six questions, most children, independent of culture or language spoken, developed personal event narratives. However, individual diversity was high, with a total number of utterances ranging between 10 and 200. Regardless of the culture or language spoken, the topics were comparable among the children.

Conclusions: This study provides preliminary evidence for the Global TALES protocol's feasibility. The protocol will be described in detail, as well as future directions.



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New frontiers in speech and language therapy: advancing practice, research and education

The Investigation of the Vocational Expectations, Decision-Making Competencies, Social Supports and Career Stress of Speech and Language Therapy Students in Turkey

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Background: University students may have characteristics such as career stress and insufficient self-efficacy in their careers. Although career-related studies have been conducted with Speech and Language Therapy (SLT) students in other countries, there is no detailed study examining the relationships between these characteristics in Turkey.

Objectives: 1) To investigate the effect of Socioeconomic Status (SES) on vocational expectation, decision-making competencies, social supports, and career stress. 2) To examine the relationship between social support and other career factors specified.

Methods: The authors used a cross-sectional questionnaire design. The 83 students who agreed to participate filled out the questionnaires. The Demographic-SES information form, Career Stress Scale, Career Decision Self-Efficacy Scale, Vocational Outcome Expectations Scale, Multidimensional Perceived Social Support Scale were administered. The authors gathered data online from participants. The statistical analyses were performed with the SPSS 24.00 programme.

Results: A Positive relationship was found between multidimensional perceived social support and career decision self-efficacy, vocational outcome expectation (p<0.05). The results show that SES groups did not make a significant difference in self-efficacy on career decision, social support, career stress, and vocational outcome expectation (p>0.05).

Conclusions: It is concluded that the career-related factors of SLT students in the sample, unlike general university students, were not affected by low-intermediate-high-level SES groups. The results of this study support that as SLT students' social support increases, their vocational expectations, career decision-self-efficacy increase, and their career stress decreases.

Keywords: speech and language therapy students, career decision, career stress, career decision self-efficacy, multidimensional social support, vocational expectation.



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New frontiers in speech and language therapy: advancing practice, research and education

The Relationship Between Oral and Written Language Skills in Children With and Without Developmental Language Disorder

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Background

Language, the ability to use abstract symbols to communicate, involves both oral and written skills. Although the relationship between them is widely accepted, especially in alphabetic languages such as European Portuguese (EP), the knowledge about which specific oral language skills are most closely related to written language processing remains unclear.

Aim

Here we explored how the auditory receptive and expressive language skills of EP children diagnosed with Developmental Language Disorder (DLD) and age- and cognitive-matched controls with typical language development (TLD) at preschool (Time 1[T1]), relate to their written language skills assessed when they were at the 2nd grade of primary-school (Time 2[T2]).

Methods

23 preschool children (7 with DLD and 16 from the TLD group) responded to the Teste de Linguagem–Avaliação de Linguagem Pré-Escolar and to the Teste Fonético-Fonológico—Avaliação de Linguagem Pré-escolar to assess oral language skills at T1. At T2 the same children responded to the Bateria de Avaliação da Leitura em Português Europeu to assess the processes involved in reading. In preschool children also responded to the Raven's Coloured Progressive Matrices and in primary-school to the performance subtests of the Wechsler Intelligence Scale for Children to control for non-verbal IQ.

Results

Children with DLD performed significantly below children from the TLD group in all the language measures at T1 and in almost the reading measures at T2. Differences across groups in non-verbal IQ were nonsignificant. Language skills at T1 were strongly correlated with reading skills at T2, particularly those related to phonetic-phonological skills in preschool and the measures associated with phonological awareness and the reading of words and pseudowords in primary-school.

Conclusions

Children with DLD have an increased risk of developing reading difficulties. An early diagnosis and timely intervention are critical.



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New frontiers in speech and language therapy: advancing practice, research and education

The use of vocalized pauses as a window to pragmatic abilities in bilingual children with ASD

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Background: Deficits in pragmatic language are central to autism spectrum disorder (ASD), given that individuals with ASD are generally less able to account for their listener's perspective to meet social goals (Paul et al., 2009).

Aims: The current study investigated whether the use of listener-oriented vocalized pauses (e.g., uh, um) can index pragmatic competence among bilingual children with ASD in their both languages with the main aim to replicate previous findings showing that monolingual individuals with ASD use vocalized pauses less often than typical peers (Lake et al., 2011).

Methods: We compared speech dysfluency distribution in narratives of two groups of participants: bilingual Russian-Hebrew children with ASD (n = 21) and bilingual TLD controls (n = 30) who acquired Russian as their Heritage Language and Hebrew as the Societal Language. Both groups were matched for age (Range: 5-9yrs), non-verbal intelligence, age of SL-Hebrew exposure (AoO), current exposure to SL, etc. All children were tested on a battery of linguistic and cognitive tasks. Diagnostic status of children with ASD was verified using the Autism Diagnostic Observation Schedule (ADOS-2, Lord et al., 2000).

Narratives in Russian and Hebrew were elicited using the MAIN LITMUS battery (Gagarina et al., 2015). The narratives were analyzed using the Computerized Language Analysis (CLAN) program (MacWhinney, 2010).

Results and Conclusions: The findings demonstrate that bilingual children with ASD had a significantly lower proportion of vocalized pauses than children with TLD in HL-Russian, yet there was no difference between the two groups in SL-Hebrew. The study confirmed that the use of vocalized pauses "em" and "eh" can serve as pragmatic markers also in bilingual children with ASD. Language-specific (i.e., affected by language) use of dysfluencies as opposed to the language-universal use of dysfluencies (i.e., affected by clinical status and not different across the two languages) are discussed.



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New frontiers in speech and language therapy: advancing practice, research and education

The value of evaluation in advancing speech and language therapy practice after the pandemic

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Background

Service evaluation is vital in assuring quality care, advancing practice, and examining the impact of significant changes, such as the COVID-19 pandemic.

The RCSLT Online Outcome Tool (ROOT) supports SLT services in the UK to collate clinical data, including Therapy Outcome Measures (TOM) (Enderby and John, 2015; 2019;2020). It thus contains a wealth of longitudinal data to support service evaluation.

Aim

To illustrate the value of service evaluation, we present ROOT data, 12 months before and after the onset of the COVID-19 pandemic.

Methods

Data were extracted from the ROOT for the 'pre-pandemic year' (23/03/19- 22/03/20) and 'pandemic year' (23/03/20- 23/03/21). Frequently-used TOM scales were identified. Descriptive statistics were calculated for the overall cohorts and specifically for dysphagia cases, including:

- number of therapy episodes initiated
- gender profile
- average initial TOM 'impairment' score (sub-group analysis for completed therapy cases)

Results

Substantially fewer episodes of care commenced during the pandemic (8,371) compared with the year before (23,660). While frequently-used TOM scales varied, dysphagia remained predominant (65% of cases pre-pandemic, 46% in the pandemic year).

Fewer dysphagia cases were started during the pandemic (1328) compared with the previous year (3791). The cohorts had a similar gender profile and the same average initial impairment score (median 3.0, mean 2.9). The 'completed therapy' sub-group were, on average, substantially less impaired at therapy onset in the pandemic year (median 3.0, mean 3.0) than pre-pandemic (median 0.0, mean 0.5).

Conclusions

This evaluation indicates there was potentially less therapy provided overall in the pandemic year in the UK, which may specifically apply to severely impaired dysphagic individuals.

Services can only improve and advance practice if they are aware of the specific impacts of the pandemic, thus service evaluation has a vital role in exploring these, as demonstrated here.

Key-words

COVID-19, service evaluation



26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Theory of Mind and Language Skills across the two languages of Bilingual Children with and without Autism Spectrum Disorder (ASD)

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Background: Numerous studies have shown that limited Theory of Mind (ToM) is a core deficit in individuals with Autism Spectrum Disorder (ASD) (e.g., Baron-Cohen, Leslie, & Frith, 1985). A meta-analysis study indicated a bilingual advantage on ToM skills among children with typical language development (TLD), yet this advantage is only apparent upon adjusting for language proficiency (Schroeder, 2018).

Aims: Very few studies have assessed ToM skills in bilingual children with ASD. The current study aimed to assess ToM and language skills of bilingual children with and without ASD across their languages.

Methodology: Forty bilingual English-Hebrew speaking children (ages 4;10-10;08) participated: 20 with ASD (biASD) and 20 with TLD (biTLD). The two groups were matched for age, non-verbal IQ, length of exposure to Hebrew. Children's morpho-syntax was assessed using LITMUS English and Hebrew sentence repetition tasks (Marinis & Armon-Lotem, 2015). Verbal ToM battery included 5 subtasks. The nonverbal ToM was evaluated using a picture-sequencing task (Baron-Cohen et al., 1986). All children were tested in both languages.

Results: On morpho-syntax, the biASD group showed similar performance to their biTLD peers in both languages. Furthermore, there were no differences between the two groups in terms of non-verbal ToM scores. However, there were group differences on verbal ToM scores with ASD group performing lower. On verbal ToM and sentence repetition tasks, an asymmetry in the performance across the two languages was observed: some children performed significantly higher in English, while some performed significantly higher in Hebrew. Additionally, we found strong correlations between morpho-syntactical scores and verbal-ToM scores only in the biASD group.

Conclusions: As for assessment of bilinguals, the study confirms that ToM skills and morpho-syntax should be assessed in both languages. As for intervention, the findings of the study stress the importance of expanding morpho-syntactical skills to enhance ToM skills.

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26-28 MAY 2022 | SALZBURG-AUSTRIA

New frontiers in speech and language therapy: advancing practice, research and education

Tongue-tied babies and breastfeeding difficulties: proposal of post- surgery speech therapy treatment for 0-3 months old babies

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Objective: This study investigated the efficacy of combined therapy (frenotomy with scissors and speech therapy) in healthy, full-term, 0-3 months old babies with breast feeding problems and tongue-tie released with frenotomy.

Method: Single case study of a 71-day-old term infant, healthy, with tongue-tie. The tongue-tie was released for the first time at birth, without benefits. Two months later (study baseline) the tongue-tie was released again. After the procedure, the baby was rehabilitated with the "Protocollo di Riabilitazione Logopedica-Deglutologica Post frenulotomia" (M.Gentili, M. Panella, C. Piscitelli), initially in the clinic, then at home in telepractice. Non-invasive manual oral stimulations were used 6 times a day for 4 weeks (with reduced frequency in the last week). The soothing and analgesic effect of breast milk and cryotherapy was exploited. The "Lingual Frenulum Protocol With Scores For Infants" (Martinelli, 2013) was administered at the beginning and at the end of the observation period (after 28 days), to verify the results.

Results: The surgical wound healed without complications after approximately 3 weeks. Infant reflux symptoms improved. Wider, more rhythmic and coordinated lingual movements. Less nipple pain. The lingual snaps disappeared. No adverse events. The mother felt less inadequate.

Conclusion: The results support the efficacy of this approach for good post frenotomy surgical wound healing for 0-3 months old babies and for the improvement of the breastfeeding experience. Parent involvement was also beneficial.

Keywords: combined therapy (frenotomy with scissors and speech therapy); 0-3 months old babies.



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New frontiers in speech and language therapy: advancing practice, research and education

Using the virtual world to promote "Research Active" Speech and Language Therapy

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Background

The UK Clinical-Academic Clinical Excellence Network (CEN) was established in September 2019 in response to the growing engagement of Speech and Language Therapists (SLTs) with research. There are well-acknowledged challenges to undertaking research as a clinician and the CEN's mission was to demystify research for SLTs. This undertaking required innovation and exploration of new frontiers in the post-pandemic virtual world.

Aim/Objectives

The Clinical-Academic (CEN) has two key aims:

- · Provide learning opportunities that are relevant to, and meet the needs of our membership
- Use evidence-base to underpin our study days

Methods

For each study day we have designed a programme of interactive discussion using multimodal methods including presentations, social media, breakout rooms, and Google Jamboard. We also used thematic analysis of qualitative feedback collated from our first study day to generate future study day topics. For each study day we have identified key literature for each topic to guide presentations, breakout room discussions and panel question and answer sessions. We have used the Council for Allied Healthcare Professionals in Research Framework to consider the knowledge and skills an SLT needs to perform applied research.

Results

By combining creative study day methods with an appreciation of relevant evidence for aspiring and established clinical academics, we have been able to provide the highest quality support and guidance to members over the course of our first 3 study days. Members have reported improved confidence to further their research goals.

Conclusions/take home messages

A clinical academic pathway is of increasing interest to SLTs, and the CEN is a key route for clinicians to develop a support network while they explore engagement with research in their careers. Networking, peer support and relationship building enhance research potential and the CEN is the perfect opportunity for this.



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New frontiers in speech and language therapy: advancing practice, research and education

Validity and Reliability Study of LITMUS Turkish Sentence Repetition Test

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This study aimed to analyze the validity and reliability of the LITMUS Turkish Sentence Repetition Test (LITMUS TR) and to introduce the test into Turkish. The study was conducted with 250 children with typical language development and 44 children with developmental language disorders (DLD). In addition to LITMUS TR, Turkish School Age Language Development Test (TODİL) was applied. For the scope validity, it was explained which standards were adopted during the creation of LITMUS TR and which experts' opinions were used. With the construct validity analysis, it was shown that the test could distinguish the groups, there was a significant relationship with the age variable, and the gender variable was not a determinant in test performance. Item difficulty and item discrimination values were reported. Each item in the test was found compatible with the whole test. For criterion validity it was presented that there was a significant relationship between LITMUS TR and all subtests of TODIL. The reliability coefficient of the test was found to be very high both for the general sample and for the selected subgroups. The stability analysis was performed using the test-retest method. Interrater reliability information was provided for equivalence analysis. The diagnostic accuracy of LITMUS TR was determined by ROC curve analysis, and it was found that the test could accurately distinguish the groups at 80% and above. As a result, this study shows that LITMUS TR is a valid and reliable tool to be used in diagnosing DLD as a supportive objective measure.



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New frontiers in speech and language therapy: advancing practice, research and education

Which factors predict the interventions practitioners choose when supporting children with developmental language disorder? The role of theory

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Therapies aimed at optimizing language development in children with developmental language disorder (DLD) vary on the mechanisms of change they assume, the targets they aim at, or the ingredients and specific techniques and strategies they incorporate (Turstkra, Norman, Whyte, Dijkers, and Hart, 2016). In this study, we sought to identify the role of theory in clinical decision-making on intervention for children with DLD. In the context of COST Action IS1406, 2874 practitioners across 34 countries responded to an online multiple questionnaire which included an item about whether respondents contemplated the theory behind an intervention when deciding on its use (Question 1); 25 items relative to the criteria they used to decide upon the implementation of a particular strategy (Questionnaire 2), and 28 items on their preferred ingredients for intervention with a child with DLD (Questionnaire 3). Around 80 % of respondents indicated they took theory into account often or always. Exploratory and confirmatory factor analyses produced two factors in Questionnaire 2: Practical Considerations, and Theoretical and Clinical Considerations. Interestingly, although Questionnaire 3 included strategies of very diverse theoretical orientations, the best solution included only one factor, which could most likely be interpreted as exposure to and familiarity with different strategies (Strategy Familiarity). Different countries showed varying profiles across these factors. The factor analyses indicate that theoretical orientation only partially orients ingredient use and preference. Pragmatic considerations and familiarity appear to be just as relevant for intervention choice, and these in turn are probably influenced by training opportunities and traditions across different countries. These findings have important implications for practice development and the timely implementation of new evidence in diverse contexts.



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New frontiers in speech and language therapy: advancing practice, research and education

Working Memory and reading comprehension in primary school students with dyslexia and dyscalculia.work

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Introduction: Although it is true that several studies have shown the relationship between working memory, reading comprehension and academic performance, few have focused on the importance of textual content, as well as considering the existence of possible mediating variables.

Objective: The main objective of the present study was to study the relationship between working memory, reading comprehension and academic performance, as well as the predictive value of the first two over the third in students with dyslexia and dyscalculia in primary education.

Method: 28 children between 6 and 12 years old participated in this research and were evaluated by means of two working memory tasks (verbal analogies and semantic updating), the Diagnostic Evaluation of Reading Comprehension tool (EDICOLE) and an experimental task to assess reading comprehension when the content of the text is mathematical in nature.

Results: The results show the importance of taking into account textual content in the reading comprehension of people with dyslexia and dyscalculia. These data show the need to create specific intervention programs aimed at preventing and detecting early difficulties in working memory and reading comprehension.