



10th EUROPEAN CONGRESS OF SPEECH AND LANGUAGE THERAPY

Effectiveness | Speech and Language
Therapy | Science | Practice

10 - 12 MAY 2018
Estoril Congress Center
Cascais | Portugal

Book of ABSTRACTS



Book of Abstracts

10th CPLOL Congress
10-12 May 2018, Cascais, Portugal
CPLOL, 2018

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Standing Liaison Committee of E.U. Speech and Language Therapists and Logopedists
145 Bd Magenta, F-75010 Paris
www.cplol.eu

ISBN 978-2-9552505-1-8

EAN 9782955250518



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KEYNOTE SPEAKERS



Biography

Alexandre Castro Caldas is Professor of Neurology and presently Director of the Health Sciences Institute of Universidade Católica Portuguesa. His main interest is Behavioural Neurology. He was President of the International Neuropsychological Society in 2001 and published in the main journals of the field.

Keynote speech 1 | Language of illiterate subjects

Illiteracy due to social reasons is a common fact around the world. The first concepts about aphasia in the 19th century were based on observations done in patients not always literate but the fact was never considered important.

Our findings suggest that the brain organization of illiterate subjects differs from that of those that attended school in the proper age and this must have impact on the signs of aphasia.



Biography

Chris Code is Professorial Research Fellow in Psychology, College of Life and Environmental Sciences, Washington Singer Labs, University of Exeter, England, Foundation Professor of Communication Sciences and Disorders (Hon) at the University of Sydney and used to be Research Manager for Speakability, the British lobbying and advocacy charity for aphasic people conducting research into the psychosocial consequences of aphasia and is Speakability's National Adviser on Aphasia. He is Patron of AphasiaNow.



Research interests include the neuropsychology of language and speech, psychosocial consequences of aphasia, aphasia and the evolution of language and speech, recovery and treatment of aphasia, the public awareness of aphasia, the history of aphasia, number processing and apraxia.

He is co-founding Editor in Chief of the international journal *Aphasiology*, past Editor of the *International Journal of Language & Communication Disorders* and the *Australian Journal of Communication Disorders*, and is on the editorial boards of a number of scientific journals. His books include *Aphasia Therapy* (1982 with DJ Müller), *Language, Aphasia and the Right Hemisphere* (1987), *The Characteristics of Aphasia* (1991) and *Classic Cases in Neuropsychology* (Vol I, 1996; Vol II, 2002) (with C-W Wallesch, Y. Joanette & AR Lecour) and *Milestones in the History of Aphasia* (2008) (with Juergen Tesak).

He has an MA in Phonetics in Linguistics (University of Essex) and PhD in Neuropsychology (University of Wales) is Fellow of the British Psychological Society and Fellow of the Royal College of Speech and Language Therapists. He was the invited presenter of the Annual Mary Law Lecture, 2010. His awards include the 2010 Robin Tavistock Award for Services to Aphasia from The Tavistock Trust.

Keynote speech 2 | Is Aphasia a Language Disorder?

I will review contemporary research suggesting that underlying apparent 'linguistic' or 'verbal' deficits (symptoms of aphasia) are impairments of non-linguistic cognitive mechanisms. Aphasia effects language-specific cognitive operations, but is itself not primarily a disorder of language.

Such functions as STM/working memory, executive functions (eg, attention, (dis)inhibition, anosognosia), praxis (action processing, eg, apraxia of speech), perceptual impairments (agnosia, aspects of anomia) - 'language' is impossible without these supportive cognitive functions and it is these supportive cognitive functions that are impaired, not the rules and representations that are managed by these supportive cognitive preparations.

The traditional centres and pathways model and definition of aphasia is giving way to process and computational accounts of aphasia (McNeil et al., 2015). The traditional model proposes centres in the brain where rules and representations are stored, and they are connected by anatomical pathways (eg, Broca's - Wernickes areas linked by the arcuate fasciculus).

A growing number of aphasiologists support the idea that the weight of evidence for the processing account is overwhelming and cannot be overlooked. The proposal is that aphasia is a disorder of performance where representations are not 'lost'. The 'loss' of a component of language - phonemes, morphemes, lexical items, syntactic units, is seen as simplistic. The focus is on the processes and mechanisms responsible for the construction of representations, not the building blocks themselves.

I will survey these exciting developments and examine the significant implications for the treatment of aphasia.

Reference: McNeil, M, Hula, W. & Sung, L.E. (2011). The Role of Memory and Attention in Aphasic Language Performance. In Jackie Guendouzi, Filip Loncke and Mandy J. Williams (eds.), *The Handbook of Psycholinguistic and Cognitive Processes*. (Hove, East Sussex: Psychology Press. Pp.551-577.

Biography

James Law is Professor of Speech and Language Science at Newcastle University in the UK. He originally studied Linguistics at the University of East Anglia before qualifying and then practising as a speech and language therapist in the UK for 10 years. He has been in receipt of research grant funding of in the order of £4.0m and has published over 200 peer reviewed and other publications. He was one of the Principal Investigators of the Department for Education funded Better Communication Research Programme and is now one of the Chief Investigators on the Australian NHMRC Centre for Excellence in Child Language. He is the Chair of the management Committee of the Cost Action research network (IS1306) entitled "Enhancing children's oral language skills across Europe and beyond: a collaboration focusing on interventions for children with difficulties learning their first language".



He has written about a range of different communication disorders but his main focus has been on children, looking at the early identification and treatment of children with language disorders. In 2003 he published the first Cochrane Review in the field. Recently he has focused on both public and mental health issues, editing a special edition of Emotional and Behavioural Difficulties entitled "Language, Communication and the child with emotional and behavioural difficulties: implications for practice". With colleagues he has also carried out a number of analyses of the UK birth cohorts publishing in a wide range of journals, most recently in Child development. He has also been involved in policy discussions related to children's language development specifically a consultation on language and social disadvantage to the All Party Parliamentary Group on Speech and Language in the UK's House of Commons, two reports on the same subject for the government "think tank" Centre for Social Justice and two for the international children's charity Save the Children. Finally, he is a member of the evidence committee of the Early Intervention Foundation, an organisation set up by the government in England to promote evidence based practice in services for children.

Keynote speech 3 | Intervention to promote child language development: What we do know, what we don't and where we need to be going next

This presentation will start by summarising the key findings about the published evidence underpinning interventions for different aspects of children's speech and language development. It will then go on to what we still need to find out especially about the mechanisms underpinning these interventions and about what the implications are for practice and policy, highlighting where we need to focus next. The talk will draw on evidence from variety of sources, including the recent update of the 2003 Cochrane review, recent reviews for the UK what works centres and the reviews and questionnaire completed by members of COST Action IS1406, a network of researchers focusing on language intervention research from 35 countries across Europe and beyond.

Biography

Margaret Walshe M.Sc. PhD is an Associate Professor in the Department of Clinical Speech and Language Studies in Trinity College Dublin. She is a Board member of the European Society for Swallowing Disorders and was instrumental in establishing the first postgraduate courses in dysphagia in Ireland. Her research focuses on dysphagia, acquired communication disorders and evidence based practice. She has published widely in these areas and was awarded a Cochrane Fellowship from HRB in 2009. She is currently involved in a number of funded research studies relating to acquired neurological communication and swallowing disorders.



Keynote speech 4 | Charting the Course and Navigating the Evidence: A critical appraisal of evidence based practice in Acquired Neurological Dysphagia

This presentation will begin with a brief overview of the key domains of evidence-based practice such as research utilization, clinical research and patient preferences. The evidence for current intervention approaches for dysphagia in both progressive and non-progressive neurological conditions will be critically appraised. The efficacy as well as the effectiveness of popular intervention strategies will be examined.

Reflections on progress to date in dysphagia research, 'bad science' and the consequences of limited available evidence will frame the argument for increased high quality research in interventions in neurological dysphagia. Challenges as well as opportunities in the design, implementation and reporting of clinical dysphagia research will be discussed. The concept of implementation science and its relevance for speech and language therapists will be explored.

Finally, it is argued that the future of dysphagia research and the amalgamation of evidence must be firmly grounded in and informed by clinical practice. It must be fuelled by increased collaborations between academic researchers and clinicians, tackling clinically relevant questions. Examples of some of these successful collaborations will be provided. The presentation will conclude with a call for speech and language therapists to consider their active role in ultimately delivering future higher quality care to people with acquired neurological dysphagia.

ORAL PRESENTATIONS



Oral presentations

CO 001

(1252) - MULTI-SITE IMPLEMENTATION OF SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA™) IN DANISH HOSPITALS

Isaksen, Jytte - University of Southern Denmark, Denmark

Jensen, Lise Randrup - University of Copenhagen, Denmark

Objectives: SCA™ is a method to train conversation partners of people with aphasia in supporting conversation through simple techniques and procedures enhancing conversational and social participation (Kagan, 1998). Over the last decade, many Danish speech-language therapists (SLTs) have been trained in providing this intervention to family, friends and professional conversation partners such as hospital staff. Starting off with large-scale implementation of SCA™ at a hospital in Greater Copenhagen where all staff on the neurological unit received training (Jensen et al., 2015), the method has since been or will soon be implemented at nine or more hospitals in Denmark. This study aims to provide a thorough description of the barriers and facilitators experienced by the hospital SLTs involved in SCA™ implementation from the point of view of current approaches to implementation research and implementation drivers (Fixsen et al., 2005). The purpose is to further support a nascent community of practice across the different sites.

Methods: A questionnaire with closed and open-ended questions was distributed to one SLT at each of the hospitals involved in the implementation of SCA™ to staff. Analyses were made through descriptive statistics and thematic analysis.

Results: Implementation of SCA™ at Danish hospitals has been a bottom-up led process largely driven by SLTs. It has resulted in the staff's increased awareness of aphasia and communication with patients with aphasia. However, SLTs at the different sites face similar challenges such as lack of managerial support and suitable outcome measures.

Conclusions: To sustain and further develop the implementation of SCA™ at Danish hospitals, there is a need to continue building the nascent community of practice between SLTs from new and old implementation sites, as well as to engage in further inter-professional collaboration, which includes hospital/ward management, design of materials and outcome measures.

Keywords: Aphasia

CO 002

(1284) - WHAT ARE YOU DOING WITH MY BRAIN? AN EXPLORATORY FMRI STUDY WITH PATIENTS WITH APHASIA AND RECURRENT UTTERANCES

Rodrigues, Inês - Center of Interdisciplinary Investigation in Health Institute of Health Sciences – Lisbon, The Catholic University of Portugal, Portugal

Castro Caldas, Alexandre - Center of Interdisciplinary Investigation in Health Institute of Health Sciences – Lisbon, The Catholic University of Portugal, Portugal

Objectives: This pilot study aims to examine blood-oxygen-level dependent (BOLD) signal differences between aphasia patients with and without recurring utterances (RU).

Methods: With a 3 Tesla MRI utility we explored brain activation in response to language tasks in 15 chronic non-fluent aphasia patients (10 with and 5 without verbal stereotypes) and in 5 control subjects. In particular, we performed 2 block design fMRI sequences correspondingly to a categorization task and a naming task. The fMRI task consisted of two runs. Every stimulus was presented as either a word or picture, equalized for lexical frequency and word length. The intent of the first run was to characterize the global language processing and the second run was to study the verbal production in patients with and without stereotyped speech.

Oral presentations

In order to analyze the whole brain activation pattern in each group, a GLM Multi-study procedure was performed.

Results: The RU and Control patients had similar mean ages (55 vs 57 years, $t=1.31$ (df 1.04), $p = 0.44$), time after onset (26 vs 28 months $U=137.7$, $p = 0.21$), years of education (4 vs 5 years, $U=120$, $p= 0.81$) and size of lesion. With the FFX GLM multi-study, we found more pronounced right hemispheric BOLD signal increases in patients with RU in both language tasks. RU patients significantly activated right hemispheric areas that were not engaged in the control group.

Conclusions: This pilot study specifically focuses on fMRI data from aphasic patients with and without stereotyped speech production. Because the recovery from RUs is usually very poor, we hypothesized that patients with RU would present with stronger right hemisphere activation, supporting the notion of a maladaptive or inefficient recovery pattern. Our results emphasized that the right hemisphere activity reflects an increased, but ultimately ineffective search and language process in patients with chronic aphasia with RU.

Keywords: Aphasia, acquired language disorders

CO 003

(1094) - SCREENING FOR SYNTACTIC LANGUAGE DEFICITS IN HUMAN IMMUNODEFICIENCY VIRUS (HIV)

Kambanaros, Maria – *Cyprus University of Technology, Cyprus*

Objectives: Individuals diagnosed with HIV face a chronic, life-threatening illness involving progressive destruction of the immune system. Given the underlying frontal-basal ganglia circuit neuropathogenesis of the disease, it is surprising that little is reported about potential language deficits as part of the higher cognitive dysfunctional profile of HIV-infected individuals. This study aims to elucidate whether HIV-positive individuals have linguistic impairments that may originate from or be intensified by deficits in cognitive functions. Specifically, the clinical utility of a sentence repetition task (SRT) to distinguish adults with HIV from those without the disease is investigated. The research questions address (i) quantitative differences on SRT abilities between adults with HIV ($n=40$) and controls ($n=40$), (ii) SRT performance influenced by sentence length as related to working memory span, and (iii) correlations of SRT scores with neurocognitive measures.

Method: Language abilities were screened in the clinical setting using an offline repetition task involving specific complex syntactic operations (e.g., relative clauses, negation, clitic doubling) at the sentence-level ($n=36$ sentences). Participants were requested to repeat the sentences heard verbatim.

Results: For the HIV-positive group, linear regressions were carried out to investigate performance on sentence repetition with chronological age, years of education, years of diagnosis, and background neurocognitive measures. Significant correlations were found for sentence repetition performance with years of education, duration of illness, mini mental state examination scores, semantic fluency and phonological fluency scores, verbal memory tests, and executive function tasks.

Conclusions: Further research is urgently required regarding the relative contributions of each cognitive domain to language in individuals with HIV.

Keywords: Acquired language disorders, sentence repetition, complex syntax, cognition

Oral presentations

CO 004

(1163) - EYE-VOICE SPAN IN ADULTS WITH MILD COGNITIVE IMPAIRMENT (MCI) AND HEALTHY CONTROLS

Lundholm Fors, Kristina - *University of Gothenburg, Sweden*

Fraser, Kathleen C. - *University of Gothenburg, Sweden*

Kokkinakis, Dimitrios - *University of Gothenburg, Sweden*

Objectives: This study is part of a project focused on developing new techniques for the identification of early linguistic and extra-linguistic signs of cognitive impairment, with the overall goal of identifying dementia in the preclinical stage. In a previous study, we found that eye movements during reading can be used to distinguish between participants with mild cognitive impairment (MCI) and controls with up to 86% accuracy. In this study, we investigate the process of reading aloud, by comparing the eye-voice span in participants with and without MCI. The aim of the study is to identify any differences in the reading processes and evaluate whether these differences can be used to detect the early stages of dementia.

Methods: The eye-voice span is a measurement of the temporal and spatial organization between the eye and the voice, and is affected by, for example, working memory and automaticity, but also by the familiarity and length of words. We collected audio and eye-tracking data from participants with MCI and controls. By aligning the information about where participants' eyes are fixating with information about the words they are producing, we can calculate the eye-voice span at every time point. We can then correlate these measurements with the difficulty of the text, as well as with the participant's cognitive and language test scores.

Results: We present a quantitative and qualitative analysis of the reading process in the participants, focusing on general measures of eye-voice span, but also on instances of hesitation and mistakes in the speech, and the correlated eye movements.

Conclusions: Early detection of dementia is important for a number of reasons, such as giving the person access to interventions and medications. By expanding the knowledge about reading processes in subjects with MCI, we help demonstrate the potential of using reading analysis to detect early signs of dementia.

Keywords: **acquired language disorders, cognitive impairment, dementia, screening.**

CO 005

(1176) - PATIENT-PROVIDER COMMUNICATION ACROSS HEALTHCARE SETTINGS

Altschuler, Tami - *NYU Langone Medical Center, USA*

Objectives: Being unable to communicate in a healthcare setting is emotionally frightening and can lead to an increase in sentinel events, medical errors, and extended lengths of stay. This session focuses on establishing an augmentative and alternative communication (AAC) program across healthcare settings to enable patients to communicate their wants, needs, feelings, and participate in their own care more productively.

Methods: It is now recognized by many communication specialists across the globe, that the inability to communicate when in the hospital (poor patient-provider communication) impacts patient care and safety; patient comfort, participation and recovery; family satisfaction. The literature reveals that reduced patient-provider communication threatens patient satisfaction scores, length of hospital stay, active patient participation, discharge compliance, quality of care and personal well-being. Speech and language therapists can champion patient-provider communication change at their facility.

Oral presentations

Results: For many providers, a variety of barriers are evident within the hospital institution. These often challenge efforts to begin implementing AAC services in the inpatient setting. Despite growing awareness of a clear need for communication enhancement at the bedside, the implementation of strategies in the intensive care unit and acute care settings throughout the world is slight. Institutions may not have staffing, if staffing does exist, referrals to an AAC specialist are often not made, poor patient communication is not often recognized as a negative influence in patient medical state or recovery, and medical providers may simply not have fundamental knowledge of the benefits of communication enhancement strategies.

Conclusions: After completing this session, participants will be able to:

1. Gain awareness of the communication specialists role in hospital-wide patient-provider communication
2. Understand various barriers for implementation of communication enhancement supports
3. Appreciate the continuum of program development.

Keywords: Aphasia, acute stroke, head and neck oncology, neurodegenerative disorders, intervention

CO 006

(1402) - LANGUAGE IMPAIRMENT IN CHILDREN BORN LATE PRETERM

Helland, Wenche A - University of Bergen and Helse Fonna Heath, Norway

Straume, Anne - University of Bergen, Norway

Objectives: It has been well documented that children born preterm are at greater risk for language impairment than children born full time. However, less is known about children born late preterm (34-0 to 36-6 weeks gestation). These children have traditionally been regarded as developing in line with their peers; however more recent research indicates that they may be at a greater risk for developmental problems than expected. The aim of the present pilot study was to investigate language impairment in a group of four year old Norwegian children born late preterm.

Methods: A total of 25 late preterm children (18 girls) took part in the study (mean age =50.6 months; SD =3.99 months). The parents completed the Children's Communication Checklist Second Edition (CCC-2; Bishop, 2011). The CCC-2 consists of 70 items divided into 10 subscales assessing various aspect of language, pragmatic as well as structural. An overall measure of communication, the General Communication Composite (GCC) discriminates between language impaired and typically developing children. The results of the late preterm children were compared to the age norms of the CCC-2.

Results: The late preterm group scored significantly lower (more impaired) than the CCC-2 age norms on all four subscales measuring structural aspects of language as well as on two out of four subscales measuring pragmatic aspects. The results of the GCC was also significantly lower than age norm; $t(24)=-3.97$; $p<.001$. A total of 5 children (20%) scored in the language impaired range on the GCC.

Conclusions: The results from this pilot study indicate that children born late preterm are significantly impaired relative to norms on the majority of CCC-2 scales and that symptoms of language impairment are more common in this group than in typically developing children. Structural aspects of language were more negatively affected than were pragmatic language aspects.

Keywords: Screening

Oral presentations

CO 007

(1273) - THE PREVALENCE OF SPEECH AND LANGUAGE DIFFICULTIES AT AGES 3 AND 5 IN THE REPUBLIC OF IRELAND, AND ATTENDANCE AT SPEECH AND LANGUAGE THERAPY SERVICES

Wright, Aileen - *University of Limerick, Ireland*

O'Donoghue, Michelle - *University of Limerick, Ireland*

Objectives: Prevalence data inform resource planning in the health and education services. Growing Up in Ireland is the first national cohort study conducted in the Republic of Ireland that reports data relating to speech and language difficulties. The objective of this study was to report prevalence and persistence of caregiver concern regarding speech and language in children at ages 3 and 5, as well as referral to Speech and Language Therapy services.

Methods: A cohort of 11,134 children born between December 2007 and May 2008 were randomly selected from the Child Benefit Register. Data was gathered from their caregivers by interview at ages 9 months, 3 years and 5 years.

Results: 19.2% of caregivers reported concerns about "how their child talks and makes speech sounds" at age 3 (15.4% "a little", 4.0% "a lot"), and 16.5% at age 5 (13.4% "a little", 3.1% "a lot"). Of children whose parents had a lot of concern at age 3, and who were surveyed again at age 5, 37% still had a lot of concern, 35% now had a little concern, and 28% no longer had concerns. Of children whose parents had a little concern at age 3, 6% had a lot of concern by age 5, 32% still had a little, and 61% no longer had concerns. Of those with no concern at three, 3.9% reported a little and <1% a lot of concern at 5.

By age 5, 76% of those whose caregivers had reported a lot of concern at three were reported to have seen a speech and language therapist, along with 36% of those who reported a little, and 8% of those whose caregiver had no concerns.

Conclusions: As well as implications for local service planning, this data contributes to our understanding of prevalence and persistence of speech and language difficulties internationally.

Keywords: Developmental language disorders

CO 008

(1051) - SWEDISH SPEECH-LANGUAGE THERAPISTS' VIEWS ON CRITERIA FOR DLD: A COMPARISON WITH CATALISE

Eiman Nilsson, Liza - *Lund University, Sweden*

Ahlfont, Andrea - *Lund University, Sweden*

Hansson, Kristina - *Lund University, Sweden*

Objectives: The study investigated to what degree Swedish speech-language therapists (SLTs) and SLT students agree with criteria for Developmental Language Disorder (DLD) presented by experts from English speaking countries (CATALISE; Bishop et al., 2016). Furthermore, we analysed consensus within the group and whether the participants' background had an impact on the results. The aim was to contribute to national and international consensus work regarding criteria for DLD for both clinical practice and research.

Methods: The 27 statements regarding DLD from Bishop et al. (2016) were translated into Swedish. Together with questions on the respondents' background (experience, field of practice, geographical area), these formed a survey which was electronically distributed. The 184 participants rated on a five-point Likert scale to what degree they agreed with the statements. They could also add free-text comments. Mode, range and proportion of participants expressing consensus were calculated

Oral presentations

for each statement. Consensus was considered achieved for statements where at least 80% of the respondents had rated 4 or 5. The comments were analysed qualitatively. Comparisons and correlation analyses were carried out to explore if the participants' background influenced their ratings.

Results: Consensus was achieved for 14 statements and 25 had a mode of 4 or 5. Most statements ranged from 1 to 5. Consensus was highest for questions regarding criteria for referral and lowest regarding views on relations between DLD and other conditions. The comments indicated insecurity with respect to comorbidity, discrepancy between verbal and nonverbal abilities, clinical markers and the role of social factors. Only weak associations were found between background factors and ratings.

Conclusions: Swedish SLTs and SLT students largely agree within the group and with the CATALISE consensus document, but disagree on topics such as comorbidity and discrepancy. Consensus work is needed in order to achieve appropriate and equal service delivery to children with language disorders.

Keywords: Developmental language disorders, specific language impairment

CO 009

(1361) - EARLY EYE GAZE PATTERNS TO TALKING FACES IN EUROPEAN PORTUGUESE

Cruz, Marisa - School of Arts and Humanities, University of Lisbon, Portugal;

Filipe, Marisa - Center of Psychology, University of Porto & School of Arts and Humanities, University of Lisbon, Portugal

Butler, Joseph- School of Arts and Humanities, University of Lisbon, Portugal;

Severino, Cátia- School of Arts and Humanities, University of Lisbon, Portugal;

Frota, Sónia- School of Arts and Humanities, University of Lisbon, Portugal;

Objectives: It is well-documented that selective audiovisual attention changes with language development. Infants exposed to audiovisual materials in different languages shift their attention from the eyes to the mouth between 4 and 8 months, regardless of the native language (Lewkowicz & Hansen-Tift, 2012, a.o.). However, the question of how infants' attention to audiovisual stimuli changes across development is still unexplored in European Portuguese. Our goal is to address this question characterizing infants' eye gaze while watching a video of a talking movie character.

Methods: Participants were 24 typically developing monolingual European Portuguese-learning infants (mean age: 5.49 months; age range: 5-6 months). Using remote eye-tracking, we tested whether there were differences in gaze between focal regions (face, eyes, mouth) and a non-focal region (arm). The video shows, in the close-up scene, an animated toy with human properties talking while nodding and waving. Four different encouraging speaking messages are expressed in the video, presented to all participants in the same order.

Results: The different encouraging messages were shown not to impact on the results.

We observed that gaze was concentrated more on the face (mean fixation time: 20184ms) than on the non-focal region (mean fixation time: 2448ms), and this difference was statistically significant ($p = \leq .0001$). For the focal regions, gaze was concentrated more on the eyes (mean fixation time: 10579ms) than on the mouth (fixation time: 1655ms), and this difference was also statistically significant ($p = \leq .0001$).

Conclusions: The gaze of typically developing European Portuguese-learning infants at 5-6 months follows a similar pattern as that reported for other languages, by showing gaze fixations to the eye region before the onset of canonical babbling. Future research should include other ages, as well as clinical populations, to observe how visual attention supports language development. These results set an important foundation for studies of social interaction and clinical intervention.

Keywords: Prevention

Oral presentations

CO 010

(1219) - CORRELATION BETWEEN SPEECH PRODUCTION AND SPEECH PERCEPTION IN 5- AND 7-YEAR-OLD CHILDREN

Bóna, Judit - *ELTE Eötvös Loránd University, Hungary*

Horváth, Viktória - *HAS Research Institute for Linguistics, Hungary*

Jordanidis, Ágnes - *NILD Hungary*

Objectives: The development of complex speech production is closely related to speech perception processes. Difficulties in the speech perception mechanism may be responsible for various articulation disorders, slower vocabulary expansion and lower scores in the complexity of spontaneous speech. The purpose of this presentation is to examine the correlations between speech processing, verbal short term memory and the characteristics of spontaneous speech of 5- and 7-year-old children.

Methods: 40 Hungarian-speaking children participated in this study from the two age groups. Recordings were made of the children based on the GABI (Hungarian Child Language and Speech Database and Information Repository; Bóna et al. 2014) protocol. Furthermore, speech perception processes and verbal short term memory were also measured. For the analysis of the children's spontaneous speech, we used elicited narratives based on a picture series. We examined the size of the vocabulary, the elements of the contents, and the frequency of dysfluencies. These indicators were compared with the results of the speech processing and verbal short term memory tests. If a child had an articulation disorder, it was also analysed with respect to speech processing.

Results: Results show that there are big individual differences even within the same age groups. Well-functioning speech perception mechanisms and a suitable verbal short term memory are necessary but not sufficient prerequisites for spontaneous speech with a high level of complexity. The elicited speech of those children who have speech perception difficulties is less complex.

Conclusions: Nevertheless, the development of spontaneous speech complexity remains the task of kindergartens and schools regarding children with appropriate speech perception as well.

Keywords: spontaneous speech, speech processing, working memory

CO 011

(1362) - A NOVEL LARYNGEAL PALPATORY SCALE (LPS) IN PATIENTS WITH MUSCLE TENSION DYSPHONIA

Jafari, Narges - *Department of Speech Therapy, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran;*

Salehi, Abolfazl - *Department of Speech Therapy, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran;*

Izadi, Farzad - *Department of Ear, Nose, Throat, Head and Neck Research Center, Hazrat-e-Rasoul Hospital, Tehran, Iran;*

Ebadi, Abbas - *Behavioral Sciences Research Center, Nursing Faculty, Baqiyatallah University of Medical Sciences, Tehran, Iran;*

Van Lierde, Kristiane - *Department of Otolaryngology, University Hospital Ghent, Belgium*

Objectives: Laryngeal palpation is a more convenient and accessible method for evaluation of patients with muscle tension dysphonia (MTD). The aim of this study is to develop a new comprehensive valid and reliable "laryngeal palpatory scale" (LPS), based on psychometric criteria. The LPS is able to assess anatomical structures influenced in MTD using a quantitative-based measurement.

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Methods: The scale items were developed using an in-depth analysis of the literature and an expert focus group. Furthermore, scale item generation and item reduction was carried out by a selection of 45 items during psychometric assessment of the LPS's qualitative and quantitative content validity and qualitative face validity, followed by interrater reliability. For this purpose, 531 patients were assessed and finally 55 patients with pure MTD (26 women, mean age: 40.8 years, S.D: 12.5; 29 male, mean age: 41.6 years, S.D: 11.8) participated in the study. A weighted kappa (k^*) statistic utilized to examine the interrater agreement for each single item, as well as the total score interrater reliability was also assessed using interclass correlation coefficients (ICC) among two raters. Moreover, the standard error of measurement (SEM), a measure of absolute reliability, was determined.

Results: In the phase of content validity ratio (CVR) assessment, 3 items obtained a score of less than 0.62, and were omitted. The rest of the questions were assessed for the content validity index (CVI). The results of the CVI calculation formula showed that the I-CVI of all the items was greater than 0.79 and the S-CVI was equal to 0.96. Finally, the interrater agreement for all items included in the analysis was ICC = 0.97 (confidence interval = 0.95-0.98), suggesting almost perfect agreement.

Conclusions: The laryngeal palpatory scale (LPS) is a reliable and valid instrument for assessing patients with muscle tension dysphonia (MTD). However, future studies regarding the concurrent validity are needed.

Keywords: Voice disorders, clinical-reported outcome measures (development or cross-cultural adaptation and validation), head and neck oncology

CO 012

(1461) - EXPLORING ACOUSTIC MEASUREMENT OF RATE OF TREMOR ACROSS THE SPEECH SYSTEM

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Barkmeier-Kraemer, Julie - University of Utah, Division of Otolaryngology and Head & Neck Surgery, Salt Lake City, USA

Objectives: A physiologic model of tremor was proposed by Barkmeier-Kraemer (2010) regarding the hypothesized contributions of respiratory, phonatory, and articulatory speech structures, with as overarching concept: tremor affecting specific structures of the speech mechanism results in predictable modulation patterns of acoustic output. Oscillation of chest wall/lungs as well as vocal fold adduction/abduction are hypothesized to give modulation in intensity level (IL). Oscillation of vocal fold length is supposed to give modulation in fundamental frequency (fo), and oscillation of vertical laryngeal excursions as well as pharyngeal and oral tract diameter are expected to provide modulation in first formant (F1) and second formants (F2). In addition to this model, tracking smoothed cepstral peak prominence (CPPS) and analyzing its trail may be used to address voice quality-related modulation.

Methods: To meet that purpose, a script has been developed to automate these analyses in the program Praat (Paul Boersma & David Weenink, Institute for Phonetic Sciences, University of Amsterdam, The Netherlands). This script first trails fo, IL, CPPS, F1 and F2, and then investigates whether or not there is tremorous modulation in the frequency-domain representation of these tracks. This has been applied in a set of 27 [i:] recordings from subjects with Parkinson's disease, adductor spasmodic dysphonia and essential vocal tremor. These recordings were

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also perceptually (i.e., visually and auditorily) inspected on the presence and rate of tremor in these tracks.

Results: Correlations between visually estimated and spectrally measured tremor rates range between 0.01 and 0.62 when applied to all recordings, and between 0.67 and 0.97 when applied to recordings with clear tremor modulation.

Conclusions: When applied to selected (parts of) recordings with evident tremor in either fo, IL, CPPS, F1 and F2, this acoustic method is capable to objectively quantify tremor rate across the speech system.

Keywords: voice disorders, neuromuscular disorders

CO 013

(1152) - THE IMPACT OF A TEACHING OR SINGING CAREER ON FEMALE VOCAL QUALITY AT THE MEAN AGE OF 67 YEARS: A PILOT STUDY

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Claeys, Sofie - *Ghent University, Belgium*

Bettens, Kim - *Ghent University, Belgium*

Leemans, Laura - *Ghent University, Belgium*

Van Calster, Ann-Sophie - *Ghent University, Belgium*

Van Damme, Nina - *Ghent University, Belgium*

Thijs, Zoë - *Ghent University, Belgium*

Daelman, Julie - *Ghent University, Belgium*

Leyns, Clara - *Ghent University, Belgium*

Van Lierde, Kristiane - *Ghent University, Belgium*

Objectives: The purpose of the present study was to assess the vocal quality in females aged between 60 and 75 years and to determine the impact of a teaching or singing career on the vocal quality. The author hypothesized that a teaching or singing career can result in a decreased vocal quality at the age of 60+ in comparison with females without a teaching or singing career.

Methods: Seventy-four females with a mean age of 67 years participated in this study. Twenty one females were teachers, 12 females were singers and 40 females were non-vocal professionals. No significant age differences were found between the three groups. To determine the vocal quality, a questionnaire (voice handicap index), subjective (perceptual evaluation) and instrumental assessment techniques (aerodynamic, vocal range, acoustic measurements, Dysphonia Severity Index) were used.

Results: The vocal quality in the non-vocal professionals was characterized by the presence of increased roughness ($p=0.019$) in comparison with the singers and more strained ($p=0.018$) in comparison with the teachers. The vocal performance (intensity and frequency range) of both the singers and the teachers was significantly increased in comparison with the non-vocal professionals. No significant difference was found for the Dysphonia Severity Index between the females with a singing or teaching career and the non-vocal professional females.

Conclusions: At the age of 67 year a teaching or singing career has no negative impact on the female subjective and objective vocal quality.

Keywords: Voice disorders

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CO 014

(1159) - MASSED VERSUS SPACED PRACTICE IN VOICOLOGY: EFFECT OF A SHORT-TERM INTENSIVE VOICE THERAPY VERSUS A LONG-TERM TRADITIONAL VOICE THERAPY

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Objectives: Unlike most medical and pharmaceutical therapies, the optimal “dosage” for voice therapy is unknown. The purpose of this study was to compare the effect of a short-term intensive voice therapy (IVT) with a content-identical traditional long-term voice therapy (TVT) on the vocal quality and vocal capacities of patients with dysphonia. An additional comparison was made between two types of IVT programs: an individualized program (IVT-I) and a group program (IVT-G).

Methods: A longitudinal, pragmatic, single-blind controlled trial with a multiple baseline design was used. Forty-six patients diagnosed with dysphonia were assigned into one of the three treatment groups: IVT-I (n = 15), IVT-G (n = 15), and TVT (n = 16). The IVT groups practiced with a frequency of 1h20min a day and a duration of 10 consecutive work days (2 weeks). The TVT group practiced with a frequency of two 30 minute-sessions a week and a duration of 6 months. Both therapy programs were content-identical and guided by the same voice therapist. A standardized voice assessment consisting of both subjective (videolaryngostroboscopy, anamnesis, subject's self-report, auditory-perceptual evaluation) and objective vocal measures and determinations (maximum performance task, aerodynamic measurements, voice range profile, acoustic analysis, Acoustic Voice Quality Index, Dysphonia Severity Index) was used to evaluate the participants' voice. Time points of the assessments were at baseline (twice), after 1 week, 2 weeks, 2 months, 3 months, 4 months, 6 months, and 1 year. Additional assessments were performed after each therapy day in the IVT groups.

Results: Data are currently being analyzed and the results will be available for the conference. A pilot study of Meerschman et al. (2017) performed on healthy subjects showed that intensive short-term voice training may be equally effective as longer-term traditional voice training.

Keywords: Voice disorders, intervention

CO 015

(1352) - THE SELF-ASSESSED EFFECTS OF AN INTERVENTION PROGRAM ON TEACHERS' COMMUNICATION SKILLS AND WELL-BEING

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Houmann, Anna - Malmö Academy of Music, Lund University, Malmö, Sweden

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Objectives: Noise is a challenge for classroom communication. Previous studies also show that noise affects learning in classrooms. Teachers' vocal health is challenged by constant talking in

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noise, causing periods of hoarseness. The effects of noise and a deviant voice quality on children depend on the child's cognitive capacity, language and hearing skills. Teachers are poorly prepared for the increasing demands the environment puts on voice and communication. There is only scarce research on how teachers communicate and interact non-verbally with their students in learning environments. Knowledge is lacking about outcomes of offering teachers practical communication training to cope with different sound environments and providing them with tools to improve language learning environments. The purpose of this study is to explore the effects of an intervention program for primary-school teachers.

Methods: The program has an action-reflection-learning approach and targets training of voice and other aspects of non-verbal communication and strategies for enhanced language learning in the classroom. Teachers (n=25) and students (n=315) from seven schools participated in the program. Tests were performed pre/post intervention and at 5-weeks and 3-months follow-up. The teachers were assessed with voice recordings; voice use measurements with voice dosimetry (VoxLog); questionnaires on vocal health, self-efficacy, stress and burnout. Students answered a questionnaire to blindly feedback on the effects of the program.

Results: The results post- compared to pre-intervention measured by questionnaires showed a significant decrease of voice problems at 3-months follow-up, and of stress and total score for burn-out at the follow-up at 5-weeks. The assessment of burn-out also showed a significant decrease on the student related sub-scale at both the 5-weeks and 3-months follow-up. The assessment of self-efficacy had increased significantly at the 5-week follow-up.

Conclusions: In conclusion, the intervention program helped teachers gain better vocal health, decrease their perception of stress and risk of burn-out whilst increasing their self-efficacy.

Keywords: Professional Speaking voice & Voice disorders

CO 016

(1367) - LONGITUDINAL STUDY ON RECOVERY AND PERSISTENCY OF STUTTERING IN THE ICELANDIC POPULATION

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Objectives: The aim of this longitudinal study is to estimate the recovery rate of stuttering for a group of children who stuttered and to identify factors that support recovery of stuttering in the Icelandic population with a focus on the following: family history, age of onset, duration of the disorder, gender, the severity of stuttering, the reported variability of stuttering and academic achievement.

Methods: The participants were 38 children assessed on two occasions, the first occasion was when the children were between 2-5 years of age and the second occasion was when they were between 9-13 years. The participants were only included in the study if both parents and two speech and language pathologists agreed that the child was stuttering. The SLPs independently observed the video recording of the children and identified stuttering occasions (see Einarsdóttir & Ingham, 2008; 2009).

Results: Classified as fully recovered were 22 out of 38 cases (58%). Fully recovered children showed no sign of stuttering on the video recordings and both the parents and the children did not think they were stuttering. Some of the children did not even remember that they had ever stuttered. Children were classified as persistent if the parents or the children reported some stuttering (even only occasionally) or some sign of stuttering could be identified on the recordings. In addition they did not report any sign of fear of speaking. Persistent cases were 16 (42%), but only 2 children (5%) did stutter more than 2% SS on the second video recording and only 3 children had been stuttering consistently since preschool.

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Conclusions: The concept of recovery of stuttering is complex and needs to be clarified. This is important to consider in relation to therapy methods and therapy effectiveness. Further epidemiological factors are needed on the development of stuttering.

Keywords: Fluency disorders, stuttering

CO 017

(1366) - TREATMENT FOR SCHOOL AGE CHILDREN WHO STUTTER - TOHP (TIME-OUT HOME PROGRAM)

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Objectives: The present study aims to investigate the efficacy of a home-based stuttering treatment program (Time-Out Home Program or TOHP; Seybold & Ingham, 2011), that combines time-out training and a performance-contingent treatment and maintenance schedule (PCMS) for school children who stutter.

Methods: Participants. The participants were referred to the study through a wide network of referral sources across the country Iceland. A total of 43 potential clients were referred for the study, 28 were assessed of whom 11 met inclusion criteria of at least 3% syllables stuttered, whereas 7 participants volunteered to participate; they were all males, aged 10 to 13 years. Measurement. The study was designed to test out the efficacy of the treatment by incorporating a 3-factor stuttering treatment outcome evaluation model (see Costello & Ingham, 1984). The speech performance of each participant was repeatedly video-recorded and measured before, during and after treatment, across different speaking situations over a period of two years (see Ingham, Ingham & Bothe, 2012). Each treatment session was video-recorded and evaluated, both the measurement of speech performance and also the treatment fidelity. The effects of the treatment on the participants' quality of life was evaluated using the Speech Performance Questionnaire (Perkins, 1981; Boberg & Kully, 1994), the OASES scale for children aged 7-12 years (Yaruss & Quesal, 2006).

Results: Detailed data will be presented at the conference, as well as the experience with the program for each participant and the effect of the program on the participants' quality of life. The summarized speech performance data were the following; The %SS during the Baseline phase were 8.03%, but reduced during the follow up phase to 0.42%.

Conclusions: This new treatment approach is effective for a defined client group who could never speak without stuttering. Such comprehensive treatment might not be suitable for all persons who stutter. The effect and the limitations of the program will be discussed.

Keywords: Fluency disorders, stuttering

CO 018

(1310) - EXECUTIVE FUNCTIONS AS PREDICTORS OF THERAPY SUCCESS IN STUTTERING

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Objectives: Individual gains from stuttering therapy varies. In addition to the clinical and methodological issues, various other factors related to stuttering have been reported to influence outcomes of therapy, such as the number of years stuttering, severity of stuttering, history of stuttering in the family, among others (e.g. Howell and Davis, 2011). Personal factors, such as language and motor development and temperament, have lately been studied (Anderson

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and Conture, 2000). More recently, neurocognitive functions have been reported to influence stuttering (e.g. Nejati et al., 2013). This study aimed to investigate the impact of executive functions on the outcome of therapy.

Methods: 3 female and 9 male children who stuttered, between the ages of 7-11 years, were the subjects. Severity Instrument-3 (SSI-3) (Riley, 1994) was administered to the children to obtain severity ratings before therapy began and again after it was concluded. Prior to therapy the children were also administered the Raven Progressive Matrices (Raven, Court and Raven, 1992, 1993) to assess planning and problem solving; the Wisconsin Card Sorting Test (Heaton, 1981; Heaton et al., 1993) to assess inhibition to perseveration and set maintenance; and, the Stroop Test (Stroop, 1935; Spreen and Strauss, 1991) to assess interference control, the executive functions included in this study. Therapy was conducted to all children by the first author based on fluency shaping. All 12 children had 18 sessions of individual therapy for 6 days a week and for 3 weeks. The Structural Equation Model Smart PLS Program was the statistics used to measure the predictive power of the executive functions.

Results: Inhibition to perseveration, interference control and set maintenance were found to significantly predict therapy outcome.

Conclusions: Knowing which executive functions impact therapy outcomes will enable the clinician to include those functions in the therapy plan and improve therapy outcomes.

Keywords: Fluency disorders, stuttering

CO 019

(1255) - BULLYING AND STUTTERING: STUDY OF THE PHENOMENON IN ITALY

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Donatella, Tomaiuoli - CRC Balbuzie, Italy

Roberta, Castiglione - CRC Balbuzie, Italy

Objectives: People who stutter (PWS) report that they have been bullied for their stuttering. In many countries, research has been conducted to analyze this phenomenon and to understand its origins and evolution. The aims of this study were: a) to collect data on the frequency, impact, and nature of bullying on a sample of PWS subjects in Italy; b) to compare data between PWS and PWNS peers; c) to analyze the correlations between bullying and other parameters, such as age, sex, socio-cultural level, the severity of stuttering, etc.

Methods: The study was conducted on 60 subjects divided into 30 PWS and 30 PWNS, aged 9 to 19 years. Descriptive statistics were used to provide summaries of the level of bullying and victimization incidents among PWS subjects.

Results: The results analysis showed that the percentage of bullying in the PWS is 68%, while in the PWNS it is 32%. The correlation analysis shows how bullying is affected by different factors.

Conclusions: Bullying in connection with stuttering is widespread in Italy, most affecting teenagers who have a high severity of the covert aspects of the disorder and a low level of self-esteem.

Keywords: Fluency disorders, stuttering

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CO 020

(1028) - AUDITORY-PERCEPTUAL ASSESSMENT OF FLUENCY IN NEUROLOGICALLY DISORDERED SPEECH

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Korpijaakko-Huuhka, Anna-Maija - University of Tampere, Finland

Kent, Raymond - University of Wisconsin-Madison, USA

Objectives: The aim of this study is to investigate how speech fluency in atypical speech after traumatic brain injury is auditory-perceptually assessed by speech-language pathologists (SLPs). Our research questions were: 1) how do SLPs rate fluency in speakers with neurological communication problems, 2) do they differentiate the speaker groups, and 3) what features do they hear affecting speech fluency?

Methods: Ten SLPs specialized in neurological communication disorders volunteered as expert judges to rate 90 narrative speech samples on a 120mm long Visual Analogue Scale (VAS). Anchors were located on the scale to represent the most severely disordered speech fluency (0mm at the left end), moderately disordered fluency (40mm), average fluency (80mm), and high, if not an exceptional degree of speech fluency (120mm). The samples – randomly mixed – were from 70 neurologically healthy speakers (control group), 10 speakers with various communication disorders after traumatic brain injury (clinical group A) and 10 speakers with neurogenic stuttering after TBI (clinical group B). If the judges rated speech fluency as less than average (under 80mm) they were asked to report if speech rate, pauses, stuttering, language difficulties and/or something else affected their decision.

Results: The mean fluency rate in clinical group B (CGB) was lower than for clinical group A (CGA). These two clinical groups did not differ statistically from each other. Language difficulties were perceived only in participants with aphasia and stuttering only in participants with apraxia of speech in CGA. Still, no statistically significant correlations were found between those features and fluency values. For the CGB, a significant correlation between pauses and fluency, and with stuttering and fluency, was found.

Conclusions: The results of this study indicate the need for further studies concerning the nature of neurogenic stuttering and different dysfluencies, with a continuing discussion of the relation of perceived fluency and traditional quantitative measures.

Keywords: Fluency disorders, stuttering, traumatic head injury

CO 021

(1097) - IMPAIRED EXECUTIVE FUNCTIONS IN APHASIA: EVALUATION OF A NOVEL THERAPY TO IMPROVE COGNITIVE FLEXIBILITY IN APHASIA

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Objectives: Besides language deficits, persons with aphasia (PWA) can present with impairments in executive functions, including deficits in inhibition, working memory or cognitive flexibility. Cognitive flexibility constitutes the ability to update behaviour quickly and flexibly in a changing environment. Its deficits can restrict communicative ability, e. g. the ability to change a topic or to respond to misunderstandings in everyday conversation. To date, these deficits have been neglected in aphasia therapy, even though their consideration and integration into language treatment may be beneficial for PWA. The aim of the present study was to evaluate whether aphasia therapy including cognitive flexibility leads to larger improvement regarding language skills and communicative abilities than conventional therapy.

Methods: A series of 10 single case studies was conducted. The PWA received – in varying order (cross-over design) – both a novel therapy, the Cognitive Flexibility in Aphasia Therapy (CFAT), and conventional therapy. Each therapy method was delivered in 20 sessions over a period of two weeks. To evaluate therapy effects, an assessment battery was applied at five test times, including language skills, communicative ability and cognitive flexibility.

Results: On the group level, PWA profited from CFAT regarding language skills (German screening of word finding abilities, Benassi et al., 2012: pre vs. post CFAT, exact version Wilcoxon signed ranks test, one-tailed, $p < .001$), communicative ability (Szenario-Test, Nobis-Bosch et al., in press: pre vs. post CFAT, exact version Wilcoxon signed ranks test, one-tailed $p < .001$) and verbal cognitive flexibility (German word fluency test, Aschenbrenner et al., 2000: pre vs. post CFAT, exact version McNemar test, one-tailed, $p < .001$). Furthermore, compared to conventional therapy, the CFAT was more effective concerning communicative ability and verbal cognitive flexibility.

Conclusions: The Cognitive Flexibility in Aphasia Therapy (CFAT) offers the novel opportunity to directly train cognitive flexibility in communicative settings and to complement conventional therapy for optimal patient outcome.

Keywords: Aphasia, cognitive impairment, intervention

CO 022

(1271) - STRATEGIES OF THE COMMUNICATION PARTNER BEFORE INTERVENTION

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Objectives: Communication partner training has shown positive effects in enabling participation of people with aphasia (PwA) in conversation. Supported Conversation for Adults with Aphasia™ (SCA) is a program, where the communication partner is introduced to support the comprehension (“getting in”) and expression (“getting out”) of the PwA, as well as to verify that both have understood each other properly. Some communication partners spontaneously find strategies to help their interaction with PwA. The aim of the present study was to explore what kind of strategies communication partners use before getting information on communication support and different communication methods.

Methods: Communication partners of 54 PwA were asked to write down their answers to the questions “How do you discuss with the person with aphasia? What helps him/her to understand you better or to express him/herself better?”. 43 communication partners gave their answers, which were analyzed with content analysis using the three principles of SCA as categories.

Results: Most of the answers could be categorized into the three principles of SCA. Most reported strategies were used for “getting in”, altogether 61 comments. 47 of them described how the communication partner changes his or her own speech to be easier to understand and 14 described how they use other communication methods. “Getting out” comments were altogether 27, of which 21 concerned how to help PwA to speak or say the words, and 6 concerned requests

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to use alternate communication methods. Verifying was used for ensuring “getting in”, not in verifying if the communication partner has understood the PwA properly.

Conclusions: Communication partners without training seem to concentrate more on “getting in” than “getting out” and the communication is based more on using speech than other communication methods. Communication partners need guidance in supporting the expression of PwA and in verifying mutual comprehension to enable better participation for PwA.

Keywords: Intervention

CO 023

(1033) - APHASIA THROUGH A SOCIAL AND COMMUNITY THEATRE PROJECT: RESEARCH ON THE IMPACT ON THE AUDIENCE

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Monte, Stefano - Centro Afasia CIRP, Carlo Molo Onlus Foundation, Turin, Italy

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Steni, Patrizia - ASL Città di Torino, University of Turin, Turin, Italy

Muò, Rossella - ASL Città di Torino, University of Turin, Turin, Italy

Objectives: The Life Participation Approach to Aphasia (LPAA) is a philosophy of service delivery which aims to achieve the best social inclusion for the person with aphasia (PwA). The Centro Afasia CIRP - Carlo Molo Onlus Foundation in Turin follows the LPAA model of intervention. The Social and Community Theatre™ is one of the activities proposed to succeed in regaining the PwA's identity. “Teatro Babel” is a theatre group where PwAs, young students and professionals perform shows to promote both social inclusion and information among the community. Aim of the project was to analyse the impact of “Teatro Babel”'s last drama “Parole Dentro” on the audience, in order to verify whether theatre performance can be a useful means of information, sensitization and education about the consequences of aphasia.

Methods: Three different questionnaires were created and given to the audience at three different time points: before watching the drama (T0, n=216), immediately after the end of the performance (T1, n=213) and one month after the performance (T2, n=96). Spectators' knowledge, impressions and considerations about aphasia and the PwA were investigated. Descriptive statistics were used to present the quali-quantitative data at each time point of the study and to compare them.

Results: Our results showed 1) a strong emotional and positive impact of the drama on the audience, 2) a significant increase in the information level about aphasia, 3) higher awareness of the real characteristics of PwAs and 4) underlined PwA's resources and identity. The majority of participants considered the drama useful and would suggest/recommend other people, even professionals, to take part in it as spectators.

Conclusions: Our results suggested that “Teatro Babel”'s drama “Parole Dentro” can be considered a good tool to inform, sensitize and educate the community about aphasia.

Keywords: Aphasia, Social and Community Theatre™, social approach, information

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CO 024

(1172) - EXPRESSING RESULTATIVITY OF ACTIONS IN HUNGARIAN INDIVIDUALS WITH AGRAMMATIC APHASIA

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Objectives: Many crosslinguistic studies show that individuals with agrammatic aphasia have difficulties producing aspect of sentences. These difficulties do not affect all aspectual forms equally. Expressing perfect tense which refers to the past is more vulnerable (or selectively impaired) than other tenses. In Hungarian, perfectivity and resultativity are indicated by morphology (verbal affixes) on the verbs. In this talk we present how agrammatic aphasics express perfectivity/resultativity of an action in case of selective impairment of past perfect usage.

Methods: 27 pairs of coloured photos were collected. One in each pair showed an ongoing action, and the other represented the same action already completed (the results of action could be seen). With each photo we presented an incomplete sentence containing a subject, an object and a temporal adverb to elicit present imperfect or past perfect verb forms. Pairs of photos were presented on a PC screen and the participants (ten individuals with post-stroke aphasia and ten healthy persons) were asked to complete sentences with the verb forms that best matched the temporal adverb in the sentence and the action represented in the photo.

Results: The results indicate that individuals with agrammatism performed relatively well in the production of present imperfect verb forms to express an ongoing action (without result). However, they were impaired in producing past perfect verb forms expressing not only perfectivity but the result of an action. Mostly paraphasias were produced.

Conclusions: Our findings suggest that Hungarian agrammatic aphasics have difficulties expressing past perfect tense through morphologically complex verbs. However, they are sensitive to the resultativity of an action, and they can express it by paraphasias using morphologically simpler verb forms. These findings may have implications for the treatment of different tenses, sentence aspect and time adverbs in the course of therapy.

Keywords: Aphasia, acquired language disorders

CO 025

(1243) - VALIDATION AND ADAPTATION INTO ITALIAN OF THE "QUALITY OF COMMUNICATION LIFE SCALE" FOR PEOPLE WITH APHASIA

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Raimondo, Simona - *Università degli Studi di Torino, Italy; - ORL Presidio Molinette, AOU Città della Salute e della Scienza di Torino, Italy;*

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Objectives: The main purposes of this study are 1) to translate and adapt into Italian the "Quality of Communication Life Scale" (QCL) and 2) to provide internal consistency, reliability, construct

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validity and normative data of the new I-QCL (Paul et al., 2005). The secondary aim of the work is to investigate relations between quality of life, communicative-language skills and mood in people with aphasia (PwA).

Methods: Thirty PwA and 100 control participants will be enrolled, according to specific inclusion and exclusion criteria. The PwA's assessment include language skills (AAT), functional communication skills (I-ASHA-FACS), quality of life aspects (I-QCL and SAQOL-39) and mood aspects (VAMS and SADQ- 10). The assessment for the control group include: cognitive abilities screening (MOCA), quality of life aspects (QCL, SAQOL-39) and mood aspects (BDI). Appropriate statistical tests will be used to calculate the internal consistency (Cronbach's alpha), test-retest reliability (ICC), and construct validity (Pearson's correlation).

Results: In November 2017 assessment will be conducted and collected data will be analyzed. The QCL scale is specifically designed for PwA to provide information on the effects of communication disorders on adult relationships, communicative interactions, participation in social life, leisure, work and educational activities. As it is mainly a low verbal complexity measure, the authors hypothesize that it will replicate the original QCL's internal consistency, reliability and validity data. In addition, the authors expect moderate correlations between QCL results and AAT results; the correlation between the QCL Scale and I-ASHA-FACS is expected to be stronger.

Conclusions: Data on QoL can be really useful to define priority treatment goals, counselling strategies and outcome.

Keywords: Aphasia, acquired language disorders

CO 026

(1233) - RHYTHM OF CARRIER PHRASE AFFECTS SPEED AND ACCURACY OF JUDGEMENTS OF LEXICAL STRESS

Richards, Susan - University of Cambridge, UK

Goswami, Usha - University of Cambridge, UK

Objectives: Children with Developmental Language Disorder (DLD) have difficulty making accurate judgements of lexical stress (an integral part of the prosodic structure of words in English). We investigated whether presenting the target word following a rhythmically congruent or incongruent carrier phrase affected the speed and accuracy of lexical stress judgements.

Methods: 14 children with DLD, 22 age-matched typically-developing children (AMC) and 20 younger, language-matched typically-developing children (YLC) listened to 20 sentences in four conditions: i) correctly stressed target following a rhythmically congruent carrier; ii) correctly stressed target – rhythmically incongruent carrier; iii) incorrectly stressed target – rhythmically congruent carrier; iv) incorrectly stressed target – rhythmically incongruent carrier. Children indicated whether the target word was correctly or incorrectly stressed. Reaction Times were also recorded.

Results: Children with DLD tended to perform less accurately on this task than the AMC group, but not significantly so. The YLC group were significantly less accurate than the AMC group indicating a developmental trend in accuracy of lexical stress judgments. Sentences in which the Target was rhythmically congruent with (i.e. continued) the rhythm of the Carrier Phrase led to more accurate judgements of whether the target word was correctly stressed. This was found to be the case for both AMC and DLD groups. Congruence of carrier phrase rhythm did not lead to differences in reaction times, however responses for carrier phrases following an alternating Strong-weak rhythm were found to be faster than those using a weak-Strong rhythm for the AMC and YLC groups. Carrier phrase rhythm did not influence reaction times for the DLD group.

Conclusions: The rhythm of the preceding carrier phrase affects accuracy of judgements of lexical stress. Targets which continue the rhythm of the carrier phrase are judged more accurately.

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Typically-developing children are faster to judge lexical stress when carrier phrases have an alternating Strong-weak rhythm.

Keywords: Developmental Language Disorder, Specific Language Impairment.

CO 027

(1057) - PHONOLOGICAL AWARENESS PROGRAM IN KINDERGARTEN

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Lousada, Marisa - School of Health Sciences, University of Aveiro and Center for Health Technology and Services Research (CINTESIS.UA; UID/IC/04255/2013), Portugal

Hall, Andreia - University of Aveiro, Portugal

Objectives: One widely recognized predictor and prognostic marker for early reading success is phonological awareness (Carroll & Snowling, 2004; Catts, Fey, Zhang, & Tomblin, 2001). This study analyzed the effects of a phonological awareness program for preschool children with typical language development.

Methods: Seventy-four Portuguese children, aged 4.0-6.4 years participated in this study: 63 children that received 12 sessions of phonological awareness (experimental group), were compared with a group of 14 children that continued with their usual literacy curriculum. The experimental group received 12 group sessions (6-8 children in each group) focused on phonological awareness skills (blending, segmentation and manipulation of syllables and phonemes). The Phonological Awareness Instrument CONFIRA (that includes 4 subtests) was used to assess children before and after the program. Follow-up assessment was analyzed in both groups with ALEPE instrument, 11 months post program.

Results: Results showed that children in the experimental group improved significantly after the program in all phonological awareness subtests ($p=0.000$). There were no significant differences in the control group, in all phonological awareness subtests ($p>0.05$) except in the syllabic one, where both groups improved. One possible explanation for these results is that syllables skills require less direct instruction than phoneme skills and may develop with the general kindergarten curriculum (Gillon, 2004). Follow-up assessment 11 months post program revealed that the experimental group continue to present significantly higher scores ($p=0.031$) than the control group in phonological awareness subtests.

Conclusions: The phonological awareness program was effective. The results highlight the important role speech-language therapists can play in enhancing phonemic awareness of typically developing children, considering that the awareness of this small unit requires more explicit instruction.

Keywords: Dyslexia and Prevention

CO 028

(1353) - THE IMPACT OF SCREEN MEDIA EXPOSURE ON THE LANGUAGE DEVELOPMENT OF YOUNG CHILDREN

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Serratrice, Ludovica2 - School of Psychology and Clinical Language Sciences, University of Reading, UK

Objectives: To investigate the impact of the quantity, quality, and social context of screen media exposure (both TV and mobile media) on the language development of 1-3-year-old Saudi children.

Methods: We employed weekly time-use diaries and questionnaires to track children's screen media use patterns and the social contexts of screen media use. Children's language development

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was assessed using JISH Arabic Communicative Development Inventory (JACDI) (Dashash & Safi, 2014), the official Arabic adaptation of the MacArthur-Bates Communicative Development Inventories (CDI) (Fenson et al., 1993).

Results: Our findings indicate that out of the three screen media viewing parameters (quantity, quality, and context), the most significant predictor of language development in 12-16-month-olds was media context as measured by the frequency of interactive joint media engagements with the child. The more caregivers co-viewed screens with their young children and the more they interacted with them while co-viewing, the higher expressive and receptive vocabulary scores their children had. In older children (17-36-month-olds), media quantity, as measured by the amount of time spent in viewing screens, the prevalence of background TV, and the onset age of media viewing, had the highest negative impact on children's expressive vocabulary scores and the mean length of the three longest utterances they produced (M3L).

Conclusions: For children aged 16 months and below, screen media can be beneficial for language development, but only when parents co-engage with their children in viewing screens and verbally interact with them while co-viewing. Despite the trend in screen media discourse that calls for parents not to be obsessed with the amount of time children spend with screen media and that calls for more focus on the quality of screen media contents rather than the quantity of exposure, the current study confirms previous research indicating a negative association between the quantity of screen time and language outcomes in children 17-36 months.

Keywords: Developmental language disorders

CO 029

(1084) - CLARIFICATION REQUESTS BY YOUNG CHILDREN WITH/WITHOUT DEVELOPMENTAL LANGUAGE DISORDER - A CONVERSATION ANALYTIC STUDY

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Muskett, Tom - Leeds Beckett University, UK

Golonka, Sabrina - Leeds Beckett University, UK

Objectives: Children with receptive language difficulties are at particular risk of persistent impairments and poor outcomes. One component of receptive language is the ability to monitor one's own comprehension and to request clarification if necessary. This skill emerges in the pre-school period in typically developing children, but can be problematic for children with receptive language difficulties. The study described below is the first of three studies which constitute the first author's doctoral studies in this area. The study aims to investigate when and how young children make clarification requests, and how these behaviours influence the ongoing conversation.

Methods: Following ethical approval, eight child participants are recruited from local schools and nurseries to span the age range 2;6-5;6 years. Four children have a research diagnosis of Developmental Language Disorder (DLD) with receptive language impairment, four are typically developing. Approximately 40 minutes of video data are collected in each of two naturalistic play conditions: with a parent and with an unfamiliar adult.

Results: Preliminary results are presented from conversation analysis of the video data. This focuses on instances where adults repair their previous turn and identifies the antecedents of this in child verbal and non-verbal behaviours. The strategies used by children at different ages, in the different conditions (familiar or unfamiliar adult) and by participant (with or without DLD) are compared for qualitative differences. Adult language in utterances before and after clarification requests is compared.

Conclusions: Clinicians can benefit from conceptualising comprehension as a shared entity which is jointly negotiated by the participants in a conversation. Consideration of the emergent ways in which children with and without DLD signal breakdowns in comprehension, and the ways

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in which adults respond, can add to our understanding of functional communication deficits. Suggestions for how clinicians can incorporate this into assessment practices are considered.

Keywords: Developmental language disorders, pragmatics, functional diagnosis

CO 030

(1222) - LANGUAGE SKILLS AND LANGUAGE DISORDER IN CHILDREN WITH MILD AND CHILDREN WITH MODERATE HEARING LOSS

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Asker-Årnason, Lena - *Lund University, Sweden*

Ibertsson, Tina - *Lund University, Sweden*

Hansson, Kristina - *Lund University, Sweden*

Objectives: The risk for difficulties in language development is higher in children with hearing loss (HL) than in hearing peers. A large proportion meets criteria for language disorder (LD), although within-group variation is very high. Much of current research on language development in children with HL focuses on children with severe/profound hearing loss and cochlear implants. Here we focus on children with mild and children with moderate HL. They are often treated as one group and it is not clear to what extent they differ in language skills. We compare the two groups to see if either group is more likely to have LD as indicated by measures considered clinical markers or prognostic of LD. We also explore whether there are any differences in age at diagnosis or time at fitting with hearing aids (HA).

Methods: Participants were 41 children with bilateral sensori-neural HL aged 4;11-15;10 years, 19 with mild (BEHL 23-39 dB) and 22 with moderate (BEHL 40-70 dB) HL. The assessment included age at diagnosis, age at HA, nonword repetition skills and sentence comprehension.

Results: The children with mild HL tended to be diagnosed somewhat later and were fitted with HAs significantly later than the children with moderate HL. There were no significant differences between the groups on nonword repetition or sentence comprehension. Around 20% of the children in both groups performed 2 SD or more below controls on both language measures.

Conclusions: In line with other recent research the results indicate that children with minimal and mild HL are equally at risk for language learning difficulties as children with moderate HL, but tend to be fitted with hearing aids later. Early identification is not sufficient, increased clarity and determination when giving patients advice about the necessity of amplification is important, even in minimal and mild HL.

Keywords: Hearing impairment

CO 031

(1080) - BUILDING RESEARCH CAPABILITY IN SPEECH AND LANGUAGE THERAPY – AN UNDERGRADUATE STUDENT PERSPECTIVE

Osen, Christina - *Medical Faculty Heidelberg, Germany*

Wensing, Prof. Dr. Michel - *Medical Faculty Heidelberg, Germany*

Berger, Sarah - *Medical Faculty Heidelberg, Germany*

Objectives: In order to provide best practice patient care, not only do Speech and Language Therapists need access to up-to-date evidence, but increasingly they need to generate evidence by undertaking research in their clinical settings. Raising research engagement in the workforce may be contingent upon exposing undergraduate students to research opportunities with

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appropriate mentorship to encourage, support and facilitate their own early research endeavours. This case report describes one student's experience undertaking a bachelor research project that examined factors influencing entry-to-practice for new graduate Speech and Language Therapists in Germany.

Methods: Under supervision, a bachelor student planned and conducted a small qualitative study based on expert interviews with two experienced German Speech and Language Therapists. A semi-structured interview guideline contained questions drawing upon current evidence related to 'entry-to-practice' and 'intent-to-stay' in the profession. The interviews were digitally recorded and transcribed verbatim. An inductive-deductive approach to data analysis informed by Emerson was supported with the qualitative research software Atlas.ti.

Results: Content analysis of transcribed responses resulted in the identification of four key themes (each with associated sub-themes) related to the study's aim: a) entry-to-practice inhibiting factors, b) entry-to-practice enabling factors, c) intent-to-stay demotivating factors and d) intent-to-stay motivating factors.

Conclusions: Findings from this bachelor research project indicated the need for further professionalization in Speech and Language Therapy in Germany to increase job satisfaction and prevent early exit from the workforce. In addition, this case report demonstrates that supporting undergraduate students to apply research methodologies and conduct research with appropriate mentorship is one important step towards building research capability in the workforce. This has the potential over time to steadily increase effectiveness of Speech and Language Therapy in science and practice.

Keywords: Research methodologies, evidence-based practice

CO 032

(1106) - ORTHOCORPUS: A TERMINOLOGICAL PROJECT FOR EUROPEAN SPEECH AND LANGUAGE THERAPY

Brin-Henry, Frédérique - ATILF- CNRS Université de Lorraine Centre Hospitalier de Bar le Duc, France

Objectives: Since having written the Dictionnaire d'Orthophonie (Ortho-Edition 1997, 2004, 2011), we have been involved in the clarification of SLT terminology (i.e. concepts and terms for Language Pathology) based on semantic and syntactic analyses of large specialised corpora. We explore the relationship between specific linguistic units and the representation of language pathology, and the ordinary vs pathological border. The OrthoCorpus Project (2015-2017), co-funded by CNRS, the Lorraine Region and FNO, aims at exploring the diversity of SLT terminology, using thorough semi-automatic text-mining of a purpose-made specialised corpus.

Methods: OrthoCorpus built a 3 million-word corpus collecting 850 articles published between 1997 and 2014 in Rééducation Orthophonique. Along with the valuable creation of metadata (areas, authors, key words, etc.), we extracted most frequent terms ("difficultés") and strategic terms ("évaluation") and performed linguistic analyses (concordances, specificities). We also examined key words and various linguistic phenomena, such as human nominal reference and light verbs' distribution, and found conceptual properties. With the help of its expert consortium, our ambition is to implement bigger-scale projects including the creation of a European multilingual open platform.

Results: Preliminary results show interesting aspects, such as dynamics and evolution of the pathology (e.g. developmental vs acquired). Impact is sought on initial and continuous training through indexing, an original non-biomedical classification and linguistic descriptions. Expert participation will help us to finalise some guidelines and a valid conceptual model for language pathology based on linguistic analyses on SLT professional and scientific written material (e.g. anonymous reports, articles).

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Conclusions: This presentation will show how analysing SLT discourse contributes to comprehending how concepts of language pathology may be related to specialised terminology in Europe. We will show how SLTs can contribute to, and benefit from the construction of dedicated multilingual corpora, made available to both researchers and practitioners.

Keywords: Research methodologies, terminology

CO 033

(1125) - CONFIDENTIALITY: CHALLENGES AND SOLUTIONS

Balandin, Susan - Deakin University, Australia

Objectives: Qualitative researchers working in small fields such as augmentative and alternative communication (AAC) may be challenged by the balance between adequately reporting the outcomes of research and maintaining the confidentiality of the participants. The increased emphasis on involving advisory boards or consumer panels in the research process increases the difficulty of ensuring complete confidentiality. This presentation will focus on current views of ethical qualitative research, including autoethnography, and will question whether it is reasonable for researchers to promise participants that their confidentiality will be maintained.

Methods: Qualitative research literature and a range of ethical guidelines from national research organizations, such as the National Health and Medical Research Council, were searched for guidelines on confidentiality. Examples of cases where confidentiality was questionable were drawn from research articles and case reports.

Results: Overall, confidentiality is dealt with somewhat superficially and makes little allowance for problems that can arise in small fields where a little information can identify a person. Despite an increased interest in the use of autoethnography, particularly from people who wish to 'tell their own story', this method rarely features in discussion on confidentiality and is not dealt with in the research guidelines explored.

Conclusions: Researchers understand the importance of confidentiality and are quick to promise research participants that their confidentiality is secure. Participants are assured that their data will be de-identified and no names or other identifying information will be reported. Nevertheless, this may not be enough to ensure confidentiality and does not solve the problem of the person who wishes to be identified to advocate for or give credence to a particular topic. More attention needs to be paid to confidentiality issues. Human research ethics boards and participants may need to understand that every attempt will be made to protect confidentiality, but complete protection cannot be guaranteed.

Keywords: Research methodologies

CO 034

(1019) - CLINICAL EDUCATION IN SPEECH-LANGUAGE PATHOLOGY: ETHICAL CONTRIBUTION

Kerlan, Mireille - FNO, France

Objectives: The aim is to show why teaching ethics is necessary for training in speech-language pathology the reason that all clinical characteristics are considered.

Methods: This presentation will develop its argument at several levels:

- It will analyse the speech-language clinical practice, a practice in caring, the aim of which is language and communication, inherent to mankind.

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- It will illustrate this by way of a number of clinical examples arising from practice.
- It will provide information resulting from an experience in initial training and continuous training based on ethical considerations. (In France, ethics is a part of the university curriculum of students in speech-language therapy and is the object of specific speech-language training for professionals)

Results: Ethical questioning, anchored on principled values and accompanies speech-language clinical practice in all fields and at different moments of care. It works like a real-life case method vis-à-vis the issues found in speech language clinical practice. The teaching of ethics helps the speech-language pathologists take notes or make a cross-reference of convincing evidence, the knowledge resulting from the pathologist's and the respect of the patient's wishes, according to the reference model of Evidence Based Practice. This allows for an assessment of professional practices including therapeutic relationships

Conclusions: It has been known for a long time in medicine that scientific knowledge is not enough to answer the questions asked by pathologists as the pathology is included in a problem specific to each situation, to each patient. The question of the subject is often neglected in favour of a description of symptoms and treatments that can be delivered, sometimes leaving the health professional and the patient dissatisfied. Therapeutic relationships must consider the patient as a person, suffering from their pathology, trouble or disability, as a knowing subject with knowledge resulting from their experience.

Keywords: Specific field–Clinical education

CO 035

(1111) - GIVING VOICE THROUGH ORAL HISTORIES. SPEECH THERAPISTS' STORIES.

Stansfield, Jois - Manchester Metropolitan University, UK

Objectives: In the UK, the Royal College of Speech and Language Therapists has recognised a need to talk to older members of the profession to enrich the written history of SLT in the UK with oral histories.

The objectives of this paper are:

- To outline methodological issues in collecting oral histories, including participant identification and recruitment, logistics, recording, transcription, analysis and editing.
- To present results from the UK SLTs interviewed for the RCSLT oral history archive.

Methods: SLTs who had qualified before 1970 were invited to contribute. They were recruited from across the UK via the RCSLT retirement network, Scottish retired managers' network and snowballing, using the first participants as gatekeepers. Participants were sent a topic guide and interviewed in their own homes, or a venue of their choosing. Conversations were audio recorded and transcribed. Thematic analysis identified global themes, illustrated by individual quotations.

Results: The earliest qualified participant graduated in 1943 and the most recent in 1969. The oral histories demonstrated common themes of: the impact of charismatic individuals during initial training; intensity of practical 'training'; lifetime challenges; flexibility and adaptation to changes in professional practice; professional recognition and salaries. Participants were proud of their contribution to the well-being of clients and also to the profession and a commitment to its future progress.

Conclusions: Senior SLTs have made great contributions to the profession of today and to the way in which practice has developed. Listening to their stories gives a powerful picture of the distance travelled since RCSLT was founded in 1945. It also gives confidence that there will be continued development of the profession through its current and future members.

Keywords: Competency-based learning

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CO 036

(1394) - "MUJERES QUE DAN PALABRA": REDRAFTING SLT WOMEN'S ORAL HISTORY IN SPAIN

Rodriguez, Lidia - *University of Castilla-La Mancha & AELFA-IF, Spain*

Velasco, Carmela - *University P. of Salamanca, Spain*

Nieva, Silvia - *University Complutense of Madrid, Spain*

Objectives: There is still a lack of research about women made by women from a biographical-narrative perspective. "Mujeres que dan palabra" is a project based on recovering the pioneers in SLT in Spain through women's first person narratives, inspired by the one developed in the UK (Stansfield 2017). Our objectives are: 1. To create a historical archive of professional and personal stories linked to the first SLT women in Spain; 2. To redraft the recent Spanish SLT history through a feminist lens with an all-female research team working on a documentary. In this presentation, we will share the first breath, background of the project, methodological design and preliminary results of the project.

Methods: Participants are senior SLT women who have contributed with their professional practice to the development of the discipline throughout Spain. The methodology followed is based on biographical-narrative research: Histories of Life. Participants were interviewed for a self-produced documentary film. Data collected have been treated through thematic network analysis. Besides, the professional links among participants have been represented by a sociogram to evidence the social dynamics.

Results: Recovering oral history from narratives has revealed the underlying network among women, who recognise one another as mutual referents. Crossed biographies have been identified relating to their difficulties and challenges, as participants seem to agree that their personal, social and emotional networking has been crucial in strengthening the professional development of the discipline.

Conclusions: Understanding all these biographies will redraft a global framework of the historical achievements of our discipline. Looking back to the past from a gender perspective (in a discipline predominantly made by women) could be a way to consolidate the scientific identity of future SLTs. SLT History/Herstory is not complete without all these women. Attendants to CPLOL congress are welcome to participate, join our project, and develop it in different European countries.

Keywords: Research methodologies, interprofessional learning

CO 037

(1354) - A SYSTEMATIC REVIEW OF THE RAPID PROMPTING METHOD (RPM): FINDINGS AND IMPLICATIONS FOR SPEECH AND LANGUAGE THERAPISTS WORLDWIDE.

Hemsley, Bronwyn - *The University of Newcastle NSW Australia*

Schlosser, Ralf - *Northeastern University, USA*

Shane, Howard - *Children's Hospital, Boston, Harvard University, USA*

Mostert, Mark - *Regent University, USA*

Lilienfeld, Scott - *Emory College of Arts and Sciences, USA*

Odom, Samuel - *The University of North Carolina, Chapel Hill, USA*

Todd, James - *Eastern Michigan University, USA*

Trembath, David - *Griffith University, Australia*

Lang, Russell - *Texas State University, USA*

Fong, Seraphina - *Northeastern University, USA*

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Objectives: Families of people with autism are often confronted with new treatment approaches that claim unprecedented gains. One of these approaches making these extraordinary claims in relation to people with autism is the Rapid Prompting Method (RPM) (Mukhopadhyay, 2008). RPM is a technique that involves a facilitator holding and moving a letter board while the individual with autism moves his or her own hand to communicate. RPM is described as being another form of facilitated communication (FC).

Methods: A systematic review was undertaken to determine the effectiveness of RPM in terms of body motor skills, speech skills, communication skills, communication-related cognitive skills, and/or challenging behaviors. The protocol for this review has been registered with PROSPERO, an international prospective registry of systematic reviews.

(see Schlosser et al., 2016;

http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016047871).

We searched the Cochrane Library, ComDisDome (ProQuest), Cumulative Index of Nursing and Allied Health Literatures (EBSCOhost), Education Journals (ProQuest), Education Research Complete (EBSCO Host) Education Resources Information Clearinghouse (ProQuest), Google Scholar, Linguistics and Language Behavior Abstracts (ProQuest), Medline (via Pubmed), ProQuest Dissertations and Theses Global, PsycINFO (ProQuest), Psychology and Behavioral Science Collection (ProQuest), Web of Science. Also, these publisher-specific databases were searched: Sage Journals Premier, ScienceDirect (Elsevier), SpringerLink Journals, and Taylor & Francis Online.

Results: Despite an extensive search, we found no research evidence that supports any of the claims made by the developers and other supporters of RPM. In this paper we will review the studies on RPM and reasons for their exclusion from the review.

Conclusions: There is no evidence supporting the use of RPM. Its use is not recommended, and it places clinicians at risk of breaching ethical standards. We will discuss how clinicians can respond to false claims about RPM, by drawing upon evidence in the field of AAC which provides a counter-argument and information on effective communication interventions for children with autism.

Keywords: Developmental language disorders

CO 038

(1392) - INTERESTS IN PRESCHOOL CHILDREN AS DIAGNOSTIC INDICATORS

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Šimleša, Sanja - University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia

Antončić, Zvezdana - University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia

Vukelić, Nika - University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia

Kamber, Petra - University of Zagreb, Faculty of Education and Rehabilitation Sciences, Croatia

Utović, Vlatka - SUVAG Polyclinic Zagreb, Croatia

Objectives: Interests reflect the specific cognitive infrastructure of each child and are key factors in active learning. Diagnostic criteria highlight the importance of assessment of the child`s interests to differentiate between autism spectrum disorder (ASD) and intellectual disability, as well as ASD and social (pragmatics) communication disorder. Although the diagnostic criteria for ASD require that a clinician should identify whether the child`s interests are “highly restricted, fixated or abnormal in intensity or focus”, there is a great lack of objective measures for the assessment of all clinical aspects of interests – intensity, span and content. The aim of this study was to examine the interests of typically developing preschool children and compare various aspects of their interests with interests in children with ASD, intellectual disability, language disorder and hearing impairment.

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Methods: Parents filled the Interests questionnaire for preschool children which was designed for this study. The study included 260 children aged 3-6 years: typically developing children, children with ASD, children with intellectual disability/global developmental delay, children with language disorder and children with hearing impairment. Questionnaires were analyzed both qualitatively and quantitatively.

Results: Results indicate that these groups of children show differences in various aspects of interest. All children show interests in similar toys/subjects, but their span of interests varies greatly. Children with ASD generally show the greatest aberration in interests – their interests tend to be very narrow and largely non-socially oriented. Quantitative results differentiate children with ASD and typically developing children with 90% accuracy. Children with intellectual disabilities also show narrower interests, but do not show the lack of social interests. Children with language disorders and hearing impairment generally display the same content and span of interests as typically developing children, with some specific minor characteristics.

Conclusions: Child`s interests can be and should be assessed objectively in the process of differential diagnostics, especially if ASD is a candidate diagnosis.

Keywords: **Autistic spectrum disorders, cognitive impairment, functional diagnosis**

CO 039

(1092) - THE WEAK COHERENCE ACCOUNT IN AUTISM SPECTRUM DISORDER: EVIDENCE FROM COMPOUND DEFINITIONS

Grohmann, Kleanthes K. - *University of Cyprus, Cyprus*

Kambanaros, Maria - *Cyprus University of Technology, Cyprus*

Objectives: The language abilities of children with autism spectrum disorder (ASD) are highly variable. More insight is needed into the mechanisms that underlie co-morbid language impairments in children with ASD across complex lexical and/or grammatical phenomena, particularly for languages beyond English. The present study tested the comprehension and production of two-constituent compound words at the single-word level for Greek (e.g., pondikopayitha ‘mouse trap’).

Methods: The Compound Word Test (Kambanaros, 2014), measured on a range of psycholinguistic variables, was used to assess the comprehension, definition, and production of compositional noun–noun compounds in four school-aged children diagnosed with ASD. Comprehension was probed in relation to the word’s constituents, for which semantic interpretation involved explaining the meaning of the compound. Production of compound words was tested using a picture confrontation naming task.

Results: The results revealed that the children with ASD had less difficulty parsing the compound constituents but showed a significant deficit in deriving the compound meaning compared to age-matched peers with typical language development (TLD). Naming compounds was exceptionally difficult for the ASD group as compared to the TLD group despite generally intact comprehension of the object pictures.

Conclusions: The findings suggest a dissociation between linguistic and conceptual knowledge about the constituents and the compound word. Moreover, the children with ASD produced semantically infelicitous responses (e.g. ‘the raisin that has a bread’ for ‘raisin bread’) when explaining the meaning of compounds, an error not evident in TLD peers. That is, they appear to convey a reversed connection to the wider world denoted by the compound. This finding may lend support to the Weak Central Coherence Hypothesis (Happé & Frith, 2006), capturing what appears to be an inferior ability to integrate pieces of information to a coherent whole.

Keywords: **Autistic spectrum disorders**

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CO 040

(1078) - AN EXPLORATION OF THE AAC ASSESSMENT PROCEDURES FOLLOWED BY SPEECH AND LANGUAGE THERAPISTS IN CYPRUS

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Pampoulou, Eliada - *Cyprus University of Technology, Cyprus*
Sampson, Nikoleta- *SLT, Practitioner, Cyprus*

Objectives:Augmentative and Alternative Communication (AAC) is a part of speech and language therapists' clinical practice and is used by individuals whose speech cannot serve their daily communication needs. Its positive benefits have been documented extensively for those with complex communication difficulties, both of developmental and acquired forms, for people of all ages. To ensure successful intervention outcomes and a high quality of service provision, for such people, a comprehensive assessment is of paramount importance. AAC assessment is neither straightforward nor simple. However, the literature surrounding AAC assessment does not yet provide a comprehensive account covering all different elements of the assessment for different disorders and age groups. Given the fact that AAC is a new field in Cyprus, understanding of current practice is lacking and hence, it is vital that this is investigated.

Methods:Accordingly, for this research project, the AAC assessment process followed by Cypriot Greek speech and language therapists was investigated.To this end, questionnaires containing 31 open-ended and multiple-choice questions were developed based on the Human Activity Assistive Technology (Cook and Hussey, 2002) and the Participation Models (Baukelman and Mirenda, 2005).

Results: One hundred eighty SLTs working at the Ministry of Education and Culture of Cyprus were approached and the response rate was 60%. The findings show that speech and language therapists base their AAC assessment on clinical decisions, taking into consideration a number of elements, such as language, communication and social skills. However, the process uncovered through this research cannot be characterised as either comprehensive or systematic. Regarding the more specific assistive technology assessment, this is mostly conducted by colleagues who specialize in the relevant field.

Conclusions:The findings indicate that further training on AAC assessment is warranted, thus ensuring a high quality of services for people with complex communication needs.

Keywords: **Augmentative and Alternative Communication (AAC)**

CO 041

(1060) - INDIVIDUALS WITH AUTISM DO NOT CHANGE READING STRATEGIES AS A FUNCTION OF READING GOALS: AN INSIGHT INTO PLANNING SKILLS

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Vulchanova, Mila - *Norwegian University of Science and Technology, Norway*
Saldaña, David - *Universidad de Sevilla, Spain*

Objectives: Persons with autism spectrum disorder (ASD) generally find reading comprehension difficult. The role of oral and cognitive skills has been broadly explored, but very little is known about the influence of executive functions in reading comprehension in ASD. We aimed to investigate planning skills in ASD by looking at the ability of readers with autism to adapt their reading strategies to different reading goals.

Methods: Participants with and without ASD read three stories under three different reading goals conditions, while gaze was recorded: entertainment, study, and fast reading and searching for information for a previously presented question.

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Results: Results showed no group differences on accuracy in question answering. Eye movement data showed that the control group read more slowly, made longer fixations in the texts and perceived themselves as more accurate in question answering during reading for study compared to reading for entertainment. These differences between reading goals and perception of performance were not observed in the ASD group. The control group adopted, and was aware of, the use of different reading strategies for different reading goals. In contrast, the ASD group did not change their reading behavior according to the reading goal and showed less deep-level processing strategies when necessary.

Conclusions: Reading comprehension problems in ASD may be partially explained by difficulties in adjusting the reading behavior according to the task and in planning. Reading comprehension intervention may include specific training on planning and instructing individuals with ASD on the possible benefit in using different reading strategies for different reading goals.

Keywords: Autistic spectrum disorders, developmental language disorders

CO 042

(1077) - PROMOTING THE NEEDS OF PATIENTS WITH COMMUNICATION DISORDERS DURING MENTAL CAPACITY ASSESSMENTS.

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Objectives: The Mental Capacity Act (2005) requires health and social care staff in England and Wales to complete a mental capacity assessment if a patient appears to have difficulty making informed decisions. Mental capacity assessment is complex, especially when it involves patients with communication disorders, who may need support to understand information about decisions and express their choices. This study aimed to develop a toolkit to facilitate and improve mental capacity assessment and test the feasibility of using the toolkit in clinical settings.

Methods: A mixed methods design was employed. Research evidence and case law were reviewed. Multidisciplinary staff were interviewed about their practice. This evidence informed a design specification for the toolkit. A prototype toolkit was developed with user-centred design methods. Design modifications were identified from survey, interview and ethnographic data collected during staff, service user and expert reviews of prototype iterations. Staff used the toolkit to assess patients with diagnoses of stroke, dementia, delirium and brain injury. Document analysis, staff surveys and patient and family carer interviews were used to investigate the toolkit's usability, acceptability and its effects on practice.

Results: The study identified that practice varies and staff require support to improve their capacity assessments, especially for patients with communication disorders. The Mental Capacity Assessment Support Toolkit (MCAST) was designed to enable multidisciplinary staff to: i) prepare, complete and document capacity assessments; ii) identify and support patients with communication disorders during capacity assessments. Most staff participants reported the MCAST was easy to use and helped them to assess capacity. All patients and family carers considered the MCAST to be acceptable and potentially beneficial. Use of the MCAST was associated with improved assessment documentation and increased staff confidence.

Conclusions: The MCAST has the potential to facilitate and improve practice and increase access to support for people with communication disorders during capacity assessments.

Keywords: Acquired language disorders, acute stroke, cognitive impairment, dementia, traumatic head injury

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CO 043

(1365) - PRAGMATIC DEFICITS AND COMMUNICATIVE RESOURCES IN NEUROCOGNITIVE DISORDERS: EVIDENCE FROM TBI AND DEMENTIA

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Klingenberg, Gudrun - Neurological Clinic Bad Aibling, Germany
Schmid, Karolina - Neurological Clinic Bad Aibling, Germany
Hallhuber, Katrin - University of Munich, Germany

Objectives: Neurocognitive Communication Disorders (DSM-V) can occur after traumatic brain injury (TBI) as well as in neurodegenerative disease. Cognitive and linguistic deficits can lead to communication disorders in these patients with a serious impact on social interaction, self-regulation, daily living activities, as well as academic and vocational performance. The focus of our study is two-fold; first want to examine the extent of pragmatic deficits in patient with TBI and dementia, and second, we want to highlight the resources in communicative behavior in these patients. Neurocognitive Communication Disorders can result from selective and overlapping dysfunctions in the cognitive system, the language system and in behavior.

Methods: On the basis of a prospective cohort study (n=66) with healthy controls and patients with Alzheimer dementia and traumatic brain injury, we examined the performance of the patients in processing pragmatic language, in cognitive functions (e.g. MMST) and in aspects of social communication. We used the german version of the LCQ (Douglas et al. 2000, Büttner et al. 2016) for measuring differences in self- and other ratings in communicative behavior, the MEC-Test (Scherrer et al. 2016) and the MAKRO Screening for indirect speech acts and narrative text production. Furthermore we tested the ability to be empathic with the Reading-Mind-in-the-Eyes-Test (RMITE, Baron-Cohen; Bölte et al).

Results: The two patient groups had significantly lower scores on the pragmatic tests (e.g. MEC-Test, $z=-2.50$). There was a strong correlation between cognitive functions and pragmatic performance (e.g. MMST x MEC-Test: $r=0.81^*$ (ind. ´ speech acts). The ability to be empathic was preserved in the dementia group ($z=1.1$, RMITE x MMST= $r=0.01$).

Conclusions: According to the guidelines of the ICF, the main outcome in rehabilitation is due to improvement in the area of participation. Because of this, language therapy should put a special focus on the pragmatic level.

Keywords: Acquired language disorders

CO 044

(1086) - SUCCESSFUL COMMUNICATION, NARRATIVE SKILLS AND THE EFFECTIVENESS OF 'EASY LANGUAGE' FOR PEOPLE WITH INTELLECTUAL DISABILITIES

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Objectives: People with Intellectual Disabilities (ID) are at increased risk of medical problems compared to the general population. Because of limited verbal and communicative capacities, they often experience problems in effectively communicating with health care professionals. Structure in narratives plays a crucial role in successful communication between medical staff and patients as patients typically report about their medical problems during the case history therefore initialing the assessment process. This study examined the pragmatic skills utilized by people with ID in a therapist-patient-communication setting. Specifically, it was investigated whether people with ID manage to produce structured narratives and whether the use of 'easy language' supported their narrative skills.

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Methods: This empirical study took place during the national Special Olympics summer games 2012. A patient-focused style of communication was investigated in a quantitative study (N = 80 participants with ID) related to different communication criteria. Furthermore, narratives of people with and without ID (N = 160) were compared in terms of story structure. In this context the variable of using 'easy language' was also investigated.

Results: 25% of participants with ID were able to produce structured narratives; however, they were shorter and less elaborated. The use of 'easy language' was highly significant in supporting the understanding and re-narration process (0.003; $p < 0.01$). The patient-focused style of communication demonstrated to be effective enabling 75% of participants with ID to communicate autonomously.

Conclusions: For 75% of participants with ID it was very difficult to retell a story. This shows the enormous need of support like using 'easy language'. The most important factors of successful communication were clear dialogue structure, sufficient time, and an appreciative and accepting attitude. The potential advantage of improving communication skills is that – apart from improving their health - it may help people with ID exercise autonomy and self-representation.

Keywords: Cognitive impairment, screening

CO 045

(1201) - (DYS)PROSODY IN PARKINSON'S DISEASE: THE IMPACT OF MEDICATION AND DISEASE PROGRESSION

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Oliveira, Pedro - School of Arts and Humanities, University of Lisbon, Portugal

Cruz, Marisa - School of Arts and Humanities, University of Lisbon, Portugal

Vicente, Selene - School of Psychology and Education Sciences, University of Porto, Portugal

Cardoso, Rita - School of Medicine, University of Lisbon and CNS, Portugal

Guimarães, Isabel - School of Medicine, University of Lisbon, Portugal

Ferreira, Joaquim J. - School of Medicine, University of Lisbon and CNS, Portugal

Pinto, Serge - Aix-Marseille Université, France

Vigário, Marina - School of Arts and Humanities, University of Lisbon, Portugal

Objectives: This study examines the impact of Parkinson's disease (PD) on two of prosody's main functions crucial to communication – sentence modality and speech chunking –, which have not been investigated in previous studies of (dys)prosody in PD (Tykalova et al. 2014, Martens et al. 2011, a.o.).

Methods: Time from diagnosis (G1: 1-3 years; G2: ≥ 10 years) and medication (OFF vs. ON medication) were taken into consideration. Twenty sentences eliciting specific prosodic patterns were uttered by 10 age and gender matched controls and 20 PD patients (10 in G1; 10 in G2) in OFF medication and ON medication (1 hour after a dopaminomimetic drug intake). Prosodic analysis of sentence modality and speech chunking was done with PRAAT, using the P-ToBI system (Frota et al. 2015). A deviance scale from '1' to '-1' was computed taking the performance of controls as '1' (reference) and positioning PD patients relative to controls. Group performance was examined by means of a One-Way ANOVA (Controls, G1, G2). A mixed ANOVA assessed the effects of OFF/ON medication (within-subject factor) across the two groups of PD (G1, G2).

Results: Results indicate that sentence modality distinguishes between groups ($F(2.47)=7.92, p=.001, \omega=.47$), with patients performing worse than controls, but no effect of time from diagnosis (G1, G2) was found. By contrast, medication significantly improves the expression of modality ($F(1.18)=5.29, p<.05, r=.48$). On the other hand, presence/absence of expected speech chunks does not differentiate the groups ($F(2.47)=1.86, p=.17$). Although a main effect of ON/OFF medication was not found, there was a significant interaction between medication and PD group ($F(1.18)=4.70, p<.05, r=.46$):

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G1 chunking improves in ON state, unlike G2 chunking. Overall, medication had a strong effect on sentence modality, but it did not help with dysprosodic chunking, which evolves differently.

Conclusions: Findings suggest that different prosodic functions are affected differently in PD, with implications for PD neurophysiology and therapy.

Keywords: Parkinson's disease

CO 046

(1203) - DUAL SPEECH INTELLIGIBILITY TREATMENT: A PROPOSED NEW TREATMENT FOR SPEAKERS WITH MULTIPLE SYSTEM ATROPHY

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Objectives: This investigation presents a new speech treatment, dual speech intelligibility treatment (DSIT), to improve communicative function in individuals with multiple system atrophy (MSA). MSA is a rare, neurodegenerative disease with rapid progression of motor symptoms. The motor speech disorder of dysarthrophonia characterizes the speech of individuals with MSA and usually develops in the first few years after onset of the disease. However, and despite the rapid deterioration of communicative abilities in individuals with MSA, there is currently no evidence-based research to guide speech treatment in this population.

Methods: An 82-year old woman participated in this case study. She was a native speaker of Spanish and presented severe dysarthrophonia with predominance of hypokinetic dysarthria. A guided interview was initially performed together with a face-to-face speech assessment. Intensive treatment was delivered via videoconferencing for one month. Treatment combined intensive voice exercises and script training techniques to address the linguistic and cognitive needs characteristic of MSA. The speaker's primary communication partners rated her communicative abilities pre - to post-treatment on a scale of 1-7 (1 = poor ability; 7 = very good ability).

Results: Pre-treatment ratings for all measures ranged from 2 to 3 points, whilst post-treatment ratings ranged from 3 to 6 points. Pre-treatment, perceived intelligibility was rated as 2 (i.e. quite poor) and the overall impression of the participants's speech and voice was given a rating of 3. Speech initiation with familiar listeners increased from 3 to 5 points after treatment. Immediately post-treatment, perceived intelligibility was rated as 5 and her overall speech, as 6, suggesting short-term benefits of speech intervention.

Conclusions: DSIT addresses an existing gap in the literature of motor speech disorders involving MSA and has the potential to significantly improve intelligibility and communicative abilities in these patients. A larger study is currently being developed to assess the feasibility of DSIT in this population.

Keywords: Neurodegenerative disorders, speech disorders, dysarthria

CO 047

(1371) - INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF COMMUNICATION IN RETT SYNDROME

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Wandin, Helena - *Swedish National Center for Rett Syndrome and Related Disorders, Frösön, Sweden - Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden*

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Bartolotta, Theresa E - *School of Education, Monmouth University, NJ, USA*

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Curfs, Leopold Mg - *Rett Expertise Centre Netherlands – GKC, Maastricht University Medical Center, Maastricht, The Netherlands*

Objectives: Rett syndrome is a rare neurodevelopmental disorder associated with significant difficulties with communication, some typical for the syndrome. There are no published clinical guidelines available and caregivers report their struggles to access appropriate, knowledgeable, timely and ongoing support tailored to their children's specific communication needs. The aim of this project is to develop rigorous international clinical guidelines for the assessment, intervention and long-term management of communication in individuals with Rett syndrome.

Methods: An expert panel consisting of 36 experienced professionals and caregivers reviewed draft guidelines through a two-stage modified Delphi study. These draft guidelines were based on the results of a literature review and international online surveys for communication professionals and caregivers. The experts reported their agreement with the statements in the draft guidelines using a Likert scale and added additional comments in response to questions about the statements. The final set of guidelines that were developed through consensus consists of statements that reached a threshold of >70% agreement.

Results: The guidelines are based on more than 300 articles, drawn from literature relating to Rett syndrome as well as augmentative and alternative communication and clinical practice documents. More than 400 caregivers and 120 communication professionals from over 30 countries completed the online surveys. The expert panel reviewed a comprehensive list of statements in the Delphi process many of which reached the preset level of consensus. The results of the modified Delphi study and the final international guidelines for management of communication in individuals with Rett syndrome will be described in this presentation.

Conclusions: The guidelines need to be flexible and responsive to variations between countries, culture and language, as well as economic and political situations. This project drew on the knowledge and experience of individuals across the world and is firmly embedded in the lived experience of Rett syndrome.

Keywords: **Intervention, assessment, clinical education, evidence based practice, research methodologies**

CO 048

(1082) - DUTCH POSITION STATEMENT CHILDREN WITH LISTENING DIFFICULTIES: DEVELOPMENT

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Neijenhuis, Karin - *Rotterdam University of Applied Sciences, Research Centre Innovations in Care, Rotterdam, the Netherlands*

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Objectives: Children with (suspected) auditory processing disorders (susAPD) may experience difficulties listening in the presence of background noise despite displaying normal peripheral hearing. Mostly, it is not clear whether these listening difficulties are caused by a sensory, cognitive, or both sensory and cognitive impairment. The uncertainties related to susAPD provoke diversity among professionals of Dutch audiological centres in diagnostic procedures and counselling. Because of the national discussion about susAPD, in May 2014 we started with the development of a Dutch Position Statement for children with listening difficulties. The purpose is to offer Dutch professionals an evidence base for a uniform approach in identifying, diagnosing and treating children with susAPD.

Methods: To provide an evidence base for the Dutch Position Statement, we conducted: (1) two separate systematic reviews; (2) a focus group study; (3) a Delphi study; and (4) a survey. In addition, we held two meetings with professionals from Dutch audiological centres (n=44 and n=29) in order to inform professionals about the up to date knowledge on the subject, and also to stimulate sharing of their own ideas and experiences. The draft version of the Position Statement was presented for comments to professionals affiliated with the Federation of Dutch audiological centres (FENAC). Representatives of fifteen Dutch audiological centres gave feedback on the draft version. After processing these comments, the final version was adopted.

Results: The final version of the Position Statement consists of 9 statements, agreed by professionals of the Dutch audiological centres.

Conclusions: The mixed methods approach yielded an evidence based document, where evidence from science and practice were integrated. By including professionals' perspectives, chances for successful implementation are increased. The content of the Dutch Position Statement will be discussed in the oral presentation of Karin Neijenhuis, entitled: 'Dutch Position Statement listening difficulties: content'.

Keywords: Specific learning disorders, hearing impairment, functional diagnosis

CO 049

(1116) - DUTCH POSITION STATEMENT CHILDREN WITH LISTENING DIFFICULTIES: CONTENT

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De Wit, Ellen - Hanze University of Applied Sciences, Research Group Healthy Ageing, Allied Health Care and Nursing, Groningen, Netherlands - University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology, Head & Neck Surgery, Groningen, Netherlands - University of Groningen, Graduate School of Medical Sciences, Research School of Behavioral and Cognitive Neurosciences, Groningen, Netherlands

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Objectives: Children with (suspected) auditory processing disorders (susAPD) may experience difficulties listening in the presence of background noise despite displaying normal peripheral hearing. Mostly, it is not clear whether these listening difficulties are caused by a sensory, cognitive, or both sensory and cognitive impairment. Also, it is not clear how these difficulties should be named. In July 2017, we developed a Dutch Position Statement (DPS) for children with listening difficulties in order to enhance uniformity of practice by Dutch audiological centres.

Methods: This evidence-based position statement was developed by applying a mixed methods approach, where evidence from science and practice were integrated (see oral presentation Ellen de Wit, called 'Dutch Position Statement Listening Difficulties: Development').

Results: The final version of the DPS consists of 9 statements, agreed by professionals of the Dutch audiological centers. These statements concern definition, referral, diagnosis and treatment of children with listening difficulties. The multidisciplinary approach and broad

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developmental view (opposed to a pure audiological view) are the main points where consensus was reached. In the DPS, the name 'unexplained listening difficulties' was chosen to replace 'auditory processing disorders'.

Conclusions: This consensus document aims to provide clarity on controversial issues around children with listening difficulties. We expect that the involvement of all stakeholders during the developmental process facilitates a smooth implementation of the DPS for Dutch audiological centres. However, it can be expected that not all audiological centers will find this easy. Therefore, the implementation process should be monitored to prevent that it ends up unutilized.

Keywords: Specific learning disorders, hearing impairment, functional diagnosis

CO 050

(1448) - EXECUTIVE FUNCTIONS, ARITHMETIC PROBLEM SOLVING AND SPECIFIC LEARNING DISORDERS

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Pieretti, Manuela - *ASL Roma C, via Monza 2, Roma, Italy*

Objectives: The aim of this study is to explore the role of working memory, planning/organization and attention in arithmetic problem solving, by comparing the different performances in executive functions (EF) between poor and skilled solvers and between children with typical development and children with specific learning disorders (SLD).

Methods: Eighty-five children attending the fourth grade of primary school in Rome (47 F, 38 M; 74 with typical development and 11 diagnosed with specific learning disabilities) were evaluated with: six Arithmetic problems; Coloured Progressive Matrices (CPM), Listening Span test, Forward and Backward Digit Span test, Bells test and Tower of London test (TOL). Typically developing children were divided into skilled and bad solvers, respectively with a score lower than 15th percentile (n=14) and higher than 80th percentile (n=15).

Results: Skilled and bad problem solvers got significantly different scores only in the 120-seconds Bells test (1.93 vs 0.92; $p < 0.001$). Almost statistically significant is the difference observed in the Backward Digit Span test (3.8 vs 3.0; $p = 0.05$). In the Problem Solving tests, children with SLD show a slightly better performance than bad solvers (4.27 vs 2.0; $p = 0.05$), but a significantly worse performance in scoring violations of the TOL and Listening Span test (0.82 vs 1.64 $p = 0.01$; 0.73 vs 1.93 $p = 0.01$). All trials highlight the significantly better performances of the skillful solvers compared with children diagnosed with SLD, except in Time and Fairness scores and in the Forward Digit Span Test.

Conclusions: Our study confirms the value of sustained attention and digit working memory in arithmetic problem solving. It also underlines a wide range of difficulties in children with SLD, thus confirming the importance of the study of the executive functions in this population and of integrated treatments in executive functions and reading, writing and calculation specific skills.

Keywords: specific learning disorders, functional diagnosis

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CO 051

(1235) - LANGUAGE SKILLS IN CHILDREN WITH BENIGN CHILDHOOD EPILEPSY WITH CENTRO-TEMPORAL SPIKES: PRELIMINARY RESULTS

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Santos, Maria Emília - *Interdisciplinary Center of Research in Health, Institute of Health Sciences, Universidade Católica Portuguesa, Portugal*

Objectives: Benign Childhood Epilepsy with Centro-Temporal Spikes (BCECTS) is one of the most common childhood disorders, affecting many children. Despite the benignity usually attributed to this epileptic syndrome, several studies have demonstrated that these children have cognitive morbidities, in particular at the level of attention and memory, and also of language. However, language disorders have been the least studied of these impairments. In this study we aim to present some results from a larger study that is being carried out.

Methods: We assessed language skills within several language areas of 24 children with BCECTS (11 girls and 13 boys), followed in three hospitals in Lisbon, and 48 children with typical development attending the same schools (22 girls and 26 boys), matched by age and gender. The evaluation tests covered the areas of semantics, morphology, syntax and phonology.

Results: The results show that at least half of the children with BCECTS had linguistic deficits in particular areas and some had difficulties in all language areas. Overall, these children showed greater difficulties in semantics (identification of words from the same lexical group) and syntax (sentence organization, expansion and construction).

Conclusions: Children with BCECTS seem to demonstrate inferior language skills compared to their peers in several language areas. Thus, the early assessment of these abilities and the possible need for therapeutic intervention should be emphasized, in order to minimize the impact on their academic performance and quality of life.

Keywords: Developmental language disorders, cognition, epilepsy

CO 052

(1295) - USING TWITTER TO FIND CREDIBLE SOURCES AND BUILD CLINICAL RESEARCH COMMUNITIES: THE #RESNETSLT COMMUNITY

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Roddam, Hazel - *University of Central Lancashire, UK*

Fillingham, Joanne - *NHS Improvement, National Health Service, UK*

Objectives: #ReSNetSLT is a Twitter hashtag community, launched in 2016, as part of the Research Support Network for speech and language therapists in the UK and Europe. Two goals of the Research Support Network scheme are to “support research capacity building” and help “experienced clinicians contribute to the professional evidence base”. The #ReSNetSLT community specifically aims to improve intervention and care. The aim of this hashtag study was to determine: (a) the nature of interactions on tweets tagged with #ReSNetSLT, (b) the content categories of tweets tagged #ReSNetSLT, and (c) tweeters' views on the benefits or limitations of using Twitter in the Research Support Network.

Methods: The study was ethically approved at the University of (De-Identified). All tweets tagged with #ResNetSLT from Sept 2016 to Oct 2017 were collected using Spredfast software and examined in an Excel spreadsheet for frequency counts and inductive content coding.

Results: In total, the sample comprised 1652 tweets (1010 original tweets; 642 retweets), by 254 separate @User handles: 135 @Users posted 1 tweet; one @User posted 338 tweets or

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retweets; and 118 tweeters posted an average of 9.9 tweets or retweets. Thus, the #ReSNetSLT content is reliant upon a small number of influential tweeters, and a larger network of tweeters supporting dissemination of that content. Major content categories in the body of tweets were: (a) building an identity as a researcher or clinician-researcher; (b) research cultures, training, and funding; and (c) benefits and limitations of using Twitter for finding credible sources and research-themed discussions.

Conclusions: The tweets reflected support for the primary goals of the Network, but the impact of #ReSNetSLT on clinicians' decisions is not yet known. The #ReSNetSLT Twitter network data and tweet content themes will be discussed in relation to literature on the use of Twitter for research engagement and translation of evidence into practice.

CO 053

(1179) - SPECIALISATIONS FOR SPEECH AND LANGUAGE THERAPY: A TOUGH DECISION DECISION

Van Der Vloed, Drs. Judith - Dutch Association of Speech and Language Therapy / Nederlandse Vereniging voor Logopedie en Foniatrie (NVLF), Netherlands

Heerkens, Dr. Yvonne - Dutch Paramedic Institute, Netherlands

Boersma, Anieke - University of Applied Science Windesheim, Netherlands

Objectives: For speech and language therapists (SLTs) in the Netherlands no formal specialisations are available, although there are several groups of SLTs who claim to have much expertise in a certain area, such as fluency specialists and pre-verbal SLTs. The Dutch Association of SLTs (NVLF) and the bachelor programmes for SLT are working together to develop criteria to decide which and how many specialisations are needed, knowing that there are different opinions about the need to specialise and knowing also that the profession of SLT is relatively small (6000) in comparison to professions as e.g. nursing (>200.000) and physical therapy (ca. 27.000) in the Netherlands.

Methods: Methods used are: 1) individual interviewing and focus group interviews with representatives of groups of SLTs with additional expertise, bachelor programmes for SLT, other health professions (including referring physicians), patient associations, and health care insurances companies; 2) making an international inventory of existing specialisations via the professional organisations of SLTs in other European countries; and 3) reading literature about the developments in health care education and work for the next 20 years in the Netherlands.

Results: Expected results are: 1) an analysis of the strengths, weaknesses, opportunities and threats (SWOT-analyses) of specialisation of SLTs; 2) a description of different scenarios for the realisation of specialisations (description of different groups, the criteria for specialisation, level of education and so on); and 3) a working plan.

Conclusions: Specialisation can have benefits (further profiling) as well as risks (fragmentation) for a profession. Criteria can help to make proper choices and to make the profession more 'future proof'.

Keywords: Quality of education

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CO 054

(1305) - CLINICAL DECISION MAKING IN SPEECH AND LANGUAGE THERAPY IN THE UNITED KINGDOM

Lowe, Jane - *Royal College of Speech and Language Therapy, UK*

Objectives: The research aims to gain an insight into speech and language therapists' primary clinical judgements during initial client assessment sessions.

Methods: In-depth interviews were carried out with SLTs across the UK. Participants were practising therapists within a variety of clinical roles working both within and outside of the NHS. Clinicians were asked to reflect on their recent clinical decisions. Collection and analysis of data through the use of Classic Grounded Theory methodology aimed to identify a substantive theory around initial clinical decision making common to the profession. A two-stage process was chosen: Stage 1 Unstructured interviews with highly experienced SLTs were used to establish an interview guide for the main study. Stage 2 Semi-structured interviews undertaken with a wider range of practising speech and language therapists. Participants were asked to reflect on their recent clinical decisions in order to ascertain their perspectives and processes during initial assessment.

Results: Findings captured within-client factors such as assessment results, stimulability and preference, and features external to the client, for example service-delivery models and therapist's clinical philosophy. Results showed a tendency to rely more on subjective factors than objective measures.

Conclusions: There is a need for decisions around the client to be bespoke and holistic while maintaining a clear scientific rigour. A result of austerity is increasing scrutiny from external funders. The profession needs to be able to justify clinical decisions and practice. In order to be as effective as possible for our clients, there needs to be a transparency around the profession's use of the evidence base, client choice and clinical expertise.

Keywords: Assessment

CO 055

(1091) - SLTs' EXPERIENCE OF PROFESSIONAL DEVELOPMENT USING ELEARNING

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Purcell, Rachel - *School of Health University of Manchester, UK*

Adams, Catherine - *School of Health University of Manchester, UK*

Objectives: Maintaining professional skills is essential for quality services in health. SLTs in the UK have access to little additional funding for training or allocated time to develop their skills. Such limits raise questions about how SLTs can be confident that their practice guarantees quality based on best evidence. Online learning programmes make CPD available and accessible to a wide audience and are thought to offer flexible learning opportunities. As yet, we have little evidence in SLT of the merits of learning using this medium. This paper presents findings from a qualitative study exploring SLTs' experience of two online learning programmes, investigating practitioner views of the impact of learning on understanding and practice.

Methods: The study employed a qualitative research method with ten SLTs undertaking two online programmes in 2017/18 on evidence based practice and developments in aphasiology. Purposive sampling ensured that participants were at various stages of their professional career, potentially reflecting different CPD needs. Semi structured interview focused on (i) participants' views of learning independently using the online programmes and (ii) changes in thinking and practice reported by participants. Responses were explored using thematic analysis to identify themes and subthemes.

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Results: The study will report findings from SLTs undertaking online learning of a general and specialist programme. The results will inform us about SLTs' perceptions of (i) viability of undertaking CPD online (ii) benefits to SLT knowledge, understanding and reported practice (iii) obstacles to learning using online material.

Conclusions: The findings should add to understanding how online learning contributes to developing professional skills, enabling insight into the content of both discipline specific programmes, as well as using technology as the medium for learning.

Keywords: E-learning, quality of education

CO 056

(1230) - CLINICAL GUIDELINES FOR SPEECH AND LANGUAGE THERAPY: PROPOSAL OF THE PORTUGUESE PROFESSIONAL ASSOCIATION

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Branco, Regina - *Centro de Medicina de Reabilitação de Alcoitão*

Caldas, Joana - *Escola Superior de Saúde do Instituto Politécnico do Porto*

Cardoso, Rita - *Clinical Pharmacological Unit, Instituto de Medicina Molecular, Faculdade de Medicina, Universidade de Lisboa, Lisboa; - CNS - Campus Neurológico Sénior, Torres Vedras*

Canossa Dias, João - *Associação para a Recuperação de Cidadãos Inadaptados da Lousã (ARCIL)*

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Objectives: To develop clinical practice guidelines that embrace the whole scope of practice to guide Speech and Language Therapy professionals over the clinical process in the following

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areas: augmentative and alternative communication, adult language, child language, swallowing, speech and orofacial myology, fluency, and voice disorders.

Methods: A team of clinicians and researchers was formed and coordinated by an unit designated by the Portuguese Speech and Language Therapy Association (Associação Portuguesa de Terapeutas da Fala - APTF). The team had regular meetings and proceeded with a literature review based on well-known international clinical guidelines. The review was complemented by a structured search in PubMed/Medline, EBSCO, speechBITE as well as other scientific databases taking into account the best scientific evidence. After an internal review, a panel of 7 experts was recruited to make an independent review of the first version of the document.

Results: A final document will include all the fields of clinical practice mentioned above. Transversal topics were reviewed: assessment methods, therapy approaches, charts information management, ethical and deontology concerns, amongst others.

Conclusions: The clinical practice guidelines from the Portuguese Speech and Language Therapist Association (APTF) represents the main areas that speech and language therapists embrace in their everyday work in Portugal. The guidelines aim to be a practical and functional resource supported by scientific evidence.

Keywords: Clinical education, evidence-based practice

CO 057

(1136) - HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH CLEFT PALATE: VALIDATION OF THE DUTCH VERSION OF THE VELO QUESTIONNAIRE

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Corthals, Paul - Ghent University, Belgium

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Objectives: Disease-specific health-related quality of life (HRQOL) questionnaires provide the clinician with important information regarding the impact of the disease on functioning and well-being. For patients with velopharyngeal insufficiency (VPI), the VPI Effects on Life Outcomes (VELO) questionnaire was developed and validated in English by Skirko et al. (2012), evaluating speech, swallowing and the influence of those aspects on functioning. However, a Dutch translation of this questionnaire was not available yet.

Methods: A forward-backward translation procedure was used. Based on the responses of 39 parents of patients with cleft palate (CP) (parent report) and the responses of 14 patients older than 8 years (child report), a linguistic validation and an evaluation of the parent proxy assessment, the internal consistency and the correlation between the responses and the patient's age was performed. Based on the responses of a control group without CP, the discriminant validity was evaluated. Additionally, the concurrent validity was assessed by comparing the scores on the parent report to those on the P-VHI.

Results: The parent report was easy to complete for all parents. Nine of the fourteen patients were able to complete the child report independently. The Dutch translation of the questionnaire showed good discriminant validity and internal consistency of the parent report and the child report. The responses of the parents were similar to the child's responses. A significant positive correlation was found between the score on the parent report and the age of the patients. Furthermore, a significant negative correlation was found between the parent report and the

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P-VHI. Results regarding the test-retest reliability and sensitivity of the questionnaire to HRQOL changes are currently being analyzed and will be presented at the congress.

Conclusions: The Dutch VELO questionnaire is a valid, reliable and user-friendly patient-reported outcome measure that provides SLPs important information about HRQOL in patients with CP.

Keywords: Cleft palate speech, patient-reported outcome measures (development or cross-cultural adaptation and validation)

CO 058

(1184) - ATTITUDES OF NORMALLY-DEVELOPING PEERS TOWARDS THE SPEECH OF CHILDREN WITH CLEFT PALATE BETWEEN 7 AND 12 YEARS OLD.

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Van Lierde, Kristiane - Ghent University, Belgium

Objectives: In addition to anatomical and physiological problems, children with a history of cleft (lip and) palate (CLP) often have to face psychosocial difficulties. A complex interaction between the patient and his/her environment may induce these problems. Based on literature, speech disorders may negatively influence a listener's judgment of a speaker. Therefore, the aim of the present study was to investigate the attitudes of peers on the speech of children with CLP.

Methods: Sixty-nine normally-developing children (7-12 yrs, 34 boys, 35 girls) judged audio-recorded speech samples of eight children with CLP and three control children based on three attitude components. Additionally, a speech intelligibility percentage was calculated for each speaker based on the transcription of spontaneous speech by 23 layman adults and a hypernasality percentage was determined by using nasometry. A correlation was then calculated between both the attitude components and the speech intelligibility percentage, and the attitude components and nasalance percentage, in which the possible influence of age and gender of the listeners was taken into account.

Results: A significantly positive correlation was found between the speech intelligibility percentage and the attitude components: when a child was understood better, more positive attitudes were measured. Additionally, a significantly negative correlation was found between nasalance and all attitudes components: the presence of more hypernasality resulted in more negative attitudes. Furthermore, boys and younger children seem to have more negative attitudes compared to girls and older children.

Conclusions: This study shows that attitudes of normally-developing peers towards children with CLP are influenced by the amount of articulation and resonance disorders in these children. This result emphasizes the need for sensitization regarding children with CLP in primary schools, which can be integrated in already existing initiatives regarding negative stereotyping and teasing. Further research can evaluate the effect of such awareness campaigns on the attitudes of children.

Keywords: Cleft palate speech

CO 059

(1199) - OROFACIAL FUNCTION IN A GROUP OF CHILDREN AND ADOLESCENTS WITH SPEECH SOUND DISORDER (SSD)

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Objectives: This study explores and describes orofacial function, speech characteristics and background factors related to speech sound disorders (SSD) in a group of children and adolescents 6-16:7 years.

Methods: Sixty participants (mean age 8:3 years, 14F/ 46M) were consecutively recruited from referrals to an orofacial resource center for speech and oral motor examination. Background questionnaire (MHC Questionnaire) on heredity, medical conditions, neurodevelopmental disorder, and speech development was used. Orofacial function was screened using the Nordic Orofacial Test-Screening (NOT-S). Speech production and intelligibility were assessed using The Swedish Articulation and Nasality Test (SVANTE) and The Intelligibility in Context Scale (ICS).

Results: The speech impairment varied from mild to very severe. Intelligibility was affected in 92%. A majority (87%) of the participants displayed difficulties in orofacial functions. Most affected domains were chewing and swallowing (42%) and masticatory muscles and jaw function (38%). Co-existing gross motor difficulties (29%) and a confirmed neuropsychiatric diagnosis (14%) were common.

Conclusions: Results from this study emphasize the need for further assessments besides speech and articulation in children with SSD. It also confirms that children with SSD often have concomitant orofacial sensory motor deficits.

Keywords: Speech disorders, oro-motor dysfunction, myofunctional disorders

CO 060

(1360) - A PROPOSAL FOR A NEW NEUROREHABILITATIVE INTERVENTION ON MOEBIUS SYNDROME PATIENTS AFTER 'SMILE SURGERY'

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Objectives: Moebius Syndrome (MBS) patients are incapable of moving facial muscles and face a challenge after having undergone corrective surgery: reanimating the transplanted muscles to achieve voluntarily control of smiling. We propose two new complementary rehabilitative approaches based on observation/imitation therapy (Facial Imitation Therapy, FIT) and on hand-mouth motor synergies (Synergistic Activity Therapy, SAT). Preliminary results show that our intervention protocol is a promising approach for the neurorehabilitation of patients with MBS.

Methods: We present a case report study of a patient with MBS who underwent smile surgery and 6 months of FIT-SAT treatment. Periodical 3D motion analysis of the patient's performance was planned to measure the efficiency of the rehabilitation protocol. We reconstructed the kinematic of the patient's smile excursion, the maximal lip aperture (%IDD), which is considered as index of the effective recruitment of the transplanted muscle. The experimental conditions are divided into two blocks of imitation or no imitation, combined with three motor conditions (smiling, smiling and contracting the hand, smiling and curling the toes).

Results: The smile excursion is greater when the MBS patient performed the imitation block closing her hand ($F(5,45) = 3.7$, $p = 0.007$, $p_2 = 0.3$). We compared the data of the MBS patient with that of the control group: Δ values were calculated and expressed as the difference between IDD of each FIT-SAT condition and the baseline condition. The patient's delta values for SO-HC and HC conditions were beyond the CI upper bound

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Conclusions: We propose a neurorehabilitative intervention for MBS patients after smile surgery. The idea is that facial reanimation could be facilitated by “imitation therapy” and hand-mouth synergistic activity. Preliminary kinematic results support our expectations showing that the FIT-SAT protocol can be successfully applied to MBS patients’ rehabilitation. Such results may pave the way to the application of FIT-SAT to patients with other forms of facial palsy.

Keywords: Oro-motor dysfunction, myofunctional disorders, neuromuscular disorders

CO 061

(1275) - FUNCTIONAL RESULTS FOR SPEECH AND SWALLOWING AFTER SOFT PALATE SURGICAL RECONSTRUCTION IN PATIENTS WITH OROPHARYNGEAL CANCER: A SYSTEMATIC REVIEW

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Objectives: To determine the type of surgical flap that obtains better outcomes for speech and swallowing in patients who suffer from oropharyngeal cancer and have performed partial or total sphincter velopharyngeal reconstruction.

Methods: A systematic search on speech and swallowing after soft palate surgical reconstruction in patients with oropharyngeal cancer was conducted on Medline, Scopus, Cochrane Central, CDSR, Clinicaltrials.gov. data bases. Studies were selected according to inclusion criteria until December, 2013, and individually evaluated in a blind process referring to applied analysis and methodology, by two independent researchers. Some forms were filled in to identify and analyse the surgical flaps and reconstructive methods vs speech and swallowing results, with qualitative analysis according to the STROBE scale.

Results: Out of the 2123 identified studies, 21 were included in the review. They consisted of the following: two studies where reconstruction was performed using the primary closure; five studies which used local flaps; five studies that used myocutaneous/fasciocutaneous flaps; nine studies which used free flaps, the most prevalent being the radial forearm free flap (4 studies - inserting technical variants). The data collected for analysis in this review were: study design; sample size; flap type; type of functional assessment in the speech and swallowing context; result of study’s quality through the STROBE checklist. After analysis it was found that reconstructions in more extensive areas revealed more difficulties at restoring speech and swallowing patterns. The lack of uniformity in flaws classification of soft palate post resection has limited the prospective comparison of reconstruction methods.

Conclusions: There are few studies that have proved the efficiency in soft palate reconstruction, with the absence of secondary complications. The difficulty to create a dynamic soft palate which is efficient for speech, swallowing and breathing remains questionable and the absence of consensus regarding the most effective method is patent in the literature.

Keywords: Head and neck oncology, dysphagia, speech disorders, dysarthria

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CO 062

(1045) - THE THEORY AND PRACTICE OF MANAGING THE CHILD WITH LANGUAGE IMPAIRMENT - A EUROPE WIDE PRACTITIONER SURVEY

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Murphy, Carol-Anne - University of Limerick, Ireland

Gerrits, Ellen - University of Utrecht, Netherlands

McKean, Cristina - Newcastle University, UK

Topbaş, Seyhun - Istanbul Medipol University, Turkey

Thordardottir, Elin - McGill University, Canada

Beckermann, Elisabeth - University of Marburg, Germany

Objectives: This survey was carried out as part of the activity of COST Action IS1406 «Enhancing children's oral language skills across Europe and beyond: A collaboration focusing on interventions for children learning their first language.» This is a research network that covers not only all EU countries (with the exception of Montenegro) but also neighbour countries such as Iceland, Albania, Lebanon and Russia. The aim was to survey practitioners across Europe about their practice and specifically issues related to aspects of service delivery (location, models of delivery, duration etc), cultural concerns (including multilingualism and cultural competence) and the theoretical underpinnings of the interventions that they deliver.

Methods: The survey was first developed in English by members of the Action. It was then translated and back translated into thirty different languages and sent out through a variety of networks (including CPLOL) across Europe in July 2017 via a list of survey monkey links. The links remained open through until the middle of October 2017. The data were then analysed in the first instance by a team at Newcastle University in the UK.

Results: The results have not yet been analysed (26.09.17) because the closure date for the survey is very close to the submission date for the abstracts for CPLOL 2018. We know at this stage that we have over 4000 responses to the online survey, the largest of its kind ever carried out on this topic. This abstract will be updated once we have results available (mid November 2017).

Conclusions: This is the first survey of practice "on the ground" across Europe and the first to paint such a comprehensive picture across so many countries (36). The results will be of interest to practitioners and policy makers in all the countries concerned and we hope will be picked up at the EU level.

Keywords: Specific language impairment, developmental language disorders, intervention

CO 063

(1427) - CHILD CHARACTERISTICS RELATED TO IMPROVEMENT IN LANGUAGE PERFORMANCE OF PRESCHOOL CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDERS

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Gerrits, Ellen - Utrecht University of Applied Sciences, Netherlands; - Utrecht University, Netherlands

Wijnen, Frank - Utrecht University, Netherlands

Objectives: Several studies have shown that language therapy can be effective in children with DLD (Law et al, 2004, Broomfield & Dodd, 2011). However, not every child shows improvement and little is known about child characteristics related to progress. Understanding of these factors is important to adapt services to the needs of each individual child. In this study we investigated

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the improvement in language performance of 4 and 5 year old children with DLD, receiving language intervention in different educational settings in the Netherlands. Furthermore we studied the relation between improvement and severity of the language disorder, non-verbal intelligence and multilingualism.

Methods: In the Netherlands most 4 and 5 year old children with severe DLD receive speech and language therapy together with educational support, either in mainstream classes or in schools for special education. To be eligible for this service, non-verbal IQ has to be at least 70. From the files of 220 children, receiving language therapy at 26 locations spread across the Netherlands, we collected standardized language test scores of two assessments with an interval of approximately one year. We also registered non-verbal intelligence, and asked parents to fill in questionnaires about home languages.

Results: On the group level the children showed significant progress on quotient scores on language tests, but individual differences were large, with some children even having declining scores. Non-verbal intelligence was not related to improvement in language performance, whereas the severity of the disorder was. Children with initial low scores showed more progress than children with higher scores. Preliminary results show that multilingual children with DLD might be able to catch up their delays faster than monolinguals.

Conclusions: Children with non-verbal intelligence below the mean can benefit equally from language intervention as children with higher non-verbal IQs. Severity of the language disorder and multilingualism versus monolingualism could be predictors for progress.

Keywords: Developmental language disorders, intervention

CO 064

(1103) - DIGITAAL – GAMES-BASED LEARNING IN SPEECH AND LANGUAGE THERAPY

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Zwitsersloot, Rob - Senior researcher, PhD, research group Speech and Language Therapy, HU University of Applied Sciences Utrecht, Netherlands

Objectives: To investigate the usability of tablet games in language therapy and its effects on language learning for preschool children with Specific Language Impairment (SLI) by answering the following three research questions:

1. Which tablet games are suitable for language therapy?
2. What are best practices in stimulating interaction and communication between therapist and child while using tablet games in language therapy?
3. What is the effect of language therapy with tablet games, versus language therapy with traditional play materials?

Methods: To answer the first question, a reliable game selection checklist and an open source database for reviews on games has been developed. To answer the second question, systematic video analysis of interaction and communication between Speech Language Therapists (SLTs) and children with SLI has been performed. The third study is a Randomized Controlled Trial (RCT) which investigates the effectiveness of vocabulary intervention with tablet games compared to traditional play materials in a group of 3-year-old children with SLI.

Results: The checklist for game selection and reviews of games will be available in a Dutch open source database for SLTs and other professionals. A practical guideline about gaming, including

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short instruction videos, has been composed and additional workshops for SLTs in therapy are under development. Preliminary results of the effect study on language therapy with tablet games versus therapy with traditional play materials will be presented.

Conclusions: New insights into the highly discussed topic whether gaming in language therapy has a positive effect on language development will be presented. We will share information about the necessary features a tablet game should contain in order to be suitable for use in language therapy. Furthermore, we will introduce best practices for language therapy when using tablet games.

Keywords: developmental language disorders, intervention

CO 065

(1239) - EFFICACY OF FUNCTIONAL IMITATION THERAPY (FIT) FOR TODDLERS WITH DLD IN SPECIAL CARE GROUPS: A PILOT STUDY

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Objectives: The aim of this study was to investigate the efficacy of Functional Imitation Therapy (FIT, Schlichting & de Koning, 1988) targeted at improving morphosyntax in special daycare groups for children with developmental language disorders (DLD) in the Netherlands.

Methods: Twenty-eight children (mean age 3;5 years) from five special daycare groups for children with DLD participated in this study. All children were diagnosed with DLD, having average non-verbal IQs and expressive language scores on standardized tests falling -1.7 SD below the mean. Spontaneous language samples were collected at three time points T0, T1, and T2, with seven week intervals. During T0-T1 the children received usual care, consisting of speech and language therapy (SLT) and language stimulation activities from the two pedagogical assistants working in each group. During the intervention (T1-T2), the children received SLT and participated in group activities with FIT, delivered by the pedagogical assistants for 30 minutes a day, three days a week. The pedagogical assistants were trained in working with FIT before the intervention started and were coached by the SLTs. After the intervention period, the SLTs and pedagogical assistants participated in semi-structured interviews aimed at collecting their views and opinions on working with FIT.

Results: Four children were excluded from the analysis: three children were not intelligible at T0, T1, or T2, one child missed T2. Paired samples t-tests showed no significant gains in mean length of utterance (MLU in words) in the usual care period. After the intervention, significant growth in MLU (effect size $d = -0.65$) was found. The SLTs and pedagogical assistants were positive about FIT and strongly valued their cooperation during the intervention. However, FIT is not suited for all children and proper training in working with FIT is necessary.

Conclusions: When implemented appropriately, FIT can be a valuable addition to the remediation toolkit of special daycare groups.

Keywords: Developmental language disorders, specific language impairment, intervention

CO 066

(1143) - HOW TO ENHANCE ORAL LANGUAGE COMPREHENSION?

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Stolt, Suvi - *University of Helsinki, Finland*

Launonen, Kaisa - *University of Helsinki, Finland*

Objectives: There is a lack of oral language comprehension intervention research in children and adolescents with developmental language disorder (DLD), and the overall picture of the

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matter is obscure. The objective of this workshop is to provide an overview of oral language comprehension interventions and discuss the individual therapy techniques which can be used for enhancing oral language comprehension. This workshop is based on a literature review on oral language comprehension interventions (Tarvainen, Stolt & Launonen, submitted). After a short introduction to the topic the participants will discuss in small groups which therapy techniques they would use to enhance oral language comprehension in children and adolescents with DLD. The results of these discussions will be shared with the whole group. This will then be reflected to what is known on this topic according to research, and a framework of oral language comprehension interventions will be presented. The framework will introduce three levels of intervention focus: modifying the communicative environment of the child, targeting child's language, and targeting child's language processing. The framework will also present the two possible approaches: enhancing child's skills and teaching strategies to cope better with current skills. The therapy techniques which the participants have introduced will be placed in this framework. The efficacy and strength of evidence of each therapy technique will be presented. After the workshop the participants will have an overview of the possible therapy techniques to be used in oral language comprehension enhancement, their efficacy and strength of evidence. The participants will be able to combine past and future knowledge with the overview and apply this information to clinical work to enhance evidence-based practice.

Tarvainen, S., Stolt, S. & Launonen, K. Submitted. The effects of language interventions on oral language comprehension in children and adolescents with developmental language disorder: A systematic scoping review.

Keywords: Developmental language disorders, intervention

CO 067

(1314) – PATTERNS OF CHANGE IN SPEECH ACCURACY AND MEASURING TREATMENT EFFICACY IN PRE-SCHOOLERS WITH SSD (SPEECH SOUND DISORDER).

Wright, Aileen (Ireland) - *University of Limerick*

Objectives: To ensure efficient service delivery therapy should be offered only where effective, and to those children who will benefit. It may be difficult in pre-schoolers, to distinguish therapy effect from maturation. The aim here was to identify individual trajectories of change in speech accuracy before intervention, after 8 weeks of intervention, after an 8-week maintenance period and after one year, also measuring reading one year later.

Methods: 20 children aged 3;0 to 4;11 with SSD were randomly allocated to immediate intervention or a waiting control group. Speech accuracy was measured in Percent Consonants Correct on the DEAP. PA (phonological awareness) was measured using the PAT, and reading ability (in those who had started reading), using the YARC (York Assessment of Reading Comprehension).

Results: Five patterns of change were identified in 12 children assessed at all time points:

- Negligible improvement immediately following intervention, significant improvement 8 weeks later, with negligible improvement over the next 8 months (P4, P8, P5).
- As above, with age-appropriate speech attained 8 months later (P11).
- Significant improvement immediately post intervention, no improvement during the maintenance period, and age-appropriate speech 8 months later (P1).
- No improvement following the no-intervention period, significant improvement during intervention and age-appropriate speech 8 months later (P2, P10, P13, P15, P16).
- Significant improvement during the 8-week no-intervention period, followed by the same rate of improvement during the 8 week intervention period (i.e. no apparent effect of intervention) (P3, P17).

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After 1 year 11/12 children had age-appropriate PA abilities. Five who had started reading instruction had age-appropriate word recognition skills.

Conclusions: Speech accuracy changes are consistent with known fluidity in pre-school profiles. Longitudinal design incorporating pre-intervention multiple base-lines to control for maturation with repeated follow-ups captured delayed effect, and were informative measures of treatment efficacy. This can guide development of individualised interventions.

Keywords: Phonological disorders, Clinician-reported outcome measures

CO 068

(1088) - ARTICULATION RATE, SPEECH INCONSISTENCY AND SPEECH STIMULABILITY TO COMPLEMENT THE DIAGNOSIS OF SSD

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Pagan-Neves, Luciana - University of São Paulo, Brazil

Objectives: The aim of this study is to compare the performance of children with typical development and with speech sound disorders (SSD), in complementary tests to the SSD diagnosis: speech inconsistency (SI) articulation rate (AR) and speech stimulability (SS).

Methods: Participants were 70 children aged from 5:1 to 7:11 years old, divided into two groups: a Control Group with 30 children (CG) and 40 SSD children. We applied the Brazilian Portuguese-phonology test (picture naming-PN and imitation of words-IW tasks) from the ABFW Infantile Language Test (Wertzner, 2004) and analyzed it according to the specifications of the test. We also calculated PCC and PCC-R indexes from these two tasks. SI consisted of the naming of 25 figures presented three times in different presentation sequences (Castro and Wertzner, 2011). AR was measured through a short sentence with 12 phones and in a long sentence with 22 phones. SS was tested for the absent sounds from the phonetic inventory (only for the SSD).

Results: Mean values of PCC analyzed from PN and IW was 97.89% for CG and 74.72% for SSD. PCC-R means from PN and IW was 97.98% for CG and 79.50% for SSD. General results indicated significant differences between the two groups for the number of inconsistent children (SSD>CG; $p=0.009$) and for the number of phones per second in both the short and the long sentence (SSD<CG; $p=0.001$). 29 children with SSD presented absent sounds and were stimuable for 50% of these sounds.

Conclusions: AR, SI and SS are three tests that help the clinician to differentiate typically developing children from those with SSD demonstrating that speaking rate from the SSDs is slower, there are more absent sounds that are more difficult to be produced and also that their phonological programming is compromised.

Keywords: Phonological disorders

CO 069

(1278) - ASSESSING THE TREATMENT EFFECTIVENESS OF CHILDREN WITH SEVERE PHONOLOGICAL DISORDERS

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Scheper, Annette - Royal Dutch Kentalis, Netherlands

Objectives: International literature describes that young children with a severe phonological disorder benefit from treatment aimed at improving their intelligibility. At the Speech and Language Center of Royal Dutch Kentalis, children with a severe phonological disorder receive treatment

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in different settings depending on their age. Children aged 2½-4 years, both monolingual and multilingual, receive treatment in special daycare (three days a week for nine months). Children aged 4-7 years old that do not make enough progress in regular speech therapy receive intensive treatment in a multidisciplinary setting for a period of six weeks, followed by treatment (with adapted advice) in regular speech therapy.

Methods: Data of 50 children aged 2½-4 years and 100 children aged 4-7 years, all with severe phonological disorders, are presented. Data on both cognitive, hearing and linguistic skills were collected for all children. A pre-post design was used to gain insight into phonological growth and the relation between phonological development and other language skills.

Results: This research results in profiles of children in different age groups with a severe phonological disorder. The following questions will be answered: 1. Which specific phonological profile do these children have? 2. What is the relation between phonological profiles and hearing, cognitive and language abilities? 3. How effective is phonological treatment for children with a severe phonological disorder, measured by language measures and by parents' evaluations?

Conclusions: It is important to gain insight into the abilities of children with a phonological disorder. With this knowledge, one can choose for the best possible intervention for phonological disorders. Phonological profiles serve as the basis for the creation of a treatment plan with SMART formulated treatment goals to develop a child's intelligibility.

CO 070

(1126) - CHILDHOOD APRAXIA OF SPEECH: SPEECH MOTOR SKILLS AND DIAGNOSTIC MARKERS FOR SWEDISH

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McAllister, Anita - Karolinska Institutet, Sweden

Hansson, Kristina - Lund University, Sweden

Objectives: Childhood Apraxia of Speech (CAS) is an impairment of speech motor control with reduced ability to convert abstract phonological codes into motor speech commands. Differential diagnosis between CAS and other speech sound disorders is crucial for correct intervention. There are currently no known single neurological or behavioural markers for CAS, but different sets of symptoms have been suggested. Most sets are based on English and may thus be language-specific. The two main research questions are: What are the core symptoms in Swedish? How are speech motor skills associated with oral motor, phonological and grammatical skills in children with suspected CAS?

Methods: Participants were 51 children, 3;03 to 8;10 years referred due to Speech Sound Disorder (SSD) and suspected CAS. Speech motor skills were assessed with the test Dynamic Motor Speech Assessment (DYMTA). The children's output phonology, oral motor performance and grammatical production were assessed using Swedish tests with norms or reference data from children with typical development. Assessments were video/audio-recorded, transcribed and scored according to test manuals. Non-parametric statistics were used.

Results: Preliminary analyses of 27 children indicate that the participants as a group performed with high variability on all tests with much higher standard deviations than age-matched controls. Speech motor skills correlated significantly with phonology ($r = .926$), oral motor skills ($r = .826$) and grammar ($r = .614$). No significant correlation between age and any of the assessed skills was found.

Conclusions: Children with SSD and CAS are a heterogeneous group with speech-language skills not correlating with age, but with strong correlations between speech motor skills and oral motor skills and language, in particular phonology. The association with grammar will need further analysis. Language-specific knowledge of the core symptoms of CAS will guide clinicians to a reliable diagnosis in the relevant language and when assessing multilingual children.

Keywords: Dyspraxia

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CO 071

(1064) - BEHAVIORAL AND NEUROSTRUCTURAL EFFECTS OF A MOTOR INTERVENTION IN CHILDHOOD APRAXIA OF SPEECH.

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Objectives: The aim of this study is to explore changes in brain-behaviour relationship as a function of intervention type. For this we report the changes in behavioural measures and neural connectivity following two different intervention approaches (motor-speech vs. language) in 10 children with Childhood Apraxia of Speech (CAS).

Methods: 10 children with CAS were selected: five were randomly assigned to a motor-speech intervention (MS-treated; these children received PROMPTs for Restructuring Oral Muscular Phonetic Targets program) and the other five received Language and Oral-Motor treatment (L&OM-treated). Behavioural measures included the evaluation of verbal/oro-motor skills (Verbal Motor Assessment for Children-VMPAC), Diadochokinesis (DDK), measures of speech intelligibility, phonetic inventory, accuracy and inconsistency of errors. Neural connectivity of brain circuitries subserving speech was studied by means of MR-Diffusion Tensor Imaging (DTI). All children were evaluated before and after a treatment period of six months during which they received at least 30 individual treatment sessions.

Results: The two groups did not differ statistically on any of the variables at pre-treatment. After treatment the MS-treated children improved significantly on the following behavioural measures: focal oromotor control and sequencing subtests on the VMPAC; lexical accuracy and consistency of errors, intelligibility, DDK accuracy and spontaneous language organization. For L&OM-treated children intervention did not result in significant improvements in verbal/oro-motor skills, word accuracy, consistency of errors, DDK accuracy or intelligibility. However they showed a statistically significant increase in phonetic inventory, receptive vocabulary and in the level of spontaneous language organization. Connectivity changes in the MS-treated group were specific to a set of networks subserving oral motor control, while L&OM-treated group demonstrated more diffuse, but not motor speech specific modifications.

Conclusions: Improvements in core symptoms of CAS after MS-intervention might result from changes in a strategic set of networks related to speech-motor and sensory-motor areas, thus providing insights for the choice of therapeutic approaches.

Keywords: Developmental language disorders

CO 072

(1042) - A 6-YEAR RETROSPECTIVE REVIEW OF PAEDIATRIC PATIENTS SEEN IN A MULTIDISCIPLINARY VOICE CLINIC

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Oral presentations

Objectives: Specialised Multidisciplinary Voice Clinics are becoming more popular and recently attracting an increasing number of paediatric cases. Historically, paediatric voice disorders have been examined as part of a general laryngeal and upper respiratory tract disorders. In the last two decades paediatric voice disorders, not related to breathing difficulties, were addressed as a separate entity especially with the increasing population of professional voice users among children. Minimal pathological lesions of the larynx have been extensively researched in adults. However, the same is yet to be fully understood in the paediatric population. Researchers acknowledge the complexity and difference between adult and paediatric laryngeal pathologies and consequently their management plans. This work aims to shed light on the prevalence of voice disorders in the paediatric population with their subsequent management.

Methods: A retrospective analysis was conducted on all paediatric patients presenting to a specialist multidisciplinary voice clinic over a 6-year period from January 2011 to March 2017. Patient demographics, investigations, diagnoses and management strategies were evaluated.

Results: 113 new paediatric patients were seen. 61.9% of children were male and 38.05% were female, ranging from 3 to 15 years. Vocal fold cysts (22.1%), muscle tension dysphonia (23%) and nodules (12.6%) were the commonest diagnoses. Surgery was performed in 19.5%, 49.6% were referred for speech and language therapy, 13.3% were put on "wait and see" follow up, and 17.6% were discharged from the clinic. Almost 10% of the sample were professional singers with their age ranging from 9-15 years.

Conclusions: Paediatric voice disorders can be more appropriately managed either by surgical and/or speech and language expertise of a multidisciplinary team. Vocal fold cysts are likely to be more common than nodules especially in professional child singers. It is also interesting to see young children developing muscle tension dysphonia, suggesting a need for developing more paediatric-focused clinical skills in voice therapy

Keywords: Voice disorders, functional diagnosis

CO 073

(1190) - VOCAL QUALITY AFTER A PERFORMANCE IN ACTORS COMPARED TO DANCERS

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Van Lierde, Kristiane - Ghent University, Belgium

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Objectives: The purpose of this study is to describe the vocal habits of performers and to compare the impact of a performance on the objective and subjective vocal quality between theater actors and dancers. Hypothetically, the impact of a performance on vocal quality is greater in actors compared to dancers.

Methods: Speech samples of the subjects were recorded before and after a performance of one and a half hours using PRAAT. The samples consisted of a combination of sustained phonation and continuous speech. For each speech sample the multiparameter index Acoustic Voice Quality Index (AVQI) was calculated. Secondly, maximum phonation time, frequency and intensity range and jitter (%) of an isolated vowel /a/ was determined using PRAAT for the calculation of the Dysphonia Severity Index (DSI). Auditory perceptual evaluations were performed using the GRBASI scale. Questionnaires were used to inventory vocal symptoms and influencing factors. Voice recordings of 27 professional actors, 19 non-professional actors and 8 professional dancers were collected before and after a performance with a mean duration of 90 minutes. For comparison of the data ANOVA with Post-hoc Scheffé tests or chi-square tests were used. To compare the impact of the theater performance in the three groups, the Wilcoxon matched-paired ranks test was used.

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Results: Although the questionnaires revealed poor vocal hygiene habits, the acoustic vocal quality was significantly better in actors compared to dancers. No significant differences pre- and post- were found in the DSI, AVQI and GRBASI in the three groups. In actors, a significant increase in f0 was measured possibly reflecting a warm-up effect. After performing actors reported more vocal tract discomfort and dancers reported more pain symptoms.

Conclusions: The results of this study show a similar vocal quality after performing with an increase of vocal tract discomfort in actors and pain in dancers.

Keywords: Voice disorders, professional speaking voice

CO 074

(1161) - EFFECT OF THREE SEMI-OCCLUDED VOCAL TRACT THERAPY PROGRAMS ON THE VOCAL QUALITY OF PATIENTS WITH DYSPHONIA: LAX VOX, STRAW PHONATION AND LIP TRILL

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Objectives: The purpose of this study was to investigate the effect of three semi-occluded vocal tract (SOVT) therapy programs "Lax Vox", "Straw Phonation" and "Lip Trill" on the vocal quality and vocal capacities of patients with dysphonia.

Methods: A multigroup pretest-posttest control group design was used. Thirty-six patients with dysphonia were assigned into one of three experimental groups (practicing either lax vox, straw phonation or lip trill) or a control group (receiving a sham therapy) using blocked randomization. Each group received 6 sessions of 30 minutes over 3 weeks. A standardized voice assessment consisting of both subjective (anamnesis, subject's self-report, auditory-perceptual evaluation) and objective vocal measures and determinations (maximum performance task, aerodynamic measurements, voice range profile, acoustic analysis, Acoustic Voice Quality Index, Dysphonia Severity Index) was used to evaluate the participants' voice pre- and post-therapy.

Results: The experiment is currently being performed and results and conclusions will be available for the conference.

Key words: Voice disorders, intervention

CO 075

(1133) - PROMOTING VOICE WELL-BEING: PROEL METHOD MEETS A PRIMARY SCHOOL SECOND GRADE

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Objectives: The PROEL method was developed for the rehabilitation of voice disorders; it includes mainly physical and proprioceptive activities. A school project was developed both to increase vocal awareness and to promote vocal well-being. The study aims to analyze and discuss if

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experiencing activities based on the PROEL method could lead to a greater improvement in vocal well-being than only giving information.

Methods: Two classes were randomized to an activity (AG, n= 20) and a control group (CG, n = 18); all participants attended a first frontal meeting, where voice characteristics and vocal hygiene norms were illustrated. The AG attended three more meetings, where activities from PROEL method were experienced. All children's voices were analyzed with the multiparametric software MDVP, the GIRBAS perceptual scale and the self-assessment questionnaire CVHI-10, before the meetings (T0), immediately after the end of the meetings (T1) and five months later (T2).

Results: Our results showed a positive impact of the project over the whole sample of children. The AG could recall more activities at T1 and even after five months compared to CG; the dynamic and perceptual exercises of the PROEL had a strong positive impact on children who had tried them. Vocal parameters analysis showed few statistical differences between the two groups at the three different timings: at T1 in the AG the maximum phonation time (TMF) was longer, the perceptual general grade of voice (G) on the GIRBAS scale was improved and the mean fundamental frequency (F0) was highest. However, all significant results observed at T1 were no longer detected at T2.

Conclusions: The PROEL method can be considered a good approach to promote voice well-being in schools, yet significant vocal changes were not established over time.

Keywords: Voice disorders, prevention

CO 076

(1090) - USING VIDEO ANALYSIS TO DEVELOP INTERPERSONAL SKILLS IN STUDENT SLTS

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Objectives: Video analysis is a well-established teaching method to develop the skills of professionals. Systematically analysing behaviour using video of practice provides a level of analysis and reflection that is difficult to achieve via other teaching methods (Fukkink et al., 2011). We present evidence from an evaluation of student SLTs' learning using video of different aspects of practice, exploring in what ways, and to what extent, video feedback enhances student learning in SLT. We consider:

1. Feasibility of video analysis, and
2. Influence of video analysis on quality of reflection and changes in interpersonal skills.

Methods: We used qualitative research methods to investigate the experience and views of video analysis of 43 first year student SLTs, in 2017/18. Video analysis was introduced as part of a new programme to develop skills in clinical conversations during (i) simulated clinical interviews with service users; (ii) role play sessions with peers focusing on case histories, assessment, advice and participation in multidisciplinary meetings; (iii) first clinical placements with service users. Students recorded their practice using IPADs and uploaded videos to a secure professional learning platform, (IRIS Connect). Videos were analysed by students using an observation schedule, then shared with peers and tutors as part of a coaching process.

Results: We will report on the benefits and challenges of using video analysis from (i) metrics of use of video analysis by trainees; (ii) pre and post self - assessment of confidence in interpersonal skills; (iii) self-report of trainees' experience of using video analysis; and (iv) focus groups with students.

Conclusions: Video analysis and coaching are used extensively in SLT practice, but less frequently in developing the skills of trainee SLTs. This study should provide evidence of the feasibility and benefits of video analysis for developing insightful reflection contributing to the development of interpersonal skills of student SLTs.

Key words: Clinical education

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CO 077

(1104) - DEPLOYING A VIDEO ANNOTATION TOOL IN LEARNING WITH PEER FEEDBACK IN PLACE- AND TIME-INDEPENDENT SITUATIONS.

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Objectives: Nowadays place- and time-independent studying is becoming increasingly important. To contribute this to the 'leerwerkplaats' is a challenging task for educators. SLT students at Hanze University of Applied Sciences are required to do an internal apprenticeship in their 2nd and 3rd year in 'de leerwerkplaats'. They form a small practice of approximately twelve students, in which they learn to examine and treat patients, practice clinical reasoning skills and develop a professional and reflective attitude. While making 'leerwerkplaats' more place- and time-independent, it is important to know what the opinion of students is about video annotation tools in education, like Video Fragment Rating (VFR) is. Maybe a tool like Video Fragment Rating can make a significant contribution in education.

Methods: Two groups of 2nd year students were involved to provide peer feedback:

1. in the classroom while watching a live session through a one-way screen, and
2. at a computer while watching a video of a session that is uploaded in VFR.

Afterwards students filled out a questionnaire about the usability, workability, efficiency and effectiveness of both educational methods.

Results: In general, students are positive about using peer feedback. In VFR they gave and received more feedback and the feedback was more specific to the situation. The possibility of self-reflection in VFR is easy to use and good for their professional development. But the aspect of place- and time-independent needs more notice in the video annotation tool VFR.

Conclusions: Using a tool like VFR has improved the awareness of the importance of peer feedback and self-reflection in students. Anywhere, Anytime and Anydevice appear to be critical success factors in the selection of the tool that supports place- and time-independent education.

Motto: "Don't just watch. Learn."

Keywords: Quality of education, E-learning

CO 078

(1167) - TACKLING CHALLENGES IN SLT PRACTICE – PEER COACHING AS A PROBLEM-SOLVING TOOL IN THE CLINICAL REASONING PROCESS

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Objectives: The increasing complexity of caseloads in SLT practice, e.g. due to higher comorbidity, lacking information or experience in the treatment of complicated cases, calls for support from experienced as well as specialist practitioners from within the field - especially for novice therapists. One way to tackle these challenges may be peer coaching and how it can be employed within the educational and professional SLT setting.

Methods: Peer coaching was implemented across five semesters of a successive SLT study programme at a University of Applied Sciences in Germany. The approach was embedded in a clinical reasoning seminar with 25 SLT students who each presented a challenging case study from their current workload. All participants completed a short online survey to evaluate the feasibility of the team approach within this setting as well as their personal benefit and development regarding the discussed case studies.

Results: Students felt encouraged by being able to share their experience and tackle actual challenges. They particularly valued receiving answers from a broad range of other SLTs but also

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contributing to other students' queries and providing practical solutions for them. All participants felt that peer coaching was an appropriate approach for clinical reasoning to support their professional as well as personal development. Other outcomes were a perceived increased ability to employ metacognitive reflection to be used with their whole caseload but also a prospective need for further training. Some students suggested the employment of peer coaching within their work setting.

Conclusions: In the educational as well as professional SLT setting, peer coaching can be successfully employed, triggering metacognitive reflection regarding practitioner's thinking and acting, resulting in an increased awareness of needs and skills as part of the clinical reasoning process.

Keywords : Clinical education, problem-based learning, quality of education

CO 079

(1158) - THE IMPACT OF A PEER-TUTORING PROJECT ON ACADEMIC LEARNING SKILLS IN SPEECH-LANGUAGE PATHOLOGY STUDENTS

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Aper, Leen - Ghent University, Belgium

Danneels, Lieven - Ghent University, Belgium

Van Lierde, Kristiane - Ghent University, Belgium

Objectives: Peer-tutoring may advance the learning experiences and academic performances of students. Moreover, it seems to be an effective strategy to acquire and develop new skills. This study aimed to explore the effects of peer-tutoring on the competencies of first-year students (tutees) and final-year students (tutors) of a master program in speech-language pathology.

Methods: Self-administered questionnaires were used to investigate the motivation, expectations, learning success and competencies of 69 tutees and 32 tutors regarding a peer-tutoring project to optimize the articulatory skills of the tutees. Their answers were statistically compared with those of a control group of students who did not participate in the peer-tutoring project.

Results: Tutees reported a significantly higher learning success compared to the control group, although their motivation and expectations were comparable at the start. The tutors, however, reported little motivation at the start and no improvement at the end of the project.

Conclusions: Based on the positive effects reported by the tutees, this peer-tutoring program will be integrated in the speech-language training curriculum to improve the articulation skills of first-year students. Nevertheless, adjustments will be needed to decrease the resistance in the final-year tutors. Further research may evaluate the effect of incorporated adjustments on this resistance.

Keywords: Clinical education

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CO 080

(1029) - ADDRESSING CONTINUED EDUCATION IN EGYPT THROUGH THE SPEECH AND LANGUAGE PATHOLOGY INTERNATIONAL PROGRAM

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Al-Dakroury, Wael (Saudi Arabia) - *Psych Care Clinics*

Elie, Martine (United States of America) - *Howard University*

Natour, Yasser (Jordan) - *Psych Care Clinics - University of Jordan*

Objectives: This panel presentation will address the needs in Egypt as it relates to the education of professionals in a myriad of clinical topics. The field in Egypt is growing and is at an exciting point that the professional organization The Egyptian Association of Communication Sciences and Linguistics designed and implemented the First Speech and Language Pathology International Program. The Continuing Education activities offered the participants the opportunity to receive ASHA CEUs through a collaboration with the District of Columbia Speech, Language and Hearing Association. A needs assessment identified four areas to address during the program: Autism Spectrum Disorders, Reading and Language Disorders, Child Language Disorders, and Dysphagia. The emphasis was to offer best practices information in order to relate research to practice.

Participants will:

- a. Summarize the present situation of the professions in Egypt.
- b. List some of the continuing education needs of professionals in Egypt.
- c. Summarize the activities carried out in order to try to address the gap between professional skills and client needs.

Methods: A one week continuing education program was held with an attendance of more than 60 participants. A pre-assessment of needs helped to guide the development of the program. Highly skilled and experienced professionals addressed best practices in autism, dysphagia, reading and writing, and child language disorders. The main focus was to address research to practice, so that participants could implement new skills immediately in their settings.

Results: Overall program evaluations results proved that the activities were highly successful in accomplishing the goals of meeting participant needs.

Conclusions: Other organizations and professionals can emulate the activities offered by the Egyptian Association of Communication Sciences and Linguistics. Most importantly, for countries such as Egypt, information related to clinical applications that can be used immediately by professionals proved to be preferred.

CO 081

(1237) - WORDS FOR PHONOLOGICAL ASSESSMENT OF THE ITALIAN LANGUAGE: CONTENT VALIDITY

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Keske-Soares, Márcia - *Universidade Federal de Santa Maria UFSM, Brazil*

Ilha Ceron, Marizete - *Universidade Federal de Santa Maria UFSM, Brazil*

Objectives: Phonological assessment fundamentally should capture the phonological knowledge of the child with respect to segments, specifically regarding the internal structure of the segments and syllabic constituents of their mother tongue. In order to obtain a significant sample of the child's phonological system, it is essential to have a list of words that represents all the phonemes of the language in analysis, considering simple and complex onset. This study aimed to propose a list of validated words to compose a possible phonological assessment tool for the Italian language.

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Methods: The researcher identified 2489 words based on children's speech assessments in the Italian language. The words were classified by considering segments and their position in the syllable and the word. This list was evaluated by a group of experts on the subject matter (Italian speech-language pathologists) using PAROLE software. For each word three choices were offered, from which one single choice could be made. Then, through other statistical software, the content validity ratio (CVR) index was calculated for each item evaluated.

Results: Of the 2489 items, 131 words were considered valid to evaluate the phonemes in simple and complex onset positions in Italian monolingual children between three years and eight years and 11 months. Among the selected words, it may be observed that some are repeated in order to evaluate different phonemes. This evaluation is necessary in order to create a list of words with at least three occurrences of each segment in the different positions of the syllable and the word, which are pictorially representable to facilitate the elicitation of the words, and so that it can be tested by other subject matter experts (children).

Conclusions: The list of validated words allowed the researchers to obtain an adequate number of stimuli to be used in a new phonological assessment tool for Italian monolingual children.

Keywords: Phonological Disorders

CO 082

(1412) - MORPHO-SYNTACTIC COMPLEXITY MEASURES IN TURKISH: MEAN LENGTH OF UTTERANCE, DEVELOPMENTAL SENTENCE SCORING AND INDEX OF PRODUCTIVE SYNTAX

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Özcebe, Esra - Hacettepe University, Turkey

Turan, Figen - Hacettepe University, Turkey

Objectives: This study is conducted with the aim of comparing the results of morpho-syntactic measures, MLUm, MLUw, DSS and IPSyn, among Turkish children. Hence, the most appropriate measure can be identified for the Turkish language assessing morpho-syntactic abilities of Turkish children besides standardized language tests.

Methods: The subjects were 80 typically developing, monolingual Turkish children between 2;0 and 5;11 years. The subjects were divided into eight age groups with six-month intervals and each group had equal representation by sex. The data was collected during a free play setting with a farm toy set and recorded with a hand camera. The conversation during play was then transcribed via SALT v9 Turkish version software and both MLUw and MLUm were calculated for the first 100 utterances. The other first 100 utterances were defined taking utterance exclusion criteria for IPSyn into account and analyzed according to grammatical structures in IPSyn-TR. For DSS, the last fifty sentences determined the eight subgroups of DSS for Turkish.

Results: When the utterances were analysed, all scores showed a steady increase across all groups except for a minimal decrease in the age group of 4;6-5;0 years in IPSyn. Also, scores are highly correlated not only with standardized tests assuring typical development, but also with standardized language tests. Although each is highly correlated with the other, MLUm and IPSyn have the strongest value. Moreover, MLUm has a higher value with others in comparison to MLUw.

Conclusions: MLU, DSS and IPSyn are reliable and valid methods to assess the morpho-syntactic abilities of Turkish children between 2;0-5;11 years. However, MLUm is a better indication than MLUw for Turkish, which is a morphologically rich language. Having a higher correlation with IPSyn gives rise to the thought that IPSyn is a more reliable indicator for expressive language skills in Turkish.

Keywords: Prevention, developmental language disorders

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CO 083

(1404) - PORTUGUESE VERSION OF THE LANGUAGE USE INVENTORY: A PARENT-REPORT MEASURE FOR PRAGMATIC LANGUAGE SKILLS

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Cruz-Santos, Anabela - *CIEd, Institute of Education, University of Minho, Portugal*
Almeida, Leandro - *CIEd, Institute of Education, University of Minho, Portugal*

Objectives: Considering the relevance of pragmatics in communication and the lack of assessment tools in Portugal to assess these abilities in early ages, one of the primary goals of this study relies on the translation, adaptation, validation and standardization of the inventory “Language Use Inventory” (LUI), to European Portuguese. LUI is a standardized parent-report measure, with three parts (I–gestures; II–words; III–phrases) designed to assess the development of pragmatic skills in children from 18- to 47-months-old.

Methods: All the procedures recommended by international test adaptation and validation guidelines were adopted in this quantitative study: first, a pilot study was implemented with a sample of 120 inventories, and second, a normative study was executed with a sample of 1555 inventories. In the normative study, all inventories of the sample were answered by the parents/caregivers of children from 18-to 47-months-old, from Portugal (which includes mainland and islands).

Results: The analysis of the reliability of the three parts of the inventory showed Cronbach’s alpha coefficients above .80, obtaining test-retest correlation coefficients between .83 and .97, stating the stability of the results. On the other hand, at the level of structural validity, according to the theory, the inventory subscales were organized around two factors which taken together can explain 77.4 % of the variance of the results.

Conclusions: These high levels of reliability and validity of the Portuguese version of the inventory (LUI-PT) illustrate its standardization, and the establishment of standard norms for the analysis of pragmatic skills of Portuguese children between 18 and 47 months old. The growth of the results according to age, and their differentiation according to typical language development or difficulties in this field, suggest the relevance of this tool for the identification of pragmatic impairments in the early years, as well as for the needs of all professionals in the field.

Keywords: Pragmatics, screening

CO 084

(1340) - THE HUNGARIAN ADAPTATION OF THE MACARTHUR-BATES CDI-3 FOR SCREENING LANGUAGE DELAYS

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Lőrök, József - *Eötvös Loránd University of Sciences, Bárczi Gusztáv Faculty of Special Education, Hungary*

Objectives: The main aims of our study were to gather norming data for the Hungarian form of the MacArthur-Bates CDI-3 and to introduce the instrument as the main tool for language screening. In Hungary, law changes have made screening for language delay at the age of 3 years obligatory for SLTs working in educational settings.

Methods: 1453 children with no apparent developmental problems between age 2;0 and 4;0 years were involved in the norming study. Participants were gathered from the capital city, as well as from small towns and villages in the country. CDI-3 forms were completed with demographic questionnaires. Quantitative statistical analyses were performed on the number

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of words in the expressive vocabulary list, the mean length of the three longest sentences and the number of positive answers on sentence complexity and communicative routines. Validity of the CDI-3 form was investigated in a subgroup of children by comparing parental report with children's performances in tests of sentence comprehension (TROG) and expressive morphology, as well as narrative speech samples.

Results: Data showed normal distribution in all age groups. The normal ranges of expressive vocabulary, sentence complexity and communicative routines were defined with cut-off levels marking language delay. The different sections of the form show a strong correlation in general. Sections of the parental report form showed a strong correlation with children's performances in tests of sentence comprehension, expressive morphology and quantitative measures of narrative speech samples.

Conclusions: The Hungarian form of the MacArthur-Bates CDI-3 is a valid instrument for screening language delay at the age of 3 years and might also be useful in monitoring the efficacy of intervention for childhood language disorders.

Keywords: **Developmental language disorders, screening, patient-reported outcome measures** (development or cross-cultural adaptation and validation)

CO 085

(1215) - A NEW TEST FOR THE ASSESSMENT OF PROSODY IN PRE-SCHOOL CHILDREN (APC)

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Vigário, Marina - CLUL, Portugal; - FLUL, Portugal

Lousada, Marisa - Cintesis.UA, Portugal; - ESSUA, Portugal

Frota, Sónia - CLUL, Portugal; - FLUL, Portugal

Objectives: A growing body of research has shown that prosody has a crucial role not only in human communication but also in language acquisition and development. Prosody (i.e. intonation, rhythm, prominence, chunking) helps infants/toddlers to segment the speech signal and establish linguistic categories (Gervain & Mehler, 2010; Morgan & Demuth, 1996). Typical prosodic development in production is also crucial, relating to lexical, morpho-syntactic and pragmatic development (Frota et al, 2016). In this work, we present the Assessment of Prosody in Children (APC), a new tool for the assessment of prosodic development in children from 3 to 5 years of age, fulfilling a gap in the existing protocols for the evaluation of prosodic development.

Methods: The APC assesses European Portuguese (EP) children's prosodic comprehension and expression abilities related to (i) affect – liking versus disliking, (ii) modality – vocative chant versus statements, (iii) focus – accent placement on a particular word, and (iv) stress (only comprehension) – discriminating stress patterns. The construction of the APC was informed by the existing instruments for older subjects (McCann & Peppé, 2003; Filipe et al. 2017) and the test is administered with computer support. Vocabulary items were selected from PLEX-5 - A production lexicon of child speech for European Portuguese (Frota, Correia, Severino, Cruz, Vigário & Cortês, 2012). A convenience sample (N = 21 females, 10 males; age range 3;00 to 4;00 years; mean=XX) was recruited in a Kindergarten, following all standard ethical procedures. A speech-language therapist assessed all the children individually, recording all the productions.

Results: Children's responses revealed a different pace of development across prosodic abilities.

Conclusions: The APC was found to be an informative test that can be easily applied to assess prosodic development in pre-school children as early as 3 years of age.

Keywords: **Assessment, clinical education**

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CO 086

(1211) - RECURRENT MIDDLE EAR INFECTIONS IN EARLY CHILDHOOD – AUDITORY PROCESSING AND ACQUISITION OF PHONOLOGY

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Objectives: The incidence of middle ear infections is greatest in early childhood, which is an important period for the development of central auditory processing. The aim of this study was to examine central auditory processing and acquisition of phonology in 2-year-old children with a history of recurrent acute otitis media (RAOM). For the first time children with RAOM were examined by using auditory event-related potentials (ERPs) to study sound encoding and pre-attentive auditory discrimination of speech stimuli, and neural mechanisms of involuntary auditory attention. In addition, the consonant production of these children was studied to supply information about accuracy of neural sound discrimination and phonological representation forming.

Methods: Twenty 2-year-old (± 2 months) children with RAOM and their matched controls were examined. Electroencephalography was recorded in a passive multi-feature paradigm containing Finnish syllable stimuli and five of their deviations (frequency, intensity, vowel, vowel duration, and consonant changes). Obligatory P1 and N2, Mismatch negativity (MMN), early P3a (eP3a), and late P3a (lP3a) responses of ERPs were analysed. Consonant inventories were analysed from spontaneous speech samples produced in a semi-structured free play situation of 15 minutes.

Results: The results suggested that those children with RAOM had intact sound encoding but atypical preattentive auditory discrimination of multiple speech sound features. In addition, they showed atypical neural mechanisms of involuntary auditory attention for novel but meaningless sounds. The children with RAOM also had restricted consonant inventories compared to their peers.

Conclusions: Fluctuating hearing loss associated with RAOM in early childhood may affect central auditory processing and thus prevent optimal language development. It would be important to counsel the parents about fluctuant hearing loss and to monitor the language development of these children.

This work was presented at a national meeting of the Finnish Association of Speech and Language Research on March 30th, 2017.

Keywords: Hearing impairment, Phonological disorders, Prevention.

CO 087

(1294) - GREEK SPEECH-LANGUAGE THERAPISTS' PRACTICES FROM ASSESSMENT TO SERVICE DELIVERY FOR CHILDREN WITH SPEECH SOUND DISORDERS (SSD).

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Objectives: Speech & Language Therapists (SLTs) use a variety of practices for children with Speech Sound Disorders (SSD). While an emerging body of empirical research is building in the field of SSD, our understanding of how closely this aligns with professional clinical practice is limited. Aims: To investigate Greek SLTs' practices from assessment to service delivery for children with SSD.

Methods: A questionnaire (McLeod and Baker, 2014) modified by the research team was completed by 68 Greek SLTs. The survey consisted of qualitative and quantitative questions concerning practices from assessment to service delivery for children with SSD.

Results: The majority of the respondents (81.6%) were working in private practice. 50% had more than 9 years of experience and 41.4% were specialized in phonological delay / development.

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54.4% of SLTs administered the “Test of Phonetic & Phonological Development” assessment tool standardized in Greek (PAL, 1995), while 60% used a phonological process method of analysis. SLTs reported that children’s ages always influenced their intervention decisions, while early developing sounds were indicated as a high priority for 86.6% of respondents when prioritizing intervention targets. The most commonly used intervention approaches were Phonological awareness (53.1%) and Auditory Discrimination (65.7%). Service was delivered individually (one-to-one) by 85.8% of the responders, in clinical settings (86.8%) and by the clinician him/herself (60.3%). A Parent-as-Therapist-aid model was deemed to be the most preferable practice by SLTs when dealing with families of children with SSD. Moreover, 71.6% of the respondents believed that family involvement always positively affects intervention outcome.

Conclusions: Greek SLTs’ practices from assessment to service delivery were investigated. Professionals are not always in line with literature suggestions, but appear to rely on their clinical expertise as well. Differences between professionals’ practices across countries are discussed.

CO 088

(1188) - CORRELATION BETWEEN THE SUBJECTIVE RATINGS OF INTELLIGIBILITY OF CHILDREN WITH SPEECH SOUND DISORDERS AND THE RESULTS OF STANDARDIZED TESTS

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Objectives: Speech sound disorders is a developmental disorder characterized by speech sound production errors that impact intelligibility. The objective of this study was to assess the intelligibility of children with speech sound disorders through not only subjective methods but also standardized tests and the correlation between the objective and subjective measures of speech sound disorders were tested.

Methods: 42 children with speech sound disorders, aged from 4;5 to 6;6 years old were included in the study. The Goldman-Fristoe Test of Articulation-Turkish version (SST) was used to assess the speech sound development of children and Intelligibility in Context Scale-Turkish version (ICS) was used to assess the intelligibility of the children. The ICS is a parent-completed questionnaire consisting of 7 items, to rate the degree to which children’s speech is understood by different communication partners on a 5-point scale. Mothers participated as the judges of their children’s intelligibility. The results of the SST and the intelligibility raw scores were analysed to test whether there was a correlation between the objective and subjective measurements of the children.

Results: The findings of the study show that there is a low correlation between the standard scores of the SST and the intelligibility ratings of the children. Spearman’s correlation coefficient was calculated between Auditory Discrimination subtest scores and Intelligibility scores; between Articulation Subtest scores and Intelligibility scores and lastly between Phonological Processes Subtest scores and Intelligibility scores. Auditory Discrimination scores and Intelligibility scores were negatively correlated with each other ($r = -0.44$; $p = 0.046$). Articulation Subtest scores and Intelligibility scores were negatively moderately correlated ($r = -0.64$; $p = 0.002$) and lastly Phonological Processes Subtest Scores and Intelligibility test scores were also negatively moderately correlated with each other ($r = -0.51$; $p = 0.018$).

Conclusions: Although the children’s performance was low on the SST and had mild to moderate or moderate to severe speech sound disorders, their intelligibility was not rated low by their mothers.

Keywords: Phonological disorders

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CO 089

(1315) - EFFECTIVENESS OF STIMULABILITY THERAPY IN TURKISH CHILDREN WITH SPEECH SOUND DISORDERS

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Objectives: Stimulability has been used successfully by speech and language pathologists in the treatment of speech sound disorders. Although difficult to define, stimulability is an easily measured skill that can provide valuable information for clinicians in the treatment of children with speech sound disorders. Its unique role in treatment planning of speech sound disorders in Turkish-speaking children has not been explored, yet. The objective of this study was to investigate the effect of stimulability therapy on speech sound disorders.

Methods: The participants involved in the study were selected from children aged between 4;5 to 6;6 years old. 22 children with speech sound disorders were included in the study and were recruited from Hacettepe University, Speech and Language Therapy Unit. The Turkish version of the Goldman-Fristoe Test of Articulation (SST) was used to assess the speech sound development of the children. Children were given 'Stimulability Therapy' for 11 sessions to improve their speech intelligibility.

Results: Pre-test and post-test results of the SST were compared. The data analysis showed significant positive changes in the SST scores; the number of developmentally inappropriate phonological processes of the children had disappeared and their intelligibility had improved. Pre-test and post-test results of subtests of the SST were compared with each other. The differences between the variables were analysed using the Wilcoxon test. It was revealed that all post-test scores were relatively higher than pre-test scores and all these differences were statistically significant ($p < .05$).

Conclusions: Results of the study contribute to the findings of Miccio & Elbert (1996), in which the researchers invented the stimulability intervention program for children who have small phonetic inventories and contribute to their phonological system positively. The results of the study indicate that stimulability therapy can be used as a type of treatment in speech sound disorders in Turkish-speaking children.

Keywords: speech sound disorders, stimulability, intelligibility, intervention

CO 090

(1089) - THE RELATION BETWEEN SSD SEVERITY AND CLICK ABR

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Objectives: To verify the relation between Speech Sound Disorder (SSD) severity on Auditory Brainstem Responses (ABR) with click stimulus.

Methods: ABR with click stimulus were recorded and analyzed (IO-LOGIC equipment) in 29 children diagnosed with SSD aged between 5:0 and 7:11 years old, allocated into three groups according to the severity of the SSD as measured by the Percentage of Consonants Correct (PCC). The mild group (MG) was composed of 9 subjects with PCC values above 85%, the moderate group (MDG) comprised 10 subjects with a PCC value between 65% and 84.9% and the severe group (SG) by 10 subjects with PCC values below 65%. The latencies of I, III, V waves of these subjects were analyzed, as well as the interpeaks I-III, III-V e I-V.

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Results: Results demonstrated that in the three groups the latency averages of the I, III and V waves and their interpeaks were higher than the values described for typically developing children in the Bio-Logic equipment manual. Furthermore ANOVA analysis indicated no significant differences between groups for the latency averages of the three waves I ($p=0.665$), III ($p=0.965$) and V ($p=0.395$) regardless of the tested ear ($p=0.354$), ($p=0.162$) and ($p=0.866$). There was also no difference between groups for interpeaks averages I-III ($p=0.665$), III-V ($p=0.110$) and I-V ($p=0.206$) regardless of the tested ear ($p=0.589$), ($p=0.836$) and ($p=0.754$).

Conclusions: Children with SSD presented higher latencies of waves and interpeaks waves than the typically developing ones suggesting a relation between SSD and the auditory pathway even though the severity of SSD did not seem to influence the performance of ABR with click stimulus: the severity did not influence the impairment of the auditory pathway in the brainstem.

Keywords: Phonological disorders

CO 091

(1286) - EXPLORING AGE EFFECT ON STORY GRAMMAR AND COMPLEX SYNTAX IN BILINGUAL AND MONOLINGUAL NARRATIVES

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Objectives: Narrative tasks are an ecological measure to elicit language performance that requires organization at the discourse level and at the syntactic level. There is still little evidence on bilingual children's abilities on narrative tasks. The aim of this study was to examine the impact of the amount of bilingual exposure and age of first bilingual exposure (AoA) on the macro level (story grammar) and micro level (length and complexity of utterance) in narratives.

Methods: Participants were 103 typically-developing children in Quebec, Canada, in two age groups: Grade 1 (mean age 6;9 years (SD 6m) and Grade 3 (mean age 8;8 years (SD 8m)). Each group included 3 subgroups: monolingual French speakers, sequential and simultaneous speakers of French. Within each age group, the subgroups were equivalent on age, nonverbal cognition and maternal education. Narratives were elicited using wordless picture stories using The Edmonton Narrative Norms Instrument -ENNI- (Schneider, Dubé & Hayward, 2005). Outcome measures included Story Grammar (macro level), and, at the micro level, mean length of utterance (MLU), total number of utterances, Number of Different Words (NWD) and Complexity Index (CI, a measure of the use of subordinate clauses).

Results: Results were analysed using ANOVA and regression. For both Grade 1 and Grade 3 children, no significant differences were found between monolingual and bilingual children on any measure, whether using group analyses or treating amount and timing of exposure on a continuum. Significant differences were found between the two age groups.

Conclusions: The results suggest that narratives are relatively unaffected by bilingualism in school-age children at the macro and micro levels. Given previous results on preschool children and vocabulary results on the participants of this study, the results suggest that syntactic structures may need less exposure to be acquired by school-age children and that syntax could be more semantically biased in younger children.

Keywords: Multilingualism

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CO 092

(1034) - MULTILINGUAL AND MIGRANT CHILDREN'S ACCESS TO SPEECH-LANGUAGE THERAPY SERVICES

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Objectives: Speech, language and communication needs are particularly common amongst children including multilingual and migrant children. More than every third child in Germany has a migrant background. In parts of the city of Bremen, this figure is even higher, including refugee children. The availability of data on the access and provision of speech-language therapy (SLT) services is still inadequate, accounting especially for multilingual children. However, health-monitoring programs report that migrants like children from disadvantaged families differ in many health-related aspects from the majority population, i.e. that they are more likely to experience barriers in health care.

Methods: Information was obtained from speech language therapists (SLT) representing 30 practices in different districts across one of the largest cities, which is uniquely affected by socio-spatial polarization. Data was collected between July and September 2016 by means of a questionnaire, data analyzed using descriptive statistics and SPSS. Practices were clustered according to the proportion of minor migrants and minor welfare recipients of the district. The survey addressed i.e. consultation number and proportion of multilingual children, age of child by time of referral, physician vs. SLT diagnosis, application and type of assessment materials, intervention goals, socio-demographic data of practicing SLTs.

Results: Findings suggest that multilingual children experience later referral compared to monolingual German speaking children, with every second referred multilingual child demonstrating a DLD, whereas some children with poor socioeconomic status were misdiagnosed. Moreover, SLT experience determination of accurate differential diagnosis between communication disorders and typical linguistic variations still challenging without participation in continuing education focusing on service provision of the multilingual and multicultural clientele.

Conclusions: The study highlights obstacles and the need for increased multiprofessional awareness and an enhanced professional knowledge to provide effective and swift diagnosis earlier to allow multilingual children with DLD to access needed services on equal terms.

Keywords: Developmental language disorders

CO 093

(1343) - NO BILINGUAL ADVANTAGE FOR TWO AGE GROUPS OF SCHOOL-AGE CHILDREN ON TWO TASKS OF EXECUTIVE FUNCTION

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Objectives: A number of research studies have concluded that bilingual children outperform monolingual children on tasks of executive function (Barac & Bialystok, 2011), while other studies have failed to find a bilingual advantage (e.g. Namazi & Thordardottir, 2010). Many of these studies have employed the Dimensional or Wisconsin Card sorting tasks (Bialystok, 1999; Bialystok & Martin, 2004), which requires participants to figure out and then shift card sorting criteria in the face of conflicting evidence. This study compared monolingual children to bilingual children on two tasks of executive function.

Methods: Participants were 76 school-age children, in grade 1 and grade 3 in French schools in Montreal. Each grade level comprised monolingual children and two bilingual subgroups,

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equivalent on age, maternal education and nonverbal IQ, but who differed in age of bilingual exposure (AoE) and on overall amount of bilingual exposure. Background variables were carefully documented through detailed parent report. The monolingual and bilingual groups were shown previously to differ significantly on vocabulary measures. All participants were administered two measures of executive function, the Wisconsin Card Sort Task (WCST, Heaton et al. 1993) and the Odd one Out (OoO, Henry, 2001), a task of visual WM span. The WCST was scored for total correct responses, number of correct trials, and number items to shift. The OoO was scored for total correct responses and span (longest set recalled).

Results: At both grade levels, the monolingual children had the highest performance; however, group differences between monolingual and bilingual children were not significant. Regression analyses treating amount of bilingual exposure and AoE as continuous variables yielded marginally significant results for executive function scores for the younger group ($p=.077$) suggesting better performance by bilingual children with later AoEs. The regression was not significant for the older group ($p=.432$).

Conclusions: The study failed to find evidence of a bilingual advantage in executive function.

Keywords: Multilingualism

CO 094

(1428) - LANGUAGE DEVELOPMENT IN TURKISH-DUTCH BILINGUALS COMPARED TO MONOLINGUALS

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Objectives: The purpose of this study was to investigate the language skills of 25 Turkish-Dutch bilinguals compared to 25 age and gender matched monolingual Dutch children. Secondly, in 9 Turkish-Dutch bilinguals and 13 monolingual Dutch children longitudinal data of three years (at the age of 6 years and at the age of 9 years) were collected and compared.

Methods: Fifty children born in 2007 were included in the study. The subject group consisted of 25 bilingual Turkish-Dutch children with a mean age of 9;6 years (range: 8;11 – 9;10 years, SD: 0.26) with Turkish as the dominant home language. Language exposure to Dutch was at least 2 years. An age and gender matched control group of monolingual Dutch children was compiled. Language skills were investigated using the CELF. In 22 children, language skills were reassessed three years later in a follow-up study. Data were compared using the Mann-Whitney U-test and Wilcoxon matched-pairs signed ranks test.

Results: The general language skills, language comprehension and language production were significantly lower in the multilingual Turkish-Dutch children compared to the monolinguals. The follow-up study showed no significant differences in language skills in both the multilingual Turkish-Dutch and monolingual children. Language production in the bilingual children was mainly influenced by the occupation of the mother and the home language.

Conclusions: After three years, the language delay in bilingual Turkish Dutch children remained.

Keywords: Multilingualism

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CO 095

(1147) - BILINGUAL LANGUAGE EXPOSURE AND VOCABULARY IN THREE-YEAR-OLD CHILDREN

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Objectives: Previous research has shown that bilingual children tend to have smaller vocabularies in each language compared to monolingual children. Previous research also indicates that whether or not a bilingual child's vocabulary reaches the typical monolingual range depends on the bilingual language exposure pattern. There seems to be a connection between the amount of exposure to a language and performance in that same language. This study in progress examines the relationship between expressive vocabulary in Swedish and Finnish and language exposure among three-year-old bilingual children in Finland. The study also makes comparisons concerning vocabulary size between bilingual and monolingual children.

Methods: Participants were 46 Swedish-Finnish speaking simultaneous bilingual children and 24 Swedish speaking monolingual children. They were assessed individually on expressive vocabulary in Swedish and/or Finnish with the Renfrew Language Scales: Word Finding Vocabulary Test. The parents also filled out a questionnaire with background information concerning their child's language exposure from birth up to three years of age.

Results: The results of the present study will be reported through measures of single, total and total conceptual vocabulary of the bilingual and the monolingual children, and measures of language exposure for the bilingual children. Based on previous research, we hypothesize that the analyses will show a positive correlation between size of expressive vocabulary and amount of language exposure in each language. Implications of the findings will be discussed and their relevance to the differentiation between typical and impaired language development in bilingual children will be evaluated.

Conclusions: In order to gain a better understanding of typical language development in bilingual children, data from bilingual children is needed to succeed in avoiding under and over diagnosis of language impairment in this population. The present study will contribute with perspectives on how to accurately measure and interpret data on bilingual vocabulary in young children.

Keywords: Multilingualism

CO 096

(1175) - IMPACT OF VOCABULARY AND SYNTAX INTERVENTIONS ON THE READING OF POOR COMPREHENDERS: A RANDOMIZED-CONTROLLED STUDY

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Objectives: The simple view of reading proposes that reading is a product of decoding and oral comprehension. In this model, the difficulties of poor comprehenders, who can decode fluently and accurately, stem from weaknesses in oral language. Some interventions on oral language have been shown to impact on their reading. However, the best targets for oral language intervention

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are not clear. In this randomized-controlled study we aimed to compare the impact on the text comprehension of poor comprehenders of two oral language-focused interventions centred on syntax and vocabulary, respectively.

Methods: 175 children (M = 9:5 years, SD = 0:5, 87 girls) took part in three interventions — syntax, vocabulary, and executive functions, and a control reading-motivation group. 85 were classified as poor comprehenders (PC) and 90 as typically-developing readers (TD). Interventions were carried out in 26 intervention groups (6-10 participants each) for a one-hour weekly group session for 10 weeks. The vocabulary intervention was modelled on the Robust Vocabulary Instruction Method (Beck, McKeown, & Kucan, 2002), and the syntax intervention on Phillips (2014).

Results: An ANCOVA controlling for age, prior standardized vocabulary scores, and pretest scores, showed an improvement for participants' vocabulary ($p < .001$) and syntax ($p = .024$) in the vocabulary intervention, and their syntax ($p = .001$) and vocabulary scores ($p = .008$) in the syntax intervention, compared to the control group. There was no Intervention x Group interaction, indicating that interventions impacted equally on the PC and TD participants. However, participants in the vocabulary and in the syntax group did not improve in their reading comprehension scores as measured with an ad hoc task and a standardized test.

Conclusions: Although weaknesses in oral language could be related to poor text comprehension, the impact of oral language interventions and transfer to reading is probably limited unless transfer is specifically targeted.

Keywords: Intervention

CO 097

(1023) - ORAL READING FLUENCY NORMS FOR ROMANIAN LANGUAGE AT THE END OF FIRST GRADE

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Objectives: Oral reading fluency represents a priority in our educational system, even though there are not any norms for elementary students. The purpose of this study is to establish norms for oral reading fluency for the Romanian language at the end of first grade using PEAFC (The Assessment and Training of Reading Fluency Instrument, Bodea Hațegan & Talaș, 2014).

Methods: PEAFC is a tool developed according to the particulars of the Romanian language for the early detection of oral reading fluency disorders and early intervention in the first grades. 1997 students, 954 girls and 1023 boys aged 7-9 years old, first graders, participated in this study. The students were selected from rural and urban schools (385 students from rural schools and 1592 students from urban schools). The data were collected by the evaluators using four different word lists selected from PEAFC. The evaluator recorded the number of words the student read in a minute and the number of errors the students made in each list.

Results: The results offer new norms for oral reading fluency at the end of first grade in the following areas: monosyllabic words, disyllabic words, three-syllable words and text words (41.21 monosyllabic words, 37.66 disyllabic words, 25.73 three-syllable words and 38.74 text words).

Conclusions: The norms for oral reading fluency at the end of first grade offer a new perspective on oral reading fluency for teachers and speech therapists, as early intervention programs can be developed comparing the students' results to these norms. The tasks used in this study can

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be used to identify students at risk for dyslexia at an early age. Oral reading fluency norms for second grade, third grade and fourth grade need to be established. The implications of these norms in the Romanian education system for assessment and interventions in the context of dyslexia will be discussed.

Keywords: Quality of education

CO 098

(1009) - SEMANTIC PRIMING INFLUENCES THE PROCESSING OF SEMANTIC PROPERTY MAPPING - RESULTS OF A PRE-STUDY ON AN INTERVENTION PROGRAM FOR DYSLEXICS

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Objectives: In priming, a short-term context stimulus affects the processing of a subsequent target stimulus (Gulan, 2010). Transferred to the processing of written language in primary school, the prime facilitates the reading process for children when they link the word read to their previous experiences. Primes (e.g., images) that precede the target affect the recognition time of the semantic feature map (Gulan & Valerjey, 2010).

Methods: In the first part of the present study, we assess the reading rates and priming effects on it in a sample of $n = 47$ children and adolescents. In addition, differences between the age groups are recorded for functional and visual characteristics of a category (fruits, vegetables, tools, toys, animals) and the detection times are checked according to presented targets. We assume a faster reading process if the relationships between targets and primes are close and positive.

Results: A preliminary study with adult participants results in average reading speed of 2.24 seconds. The functional feature assignment ($\emptyset = 2.0$ s) to a category is carried out 30 milliseconds faster than the visual feature detection ($\emptyset = 2.3$ s) (Prange, unpublished). Initial results for the identification of suitable primes and targets in children and adolescents are discussed and interpreted against the theoretical background of the Logogen model (Patterson, 1998).

Conclusions: On the basis of these results, we conceptualize an intervention to improve the reading speed of children and adolescents with dyslexia. Its effectiveness is evaluated in the context of a single case series ($n = 6$) in the second part of the present study.

Keywords: Dyslexia, intervention, cognitive impairment

CO 099

(1191) - A COMPARISON OF PRINT CONCEPT KNOWLEDGE SKILLS OF TURKISH CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDERS AND TYPICALLY DEVELOPING TURKISH PRESCHOOL CHILDREN

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Objectives: Emergent literacy skills (ELS) are predictive skills which are related with future reading abilities. The emergent literacy skills that children have facilitate their reading process and prepare children for their academic life. One of the important parts of ELS is print knowledge,

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which is accepted as a broader term about developing knowledge on orthography and written language. The objective of this preliminary study was to present a brief summary of the print knowledge skills of Turkish children aged between 3-5 years.

Methods: Preschool Word and Print Awareness (PWPA) procedure was administered by trained examiners. During shared book reading, the children's print concept knowledge was questioned with different tasks (location of the front book, organization of narrative print: left to right on the page, etc.). Children's responses were rated between 0-2 points. Both assessments were conducted by two speech and language pathologists in clinical settings. Participants with developmental language disorders (n = 20) were compared with their typically developing peers (n = 20) according to their scores on these different tasks.

Results: The results of this study indicated that typically developing children had higher performance scores on different tasks of PWPA than children with developmental language disorders and the differences in the scores were statistically significant ($p=0.03$) between the two groups of children. Differences in print concept knowledge might predict the phonological awareness skills of children and their future reading abilities.

Conclusions: Hence, the children with lower performances in PWPA procedure might be under the risk of phonological disorders and later reading-writing disabilities. However, the small sample size of this study hinder us from examining the effects of SES on task performances of children. In future studies, the number of participants will be increased to examine the effects of SES on the performances of both groups.

Keywords: Developmental language disorders, print concept knowledge, emergent literacy skills

CO 100

(1240) - THE ROLE OF MOTOR KNOWLEDGE IN GRAPHIC SYMBOL RECOGNITION

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Objectives: Recent data suggest that motor knowledge plays a crucial role in the recognition of graphic symbols. Learning symbols through handwritten copy gives rise to better recognition than learning by typing on a keyboard, indicating that the type of motor activity involved while learning new characters affects subsequent recognition performance. However, handwriting and typing do not differ only by motor activity. Copying requires to reproduce all elements of the target and thus to construct a detailed visual representation of it. Conversely, typing does not require such detailed processing since a global matching between the target and the corresponding key is sufficient. The present study attempted to disentangle the respective contributions of analytic processing and motor knowledge.

Methods: We compared copying and typing to a composition learning condition which involves the analysis of the symbols without the graphomotor component. Participants composed the target symbols by selecting elementary features from the set displayed on screen and dragging them into the appropriate position. Adult participants learned sets of unfamiliar graphic symbols either by copying, typing or composing, and recognition tests were administered immediately after the learning phase and again two weeks later. Learning exposure was limited either in the number of trials or in the duration.

Results: In both situations, composing and copying gave rise to better recognition performance than typing.

Conclusions: In sum, across experiments, copying gave rise to the best and typing the poorest symbol recognition. When sufficient learning time was allowed, learning by composing led to levels of performance equivalent to learning by copying.

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CO 101

(1325) - MAXIMUM SWALLOWING SPEED QUICKLY DECREASES WITH SWALLOWING COMPLAINTS

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Objectives: As part of clinical assessment of patients with (possible) dysphagia, but not necessarily aspiration, maximum swallowing speed (MSS in ml/s: the time it takes to drink a fixed amount of water as quickly as possible) is a maximum performance task to identify reduction of swallowing capacity. To better understand the use of the MSS across etiologies, we sought to compare databases.

Methods: We compared three previously collected databases as follows: one with 28 ALS patients to study sensitivity of MSS to detect bulbar involvement, one with 50 patients with OPMD to study the clinical characteristics and natural history and one with 33 patients with Parkinson's disease (PD) to study tongue strength compared to MSS. We dichotomized each group into swallowing complaints (SC) vs. no swallowing complaints (non-SC) using for ALS non-bulbar involvement (non-BI) vs. bulbar involvement (BI), for OPMD the EAT-10 (non-SC = 0-3 vs. SC = 4-40) and for PD the ROMP (non-SC = score 7-8 vs. SC = 9-35).

Results: For ALS mean MSS was 19.7 ml/s (SD 8.1), with 27.3 (SD 8.1) for non-BI and 16.3 (SD 8.5) for BI, showing a reduction to 59.7% ($p=0.01$). For OPMD mean MSS was 10.3 ml/s (SD 7.0), with 16.8 (4.7) for non-SC and 8.0 (6.5) for SC, showing a reduction to 47.6% ($p=0.00$). For PD mean MSS was 13.5 ml/s (SD 7.1) with 18.2 (6.8) for non-SC and 9.5 (4.4) for SC, showing a reduction to 52.2% ($p=0.00$).

Conclusions: Irrespective of the mean swallowing capacity and pathophysiology (the ALS patients were all spinal onset and had relatively high MSS, while the total OPMD group had low mean MSS), maximum swallowing speed seems to decrease quickly to half when patients start having swallowing complaints. MSS is an easy clinical test to quantify swallowing capacity in various etiologies.

Keywords: Dysphagia, neurodegenerative disorders

CO 102

(1382) - TREATMENT OF DYSPHAGIA IN PATIENTS WITH COGNITIVE DETERIORATION THROUGH IMPLICIT LEARNING TECHNIQUES

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Objectives: The aim of the study is to demonstrate that patients with cognitive disorder and dysphagia are able to learn compensatory swallowing behaviors through the use of techniques of spaced retrieval, errorless learning and vanishing cues. Furthermore, after the training, patients can generalize the technique in a typical dining environment for short and medium term.

Methods: To evaluate the effects of teaching compensatory swallowing, a longitudinal design was applied to six patients with atrophic encephalopathy and vascular atrophic encephalopathy with cognitive impairment and coexisting dysphagia, from two different health care homes. Patients received individual sessions of assessment, training, booster and follow-up.

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Results: Every participant learnt the compensatory swallowing strategies and kept this information in each follow-up, both at short and medium term. Moreover, the patients showed generalization of the strategies in specific conditions.

Conclusions: This research was a pilot study to demonstrate that patients with cognitive disorder can learn new information through implicit learning techniques. It can be used as a starting point for other studies aiming to validate the results with a greater number of participants and with a control group. This work also suggested new strategies to keep the generalization of information in all conditions.

Keywords: Dysphagia, cognitive impairment, dementia, neurodegenerative disorders, intervention

CO 103

(1132) - RELIABILITY OF THE PORTUGUESE VERSION OF THE EATING AND DRINKING ABILITY CLASSIFICATION SYSTEM (EDACS-PT) IN ADULTS WITH CEREBRAL PALSY

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Folha, Teresa - Cerebral Palsy Rehabilitation Center Calouste Gulbenkian, Santa Casa da Misericórdia de Lisboa, Portugal

Gouveia, Rosa - Society of Neurodevelopmental Pediatrics of the Portuguese Pediatrics Society, Portugal;

Virella, Daniel - Epidemiology and Statistics Office of the Research Unit, Centro Hospitalar de Lisboa Central, Portugal

Objectives: Functional classifications developed for use among children with Cerebral Palsy (CP), like the Gross Motor Function Classification System, have also proved to be useful to describe functioning in adults with CP. Eating and drinking are activities that persons with Cerebral Palsy (CP) often present limitations in performance, due to oromotor difficulties, with consequences in their quality of life. The Eating and Drinking Abilities Classification System identifies characteristics of safety and efficiency related to oral feeding abilities in children with CP and the Portuguese Version (EDACS-PT) has shown to be reliable. The aim of this study was to assess the reliability of the Portuguese version of Eating and Drinking Abilities Classification System in adults with CP.

Methods: 41 adults, aged between 18 and 49 years old were assessed by two Speech and Language Therapists (SLT), one of who was not familiar with the participant, and by a relative. All therapists had more than five years of experience working with CP. Agreement between SLTs and between SLT and relatives was calculated, as well as correlations with other classifications (GMFCS, MACS, BFMF, VSS).

Results: The ICC between SLTs was 0.96 (CI95%: 0.92-0.98) and between SLT1 and relatives was 0.92 (CI95%: 0.85-0.95). Kendall's tau for GMFCS (0.58, $p < 0.001$), BFMF (0.71, $p < 0.001$), MACS (0.76, $p < 0.001$) and VSS (0.66, $p < 0.001$) shows a strong association with EDACS-PT.

Conclusions: The results are similar to those found in the application of EDACS-PT in children with CP. This work shows that the Portuguese version of EDACS is reliable for use with adults with CP and can be used in clinical practice and information could be gathered both from professionals and from close proxies.

Keywords: Dysphagia

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CO 104

(1424) - CHEWING IMPAIRMENT IN THE CASE OF ANKYLOGLOSSIA

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Pluta-Wojciechowska, Danuta - *University of Silesia, Poland*

Objectives: Ankyloglossia is a well-described lingual abnormality which impairs sucking in infants. Less is known about later consequences of a “tongue-tie” for oral function development. The aim of the study was to determine if and how different ankyloglossia stages and types inhibit chewing in children. A proper chewing pattern is necessary for achieving correct articulatory patterns, balancing tongue muscles coordination and developing normal occlusion.

Methods: Chewing ability and specific chewing patterns were assessed in 38 children with ankyloglossia and compared with 32 children without lingual frenulum abnormalities. All subjects were video-recorded while chewing solids and the three-dimensional tongue and mandible movements were assessed. The authors also used the standardized TOMASS scale.

Results: The obtained results showed that different lingual frenulum types may have various impacts on chewing. Nevertheless all of the examined non-normative frenulum types affect the tongue’s ability to process food inside the oral cavity and restrain lateral tongue movements.

Conclusions: A shortened or abnormal lingual frenulum significantly impairs chewing and bolus control in children. Abnormal chewing patterns may lead not only to abnormal articulation or phonatory problems, but also to occlusion and TMJ disorders in future.

Keywords: Feeding/swallowing disorders, prevention, oro-motor dysfunction, myofunctional disorders, functional diagnosis

CO 105

(1332) - COMPARISON BETWEEN A SPEECH THERAPIST EVALUATION AND CAREGIVERS’ OPINION REGARDING CHILDREN’S FEEDING PERFORMANCE

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Correia, Patrícia - *Escola Superior de Saúde do Alcoitão, Portugal*

Lopes, Ana Claudia - *Escola Superior de Saúde do Alcoitão, Portugal*

Objectives:

1) To determine the caregiver’s opinion regarding their children’s feeding performance; 2) to verify the level of agreement/disagreement between the caregiver’s opinion and the evaluation from the Speech Therapist; 3) to assess common characteristics and factors related to feeding difficulties among children with typical development.

Methods: The sample consisted of 171 Portuguese children from between six months and three years of age with typical development and their caregivers. The Montreal Children’s Hospital Feeding Scale is a self-completion scale, whose main objective is to identify the caregiver’s opinion about the children’s eating behavior and the Feeding Behavior Evaluation test that assesses feeding skills and early detection of dietary changes in children between four and 36 months.

Results: Most of the caregivers consider feeding time moderately easy, since children behave relatively well and have a good appetite. A correlation between the total scores of the MCH-FS scale and the ACA test was found, and in most cases, the results of the caregiver’s and the Speech Therapist assessment were similar. The Body Mass Index (BMI) correlates significantly with the total score in both evaluations, as well as the average feeding time, medication intake, existence of clinical disorders in the family and preference and rejection of certain foods.

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Conclusions: This study concludes that there is a correlation between the caregiver's perception and the Speech Therapists evaluation and that the Montreal Children's Hospital Feeding Scale is a good screening tool for Speech Therapists and other health professionals. Also, the caregivers who are most concerned about their children feeding skills do not necessarily correspond to the children that display more difficulties while eating according to the Speech Therapist. Therefore, the present study contributes to a better understanding of the caregivers' perception of children's feeding difficulties.

Keywords: Feeding/swallowing disorders, functional diagnosis

CO 106

(1388) - CO-DESIGNING AN OPTIMAL SPEECH AND LANGUAGE THERAPY SERVICE FOR SCHOOL-AGED CHILDREN WITH DLD WITH PRACTITIONERS AND SERVICE USERS

Gallagher, Aoife L. - University of Limerick, Ireland

Murphy, Carol-Anne - University of Limerick, Ireland

Conway, Paul - University of Limerick, Ireland

Perry, Alison - University of Limerick, Ireland

Objectives: Children with DLD of school- age are at risk of poorer outcomes into adulthood. If we are to improve these outcomes, delivering integrated speech and language therapy (SLT) services in school is essential. Working in schools presents speech and language therapists (SLTs) with considerable challenges, many of which remain unresolved. Further, the views of parents and children are often not accounted for when planning improvements to SLT services. We engaged key stakeholders (SLTs, teachers, parents and children with DLD) to co-design an optimal SLT service for this population.

Methods: Six focus groups were held with a purposive sample of stakeholders in Ireland (Dublin and the south-west). A novel approach to health services research (Appreciative Inquiry) underpinned the study. The groups were audio-recorded, the data transcribed in full, and a qualitative content analysis was applied to the text. A sample of the data was independently coded and post hoc checking of the analyses was provided by participants.

Results: Five key themes were identified. These related to: the characteristics of the service (child-led, collaborative and responsive); the qualities of the ideal practitioner (belief in his/her ability to affect change and adaptable); the culture of the classroom (safe, listening and inclusive); supports for learning (enabling, situated and differentiated); and priority outcomes (improved language, social cognition, and "survival" skills).

Conclusions: All stakeholders described an inclusive culture as optimal for ensuring that children with DLD can achieve and participate in school. Supporting the child with DLD to 'develop their voice' was also a key finding. Understanding the lived experience of the child with DLD in school was identified as being important to inform treatment goals. These findings add to a growing literature about the importance of SLTs working in a 'rights-based' way in schools. The findings may inform future service planning for children with DLD of school-age.

Keywords: Specific language impairment, developmental language disorders

Oral presentations

CO 107

(1200) - "I HAVE NEVER GOT TO KNOW ANYTHING ABOUT WHAT SHE CAN DO AND HOW SHE COMMUNICATES" (TEACHER)

Skogdal, Signhild - *UiT Arctic University of Norway, Norway*

Balandin, Susan - *Deakin University, Melbourne, Australia*

Objectives: Participation and communication are part of democracy and essential to students' learning in school. However, as the comment above illustrates, participation and communication are difficult if students who could benefit from augmentative and alternative communication (AAC) do not have access to AAC tools, or if teachers and classmates lack training and competence in communication using AAC. This qualitative observational study explored the challenges of participation for students using AAC in Norwegian regular lower secondary school contexts.

Methods: Six school classes, each with a student using AAC, participated in the study. The data reported in this presentation represents 42 lessons during which video observations were conducted and 27 interviews with students using AAC, classmates, assistants, special education teachers, and class teachers.

Results: The results revealed that AAC tools were available only half the time (54.7%) and were used only 16.9% of the time. The AAC systems were used for written assignments and communication with the special education teachers or assistants rather than for communicating with classmates and regular class teachers. Furthermore, the data indicated that the students using AAC and their classmates described enablers for more communication, whereas the staff described primarily barriers. Staff and students in this study had little if any training in how to communicate with the students using AAC, and none of the schools had speech and language therapy (SLT) services.

Conclusions: Despite a dominance of barriers to participation and communication, both students and staff desired an inclusive learning environment. A question for further research is how SLTs could best be involved to improve the situation in the regular school for students using AAC.

Keywords: Quality of education

CO 108

(1454) - WHAT IS THE LINGUISTIC COMPETENCE IN ADOLESCENTS? PRELIMINARY STUDY ON A SAMPLE OF HIGH SCHOOL STUDENTS

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Citro, Raffaella - *Azienda Ospedaliera Universitaria Ruggi d'Aragona, Italy*

Ferdinandi, Miriam - *OSA Cooperativa, Italy*

Objectives: Usually speech and language difficulties are believed to be associated with the early years of life, as if these difficulties would lose their importance in the later ages. Actually, plenty of studies have been conducted on children's language disorders, whilst the studies relative to the adolescent age are very few. However, more recently some studies (Conti 2008, 2013; Bryan 2009) have been conducted on the persistency of the disorders and their impact on social communication and behaviour in the adolescent age. Our research aims to contribute to the study of linguistic difficulties in adolescents.

Methods: 100 students were selected in a high school in a central area of Rome, 20 from each school year (range 14 – 18 years old), 10 females and 10 males randomly chosen. They underwent a protocol of evaluation including: narrative task, deduction task, self-evaluation questionnaire, and observation scale. Preliminarily the Raven Matrices Test screened out possible cognitive

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deficits. Students who failed the narrative or the deduction task underwent a vocabulary test too (Boston Naming).

Results: 30% of the subjects failed the narrative task, 34% the deduction task (14% both tasks). This group took the Boston Naming that was passed by only 2%. The percentage of failing subjects was higher in males for both tasks. As for the metacognitive aspects, self-evaluation reported 46% of the sample experiencing some communication difficulties. The Broadmoor Observation Scale did not remark any difficulties in non-verbal communication.

Conclusions: Our study confirms that language difficulties persist up to the adolescent age. About 2 subjects in each classroom show these difficulties, confirming the studies relative to childhood conducted in other languages. Further research is needed in this area, together with new perspectives on SLT intervention in the adolescent age.

Keywords: Developmental language disorders, screening

CO 109

CO - (1213) - THE PREVALENCE AND NATURE OF SPEECH, LANGUAGE AND COMMUNICATION NEEDS IN LONG-TERM UNEMPLOYED ADULTS

Joffe, Victoria - City, University of London, UK

Wallinger, Josephine - City, University of London, UK

Objectives: The study aims to investigate the prevalence and nature of speech, language and communication skills of a group of long-term unemployed adults. Language and communication difficulties can be long-term and pervasive and impact on academic achievement, psychosocial functioning and employment (Johnson et al., 2010). Most research in this area focuses on young children, and there is limited research or services for older children and adults with Speech, Language and Communication Needs (SLCN). A small scale study found that 88% of long-term unemployed males, aged 18 to 24, were language impaired (Elliot, 2011). Understanding more about the language and communication of the long-term unemployed adult population is important because being able to communicate competently is essential to well-being and is key to securing and sustaining employment.

Methods: The study is cross-sectional and uses purposive sampling, recruiting participants from one of the largest providers of employability services in the UK. 148 participants completed a short standardised self-assessment of language and communication, 'The Communication Checklist – Self Report' (Bishop et al., 2009), exploring Language Structure, Pragmatic Skills and Social Engagement.

Results: A substantial number of participants reported difficulties in language structure, pragmatic skills and social engagement, with most problems reported with pragmatics and social engagement. Older adults (26 years and above) reported more difficulties than those in the younger age range (18-25 years). Many of these difficulties were not previously identified.

Conclusions: Language and social engagement play a key role in the workplace and are necessary to gain and sustain employment. Identifying and understanding the nature of SLCN in long-term unemployed adults will promote the development of effective speech and language interventions for this group and will ensure they are provided with a sufficient level of support to contribute fully to society.

Keywords: Developmental language disorders, pragmatics, screening, functional diagnosis

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CO 110

(1270) - EXPLORING CHILDREN'S LIVED EXPERIENCES OF DEVELOPMENTAL LANGUAGE DISORDER AND SPEECH AND LANGUAGE THERAPY

Tiernan, Edel - *National University of Ireland, Galway, Ireland*

McMenamin, Ruth - *National University of Ireland, Galway, Ireland*

Objectives: Children with Developmental Language Disorder (DLD) can experience life-long difficulties that impact peer interaction and emotional well-being. Speech and Language Therapists can promote communicative ability to further independence and self-advocacy (Irish Association of Speech and Language Therapists, IASLT, 2017). Much of the research in Speech and Language Therapy (SLT) with children with communication impairments to date has used quantitative methodologies (Lyons, 2014). There is a need to evaluate services from the child's perspective and make service delivery decisions based on client's needs and preferences (Lyons & Roulstone, 2016, IASLT, 2017). The client's perspective is a vital consideration in the application of Evidence Based Practice (American Speech-Hearing Association, ASHA, 2017). Much of the research in Speech and Language Therapy with children with communication impairments to date has used quantitative methodologies (Lyons, 2014). This study aimed to explore older children's lived experience of DLD and attending SLT using a participatory approach.

Methods: Interviews were completed with three children aged 10-12 who have DLD and have attended SLT services in the West of Ireland. Children were invited to co-create and co-analyse data in line with a participatory research methodology. This approach emphasises the meaningful engagement of children as co-researchers in data generation. Four themes emerged from the data: identity, support, engagement and school. Children described identity in terms of sport and relationships, accessing supportive people and materials, energy and listening requirements for engagement, experiences of literacy and liaison with school.

Results: Results of this study provided insight into children's perceptions of their own identities and their experiences of SLT intervention. Findings support a solution-focused approach in clinical practice and have direct practical implications for how intervention is delivered.

Conclusions: Findings also demonstrate the usefulness of participatory techniques for service-user research with those with communication difficulties and highlight the scope for further research.

Keywords: Developmental language disorders

CO 111

(1194) - IMPACT: IMPROVING PARENT AND CHILD INTERACTION TO ENHANCE ORAL LANGUAGE DEVELOPMENT

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McKean, Cristina - *Newcastle University, UK*

Law, James - *Newcastle University, UK*

Objectives: IMPACT (a Marie Skłodowska-Curie fellowship to the first author) aims to determine whether an observational parent-child interaction scale can be used by Child Health Nurses to identify families most likely to benefit from parent-focused language interventions. Work is currently underway with nurses and families to collect data to evaluate feasibility. This presentation reports preliminary work demonstrating the validity of the parent-child interaction scale as a measure of parent behaviours associated with language progress.

Methods: Observational data from a community-based cohort of mother-toddler dyads was used to develop the parent-child interaction scale; a measure of parental responsiveness (contingent,

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appropriate and prompt parenting in response to a child's initiations). At age 2, 251 mother-child dyads were videotaped during 15 minutes of free-play. Videos were blindly rated on: 1) a detailed rating of responsiveness shown to predict language outcomes; and 2) the parent-child interaction scale (a single rating of responsiveness on a five-point Likert scale). Child expressive and receptive language was measured at ages 3 and 4 years.

Results: In adjusted linear regression models the parent-child interaction scale strongly predicted receptive and expressive standard scores at ages 3 (coefficient=5.9, $p<0.001$; efficient=5.4, $p<0.001$ respectively) and 4 years (coefficient=4.6, $p<0.001$; coefficient=3.1, $p=0.004$ respectively). The parent-child interaction scale was positively related to the detailed coding of parental responsiveness ($r(242)=.44$, $p<.001$).

Conclusions: Findings showed the observational parent-child interaction scale can be efficiently and reliably used in a community-based sample of mother-child dyads. IMPACT will address the next step by testing whether Nurses can be trained to use the rating scale to measure parent-child interaction during routine health visits. If use of the rating scale proves feasible and effective, it will have the potential to be incorporated into existing universal health services, providing Child Health Nurses with an additional tool for identifying children most likely to benefit from parent-child interaction interventions.

Keywords: Developmental language disorders, prevention, intervention

CO 112

(1298) - EFFECTIVENESS OF PARENTAL FEEDBACK IN PARENT-CHILD INTERACTION THERAPY

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Wiefferink, Catharina - Dutch Foundation for the Deaf and Hard of Hearing Child, Netherlands

Objectives: The objective for this study was to evaluate the effectiveness of parental training with feedback for children with developmental language disorders (DLD). The question is whether this training is effective for phonological problems as well as language problems.

Methods: In a RCT forty monolingual children with DLD aged 3;3 years were assigned to the intervention group or control group. All children attended special day care centres for children with DLD. They were measured two times, at baseline (T0) and six months (T1) later. Measurements included standardized language tests, analysis of parent and child language, and parental questionnaires (self-assessment; quality of life, QOL). All parents attended group meetings providing them with information about language facilitating techniques (LFT), such as recasting and speech rate reduction. Children in the control group attended individual speech-language therapy (SLT) without their parents for 24 weeks in 30 minute weekly sessions. In the intervention group parents and their children received biweekly 50 minute sessions for 24 weeks consisting of parental training with feedback by SLTs. Their parents applied LFT at home during daily routines.

Results: At baseline, most children had expressive language delays as well as a reduced QOL. Over 50% had a delay in phonological development. Parent's number of utterances was three times as high as their children's. Their mean length of utterance was two times as high. Preliminary results at T1 indicate significant improvement in the children in both groups on all measures including phonology. All parents significantly reduced their number of utterances and questions. Parents in the intervention group reported a significant increase of their autonomy while parents in the control group reported a decrease.

Conclusions: Parental training with feedback is a promising treatment for young children with DLD. The programme adds to treatment options for parents. It therefore creates choices for shared-decision making.

Keywords: Intervention

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CO 113

(1118) - ENGAGE: ENGAGING PARENTS IN GOAL ARTICULATION AND GOAL EVALUATION OF YOUNG CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER

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Klatte, Inge - HU University of Applied Science, Netherlands

Welbie, Marlies - HU University of Applied Science, Netherlands

Gerrits, Ellen - HU University of Applied Science, Netherlands

Objectives: In patient-centered care for young children with Developmental Language Disorders (DLD) treatment should be directed towards the child's and parent's priorities. However, SLTs notice that parents are often unable to voice their priorities and concerns, making it difficult to set specific, functional goals that lead to relevant outcomes for children with DLD. This project aimed to develop a tool for SLTs to structure an interview with parents about priorities and concerns and to engage parents in setting and evaluating specific goals for communicative participation.

Methods: The tool ENGAGE was developed using two methods consecutively: a Delphi study with parents and professionals (n=42) and a co-design study with SLTs (n=8). Based on the results, designers developed a prototype that was tested in a usability study with SLTs (n=68) and parents (n=11). At the start and end of the usability study, SLTs rated the tool on attractiveness, user friendliness, functionality and safety on a 10 point scale.

Results: The Delphi study resulted in 36 items describing aspects of communicative participation that parents and professionals find important. The co-design study resulted in a set of criteria that the tool should meet and an exploration of possible design directions. With this input, a prototype was developed. Next, improvements on the prototype were made in several iterations during usability testing with SLTs and parents. The final tool was rated on attractiveness, user friendliness, functionality and safety with scores ranging from 7.6 to 8.4 out of 10.

Conclusions: The tool ENGAGE meets the criteria defined by stakeholders. ENGAGE helps parents to clarify priorities and engages them in setting specific functional goals for their child: important aspects of patient-centered care. By including end users in the development process, the likelihood of developing a usable tool seems to increase. This presentation focuses on the development of the prototype and usability testing.

Keywords: Developmental language disorders, Functional diagnosis, Patient-reported outcome measures (development or crosscultural adaptation and validation)

CO 114

(1146) - TOWARDS A MORE FAMILY-ORIENTED APPROACH IN WELL CHILD CLINICS CONCERNING THE SCREENING FOR DEVELOPMENTAL LANGUAGE DISORDERS IN YOUNG CHILDREN

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Visser-Bochane, Margot - Hanze University of Applied Sciences, Research Group Healthy Ageing, Allied Health Care and Nursing, Groningen, Netherlands

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Objectives: We performed a qualitative study to explore the perceptions of parents/caregivers of children with - and without - developmental language disorders (DLD) on language screening in well child clinics (WCC).

Methods: We interviewed 10 parents of monolingual children with DLD, 21 parents of monolingual children without DLD, and 7 parents of multilingual children without DLD. The children's ages ranged from 1;0 to 4;9 years. We analyzed the data through content analysis. All interviews were transcribed verbatim and were analyzed using grounded theory.

Results: Six inductive themes emerged from the interviews:

- (1) HEALTHCARE SYSTEM: Parents need more clarity about care pathways, the SLP is considered as the expert for diagnosing DLD;
- (2) CONSULT: Continuity of care and including the home environment in screening are important;
- (3) PERCEPTION: Parents were pleased with the support for the basic things and with the approach of the professional. Some parents were less satisfied, because of quick judgement about the language development of their child, or because the referral for further diagnostics was too late according to the parents;
- (4) DESIRES: Parents need more information about the pros and cons of different care pathways, and WCC should focus more on psychosocial aspects of child development;
- (5) PARENT FACTORS: Parents have different coping strategies regarding DLD, and some of them feel insecure about raising their child;
- (6) CHILD FACTORS: Parents told about the differences in behavior in different settings, about the consequences of a language problem, and about the character of their child.

Conclusions: Target areas to improve structural speech language screening in WCC are: more clarity about the pros and cons of different care pathways, more continuity of care, empowerment of parents, tuning to the needs and coping strategies of parents, and inclusion of the home environment in language screening.

Keywords: Developmental language disorders, screening, prevention

CO 115

(1318) - EFFICACY OF A PARENT PROGRAM ON PARENT COMMUNICATION IN SCHOOL-AGED CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDERS

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Scheper, Annette - Royal Dutch Kentalis, Netherlands

Objectives: At the Royal Dutch Kentalis Speech and Language Center, children with a developmental language disorder (DLD) receive a short, intensive therapy for eight weeks. Their parents are involved in this treatment. They are coached with the Kentalis Interaction Communication Video Coaching Program (ICVC). The current study aims to clarify the efficacy of this parent program on parent's communication skills in interaction with their school-aged child with a DLD.

Methods: A within participants pre-/post- test design is applied. Data were collected at three measurement points. Two measurements took place during the regular eight-week treatment program, one measurement point was applied four weeks post-therapy. Data were derived from videotaped parent-child interactions and questionnaires. 11 parents completed the questionnaires. Outcome measures were related to following the child's initiatives, asking questions and applying language modelling techniques.

Results: Post-therapy, significant changes were found in 'following the child's initiative' (1) and in 'asking questions' (2). The first variable (1) expressed in a 'following ratio' (FR), decreased. The second variable (2) expressed in a 'question ratio' (QR) significantly decreased. No significant changes were found in 'applying language modeling techniques'. In the total scores on the questionnaires, a significant increase was found in parents' communicative behaviour.

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Conclusions: After the eight-week intervention period, there are indications that ICVC could be effective to change parent's questioning behaviour and to improve parent's skills in rating their communication behaviour during interaction with their school-aged child with DLD. There is no clear explanation so far of the decreasing 'following ratio', which was expected to increase during therapy.

Keywords: Developmental language disorders

CO 116

(1018) - INTERACTIVE READING TO STIMULATE NARRATIVE SKILLS OF CHILDREN FROM VULNERABLE ENVIRONMENTS

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Leybaert, Jacqueline – *Université Libre de Bruxelles, Laboratoire Cognition, Langage et Développement, Belgium*

Colin, Cécile – *Université Libre de Bruxelles, Unité de Recherche en Neurosciences Cognitives, Belgium*

Objectives: Narrative skills of children are strong predictors of later language outcomes (Bishop, & Edmundson, 1987) and future school performance (Schelstraete, Bragard, Collette, Nossent, & Van Schendel, 2011). Children who are brought up in a vulnerable environment have specific narrative difficulties (Lefebvre, & Giroux, 2010). According to some authors (Lever, & Sénéchal, 2011), interactive reading sessions would be beneficial for the development of narrative skills. We analyse the effects of an intervention programme in interactive reading on the narrative skills of children from fragile environments, in terms of macrostructure but also in terms of microstructure, which few studies have addressed up to now.

Methods: An intervention programme in interactive reading of 30 sessions was proposed to 172 children from positive discrimination schools from the centre of Brussels (experimental group). A second control group benefitted from no specific intervention (N=87). The programme was implemented in the classroom to the group of pupils by their regular teacher. Their narrative skills were assessed by means of ENNI (Schneider, Dubé, & Hayward, 2005). The narratives were transcribed by way of CHILDES software (MacWhinney, 1991) and analysed at the level of macro and microstructure.

Results: The results reveal no significant difference between the two groups as far as macrostructure is concerned. Nevertheless, in terms of microstructure, the results show significantly greater progress for the experimental group. This progress varies according to the children's language level (no difficulties, moderate difficulties, severe difficulties).

Conclusions: Implementing interactive reading in positive discrimination primary schools helps support the development of children's narrative skills. We point out a significant benefit at the microstructure level. Supplementary means to further improve the development of skills at the macrostructure level are to be considered.

Keywords: Developmental language difficulties, multilingualism, intervention, prevention

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CO 117

(1196) - SOLEM (SUPPORTING AND OBSERVING LANGUAGE AND COMMUNICATION IN PRIMARY SCHOOL CHILDREN): AN OBSERVATION TOOL FOR TEACHERS

Desmottes, Lise (Belgium) - *University of Liège*
Leroy, Sandrine (Belgium) - *University of Liège*
Maillart, Christelle (Belgium) - *University of Liège*
Bergeron-Morin, Lisandre - *Laval University (Canada)*

Primary school is a privileged environment to help children develop their language and communication skills. In fact, children have the opportunity to experiment rich and diversified interactions on a daily basis with teachers who can support their language development (Pence et al., 2008). In French-speaking Belgium, primary school teachers point out that there is an insufficient number of tools to observe and support the language development of children. The SOLEM tool was developed to meet this need and to facilitate cooperation between teachers and psycho-medico-social agents.

Four nominal groups were organised with 39 teachers, psycho-medico-social agents and school administrators in order to identify their requirements. The tool was then developed by a team of speech therapists and tested in 22 pilot classes in order to assess its form and content. 219 children from these classes were assessed at the same time as they were with the Oral Language Assessment (ELO; Khomsi, 2001) to determine the sensitivity and specificity of the tool.

With the nominal groups, several needs were identified: giving importance to less formal aspects of language, having a tree structure approach adapted to each child that leads to concrete measures. The validation process shows that the SOLEM tool has a sensitivity – detecting the need for language support in children who require it - of 0.79 and a specificity – objectivise the non-requirement of a language solution in children with no difficulty – of 0.93, which corresponds to an acceptable specificity and a good specificity (Plante & Vance, 1994).

The SOLEM tool helps teachers identify children who are vulnerable in terms of language and communication and guide them in their choice and use of language support strategies that can be used in their existing routine work and activities.

Keywords: Specific field - Assessment, Specific field - Interprofessional learning

CO 118

(1134) - ASSESSMENT OF READING SKILLS OF CHILDREN WITH INTELLECTUAL DISABILITIES

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De Chambrier, Anne-Françoise – *Unitéd 'Enseignement et de Recherche en Pédagogie Spécialisée, Haute École Pédagogique du canton de Vaud*

Sermier-Dessemontet, Rachel – *Unitéd 'Enseignement et de Recherche en Pédagogie Spécialisée, Haute École Pédagogique du canton de Vaud*

Linder, Anne-Laure – *Unitéd 'Enseignement et de Recherche en Pédagogie Spécialisée, Haute École Pédagogique du canton de Vaud*

Meuli, Natalina – *Unitéd 'Enseignement et de Recherche en Pédagogie Spécialisée, Haute École Pédagogique du canton de Vaud*

Objectives: Numerous studies show that people with intellectual disabilities very often have difficulty with written language –a crucial skill for social engagement–which is greater than

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their intellectual limitations (Chanell, Loveall, & Conners, 2013). This statement questions the pedagogic and therapeutic interventions they benefit from. This field of knowledge is generally poorly developed and is found essentially in Anglophone scientific literature. In order to measure the real written language skills of these children and the effectiveness of the interventions, it is fundamental to have suitable assessment instruments. The main objective of the ELODI (Teaching Reading in an Optimal manner to pupils with Intellectual Disabilities: a grant from the Swiss National Fund for Scientific Research no. 100019_173096) research, carried out in Switzerland, is to assess the effects of a new reading teaching programme based on the performances of pupils. It needs to develop a measuring tool to assess their reading performances (reading of graphemes, pseudo-words, common words, etc.) and verbal or non-verbal prerequisites (knowledge of grapheme phoneme correspondence, phonological awareness) that is suitable for French-speaking children with an intellectual disability.

Methods: Based on an instrument for German speakers validated for intellectual disability (Moser & Bayer, 2007; Sermier Dessemontet & de Chambrier, 2015), a version adjusted to the specificities of the French language was created. The items were matched in terms of length, phonological complexity and frequency in the language. Furthermore, several tests were created to measure the pupils' non-verbal skills. Pointing, judging or matching tasks were used for this purpose.

Results: This presentation will be presenting this measuring tool and the adjustments that will follow the ongoing pre-test within the framework of a number of case studies.

Keywords: Specific language disability, cognitive impairment, functional diagnosis

CO 119

(1358) - TRAINING THE WORKING MEMORY OF CHILDREN WITH DLD: HOW EFFECTIVE IS IT ON LANGUAGE?

Delage, Hélène - Université de Genève, Switzerland

Durrleman, Stéphanie - Université de Genève, Switzerland

Stanford, Emily - Université de Genève, Switzerland

Objectives: Among the recent theories of Developmental Language Disorder (DLD), some attribute the language deficits observed to limitations in Working Memory (WM). A number of studies have effectively demonstrated a strong link between DLD and the treatment of complex sentences in children with DLD (Montgomery & Evans, 2009; Marinis & Saddy, 2013; Frizelle & Fletcher, 2015; Durrleman & Delage, 2016; Delage & Frauenfelder, submitted). Our current project addresses the effects that cognitive training can produce on the language development of children with DLD.

Methods: The WM training that we have created is proposed on the Ipad and targets simple spans (=requiring information storage and retrieval) and complex spans (=requiring supplementary processing of stored information). The programme consists of 12 hours training distributed over a period of 8 weeks. Currently, 33 children (14 controls/19 DLD), aged from 6 to 12 years, have trained in WM. Their results will be compared with those of 22 children with the same characteristics but who followed an alternative training course, based on school skills aimed at guaranteeing the specific effects that are expected to be found for target training.

Results: The first results analysed are encouraging. They show a direct transfer effect, in other words that the children with DLD significantly improve their performances in untrained WM tasks, and namely in the serial memory that has proven to predict the results in syntax (Delage & Frauenfelder, submitted). An improvement in syntax performance also appears in children having undergone training in WM, particularly in the part of production.

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Conclusions: Should the overall results confirm the effectiveness of target training, with an expected benefit for WM and for the language abilities of children especially, the logical follow-up will be a transposition to the practice of speech pathologists / speech therapists.

Keywords: Developmental language disorders

CO 120

(1210) - EXAMINATION OF P/B CONFUSION IN READING: IN ADDITION TO VISUAL VERSUS PHONOLOGICAL OPPOSITION

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Medina, Franck - *Private practitioner, France*

Belmer, Coline - *Private practitioner, France*

Objectives: Our research addresses the modelling of reading as a system with three dimensions (grapheme-phoneme, phonological, visual-grapheme) described by Serniclaes and Sprenger-Charolles (2015). The “confusions”, preferential substitutions of a letter for another, are part of the symptoms of dyslexia; traditionally they are divided into two types: visual or phonological. We have focused on the case of p/b confusion in children at CE1, CE2 and CM1 school levels, monitored in speech therapy, by targeting the impairments in the underlying (phonological, visual attention and memory) processes.

Methods: We devised a protocol to distinguish the central (or memory) dimension of the confusion, the quality of reading from a lexical viewpoint (real words constituting minimal pairs), and sub-lexical viewpoint (logatomes). Then we added tests targeting the phonological dimension (repetition of logatomes with the phoneme /p/ or /b/, discrimination of pairs of logatomes) and tests on the visual attention dimension (reading with a change in font or case, barrage of p or b spellings in groups of 5 letters, influence of presentation - normal or widely spaced characters). This protocol was conveyed in the spring of 2017 to freelance speech pathologists working throughout France after a training course. The data was collected anonymously by way of an online questionnaire.

Results: The protocol is still ongoing: we have had 20 responses up to now (6 CE1, 9 CE2 and 5 CM1) for children suffering from confusion (with over 10% of errors in the word reading test). 6 children made mistakes when reading words and logatomes, 9 children also failed on the visual attention dimension, 2 on the phonological dimension and 3 in all 3 dimensions.

Conclusions: Our initial conclusions question the clinical use of a binary (phonological/visual) typology of confusions and lead us to think on a theoretical level and on different intervention approaches.

Keywords: Dyslexia, functional diagnosis, specific learning disorders

CO 121

(1445) - THE EFFECTS OF NAP THERAPY IN PATIENTS WITH VOICE DISORDERS

Mętel, Sylwia - *University of Physical Education in Krakow, Poland*

Sambor, Barbara - *University of Silesia, Poland; - National Academy of Theatre Arts, Cracow, Poland*

Adamiak, Justyna - *University of Physical Education in Krakow, Poland*

Gattner, Halina - *University of Physical Education in Krakow, Poland*

Kostrzon, Magdalena

Szczygieł, Elżbieta - *University of Physical Education in Krakow, Poland*

Golec, Joanna - *University of Physical Education in Krakow, Poland*

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Objectives: The aim of the study was to evaluate the effectiveness of N.A.P. therapy on voice improvement in patients with asthma and connected voice disorders treated in a subterranean environment in Wieliczka Salt Mine Health Resort.

Methods: A total of 17 patients (mean age 54 ± 15 years) were treated in the pilot study, receiving treatment in the underground part of Wieliczka Salt Mine Health Resort. The subjects attended N.A.P. therapy sessions which included 12 group and 2 individual sessions. The thoracic dimensions during inspiration and expiration, VO₂max indicator and a maximum phonation time were measured before and after the three-week long rehabilitation.

Results: The authors observed significant improvement in all three aspects. Maximum phonation time improved significantly and its average value increased from 11.4s to 14.6s. The average thoracic difference between maximal inspiration and expiration increased significantly from 2.47cm to 4.44cm.

Conclusions: Comprehensive rehabilitation including a subterranean environment, breathing and postural therapy, increasing the elasticity of supra- and infrahyoids based on N.A.P. therapy techniques may significantly improve voice performance in patients with asthma.

Keywords: Voice disorders, neuromuscular disorders, professional speaking voice

CO 122

(1164) - CONTRIBUTION TO THE STANDARDIZATION OF PROCEDURES IN THE ASSESSMENT OF SPEECH SOUNDS DISORDERS

Silva, Vânia Raquel - Polytechnic of Leiria - School of Health Sciences, Portugal

Monteiro, Beatriz - Polytechnic of Leiria - School of Health Sciences, Portugal

Marta Soares, Elsa - Polytechnic of Leiria - School of Health Sciences - Health Research Unit, Portugal

Pós De Mina, Sónia - Polytechnic of Leiria - School of Health Sciences - Health Research Unit, Portugal

Objectives: Construction of a Portuguese procedures manual for the assessment of Speech Sounds Disorders (SSD) in pre-school children. According to the American Speech-Language-Hearing Association, the highest incidence of disorders in pre-school age is related to speech sound disorders; this may also be found in Portugal (Bacelar, 2013). The complexity of the assessment of a speech sound disorder demands taking into account various aspects and, consequently, a set of procedures is needed. As an integral part of this study, the analysis of the available assessment instruments in Portugal was carried out.

Methods: This study is divided into three phases. The first phase was the collection of information about the assessment methodologies currently used, through an online questionnaire for Speech Language Therapists (SLT) that perform clinical intervention in the area. The second phase corresponds to the creation of the prototype of the procedures manual. The third phase consists of the content validation of the procedures manual's prototype, using an expert panel composed of SLTs.

Results: The collected data revealed that each assessment instrument only takes in consideration certain aspects that are important when assessing a speech sound disorder and none of them addresses all the aspects that must be assessed. Therefore, the main impact of this study will be the construction of a manual of procedures that identifies all the aspects that must be assessed in parallel with the identification of the assessment instruments that can be used to assess each one.

Conclusions: This procedures manual is important for SLTs' clinical practice in SSD, contributing to an improvement in the reliability of the assessment and of the diagnosis. It also allows one to measure the effectiveness of the intervention in a more reliable way.

Keywords: Speech disorders, functional diagnosis

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CO 123

(1263) - THE IMPACT OF SPEECH SOUND DISORDERS ON CHILDREN'S DAILY LIFE

Ramos, Mariana - *Universidade Fernando Pessoa, Portugal*

Rocha, Joana - *Universidade Fernando Pessoa, Portugal*

Santos, Luís - *Universidade Fernando Pessoa, Portugal*

Objectives: The main objective was to analyze the daily experiences of children with Speech Sound Disorders (SSD) in their significant contexts: home, school and speech therapy, and with their communicative partners, i.e., parents, Kindergarten Teacher (KT) and Speech and Language Therapists (SLT). The specific objectives were to investigate the difficulties presented by the children with SSD in their significant contexts and describe their perceptions and the perceptions of their communicative partners regarding the impact of the SSD on their daily life.

Methods: Based on these assumptions, a qualitative study was conducted. 24 individuals, including 5 children aged 4 to 6 years, the mother and the SLT of each child and 2 KT participated in this study. Data was collected through an interview with open answers – Speech Participation and Activity of Children (SPAA-C), which had been translated into European-Portuguese at an initial stage of the study.

Results: In this study, a thematic analysis was made, with three themes: (1) communicative impact of the disorder on the child; (2) consequences in significant contexts of the child; (3) solutions to reduce the impact of SSD.

Conclusions: It was found that the children who participated in this study may be more susceptible to isolation and that the negative impact of SSD seems to be greater and more conscientious in children over 6 years old. Their communicative partners were able to identify frustration and oppositional behavior when children did not make themselves understood. Speech therapy seems to be a solution of extreme importance for these children, in addition to team work with health and education professionals.

Keywords: phonological disorders, speech disorder, qualitative outcome.

WORKSHOPS



WS 001

(1022) –TIWOUH THE INTERACTIVE PLATFORM FOR CHILDREN WITH COMMUNICATION AND LANGUAGE DISORDERS

Grevesse, Pascale - *TIWOUH SA, Belgium*

De Villenfagne, Savina - *TIWOUH SA, Belgium*

Théate, Caroline - *TIWOUH SA, Belgium*

CAA interventions increase the communication skills of people who cannot express themselves intelligibly (Ganz et al., 2012). In addition to this, speech therapy is increasingly supported by technological solutions (Logan et al., 2017). The TIWOUH platform was designed by a multidisciplinary team of IT professionals and speech pathologists. Based on an analysis of needs (Maillart et al., 2015), this tool combines a technological dimension (tablet, speech synthesis, etc.) and a participatory dimension (sharing exercises, user support, etc.). The platform allows the therapist to create and adapt different complementary applications: CAA, vocabulary, syntax, adaptation of games/books, rituals, conversation, written language. It proposes a number of pre-constructed models of increasing difficulty. As the success of a CAA intervention is conditioned by parental involvement (Morel, 2015), it helps to include parents in the construction of exercises which can be shared among the users.

In this workshop, we will provide a theoretical introduction on the place of technology in language interventions; we will present the platform and its different possibilities, namely in terms of personalisation to optimise the benefits of the intervention (McNaughton & Light, 2013). Through a clinical vignette we will connect to the platform and will create exercises adapted to the situation presented. We will suggest videos illustrating the use of speech therapy in a session and in a family setting.

When leaving the workshop, the participants will be familiarised with the use of the platform and the construction of exercises. They will handle the exercises created and transferred by way of the tablet. They will also be able to start using this tool in their practice.

The collaborative platform TIWOUH helps speech-language pathologists use an innovative technological solution to address communication and language disorders in a personalised manner and to support families in implementing the programme in general and in everyday life.

Keywords: Intervention, developmental language disorder

WS 002

(1329) - MONTREAL CHILDREN ´S HOSPITAL FEEDING SCALE: A FAST AND EFFICIENT WAY TO IDENTIFY FEEDING DIFFICULTIES IN THE PEDIATRIC POPULATION

Lopes, Ana Claudia - *Escola Superior de Saúde do Alcoitão, Portugal*

Santos, Marta - *Escola Superior de Saúde do Alcoitão, Portugal*

Gama, Irene - *Escola Superior de Saúde do Alcoitão, Portugal*

The objective is to demonstrate that the European Portuguese version the Montreal Children's Hospital Feeding Scale, which investigates caregiver opinions on children between six months and six years of age with eating disorders, is a fast and efficient way to identify feeding difficulties in the pediatric population.

This scale has undergone a cross-cultural and linguistic adaptation through translation and back translation of the instrument for European Portuguese followed by an analysis through the Delphi process. This version was submitted to a pre-test and the final revision was performed which was then validated on the Portuguese population. The scale was administered to caregivers of 301 typically developing children and 29 caregivers of children with eating disorders.

The analysis of the scale by the experts resulted in high agreement of the content of the items (71%) and excellent agreement in relation to relevance (100%). Statistically significant differences ($p < 0.05$) were found between the groups studied for the total score. The instrument has an excellent internal consistency ($\alpha=0.910$) and has shown to be a great tool for identifying feeding difficulties in the pediatric population.

The Portuguese version of this scale has linguistic and cultural acceptability, showed accuracy in distinguishing between caregiver opinions, and can be used by other health professionals such as pediatricians, nurses and nutritionists, in order to refer children with feeding difficulties to the speech and language therapist.

Keywords: Feeding/swallowing disorders, screening

WS 003

(1425) - INTEGRATING NEUROPLASTICITY IN YOUR CLINICAL PRACTICE: EXAMPLES IN PARKINSON'S AND PEDIATRICS USING THE EVIDENCE-BASED LSVT LOUD® PROTOCOL

Fox, Cynthia - *LSVT Global, Inc., USA*

Ramig, Lorraine - *National Center for Voice and Speech, University of Colorado, Boulder, USA*

Bolie, Carol - *University of Alberta, Edmonton, Canada*

Guse, Laura - *LSVT Global, Inc., USA*

This workshop will define key principles that drive activity-dependent neuroplasticity; demonstrate how these principles can be integrated into a defined, evidence-based treatment using Lee Silverman Voice Treatment (LSVT LOUD) as an example; and discuss behavioral and neural outcome data from LSVT LOUD in people with Parkinson's and children with cerebral palsy.

For many clinicians recognizing the importance of principles of neuroplasticity is clear, but it remains a challenge as to how to integrate them into clinical practice. Principles such as specificity of training, sufficient repetitions, timing, and intensity of training will be defined; data from both animal and human studies to support the neurobiological changes associated with these neuroplasticity principles will be presented. LSVT LOUD will be described as an example of how to integrate neuroplasticity principles into a standardized, research-based treatment protocol. Data from three randomized controlled trials will be summarized including evidence from two neural imaging studies pre/post LSVT LOUD in people with Parkinson's. These data document significant improvements in vocal loudness and speech intelligibility that are correlated with brain re-organization as revealed by neural imaging studies. Research outcomes from application to other adult neurological disorders (ataxia, multiple sclerosis) will also be provided. Data from a series of three studies using LSVT LOUD with children with CP and dysarthria will be presented, including a range of measures from acoustics to neural imaging.

Potential barriers and solutions to implementing protocols that incorporate neuroplasticity principles in the real world will be discussed from the perspective of over 20 years of co-occurring real-world implementation of LSVT LOUD outside of the research laboratory.

Understanding key neuroplasticity principles and how to integrate them in clinical practice may help to guide clinicians in choosing the most appropriate treatment targets and mode of treatment delivery for their clients.

Keywords: Speech disorders, dysarthria, voice disorders, neurodegenerative disorders, intervention, Parkinson's disease

WS 004

(1290) - BUILDING REFUGEE-COMPETENT SERVICES: A NEW CHALLENGE FOR THE SLT COMMUNITY

Vlassopoulos, Maria - *1st Dept. of Psychiatry, University of Athens Medical School, Greece*
Mancini, Giuseppe - *ASL RM5 Tivoli (RM), Italy*

The refugee crisis in Europe has highlighted many of the difficulties in creating appropriate services for vulnerable populations. Refugee adults and children suffer the adverse effects of forced migration which can lead to chronic disorders, if not treated. Many studies have shown that, though European governments and policy makers are aware of the specific difficulties encountered by the refugee population, medical and rehabilitation services often do not have a consistent and cohesive plan to operate the most effective programmes. Often these programmes, when they do exist, are fragmented and poorly coordinated. Further barriers to treatment include cultural and communication difficulties, lack of access to intervention services, lack of continuity of care, as well as lack of empowerment on the part of the refugees themselves. Furthermore, most refugees are unfamiliar with Western mental health and rehabilitation services and their treatment expectations may be very different from services offered, leading to a lack of mutual understanding of the approaches used.

The speech and language therapist as part of the interdisciplinary team has a pivotal part to play in the development of refugee-competent services.

In this workshop, the following questions will be investigated:

- What comprises a refugee-competent service?
- How can the SLT contribute in a biopsychosocial model of service delivery for refugees?
- How can the SLT's expertise be put into use for better outcomes in the refugee population?
- What are some of the specific techniques which may be implemented?

The workshop will attempt to sensitize SLTs on their role in the development of appropriate service delivery, analyse the procedures, and outline the barriers to appropriate treatment, while attempting to offer some insights into ways in which these services may be improved from the SLT perspective. The workshop will use interactive methods and group discussion. Individual cases will be analysed.

Keywords: Interprofessional learning, team-based learning

WS 005

(1267) - LUBBI FINDS SPEECH BONES: SPEECH AND LANGUAGE MATERIAL FOR CHILDREN

Másdóttir, Thóra - *University of Iceland, Iceland*
Gísladóttir, Eyrún Ísfold - *Reykjavík Speech Center / Málsmiðja Eyrúnar, Iceland*

The objective of this workshop is to describe the clinical potential of a new material aimed for children with speech and language disorders. While the primary focus of the Lubbi materials is speech sound enhancement, other areas of speech, language, and literacy development are also included, such as phonological awareness and vocabulary.

The materials were developed based on research in the area of phonological development of Icelandic-speaking children (Másdóttir, 2008, 2014, 2016), phonological awareness (Símonardóttir & Einarsdóttir, 2002; Weitzman & Greenberg, 2010), and the use of gestures in language development and language learning (Callcott, Hammond, & Hill, 2015). Formal EBP evaluation of the Lubbi materials is currently underway.

Lubbi's speech and language materials consist of several different components that SLTs can use in activities to develop speech, language, and literacy skills. These include cards for individual speech sounds, drawings of articulator positions, gestures for each sound, short stories with

phonological awareness activities, and the “speech bones” from the book, which can be used for activities such as speech production exercises and encouraging early reading skills. Each sound also has an accompanying song, which highlights the sound and adds a further depth to the clinical and pedagogical instruction.

The participants of this the workshop will learn how to develop a 3-dimensional method of learning (visual, auditory and tactile stimulation along with oral production) in line with current research evidence, how such materials have been used in Iceland, and how these materials and methods could be used with speakers of other languages. The emphasis is on the clinical application of the material, providing the participants with an abundance of practical treatment ideas, not only when working with speech and language disordered children, but also for boosting normal language skills in preschool children.

Keywords: Phonological disorders

WS 006

(1098) - LEXICON PIRATE – PRACTICAL INSIGHTS INTO AN EVIDENCE-BASED STRATEGY THERAPY APPROACH FOR CHILDREN WITH LEXICAL DISORDERS

Marks, Dana-Kristin - *Ludwig-Maximilians-Universität München, Germany*

Ulrich, Tanja - *Universität zu Köln, Germany*

The workshop is designed to gain practical insights into a particular intervention method for children with lexical disorders (4-10 years) called “Lexicon Pirate”. The aim of this strategy therapy is to change the children’s reactions in those situations in which they lack lexical knowledge or when word retrieval is not possible. Using model-based learning (hand puppet “Tom”) the therapist provides and teaches a variety of semantic and lexical learning strategies, where necessary. The children are encouraged to apply these strategies in their everyday life, so that generalization effects on untrained words can be achieved.

The workshop illustrates how to perform a concrete therapy session by providing video clips and further explanations. The therapy material set will also be available and ready for inspection. Questions which arise will be answered.

The participants will gain an overview of the “Lexicon Pirate” therapy approach, the structure of a single therapy lesson and various therapeutic techniques in teaching particular lexical learning strategies.

The “Lexicon Pirate” is an evidence-based therapy approach which was developed in Germany in 2008 and has constantly been enhanced since then. The therapy hand book with all the word materials has recently been translated into English. It is possible to conduct this therapy approach in every language, so it may be applied by speech and language therapists all over the world.

Keywords: Specific language impairment, intervention

WS 007

(1063) - MULTILINGUALISM: MYTHS & REALITIES

Pénard, Joy - *ASHA - American Speech-language Hearing Association, USA*

This workshop will deconstruct a number of myths and preconceived notions surrounding multilingualism. Using recent results from international peer-reviewed research, this presentation will refute these myths, then describe typical bilingual development from birth to primary school by covering key milestones of speech and language development. Next, basic guidelines for appropriate assessment and determining whether a multilingual child presents with a language difference or

disorder will be discussed. Particular attention is given to vocabulary and literacy development in school-age children, and how to build on the identity and multiple languages of the child to further support this development. Strategies will be proposed to include community languages, involve parents, and create a supportive environment facilitating success for educational objectives.

Interactive Question/Answer session, discussion around the theme, sharing experiences, demonstrations around best practices. Offer tools and resources available for speech and language assessment and intervention. Demonstrate how to use multilingualism to support vocabulary and language development. Drawing on the latest research from internationally recognized experts on the topic of multilingualism (including Sharynne McLeod, Johanne Paradis, Brian Goldstein, Michelle Garcia Winner, Madalena Cruz-Ferreira, and Jim Cummins among others), participants will expand their clinical skillset.

Dissemination of critical and useful information with a direct impact on speech therapy clinical practices concerning the growing population of multilingual children.

Raise awareness of the prevalence of issues concerning assessment and intervention of multilingual children.

Multilingual children need appropriate speech and language assessment and intervention to establish effective and evidence-based practice.

Keywords: Multilingualism

WS 008

(1074) - USING SOCIAL MEDIA TO ENCOURAGE INCREASED ENGAGEMENT WITH RESEARCH: EXPERIENCES OF SLT STUDENTS AND PRACTITIONERS IN GERMANY AND UK.

Roddam, Hazel - University of Central Lancashire, UK

Scharff Rethfeldt, Wiebke - Hochschule fur Gesundheit Bremen, Germany

Muehlhaus, Juliane - Hochschule fur Gesundheit Trier, Germany

Increased engagement in research by healthcare professionals has a positive impact on patient experience of care (Boaz et al 2017), which further strengthens the imperative for promoting evidence-based practice and research-capacity building across students and qualified practitioners alike. Awareness and confidence for implementation of research in practice is largely constrained by limited access to relevant evidence sources for many sectors of our professional community – especially for colleagues across parts of mainland Europe (Roddam and Skeat 2010). In recent years there has been growing evidence of the effectiveness of social media for supporting dissemination of research information in healthcare (Schnitzler et al 2016). The Research Support Network (ResNet) was launched in 2015 as a web-based initiative, primarily for SLT practitioners across mainland Europe. It aims to increase skills and confidence for evidence-based practice and to encourage practice-based research (Finch et al 2013). In January 2016 a new monthly online (Twitter) journal club was launched (#ReSNetSLT), to harness the power of social media to facilitate greater interactive participation (Lizarondo et al 2010, 2012).

This workshop will present a clear overview, definition and demonstration of relevant social media platforms for sharing SLT research information, including Twitter. It will also present case examples of how SLT students and practitioners are using social media as part of their routine continuing professional development (Gilbert 2017, Moorley and Chinn 2014).

The workshop will involve delegates in a structured discussion of the benefits plus the perceived and actual challenges to using social media for access to research information and resources. It will also provide valuable advice and strategies for using social media to access and share research information relevant to their clinical practice.

SLTs at all stages of their career can benefit from using social media to access research information as part of their routine continuing professional development.

Keywords: Evidence-based practice, E-learning

WS 009

(1207) - VOCABULARY INTERVENTION WITH ADOLESCENTS WITH LANGUAGE DISORDER AT UNIVERSAL, TARGETED, AND SPECIALIST LEVELS OF SERVICE PROVISION

Lowe, Hilary - City, University of London, UK

Joffe, Victoria - City, University of London, UK

The workshop will explore the effectiveness of vocabulary interventions delivered in schools, and will develop delegates' knowledge and understanding of vocabulary intervention for adolescents with language disorder (LD) at universal, targeted, and specialist levels of service provision. The importance of vocabulary for educational attainment in adolescence will be highlighted (Feinstein & Duckworth, 2006). A study investigating the effectiveness of a novel approach to universal vocabulary intervention, "Word Discovery", will be presented. Delegates will be trained in the practical intervention methods used. Application of the intervention to targeted and specialist levels of service provision will be discussed.

Seventy-eight adolescents with LD, aged 11 – 13 years, were taught science curriculum words by teachers, in class, under two conditions: 1) 10 words taught through usual teaching practice; and 2) 10 matched words taught using specific word-learning techniques incorporating phonological-semantic activities, embedded into the teaching of the curriculum. Ten matched control words received no intervention. Word knowledge was assessed at pre-intervention, post-intervention, and follow-up time points. Mainstream secondary school teachers were trained by a speech and language therapist (SLT) in specific word-learning techniques in the experimental condition.

The experimental classroom vocabulary intervention was more effective than usual teaching practice in increasing the word knowledge of students. There were mixed preferences amongst students for whole-class, small-group, and individual models of intervention delivery.

The workshop will highlight the importance of collaboration between the SLT, teacher and teaching assistant in enhancing the vocabulary of adolescents with LD. It is not too late to intervene during adolescence, and significant improvements in vocabulary can be achieved in older students with LD, when working at different levels of service provision (universal, targeted or specialist). Consideration should also be given to which model of intervention delivery is appropriate (whole-class, small-group, individual) in relation to the needs and preferences of the student.

Keywords: Developmental language disorders, intervention

WS 010

(1356) - BARRIERS AND FACILITATORS IN INTERPROFESSIONAL EDUCATION: BARRIERS AND FACILITATORS BASED ON EUROPEAN AND NORTH AMERICAN EVIDENCE

Constantinidou, Fofi - University of Cyprus, Cyprus

Mcneilly, Lemmieta - American Speech Language Hearing Association, USA

Zerafa, Claudine - Private Practice, Malta

Bonello, Marjorie - Private Practice, Malta

Emmeneger, Catherine (Switzerland) - Private Practice, Malta

Ojaste, Anelli (Estonia) - University Setting

Jimenez Garrido, Yaiza (Spain) - Private Practice, Malta

This workshop is organized by the Interprofessional Education (IPE) Working Group of CPLOL and members of the ASHA IPE Team. The scope is to discuss facilitators and barriers of IPE programmes across Europe and North America. IPE is defined as "two or more professions

learning about, from, and with each other to enable effective collaboration and improve (health) outcomes.” (WHO, 2010, p.7). Currently, there is limited uniformity in professional standards around the world, coupled with a variety of service delivery models in health care and education services. This diversity may affect IPE practices. Nevertheless, there is a need to have a more coordinated approach among SLT training programs’ implementation of IPE. This workshop aims to present and encourage debate of adopting such an approach.

The workshop will incorporate evidence from the IPE Working group survey of CPLOL regarding the current practices of IPE training in academic programs from 20 European countries. Additionally, data from a qualitative case study conducted by Bonello (2016) using focus group methodology from academics, informants from education and health sectors, and newly qualified professionals from Malta will provide a social-cultural perspective to IPE. Finally, information from European resources and ASHA will be integrated with the above in order to offer practical recommendations in facilitating IPE during academic training.

The CPLOL survey demonstrated that universities acknowledge responsibility to provide IEP training; yet there is inconsistency and lack of uniformity in implementing IPE. Barriers and enhancers exist especially in relation to professional boundaries and identities, cultural issues, changes in curricula and funding. It appears that national cultural factors also impact IPE implementation. IPE requires a paradigm shift. There is a need to create the foundation for collaborative practices at the level of academic programs and shift to an integrative approach. SLTs work within an interprofessional context. The workshop will conclude with practical suggestions.

Keywords: Interprofessional learning, clinical education, quality of education, team-based learning

WS 011

(1035) - SPEAKABOO: SCREENING OF SPEECH DEVELOPMENT IN MULTILINGUAL CHILDREN

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Van Der Zijden, Liesbeth- *Royal Dutch Kentalis, Netherlands*

Assessing multilingual children under the age of six is a challenging task. First, all the languages of the child need to be assessed for a valid result. Second, SLTs are often not familiar with the child’s mother tongue. Third, necessary articulation screeners for foreign languages are difficult to find or do not exist. Last, young children are often shy and refuse to speak during an assessment, especially when surrounded by multiple strangers. The first aim of this study was to develop a screening tool for phonological development in eight languages. The second aim of the project was to create a digital assessment tool that would bridge the language gap between the patient and the therapist. We have developed a digital articulation screener that helps the therapist elicit words from a child in a non-threatening way by letting it play a game on an iPad. A formal or informal interpreter assists the therapist. All words are recorded by the application and stored in an individual patient’s record where the SLT can re-listen to the recordings, compare them to a native speaker and score the results.

The process of finding the right words and matching pictures, searching for evidence from the literature, expert linguists’ opinions and native speakers, will be described. Speakaboo is currently available in eight languages. For each language a different set of words and pictures is chosen, including a matching score form with IPA transcription. A description of each language and its phonological system is available too. The application can be downloaded for free from the Apple AppStore (September 2017).

Screening of speech development in young multilingual children’s L1 can be done, even when the SLT does not speak the child’s language. We are looking for collaborators and funding to develop new screening language tools.

Keywords: Developmental language disorders, phonological disorders, screening, multilingual

WS 012

(1193) - IMPROVING COMMUNICATION WITH PECS WITHIN DIFFERENT POPULATIONS

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Vilaltella Verdes, Sonia - *Pyramid Educational Consultants España, Spain;*

Maria, Aina - *Pyramid Educational Consultants España, Spain;*

1 - Pyramid Educational Consultants España, Spain; 2 - Pyramid Educational Consultants Portugal, Portugal

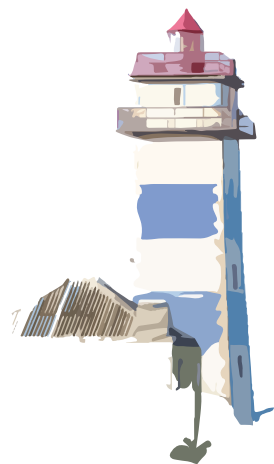
PECS, the Picture Exchange Communication System, is an augmentative alternative communication (AAC) system well established since 1985 with hundreds of studies confirming its benefits among users from all over the world, across ages and diagnoses. PECS was developed in 1985, within a clinical setting with autistic children where other traditional approaches to verbal behavior had failed and nowadays, most of the conducted studies are related to Autistic Spectrum Disorders. This protocol has also been successfully implemented with people with many different diagnoses and it has been found to be a powerful tool to improve initiation and to increase the communication skills of people who have severe impairments, such as, Trisomy 12, Angelman syndrome, Down's syndrome, TEA syndrome, Stickler Syndrome, Idiopathic 15, West syndrome, Wolf syndrome, 22q syndrome and bilateral hearing loss. This workshop aims to guide participants in the identification of potential PECS users based on their actual communication needs, independent of the diagnosis. The workshop will present videos of students with different syndromes learning to use functional communication within the phases of the PECS protocol. Presenters will also promote discussion about the challenges each implementation creates and how it contributes in enhancing the communication and social skills of such a diverse population.

The results of PECS implementation in a variety of syndromes will be demonstrated through the observation and discussion of cases. After this workshop, participants will be more aware of the broad spectrum of users they might help with PECS, and will also improve their clinical skills to intervene in severely impaired communicators.

This workshop will provide information about the PECS protocol and how it can be successfully implemented among people with different diagnoses.

Keywords: Developmental language disorders, intervention, augmentative and alternative communication systems, PECS, communication skills

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PO 001

(1151) - IMPLEMENTING PRAGMATIC THERAPY FOR CHILDREN: CASE STUDIES OF THE SOCIAL COMMUNICATION INTERVENTION PROGRAMME (SCIP) IN NORWAY

Ingvaldsen, Sissel - *Statped (Department of speech and language disorders), Norway*
Thorsen, Anne Tove - *Statped (Department of speech and language disorders), Norway*
Reinertsen, Kristin - *Statped (Department of speech and language disorders), Norway*
Adams, Catherine - *University of Manchester, UK*
Gaile, Jacqueline - *University of Manchester, UK*

Objectives: For children with social communication needs, there are few interventions that target the underlying language, pragmatic and social aspects. These children are at long-term risk of having emotional, social and behavior problems. Adams & Gaile (University of Manchester, UK) developed SCIP and demonstrated effect in a randomized controlled trial of speech-language intervention for children with Social Communication Disorder (Adams, et al. 2012). We will:

- a) examine if SCIP is transferable to the Norwegian language, school system and within special education
- b) contribute to the evidence base about developmental social communication using a case-study approach

Methods: The manual was translated into Norwegian after discussion between the UK and Norway teams. The intervention consists of three phases:

- 1) universal and preparatory,
- 2) individualized and
- 3) real-life-practice. The intervention combines language processing, pragmatics and social understanding and was completed for three children in collaboration with schools and parents.

Results: We will describe the implementation and the preliminary outcomes using the intervention for three school-aged children in Norway. We found SCIP possible to adapt to a Norwegian setting. Phase 1 is possible to implement without further adjustments, while Phase 2 presented some challenges and adaptation was required. This did not prevent implementation. We will give a description of our manner of delivery of the intervention in a Norwegian school system, making reference to the right to special education with a trained teacher, assistant or SLT.

Conclusions: It was possible to take a manualized intervention, written in one European context and translate the content and purpose to another country. This is the first time that a developmental social communication intervention has undergone cross-country and cross-cultural implementation and evaluation. The individualized approach to the child's communication needs proved to be effective and was able to implement in a Norwegian setting.

Keywords: Developmental language disorders, pragmatics, specific language impairment, intervention

PO 002

(1440) - COMMUNICATIVE FUNCTIONS AND MEANS IN CHILDREN WITH AUTISM SPECTRUM DISORDER AND TYPICALLY DEVELOPING CHILDREN: DIFFERENCES IN LANGUAGE USE

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Objective: The aim of the study was to explore similarities and differences in the functional use of early language in children with autism spectrum disorder (ASD) and typically developing (TD) children.

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Methods: Functional use of language was estimated by the number and diversity of communicative functions and means. Subjects were 40 children with ASD and 40 typically developing children matched by gender and expressive vocabulary size, estimated with the MacArthur-Bates Communicative Development Inventories. A diversity and number of communicative functions and forms, expressed during everyday communication were assessed by a structured questionnaire presented in the form of a parental interview.

Results: Results show statistically significant qualitative and quantitative group differences in the acquired type and number of communicative functions and means. Even when the two groups were matched by the size of their expressive vocabulary, subjects with ASD showed limited complexity of word use expressed by the limited number of communicative functions.

Conclusions: The results suggest that the number and complexity of communicative functions might be one of the pivotal clinical parameters in the diagnosis of autism spectrum disorder.

Keywords: Autistic spectrum disorders

PO 004

(1224)- LANGUAGE INTERVENTION TO CHILDREN WITH ASD WITH THE PARTICIPATION OF PARENTS

Fernandes, Fernanda - Universidade de São Paulo, Brazil

Barbosa, Milene - Universidade de São Paulo, Brazil

Objectives: Recent epidemiological data estimates that 1 in 68 children in the U.S. have autism. Approximately 85% of the individuals with autism present a cognitive impairment and/or adaptive disorder that interfere with their independence. The issue of communication represents perhaps the most important aspect of the disorder. Hence, recent studies involving the communication of children with ASD and issues related to the functional use of language use parameters based on pragmatic theories in linguistics. With a focus also on identifying the best treatment for these children, researchers have determined the effectiveness of various therapeutic approaches. However, other studies also emphasize that any comparisons of these approaches must consider data regarding the child's family and social context. Thus, it is recommended that interventions must be individualized to best meet the current level of the child's development and to identify the profile of each child's abilities and difficulties. The aim of this study was to compare the functional communication performances of children with ASD before and after their participation in a speech intervention program that was administered at home by the parents and/or caregivers, while being monitored remotely by the speech-language therapist.

Methods: Participants were 50 children between the ages of 3 and 13 years diagnosed with ASD. The therapists of each child developed individualized daily instructional plans and activities to be administered by the parents and/or caregivers at home and monitored using the available technology.

Results: Results indicate that children that received individually-planned speech-language intervention at home, conducted by their parents, with close monitoring by the SLP, have shown improvement similar to those who continued to receive weekly speech-language therapy.

Conclusions: These results provide important information for the planning of services that aim to reach a large number of children or to outreach those who do not have easy access to SLP services.

Keywords: Autistic spectrum disorders, developmental language disorders, intervention

E-Poster Presentations

PO 005

(1225) - SLP SERVICES TO CHILDREN IN THE AUTISM SPECTRUM

Fernandes, Fernanda Dreux - Universidade de São Paulo, Brazil

Segeren, Leticia - Universidade de São Paulo, Brazil

Objectives: To analyze the first service destined to provide speech-language therapy for children and adolescents with ASD in Brazil. This service was created in 1986 and provides services associated with research and training of SLPs in undergraduate and graduate programs.

Methods: A retrospective analysis of data regarding the last 20 years (1997 – 2016) of an SLP service specialized in ASD in Brazil was conducted. It included just the children and adolescents that received language therapy for at least 6 months, and not those who were received just for language assessment.

Results: Data refer to 442 children and adolescents and 80% were boys. Just 14% of them started language therapy before the age of 4. However, less than 10% started this intervention after 11 years. The majority started treatment between 4 and 8 years. The age of therapy onset decreased dramatically during the studied period: in 1997 the mean age of children starting SLP intervention was 6.1 years, while in 2016 it was 3.5 years. The mean period of speech and language intervention is 3 years. The main reason for interrupting the process is the family's withdrawal due to transportation difficulties.

Conclusions: Changes in the diagnostic criteria and increased awareness regarding ASD symptoms and possible treatments may be the main reason for the changes observed. This kind of data is essential for the proposal of intervention alternatives that guarantee that a larger number of persons receive services.

Keywords: Developmental language disorders, autistic spectrum disorders, intervention

PO 006

(1223) - LANGUAGE DEVELOPMENT IN AUTISTIM SPECTRUM DISORDER (ASD)

Leposa, Nikolett - Eötvös Loránd University, Hungary

Objectives: Autistic spectrum disorder (ASD) is a developmental disability. ASD includes a wide range of symptoms, skills and levels of disability. Social problems are often manifested, such as repetitive behaviours, speech and nonverbal communication disability, and unique strengths and differences in cases of people with autism. Communication disability might include delayed speech and language skills, repeated words or phrases (echolalia) and a singing intonation. The aim of this presentation is to show how communication can be improved in autism spectrum disorder. A case study will be reported.

Methods: Before intervention, the level of language skills development of the child was assessed. A language developmental screening test (PPL) was used to determine this. PPL was elaborated by Pléh, Palotás, Lórik (2007). The test determines language development disability in 4 to 8 year old children. After the test an individual developmental plan was prepared. The intervention was applied twice a week. The control of the effect of the communication and language development took place after 5 months of intervention. The development will be analysed.

Results: My hypothesis is that communication, language and socio-cognitive development (theory of mind), will be manifested in the child's communication.

Conclusions: Complex communication, language and socio-cognitive development (theory of mind), will affect development.

Keywords: Patient-reported outcome measures (development or cross-cultural adaptation and validation), autistic spectrum disorders, developmental language disorders

E-Poster Presentations

PO 007

(1107) - ASSESSING FUNCTIONAL USE OF COMMUNICATION

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Cardoso, Carla - Universidade do Estado da Bahia, Brazil
Figueredo, Ademária - Universidade do Estado da Bahia, Brazil
Ruella, Ivani - Universidade Presbiteriana Mackenzie, Brazil
Guarnieri, Camila - School of Dentistry –Universidade de São Paulo, Brazil
Sawasaki, Lidiane - School of Dentistry –Universidade de São Paulo, Brazil
Moraes, Ana Carolina - School of Medicine – Universidade de São Paulo, Brazil
Sousa, Camila - School of Medicine – Universidade de São Paulo, Brazil
Lopes-Herrera, Simone - School of Dentistry –Universidade de São Paulo, Brazil
Hage, Simone - School of Dentistry –Universidade de São Paulo, Brazil
Fernandes, Fernanda - School of Medicine – Universidade de São Paulo, Brazil
Hyter, Yvette - Western Michigan University, USA

Objectives: Assessing linguistic competence for natural communication is not an easy task for Speech-Language Pathologists (SLPs). School and clinical settings are restricted environments and the interaction with an unfamiliar adult is unlikely to elicit spontaneous and creative communicative exchanges. Several tests propose different activities as a means to prompt the use of different communication strategies and highlight the child's performance. However, even with the use of these strategies, the resulting profile not always reflects accurately the child's communicative abilities. One alternative is to obtain information regarding the impressions of parents or teachers that are familiar with the child's behavior in different situations. Issues such as affective bias and lack of information about communication may interfere with the performances reported by them. This study aimed to compare the answers to a questionnaire regarding social communication provided by parents and teachers to those given by SLPs that have been working with each child for a period of at least six months.

Methods: The study was carried out in different regions of Brazil and involves parents and teachers and SLPs of children with Autism Spectrum Disorders, Specific Language Impairment and typical development. Data refer to 120 children, ages 3 to 6.11 years from urban areas located in the southeast and in the northeast regions of Brazil.

Results: Results point out an overall similarity of the answers by the familiar adults and the SLPs. But it was also possible to identify significant differences regarding specific questions, mostly referring to the association of language and behavior or cognitive performance.

Conclusions: The results suggest that it may be possible to gather information about children's functional use of language on a timely and cost-effective manner. Further study is needed in order to verify if it is possible to improve the language of the questionnaire, so it becomes clearer to parents and teachers.

Keywords: Pragmatics, specific language impairment, – autistic spectrum disorders

PO 008

(1408) - AUDIO-PERCEPTIVE ANALYSIS OF PARKINSON'S DISEASE PATIENTS' SPEECH SAMPLES BY AN HETEROGENEOUS GROUP OF JURY PANEL

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Cardoso, Rita - CNS - Campus Neurológico Sénior, Torres Vedras; Unidade de Farmacologia Clínica do Instituto de Medicina Molecular da Faculdade de Medicina da Universidade de Lisboa, Portugal

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Guimarães, Isabel - *CNS - Campus Neurológico Sénior, Torres Vedras; Unidade de Farmacologia Clínica do Instituto de Medicina Molecular da Faculdade de Medicina da Universidade de Lisboa; Departamento de Terapia da Fala da Escola Superior de Saúde do Alcoitão, Alcabideche (Portugal)*
J. Ferreira, Joaquim - *CNS - Campus Neurológico Sénior, Torres Vedras; Unidade de Farmacologia Clínica do Instituto de Medicina Molecular da Faculdade de Medicina da Universidade de Lisboa; - Laboratório de Farmacologia Clínica e Terapêutica da Faculdade de Medicina da Universidade de Lisboa, Portugal*

Objectives: To determine if different groups of listeners have different perceptions regarding speech properties of Parkinson's Disease (PD) associated with dysarthria at different levels of severity.

Methods: This is an observational cross-sectional study. Speech samples of two minute conversations from ten participants were recorded: three mild dysarthria PD patients, three with moderate dysarthria, three with severe dysarthria and one without dysarthria, the control subject. A jury panel of fifty participants, ten per group, performed an audio-perceptive analysis: PD patients, relatives of PD patients, speech and language therapists, neurologists and participants from the general population. The main outcome was the result of a Likert scale, completed by each jury, regarding five perceptive parameters for each conversation sample. Spearman correlations between discourse comprehensibility and the other variables were computed.

Results: Speech velocity – All groups' audio-perceptive analysis described the control subject and the subject with mild dysarthria as exhibiting normal velocity and the subjects with moderate and severe dysarthria with slow velocity, except for the SLTs. Speech volume – All groups described the control subject, subjects with mild and moderate dysarthria as exhibiting normal volume (except the relatives of the control subject) and the subjects with severe dysarthria with low volume. Speech articulation – All groups described the control subject as exhibiting good articulation, the mild dysarthria subjects with normal and the severe dysarthria subjects with bad articulation. For moderate dysarthria, there were no homogeneous results. Discourse comprehensibility – All groups described the control subject with easy discourse comprehensibility, the moderate dysarthria subjects with adequate comprehensibility and the severe dysarthria subjects with difficult comprehensibility. For the mild dysarthria subjects there were no homogeneous results. Correlations was performed between discourse comprehensibility and: (i) *velocity* - ($r_s = +0.287$); (ii) *intensity* - ($r_s = +0.454$); (iii) *articulation* - ($r_s = +0.729$), statistical significant value at the 0.01 level.

Conclusions: Articulation defects are more easily perceived by any interlocutor compared to the intensity or speed of discourse, and the articulation seems to be correlated with speech intelligibility.

Keywords: Speech disorders, dysarthria, Parkinson's disease

PO 009

(1128) - COMPARISON OF SPEECH INTELLIGIBILITY OF SLOVAK PATIENTS WITH PARKINSON'S DISEASE AND HEALTHY ADULT POPULATION

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Egryová, Marta - *Second Department of Neurology, Medical School of Comenius University and University Hospital in Bratislava, Slovakia*

Košutzká, Zuzana - *Second Department of Neurology, Medical School of Comenius University and University Hospital in Bratislava, Slovakia*

Kušnírová, Alice - *Second Department of Neurology, Medical School of Comenius University and University Hospital in Bratislava, Slovakia*

Cséfalvay, Zsolt - *Institute of Psychology and Speech Therapy Studies, Faculty of Education, Comenius University Bratislava, Slovakia*

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Objectives: Communication disorders in Parkinson's disease are common, often beginning with a decrease in vocal loudness and at times progressing to more severe function limitations characterized by changes in speaking rate, articulatory precision, and speech intelligibility (Yorkston et al., 2010). Articulation is characterized by imprecise consonants, irregular articulatory breakdowns and distorted vowels (Georgeton, Meunier, 2015). Surveys estimate 69.6% of patients with PD present with intelligibility problems (Miller, 2007).

The aim of this study was to analyse speech intelligibility of healthy adults and patients with PD at single word and sentence level.

Methods: We included 39 non-demented PD patients (M=26, Mean age=62.39, SD=10.29, Disease duration=6.59, SD=7.22, H&Y=2 – 3, Mean UPDRS III-ON=32.79, SD=10.26, MoCA=26.0, SD=1.96) and 39 age-, education- and gender-matched healthy controls (HC). Original Slovak intelligibility test (T-ZROD) (Mičianová, Kaššovicová, Cséfalvay, 2015) was given to all subjects. Test is administrated by computer program which evaluates data of all tested subjects and has two parts – word level and sentence level.

Results: We found no significant differences at word level between the two groups (Mann-Whitney U = 588.0, p = 0.075), however we found significant difference in sentence intelligibility between groups (better score for healthy individuals) (Mann-Whitney U = 434.0, p = 0.000). Patients with PD also needed significantly more repetition of sentences to be comprehensible for the evaluator (Mann-Whitney U = 434.0, p = 0.000). Significant, albeit only moderate Spearman's correlation exists between sentence intelligibility scores and UPDRS III (rs = -0.387, p = 0.01).

Conclusions: Intelligibility of PD patients is disturbed particularly at sentence level in speech production. Production of single words can be entirely intelligible. These findings emphasize the need for comprehensive assessment of intelligibility of PD patient, so that test results can be useful for building effective communication strategies training for this population.

This research was supported by grants APVV-15-0155 and VEGA 1/0352/16.

Keywords: Parkinson's Disease

PO 011

(1197) - LANGUAGE SKILLS IN YOUNG-ONSET PARKINSON'S DISEASE BEFORE AND AFTER SUBTHALAMIC NUCLEUS DEEP BRAIN STIMULATION

Bóna, Judit - ELTE Eötvös Loránd University, Hungary

Objectives: Young-onset Parkinson's disease (YOPD) is a rare disease about which there is very little information in the literature. Although it is similar to late onset PD, there are some symptoms which appear differently in YOPD than in late onset PD. Whereas in cases of young patients with PD the age factor does not influence the symptoms, so the effects of the disease can be examined on their own. For this reason, it would be important to understand the characteristics of young-onset PD and the speech of these speakers.

The aim of this presentation is to present the results of a longitudinal case study.

Methods: Language skills (verbal fluency, sentence repetition, text comprehension) in YOPD were analysed in four time periods: 1) before brain surgery, 2) four weeks after the brain surgery, the implanted system not activated yet, 3) three months after the activation of the implanted system, 4) 8 months after the brain surgery.

Results: Results show that there are certain language skills (e.g. reaction time in sentence repetition) which are related to the patient's state.

Conclusions: However, subthalamic nucleus deep brain stimulation does not have any effects on other language skills.

Keywords : Parkinson's Disease

E-Poster Presentations

PO 012

(1435) - A SINGING-BASED THERAPY PROTOCOL AS A TREATMENT FOR VOICE AND ARTICULATION IMPAIRMENTS IN PARKINSON'S DISEASE

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Tedesco, Angela - *Federazione Logopedisti Italiani, Puglia, Italy*
Costante, Antonia - *Federazione Logopedisti Italiani, Puglia, Italy*
Dellomonaco, Anna Rita - *Federazione Logopedisti Italiani, Puglia, Italy*
Notarnicola, Marilina - *Federazione Logopedisti Italiani, Puglia, Italy*
D'Oronzo, Angela - *Federazione Logopedisti Italiani, Puglia, Italy*

Objectives: Voice disorders affect 90% of people with Parkinson's disease (PD). Speech and language therapy (SLT) is needed to keep the voice as long as possible. Evidences show that singing and music-based therapy may support SLT in improving vocal intensity, phonation and respiration. This study aims to investigate the effects of a choral singing treatment (CST) protocol on the speech intelligibility of people with PD.

Methods: 10 PD patients were recruited. Recordings of voice during spontaneous speech, reading and vowels production were collected. Patients underwent a total of 10 sessions of choral singing therapy, one hour session per week, directed by speech-language pathologists. Rehabilitation material for everyday home training was delivered. Pre and post-treatment recordings were analyzed and compared to verify the effectiveness of the therapy. Voice intensity and frequency, duration of vowel production, speaking rate and vowel space area (VSA) were adopted as parameters. VSA was used as the intelligibility index and a measure of amplitude of articulatory range of motion.

Results: After treatment, an increase in maximum duration of sustained vowel phonation, articulation and VSA was observed.

Conclusions: The CST protocol may maximize immediate treatment effects on speech intelligibility in a more motivating way and in a social setting. In fact, CST was described by patients as an enjoyable social activity, and participation was perceived as improving language, breathing, voice and socialization ability.

Keywords: Speech disorders, dysarthria, Parkinson's Disease

PO 013

(1180) - THE IMPACT OF EXPIRATORY MUSCLE STRENGTH TRAINING ON THE SWALLOWING AND PHONATORY FUNCTIONS IN SUBJECTS AFFECTED BY IDIOPATHIC PARKINSON'S DISEASE

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Bonisoli, Nicoletta - *Ospedale di Marzana, ULSS9 Scaligera Verona, Italy*

Objectives: To evaluate the impact of the expiratory muscle strength training (EMST) on the swallowing and phonatory functions in subjects affected by Idiopathic Parkinson's disease (IPD).

Methods: The study was conducted on 20 subjects diagnosed with IPD (Hoehn and Yahr I-II), 11 males and 9 females, whose average age is 65.25 years (SD 9.3 years, min 50, max 82). The sample was divided for the randomized case-control trial (Rct): 10 subjects were assigned to the case group, 10 to the control group. They completed five weeks of an EMST program. All of the subjects underwent the following speech protocol: Water Swallow Test; Self-evaluation Questionnaires on Swallowing and Phonatory functions; the Robertson Dysarthria Profile (Italian version); GIRBAS; voice analysis with Multi Dimensional Voice Program (MDVP); Maximum Phonatory and Exhalation Time.

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Results: From Student's Test a significant increase was noticed in the group treated with EMST150TM in the Maximum Phonatory ($t= 2.0104$, $p<0.0304$) and Exhalation Time ($t= 3.9695$, $p< 0.0005$). From the Self-evaluation Questionnaires of the Swallowing function, before and after treatment, a global improvement in the treated group emerged in handling secretions and in swallowing thin liquids, while in the control group the responses remain stable through time. From the voice analysis with MDVP, the most deviated vocal parameters in the sample are : NHR, SAPQ%, vFo%, vAm%, Jitt%, Shimm%. In the case group, after EMST, there are no significant improvements in the vocal parameters.

Conclusions: The results suggest the effectiveness of EMST treatment in subjects with IPD in I-II H&Y stages in the increase in the management of secretions and in swallowing of thin liquids, and a statistically significant increase of the Maximum Phonatory and Exhalation Time. Regarding the vocal parameters, further studies with wider and more homogeneous samples are necessary.

Keywords: Parkinson's Disease, dysphagia, speech disorders, dysarthria

PO 014

(1308) - COMPREHENSION AND PRODUCTION OF WH-QUESTIONS - SYNTACTIC ACQUISITION IN PORTUGUESE DEAF CHILDREN WITH COCHLEAR IMPLANTS

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Objectives: In general, studies report that deaf children have a better oral language development after being cochlear implanted. However, their performances seems to be better in certain language domains than in others. In the syntactic domain, few studies have reported deficits in these children's performances because of linguistic input deprivation during their first years of life, specifically in structures such as wh-questions (Friedmann & Szterman 2011). The aims of this study are: (a) to describe the different stages of wh-questions structures acquisition and development in cochlear implanted children; and (b) to investigate the impact of the sociodemographic variables *age of cochlear implant activation*, *early intervention in speech therapy* and *acquired languages*.

Methods: 46 Portuguese deaf children with cochlear implant with 2;00 to 14;11 years of hearing age performed two comprehension tasks (80 wh-questions in total) and one production task (30 wh-questions). All children from the sample were cochlear implanted between 1;00 and 5;00 years old.

Results: The cochlear implanted children were better in comprehension tasks than in the production task. Their comprehension performances were lower comparatively to what is reported in hearing children (Cerejeira 2010; Baião 2012). Children cochlear implanted after 3 years of age had lower performances. *Early intervention in speech therapy* and *oral monolingualism* variables seem to influence positively the comprehension of wh-questions. Data from the production task were also lower than what is reported in hearing children, and the variable *age of cochlear activation* does not seem to influence these results. Early intervention in speech therapy and sign language as L2 and bimodal bilingualism show a positive influence on the results but not sufficient to be compared with hearing children's performances.

Conclusions: Although the cochlear implant allows access to linguistic input for deaf children, the syntactic language domain still has to be worked on in order to achieve the desired proficiency.

Keywords: Hearing impairment

E-Poster Presentations

PO 015

(1079) - CHILDREN WITH OTITIS MEDIA WITH EFFUSION (OME) IN SPEECH AND LANGUAGE THERAPY: DATA FROM PORTUGUESE CLINICAL PRACTICE

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Objectives:

1. To characterize the clinical practice of Portuguese speech and language therapists (SLTs) attending to children with a history of OME.
2. To assess the characteristics of children with a history of OME that need Speech and Language Therapy.

Methods: In this study a questionnaire of six multiple-choice questions was drawn to collect the data; a digital tool (<http://surveymonkey.com>) was used. The questionnaire was disclosed through the e-mail addresses of colleagues and through two social networks.

Results: A total of 107 responses were obtained during the month of disclosure, corresponding to 6.57% of all SLTs in Portugal, based on 1628 professional certificates issued until 09/2012 (Paixão, 2012). The results of this study are presented in the table below.

Questions	Main responses
Q1 - Do you attend children with history of otitis media?	96.3% - positive answer
Q2 - Do you attend children with history of otitis media submitted to myringotomy with trans-tympanic ventilation tubes placement (TTVT)	87.7% - positive answer
Q3 - At what age was the surgery performed?	72.6% - Surgeries were performed between 3-6 years
Q4 - Who is the main intervener in the referral of these children to Speech and Language Therapy?	44.9% - Referral to SLT by kindergarten teacher
Q5 - Which linguistic domain is more problematic in these children?	84% - Phonology as the most problematic linguistic domain
Q6 - Do you think Speech and Language Therapy starts early enough?	73.8% - negative answer.

Conclusions: OME is considered a risk factor for phonological disorders. A closer and more effective approach involving the different professionals that deal with these children has to be implemented, in order to allow for an earlier detection of OME, thus minimizing the potential negative effects of this pathology on the physical, cognitive and social development of the child. Prevention programs should be encouraged in health centers, hospitals, kindergartens and schools.

Keywords: **Developmental language disorders,- phonological disorders**

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PO 016

(1061) - INFERENCE MAKING ABILITY OF DEAF ADOLESCENTS DURING SIGN-SUPPORTED SPEECH COMPREHENSION

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Objectives: The current study aimed to test the capability of deaf adolescents to generate associative and predictive inference during spoken language comprehension and to test whether the use of Sign-Supported Speech (SSS) increased participants' comprehension. The role of cognitive and linguistic skills in comprehension was explored.

Methods: Forty-five deaf adolescents (23 females) took part in the study. Within this group, we investigated comprehension in cochlear implant users (CI group = 12) and in native Spanish sign language users (LSE group = 11). All participants were familiar with Spanish sign language and SSS. Stimuli consisted of twenty-four short texts. Participants watched video-clips in which half the stimuli were randomly presented in SSS, and half in spoken language. For each text, participants were asked to answer to two multiple-choice questions. One question was based on literal information and the other on inferential information, requiring either associative or predictive inferences.

Results: Participants of the CI group reached lower scores in inferential information processing than when responding to literal questions. They produced as many associative as predictive inferences. SSS was more effective than spoken language only in the LSE group. In spoken language, this group had more difficulties in processing predictive than associative inferences, possibly due to the strong need to fully understand context to make predictions. Spoken linguistic skills, rather than cognitive, in particular lipreading, were found to predict comprehension across all participants, except the LSE group in SSS, possibly because they primarily focused on signs.

Conclusions: The findings of this study suggest that inference processing in spoken language relates to participants' spoken language skills. Participants of the LSE group, with lower access to spoken language, increased inference generation, in particular predictive outcomes, thanks to the use of signs of SSS.

Keywords: Hearing impairment

PO 017

(1288) - PRELIMINARY RESULTS ON THE TEST OF EARLY RECEPTIVE AND EXPRESSIVE LANGUAGE ON GREEK-CYPRIOT TYPICALLY HEARING AND DEAF PRESCHOOL AGED CHILDREN

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Objectives: The Test of Early Receptive and Expressive Language (TEREL) is an evaluation tool developed in the context of a doctoral dissertation examining the language development of Greek-Cypriot deaf children compared to that of typically hearing Greek-Cypriot peers, ages 2 to 5 years old. TEREL examines both receptive and expressive language of preschool aged Greek-Cypriot children. The receptive part tests various concepts (time, quantitative, prepositions), pronouns, mental verbs, story comprehension, inference, as well as phonological awareness. The expressive part tests the use of the Greek definite articles in all numbers, cases, and genders, the use of personal prepositions in

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their various forms based on gender, number and case, use of various syntactical forms, such as hypothetical and prepositional phrases, use of verbs in present, past and future tenses, and rhyming.

Methods: It has been administered to 80 typically hearing and developing children, ages 2.5 to 5.5 years, and is in the process of being standardized. Its administration is carried out in two sessions (receptive and expressive) with each child separately at the child's school. The children participating in this study are recruited based on their teacher's observations as far as their language development is concerned. This is because there are no other standardized language measures currently available to evaluate children within Cyprus. Only typically developing children are recruited. Parents are given a written consent form to sign informing them of the conditions of the study. Children participate only following their parents' consent.

Results: Preliminary results show strong reliability and sensitivity for both the receptive and expressive parts of the tool.

Conclusions: It seems that this is a valid and reliable tool that has been very much needed, that may be used widely by speech pathologists, psychologists and special education teachers in Cyprus and Greece following its standardization.

Keywords: **Developmental language disorders, hearing impairment, screening**

PO 018

(1138) - COMMUNICATION WAYS FOR PRETERM BORN CHILDREN WITH PROFOUND SENSORINEURAL HEARING LOSS

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Objectives: One of the long-term prematurely born children's health concerns can be hearing loss. In this study, we assessed communication ways for preterm born children with profound sensorineural hearing loss.

Methods: We analyzed the database of the Latvian Children Hearing Center with data from 2008 to 2017. The study group involved 72 preterm born children with very low or low birthweight and sensorineural hearing loss. All children's otoacoustic emission tests after their birth were negative. Three groups of children were analyzed depending on their birth weight (group 1 < 1000 g, group 2 < 2000 g, group 3 < 3000 g) and communication ways.

Results: In half of prematurely born children cases there is predominantly profound sensorineural hearing loss. Twenty-three of them were children with a birth weight of < 1000g (birth weight 500 – 999 g, gestational age 22-28 weeks). 43% of the children use verbal communication, 26% use verbal communication and signs, 22% use only signs and 9% use non-verbal communication. Thirty two of them were children with a birth weight of < 2000 g (birth weight 1000 g – 2000 g, gestational age 26-34 weeks). 38% of the children use verbal communication, 12% use verbal communication and signs, 25% use only signs and 25% use non-verbal communication. Seventeen of them were children with a birth weight of < 3000 g (birth weight 2170 g – 3000 g, gestational age 28-35 weeks). 41% of these children use verbal communication, 35% use verbal communication and signs, 12% use only signs and 12% use non-verbal communication.

Conclusions: 61% of children with sensorineural hearing loss have cognitive and psychomotor impairment. This index decreases when gestational age and weight increases. Our hypothesis that a birth weight of up to 1000g significantly affects the use of verbal means in communication in comparison with other groups was not confirmed.

Keywords: **Hearing impairment**

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PO 019

(1131) - THE USE OF POSSESSIVE MORPHOLOGY IN HUNGARIAN CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT

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Objectives: Many studies have analysed the language-specific symptoms of children with specific language impairment (SLI). Hungarian is an agglutinating language with complex inflectional morphology. To date, it is shown that Hungarian children with SLI have particular difficulties in the use of tense and agreement on verbs, case marking nominal suffixes with non-transparent meaning, and morpheme clusters (Lukács et al., 2009, 2010, 2013). Our aim was to explore the expressive use of possessive structures in SLI and typical development in Hungarian. We hypothesized that marking plurality of either the possessor or the possessee is more difficult than marking singular possessive structures. Furthermore, we expected that the use of the plural possessee marker will be particularly difficult in SLI.

Methods: We assessed the production of possessive structures in 20 children with SLI and two groups of 20-20 typically developing children matched individually on chronological age (CA) and receptive grammar (RG), respectively, in an elicited production task. The experimental method was a sentence completion task with picture support.

Results: The results showed that typically developing preschool children are not yet at the adult level in the use of plural possessive morphemes. Multiple inflections marking the plurality of the possessor and possessive pose difficulties for all groups. Children with SLI performed below the CA and the RG group in general and showed a roughly similar pattern of performance to the RG group. However, children with SLI showed marked difficulties in the use of the plural possessee marker that was revealed by fewer correct answers and a distinct and atypical pattern of substitution errors.

Conclusions: These results show that Hungarian children with SLI has difficulties in the production of possessive structures, especially with complex noun forms marking plural possessive markers. This pattern is most plausibly explained in terms of low frequency of occurrence, phonotactic complexity and inconsistent semantic content.

Keywords: Specific language impairment, developmental language disorders

PO 020

(1037) - MORPHOLOGICAL COMPLEXITY AND VISUAL WORD RECOGNITION

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Objectives: Portuguese is a flectional system with a reasonable degree of complexity and with several morphological resources available for word formation (e.g. derivation, modification, composition). It is plausible to admit that, besides orthographic and phonological factors, there are also factors of a strictly morphological nature that hinder or speed up the reading process. We intend to show that visual word processing reflects the processing of morphological constituents. We also want to demonstrate that the complexity concept applied to Portuguese morphology, that distinguishes between simple words and complex words, is not enough to establish an order of complexity.

Methods: Based on the theoretical description of Portuguese word formation processes presented in Villalva (1994, 2000), we performed a lexical decision task, applied to two groups: children with typical development attending 4th grade and college adults. Five experimental conditions were used: (i) simple words (e.g. *janela* 'window'); (ii) compositional derived words

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(e.g. *desejoso* 'desirous'); (iii) lexicalized derived words unrelated to a base form (e.g. *poleiro* 'perch'); (iv) lexicalized derived words with an allomorphic suffix (e.g. *luxuoso* 'luxurious'); and (v) lexicalized derived words with base allomorphy (e.g. *aquoso* 'aqueous').

Results: Items complexity not only affects their access in the lexicon, but also affects the knowledge of items themselves. Simple words are not always the fastest processed words and the ones with the lowest error percentages. Words with a compositional structure have lower error percentages and shorter response times than simple words. Lexicalized words are more difficult to access than any other word type and they also have higher error percentages.

Conclusions: Lexical access is sensitive to words' morphological properties and compositionality seems to be a facilitating factor in lexical access. The results also demonstrate that processing morphological constituents is not linked to processing sublexical orthographic resources of words.

Keywords: Clinical education, interprofessional learning

PO 021

(1186) - THE MASTERING OF GRAMMATICAL GENDER IN GERMAN-SPEAKING CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT (SLI)

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Objectives: In German, all nouns are either assigned a masculine, feminine or neuter gender. Nouns provide morphophonological cues carried by word endings and semantic cues (natural gender) to potentially guide gender attribution (Wegener, 1995, Köpke & Zubin, 1984). While typically developing children master grammatical gender as marked on articles relatively early (Slobin, 1985; Szagun, Stumper, Sondag & Franik, 2007), children with SLI have persistent difficulties with grammatical gender (e.g. Clahsen, 1988, for German). Our study is the first to systematically test German-speaking children with SLI for their mastering of grammatical gender.

Methods: A cross-sectional sample of 30 German-speaking children with SLI aged 6;0 – 6;11 was studied. Criteria for exclusion were: hearing impairment, serious medical problems, and German not the only language. Gender attribution was measured by a newly designed screening tool. All test items were drawn from spontaneous speech data (MacWhinney, 2000) and were controlled for frequency and type of gender cue. We chose both cue-conforming and non-conforming test items. Each test item was presented together with two distractor items. The test item belonged to a semantic category which was different from the semantic category of the distractor items. Children were asked to name the picture that did not match. For a subgroup of children, spontaneous speech data were collected for concurrent validity. Further, the children in the subsample attended the screening twice. These data served to assess the test-retest-reliability.

Results: Children showed a variety of errors such as article omission, bias towards one of the three articles and erroneous gender attribution even for items with natural gender cue. Measures of validity and reliability are good. Error rates between children differed considerably. The results are discussed with regard to typical development and possible approaches to treatment. Data collection from more children is currently under way.

Keywords: Specific language impairment

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PO 022

(1208) - ON THE ROLE OF FUNCTION WORDS IN THE EMERGENCE OF FINITENESS IN SLI

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Objectives: Research on early language development emphasizes a close correlation between lexicon size and the course of grammatical development (Bates & Goodman 1997). Therefore, children at risk or with attested language impairment typically receive vocabulary therapy. However, limits in the association between lexicon and grammar have been discussed as well (McGregor et al. 2005). It seems crucial finding out which parts of the lexicon are especially affected when lexical development is delayed and what kind of grammatical difficulties are related to specific gaps in the lexicon. We argue that especially the domain of function words requires a more detailed investigation.

Methods: By comparing longitudinal data of one German-learning SLI child (age 2;0 to 3;11) and two typically developing children, it can be shown that a) lexicons compared at points of equal size (estimated by lexicon size and MLU) differ in the proportion of some word classes.

Results: While there is no deficit in the SLI child with respect to the proportional number of verbs, there is a deficit with respect to the use of certain types of function words. Furthermore, the data of the SLI child show that the acquisition of auxiliaries and the grammatical properties of finiteness correlate. This correlation has also been found in typical L1- and L2- acquisition of German and Dutch (Jordens, 2012). That is, the SLI child lacks the command of finite verbs and target-like word order variation until auxiliary verbs are regularly used.

Conclusions: The data suggest that a complete lack of function words at age 2;5 is highly predictive for SLI. Moreover, we conclude that a delayed acquisition of auxiliaries is clear evidence of the impairment of the acquisition of finiteness in SLI children learning a language like German. Our findings strongly suggest a combination of vocabulary therapies and targeted intervention, as regards the acquisition of function words.

Keywords : Specific language impairment

PO 023

(1115) - SYMPTOMATIC DISCRIMINATION OF DYSFUNCTIONS IN DEVELOPMENTAL LEXICAL DISORDERS USING NEUROFUNCTIONAL COMPUTER SIMULATIONS

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Objectives: The *mental lexicon* is part of the speech and language knowledge repository of individuals. It enables one to produce and to understand speech. Different semantic difficulties (lexical acquisition, storage, organization, word retrieval) lead to developmental lexical disorders. Standardized tests exist for the diagnostics, but it is difficult to associate the resulting behavior with functional deficits in the child's brain. A major goal of this study is to introduce a quantitative *neurocomputational model* for lexical storage and for lexical retrieval to associate *neural dysfunctions* with *deficits in speech behavior*.

Methods: We use the computational NEF-SPA-framework (Eliasmith et al. 2012) for implementing a model of the mental lexicon and speech processing. This framework allows one to build *large*

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scale neural networks, comprising sensory, motor and cognitive components. Furthermore, it allows one to model neural dysfunctions by reducing neural activity of specific neural buffers and neural connections. The modelled task is the WWT 6-10 (Word range and Retrieval Test, Glück 2011, WWT), which is a picture naming task comprising 95 items. In case of incorrect answers, additional cues are given to facilitate word production.

Results: Simulation results came out to be quantitatively comparable with standard data of the WWT. Moreover, the results show that facilitation of word retrieval, as is done in the WWT by using semantic cues, is not sensitive to reduction of neural activity in the concept buffers (semantic knowledge) but in buffers representing the association between concepts and word forms (lemmas).

Conclusions: The results indicate that the implemented spiking neural network model based on the NEF is capable of modelling word processing and their dysfunctions as documented by the WWT. Based on the standard data given by the WWT, we can associate functional neural deficits with symptomatic behavioral data. This allows us to identify potential dysfunctions at the neural level for word retrieval and word storage.

Keywords: **Developmental language disorders, – specific language impairment, – functional diagnosis**

PO 024

(1265) - ANTONYM KNOWLEDGE IN CHILDREN WITH LANGUAGE IMPAIRMENT: TESTING THE SEMANTIC DOMAIN THEORY

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Objectives: The single domain thesis predicts that children are more likely to master both or none of the words in an antonym pair than to master only one since the two words in antonym pairs belong to the same semantic domain. This was supported in a study of children with typical language development (TD). Here we test this hypothesis on children with language disorder (LD). We further hypothesise that categorisation of the children's non-expected responses indicate how close they are to full mastery.

Methods: Children with different degrees of LD (n=27) aged 4;0-7;4 and age matched controls with TD (n=27) participated. Phonological short-term memory, language comprehension and grammatical production were tested to assess language status. An antonym task was carried out where the children were given an adjective and asked to provide its antonym. The children's responses to the antonym task were categorized into different types based on how close to correct they were.

Results: The likelihood for knowing both or none in an antonym pair was higher than knowing only one in both groups of children. Number of correct responses was strongly related to age in the control group, but not in the LD group. The categorization of responses indicated a tendency for the children with LD to respond with words unrelated to the stimulus word, whereas the children with TD were more likely to respond with words related to the stimulus word or to the expected response. Performance on the antonym test was associated with the severity of LD.

Conclusions: The results confirm the single domain thesis for both groups and type of response indicates a developmental path, and therefore what type of support will be in the zone of proximal development. Antonym comprehension and production has a potential for a theoretically based intervention for lexical difficulties.

Keywords : **Developmental language disorders**

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PO 025

(1149) - ASSESSING FALSE-BELIEF UNDERSTANDING IN CHILDREN WITH AUTISM USING A COMPUTER APPLICATION -A PILOT STUDY

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Objectives: We have developed a False-Belief (FB) understanding task for use on a computer tablet, trying to assess FB understanding in a less social way. It is based on classical FB protocols, and additionally includes a manipulation of language in an attempt to explore the facilitating effect of linguistic support during FB processing.

Methods: Specifically, the FB task was presented in three auditory conditions: narrative, silent, and interference. The task was assumed to shed new light on the FB difficulties often observed in Autism Spectrum Disorders (ASD). Sixty-eight children with ASD (M=7;5 years) and an age-matched comparison group with 98 typically developing (TD) children were assessed with the FB task.

Results: The children with ASD did not perform above chance level in any condition, and significant differences in success rates were found between the groups in two conditions (silent and narrative), with TD children performing better. Notably, children in both groups performed unexpectedly low on the FB task, which suggests that the task may have been too difficult.

Conclusions: As expected, children with ASD had difficulties passing the FB task.

We found no evidence that access to language support facilitated FB performance. The unexpectedly low result on the FB task in both groups questions the clinical usefulness of the application in its current form and/or for the current age group and suggests that further developments are needed to make it clinically relevant.

Keywords:Autistic spectrum disorders

PO 026

(1433) - A COMPARISON STUDY OF SOCIAL COMMUNICATION SKILLS BETWEEN TYPICALLY DEVELOPING SCHOOL-AGED GREEK CHILDREN AND CHILDREN WITH AUTISM

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Objectives: Social pragmatic communication disorder is one of the primary characteristics of children with autism. The aim of this study was to identify social communication skills among typically developing school aged children and to compare those skills with the ones of children with autism.

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Methods: The sample consisted of 120 typically developing students and 30 children diagnosed with autism. The participants were aged between 6 to 8 years old and were selected from public and private elementary schools. The process involved two phases: During the first phase, questionnaires were filled in by parents and teachers of the children, based on their observation of the children's interaction with peers and family members.

The questions were rated on a scale of 0-5 (0=not observed, 5=almost always) and assessed social-pragmatic abilities. During the second phase, each child was individually evaluated with standardized screening tools to assess the development of expressive vocabulary, grammar and informational competence, to exclude children with any language disorders.

Results: To compare the performance on the Greek versions of the social communication and pragmatic language questionnaires of typically developing children with that of the children with autism, statistical analysis of the data was carried out using SPSS (Statistical Package for Social Sciences). Results showed that, participants reported statistically significant differences in three domains: gestalt judgment, executive functions and perception of themselves and others. What was not consistent with our original hypothesis, was that the two groups would perform similarly on items related to communication functions, social cognition, engagement and conversational discourse.

Conclusions: The purpose of this study was to outline the profile of children with pragmatic and social communication impairments, such as children with autism, from typically developing children. The questionnaires measured the quality of interactions across contexts and interlocutors. The tool is useful in detecting the differences between children with autism and typically developing children.

Keywords : Pragmatics, autistic spectrum disorders, clinical-reported outcome measures (development or cross-cultural adaptation and validation)

PO 027

(1232) - INCLUDING PARENTS IN AAC INTERVENTIONS FOR CHILDREN WITH ASD: INSIGHTS FROM AN ECOLOGICAL TECHNOLOGY-BASED INTERVENTION

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Objectives: This study aims at investigating how parents of children with ASD can be included into AAC interventions. Based on an innovative French speaking assistive application, we addressed two different aspects:

1. Documenting parents' needs in terms of support for implementation of AAC intervention;
2. Deploying such intervention and measuring its impact from both children's and parents' points of view in real-life situations.

Methods: As they represent key communication partners, clinical research demonstrated the relevance of including parents in Alternative and Augmentative Communication (AAC) interventions for children with Autism Spectrum Disorder (ASD) (for review: Kent-Wash, Murza, Malani & Binger, 2015). Through an adapted questionnaire, we documented parents' needs in terms of support for implementing an AAC intervention among potential participants of such an intervention. An assistive AAC solution, named Tiwouh, was deployed in participants' homes. Support for parents was provided in the form of both initial training and individual remote supervision (i.e. emails and visio-conference). Parents' implementation fidelity and self-efficacy were measured, as well as children's communication skills. Finally, participants filled a satisfaction questionnaire related to supporting modalities provided during the intervention.

Results: We identified needs and constraints of parents of children with ASD when implementing a technology-based AAC intervention. We conducted this intervention at home in French speaking

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autism families, and provided them with remote individual support. The data need to be further analyzed. We predict increased intervention fidelity, as well as feelings of better competence for parents. Satisfaction related to this support will also be reported.

Conclusions: This study addresses the inclusion of parents in a technology-based AAC intervention. Thanks to a specific questionnaire, we will show how parents can be supported in real-life situations, at home, allowing improvements for both children with ASD and their parents.

Keywords: **Developmental language disorders, autism spectrum disorders, intervention**

PO 028

(1247) - PHONETIC AND PHONOLOGICAL DEFICITS IN GREEK SCHOOL-AGED CHILDREN WITH HIGH-FUNCTIONING ASD

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Vlassopoulos, Maria - *Medical School of National and Kapodistrian University of Athens, Greece*

Papanikolaou, Katerina - *Medical School of National and Kapodistrian University of Athens, Greece*

Objectives: The aim of the study was to investigate the types of speech errors in a group of Greek school-aged children with high-functioning autism.

Methods: The participants were two groups (ASD group and control group, n1=n2=25) of monolingual Greek students aged 7-10 years old. A diagnosis of high-functioning ASD (PDD-Nos, Asperger syndrome or high-functioning autism) was given according to DSM-IV and ICD-10 criteria by an experienced child-psychiatrist. All participants had a non-verbal IQ > 70 according to the Greek version of Raven's Progressive Matrices A, B, AB (Sideridis et al., 2015). Furthermore, participants with high-functioning ASD could form utterances of at least 4-5 words. Participants completed a battery of standardized assessments as part of a larger research. This study focused on data from the administration of the Test of Phonological and Phonetic Development (Levanti et al., 1995), which is a standardized phonological tool as phonological and phonetic development is expected to be complete by the age of 6 years old, in Greek.

Results: The two groups were similar in gender, age and non-verbal IQ. Participants with high-functioning ASD made statistically significant more phonological / articulation errors. The phonological deficit in the high-functioning ASD group was not the result of some extreme values of single cases in the autism group, as seventeen out of 25 participants made phonological and/ or articulation errors and two out of the 25 participants had dyspraxia. The most common misproduced speech sounds were fricatives /s/, /z/, /θ/, /ð/, affricative /dz/, and liquids /r/, /l/. Also, frequently made errors were double and triple clusters reduction with liquids /r/ and /l/.

Conclusions: Individuals with high-functioning ASD present a slower rate of phonological and phonetic development and a higher frequency of speech motor disorders than typically developing peers.

Keywords : **Autistic spectrum disorders, developmental language disorders**

PO 029

(1248) - SEMANTIC REPRESENTATIONS IN GREEK SCHOOL-AGED CHILDREN WITH HIGH-FUNCTIONING AUTISM

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Objectives: There is considerable evidence that the development of lexical representations in children with ASD follow a different path than that in typically developing children. Children with high-functioning autism can score extremely well in standardized naming tests, indicating an unusually rich knowledge of words, while at the same time they may fail to use word knowledge on organizational or retrieval tasks. The present study examines this unusual trajectory of lexical development in Greek high-functioning ASD children, assessing lexical knowledge on two different vocabulary variables, the lexical breadth and depth.

Methods: The sample included 25 high-functioning ASD school-aged children matched for age, gender and non-verbal IQ with 25 typically developing children. All participants were monolingual Greek. Non-verbal IQ was assessed using the Raven's Progressive Matrices, while in order to ensure that the ASD group had adequate language abilities the Action Picture Test was administered. Data was provided through two vocabulary tasks administered in a counterbalanced order to evaluate the lexical breadth and depth, which comprise the two different variables of lexical knowledge.

Results: The two groups did not show statistically significant differences in the Action Picture Test. Consequently the ASD participants had equal content/informational and grammatical abilities as their typically developing peers in picture description. Furthermore the statistical analysis did not reveal significant differences in naming, supporting the theory that as far as lexical breadth is concerned the mental lexicon of both groups was equally developed. However, the analysis demonstrated statistically significant differences between the two groups in the production of word definitions through the standardized Athina Test, which examines lexical depth.

Conclusions: The results of the study support the notion that the vocabulary difficulties of high-functioning ASD children reflect a unique qualitative lexical development, which stems from the distinctive mechanisms underlying the unusual nature of autistic language.

Keywords: Developmental language disorders, autistic spectrum disorders

PO 030

(1334) - ASSESSMENT OF THE NARRATIVE ABILITY OF SCHOOL-AGED CHILDREN WITH AUTISTIC SPECTRUM DISORDER

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Objectives: Recent research has focused on the narrative ability of children with autistic spectrum disorder, but the relationship between narrative ability and other language skills has not been sufficiently investigated. This study aims to a) evaluate narrative ability and language skills of school aged Greek-speaking children with autistic spectrum disorder compared with the performance of typically developing children and b) to investigate the correlation of children's performance of narrative ability with the performance of other language skills.

Methods: Participants: 24 children with typical development aged 6-8 years (N = 24). 21 children with autistic spectrum disorder aged 6-8 years (N=21). Tasks:

a) The Greek version of the test "Frog, Where Are You" (Mercer Mayer, 1969). The test evaluates the narrative performance of children both at macrostructure and at microstructure level ;

b) The Expressive Vocabulary Test (Vogindroukas, Protopapas & Sideridis, 2009) which is the Greek version of the Word Finding Vocabulary Test (Renfrew,1995);

c) The Greek version of the Action Picture Test: (Vogindroukas, Stavrakaki & Protopapas, 2011). The test assesses the children's skills in terms of grammar and pragmatics.

Results: Preliminary analysis of data from 14 children with ASD suggests a positive correlation between chronological age and their performance at the macrostructure level. A positive relationship was found between macrostructure and performance in the Expressive Vocabulary

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Test, as well as a positive correlation between macrostructure and performance in the Action Picture test. A positive correlation was found between macrostructure and performance in tasks assessing pragmatics.

Conclusions: These findings demonstrate the close relationship between lexical, grammatical, pragmatic and narrative skills in children with ASD. Our suggestion is that this relationship be taken into consideration in language support programmes aimed at people with ASD.

Keywords: Autistic spectrum disorders

PO 031

(1226) - PORTUGUESE TRANSLATION AND CULTURAL ADAPTATION OF THE SELF-ADMINISTERED AMYOTROPHIC LATERAL SCLEROSIS FUNCTIONAL RATING SCALE - REVISED

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Objectives: Amyotrophic Lateral Sclerosis (ALS) is a progressive neurological disease whose number of cases in Portugal and in the rest of the world is increasing, being a condition increasingly studied in the scientific world. In Portugal, there are no available validated screening tools for this condition. This study aims to translate and validate the "Self-Administered Amyotrophic Lateral Sclerosis Functional Rating Scale - Revised" (Self-administered ALSFRS-R) to the European Portuguese language (EP).

Methods: The English version of the Self-administered ALSFRS-R was translated into EP, by a bilingual translator and a speech and language therapist. A common version was agreed. Back translation was completed by a bilingual teacher. A panel of experts, composed of several health professionals with experience in the area, analyzed this version, and classified all its items in terms of relevance, clarity, ambiguity and conceptual adequacy (phase I). Some modifications were suggested and incorporated. The new version was reanalyzed by the same group (phase II). Data resulting from both phases were statistically analysed using the Content Validity Index (CVI). A pilot test was performed with 12 people with ALS and the internal validity was obtained.

Results: Results obtained from phase II show high agreement between all experts regarding the clarity (CVI phase I=92%; phase II=100%), ambiguity (CVI phase I=92%; phase II=100%), relevance (CVI phase I=92%; phase II=100%) and adequacy of the concepts (CVI phase I=92%; phase II=100%), and for the overall score (phase I=83%; phase II=100%). In the pilot study, the internal consistency result was also very high (Cronbach's $\alpha = 0.92$).

Conclusions: The Self-administered ALSFRS-R Portuguese version presented good values for content validity and internal consistency. It is therefore possible to use this instrument at various stages of the disease and to determine the degree of functionality of the Portuguese patients. Further studies are needed in order to analyze its psychometric characteristics.

Keywords: Neurodegenerative disorders, patient-reported outcome measures (development or cross-cultural adaptation and validation)

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PO 032

(1124) - NEUROPSYCHOLOGICAL TEST VIA EYE TRACKING AND OCULAR MOTOR STUDY IN ALS PATIENTS (NEOS)

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Objectives: Amyotrophic Lateral Sclerosis (ALS) is a heterogeneous neurodegenerative pathology that affects both the first and the second motor neuron of different body segments, progressively impairing motor skills. Studies demonstrate that 10-15% of patients show frontotemporal dementia, whereas executive functions are affected in 40% of cases. However, because of the progression of ALS, motor impaired patients have obvious difficulties in undergoing the traditional paper version of neuropsychological tests. Based on the current use of the eye-tracking technology as an augmentative and alternative communication (CAA) tool in patients with bulbar affection, ensured by the presence of a Speech Language Pathologist (SLP), a cognitive assessment can potentially be made even in patients with upper arms and bulbar motor affections.

This study wants to test the applicability of the standardized paper version correction coefficients of two neuropsychological tests named Trail Making Test (TMT A & B) and Raven Matrices (CPM47) that evaluate respectively attentive functions and reasoning abilities, to an eye-tracker version of the same tests.

Methods: An eye-tracker version of TMT A & B and CPM47 paper version were developed and 40 patients underwent both the test versions at 2 different times. The eye-tracker version raw scores were corrected using the same correction coefficients as the standardized paper version; comparison and a correlation analysis was made in order to measure the covariance of the resulting equivalent scores of the two versions.

Results: Data show that the eye-tracker version equivalent scores appear to be more similar to those reached in the paper version in CPM47 than TMT A & B.

Conclusions: The presence of an SLP with AAC competence and the use of the eye-tracker in neuropsychological assessment seems possible, but further studies are needed to perfect the eye-tracker version correction coefficients, in order to equalize the resulting equivalent scores with the traditional paper version ones.

Keywords: Cognitive impairment, screening, neurodegenerative disorders

PO 034

(1363) - PRACTICAL APPLICATION OF ULTRASONOGRAPHY OF THE TONGUE MOVEMENTS THROUGH QUALITATIVE AND QUANTITATIVE ANALYSIS

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Objectives: The aim of this study was to evaluate the articulatory production of Brazilian Portuguese consonants through qualitative and quantitative analysis, seeking to verify the practical application of ultrasonography in speech assessment.

Methods: We selected 30 adults (both genders) with typical speech production, aged between 19-44 years. The articulatory gestures were captured for a set of 19 words according to the assessment instrument, utilizing the Model DP-6600 ultrasound and analysed using Articulate Assistant Advanced software. From the tongue surface contour, the corresponding points to the 42 splines of the contour were analysed by the statistical programming language "R". The tongue movements were analysed by the Articulatory Phonology approach.

Results: All individuals presented the same standard of tongue articulatory gestures, which were confirmed by statistical analysis. Bilabial and labiodental phonemes showed a discrete body gesture towards the hard palate; /t/, /d/ and /n/ presented a tip closure towards the alveolus; /s/ and /z/ presented a critical tip gesture towards the alveolus and a medium body gesture towards the hard palate; /k/ and /g/ presented a body closure towards the end of the hard palate and /ŋ/ presented the same gesture, but towards the soft palate; /j/ and /ʒ/ presented a critical tip gesture towards the alveolus, a critical body gesture towards the hard palate, and a medium root gesture towards the pharynx; /l/ presented a tip closure towards the alveolus; /r/ showed a tip closure and a medium tongue root constriction towards the pharynx; /R/ showed a medium root gesture towards the pharynx and a medium body gesture towards the soft palate; /ʁ/ showed a tip closure towards the alveolus, then a body closure towards the hard palate and a medium root gesture towards the pharynx.

Conclusions: Ultrasonography of the tongue movements proved to be a workable instrument to estimate articulatory gestures in speech production.

Keywords: Assessment, Clinician-reported outcome measures;

PO 035

(1130) - EVALUATION OF VOCAL PRODUCTIONS IN BABIES WITH COCHLEAR IMPLANTS: "MONITORING CHILDREN'S VOCAL PRODUCTION" (IMP) - EUROPEAN PORTUGUESE VERSION

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Objectives: The evaluation instrument "Monitoring of Vocal Child Production" (IMP), recently translated and adapted to European Portuguese, was developed not only for children with pre-lingual deafness but also for their parents / caregivers, in order to help them to understand the nature and rhythm of the development of the baby's vocal productions after neonatal diagnosis and early cochlear implantation. The target population that this instrument intends to monitor are children with deafness / hearing loss, from birth to twelve months of hearing age.

Methods: The present work represents an observational study when evaluating the productions of a small sample of infants with HF in an indirect way through semi-structured interviews to the parents, based on the IMP questionnaire. The IMP questionnaire was applied to 3 babies at the Functional Unit of Cochlear Implants of the ORL Service of the Hospital Centre of the University of Coimbra to parents of children with the characteristics intended by the instrument, as a way of collecting data for the content validation process. As a guaranty of robustness of the instrument, the following were given to the parents: the Meaningful Auditory Integration Scale (MAIS), Meaningful Use of Speech Scale (MUSS) and MacArthur-Bates Communicative Development Inventories already validated for European Portuguese.

Results: Two of the cases follow the steps supposed for their chronological and auditif ages group. They presented the best results and a similar behaviour. One case presented a outlier

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results. The results were “parallel” in both the IMP and the MAIS and MUSS scales, which shows that the results can be compared using these three instruments.

Conclusions: The results obtained in the IMP and the comparison with the results obtained in the MAIS and MUSS scales are concordant and allow the affirmation that the IMP could be valid as an instrument to evaluate the baby's productions in the first year of auditory life.

Keywords: Functional diagnosis, hearing impairment

PO 036

(1333) - MULTIFACETED EVALUATION OF AURAL PERCEPTION AMONG POLISH LANGUAGE CHILDREN WITH AND WITHOUT APD.

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Objectives: The aim of the research is to present the results of aural perception research among Polish speaking children with (Central) Auditory Processing Disorders (APD/CAPD) as well as children who do not have such a disorder. The project features diagnostic research of aural perception's levels and range among pre-school children.

Methods: Basic methods of research are authorial aural perception tests. Statistical methods: Chi-square test to examine significant relationships between variables, Cramer's V to examine the strength of the relationship between elements of aural perception, Kruskal-Wallis one-way analysis of variance, Student's t-test and Kendall tau distance to examine the relationship between two variables.

Results: Results of the research show a range of aural perception, and which of them are the most and the least mastered by children with or without APD. Outcomes shows concurrent relationships between particular aural ranges.

Conclusions: The research shows differences between aural skills among children with or without APD. There are several research hypotheses in this project. Statistical calculations allowed us to verify and reject a few of them. Hypotheses mainly concerned the examination of the relationship between particular aural perception ranges.

Keywords: Screening

PO 037

(1227) - INTERACTIONS BETWEEN AUDITORY PROCESSING, READING AND ASSOCIATED FACTORS

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Objectives: A number of authors argue that the ability of auditory processing is associated with reading, speech and phonological awareness, whereas difficulties in this capacity, in turn, lead to difficulties in language development and literacy. The aim of this study is to establish correlations between auditory processing skills and the ability to decode words, reading comprehension and related factors in children in second grade at a Bulgarian school.

Methods: 56 children from second grade at a Bulgarian school are studied. Children are examined with: Test of Auditory and Visual Skills (TAVS); Test of Rapid Automatic Naming (RAN - objects and letters); Phonological Awareness - manipulation and rhyme; Decoding words and pseudo-words; Vocabulary - picture; Reading comprehension text, in order to establish dependencies and relations.

Results: This study demonstrated that the auditory processing ability is most strongly correlated with phonological awareness, reading speed and decoding. A strong statistical correlation

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between the Auditory Temporal Order with phonological awareness and the reading speed was noted; and a moderate correlation between Auditory Temporal Order and the decoding of words and pseudo-words was also observed. Sensitivity of Auditory Fusion Threshold is significantly correlated with phonological awareness and moderately correlated with the speed of reading and reading comprehension. Auditory motor skills are moderately correlated with vocabulary and reading speed.

Conclusions: In terms of future research, it is important to look for the beneficial effects of musical education and training in auditory processing, which is proved to expand the language skills and improve the children's and students' ability to read.

Keywords: Auditory processing, decoding words and pseudo-words, reading comprehension, phonological awareness, rapid serial naming, vocabulary, literacy, research methodologies

PO 038

(1391) - GESTURES AND COMMUNICATIVE FUNCTIONS IN PORTUGUESE TODDLERS (8-18 MONTH): DOES HEARING IMPAIRMENT MAKE A DIFFERENCE?

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Objectives: When children with hearing impairment do not have access to linguistic input, the use of gestures is considered different as it supports all communication skills, in contrast to typically developing children that use gestures as a complement to their oral communication. The aim of this quantitative study is to analyse the acquisition of communicative gestures, the way they are used to convey communicative functions, and their relationships in Portuguese children with and without hearing impairment, aged from 8 to 18 months.

Methods: To achieve this purpose, the following tools were administered: Assessment Tool: Gestures and Communicative Functions – 8 to 18 months (Lima & Cruz-Santos, 2012), Pre-linguistic Communication Skills Inventory and Socio-demographic Questionnaire. Participants in this study were 37 children with typical development (Group A) and 4 children with severe/profound hearing impairment (Group B), aged 8 to 18 months, from three different districts of Portugal (Coimbra, Leiria and Lisbon). ELAN software was used to code gestures (considering phase, form and type) and seven different types of communicative functions used by children while interacting with their parents.

Results: Data analysis showed no statistical significance in the average of the use of gestures and communicative functions between the two groups. However, there were statistically significant differences in the types of gestures ($\chi^2=15.523$, $p=0.001$) and in the type of communicative functions ($\chi^2=87,737$, $p<0.001$) used by children in Group A and B.

Conclusions: Results suggest that the process of developing pre-linguistic skills is different in children with and without hearing impairment and this study provide specific data for professionals working with Portuguese toddlers. Knowledge about the acquisition and the characteristics of gestures used by children, and the relationship between gestures and communicative functions will allow more accurate decision-making in the assessment and intervention of communication skills.

Keywords: Hearing impairment, developmental language disorders,- intervention

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PO 039

(1040) - MOBILE SERVICE OF SUPPORT TO EDUCATIONAL INTEGRATION OF HEARING AND/OR SPEECH IMPAIRED STUDENTS

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Objectives: Education of regular school teachers is one of the key factors of successful inclusive education of hearing and/or speech impaired students. The Education and Teacher Training Agency (ETTA) of the Republic of Croatia continuously introduces programs for the improvement of the quality of education of children with developmental difficulties by matching the existing system to European standards. This goal is achieved in collaboration with specialized institutions, such as the SUVAG Polyclinic, since the knowledge of educators and teachers, acquired during formal education, is insufficient for work with students with developmental difficulties.

Methods: The Education and Teacher Training Agency of the Republic of Croatia and SUVAG Polyclinic initiated the work of the mobile service of support to educate teachers and other professionals in the regular schools. Data presented in this poster were collected during the past ten years. The poster presentation will show the model of speech pathology support to inclusive education, as well as statistical data showing the frequency of support during the ten-year period of work of the mobile service of support (2007-2016).

Results: Mode of support to primary and secondary schools in Croatia from a mobile service of support will be presented. The support service is implemented through three modules:

1. Improving knowledge about hearing and/or speech impairments, and the characteristics of the functioning of students with difficulties in the educational process.
2. Making individualized programs, adapting them to students with those difficulties.
3. Education of regular school teachers in the SUVAG Polyclinic. Members of the mobile service of support are speech pathologists and other professionals from the SUVAG Polyclinic who work on inclusive education of hearing and/or speech impaired students.

Conclusions: This kind of collaboration is a good example how the government can take advantage of the specific knowledge of SLTs and other experts from highly specialised health institutions and use their knowledge to create better conditions for inclusive education.

Keywords: Intervention, prevention

PO 040

(1443) - LEARNING TO BE A SPEECH AND LANGUAGE THERAPIST

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Objectives: To identify and to describe conceptions about learning and about supervision, to characterize learning orientation, learning strategies (motivational strategies, affective components, metacognitive strategies, context control strategies, social interaction and resources management, search and selection of information strategies, processing and use of information strategies), to characterize the epistemic beliefs (simple knowledge, certain knowledge, quick learning, innate ability) and to characterize the moral compass of speech and language therapy students, experienced learners.

Methods: Exploratory study that uses qualitative methodology –an interview about the conceptions of learning and supervision, and quantitative methodology with the use of the scales CEVEAPEU

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(2009), EQEBI (2009) and ICM (2005). The convenience sample consisted of 65 female participants, aged between 20 and 38 years, with a mean age of 23.53 years (SD = 3.01), 71% full time students, with 60% of clinical practice completed and 65% of clinical supervision completed.

Results: Results from the scales are relevant as CEVEAPEU revealed high reliability ($\alpha = 0.848$), EQEBI revealed acceptable reliability ($\alpha = 0.666$) and ICM revealed high reliability ($\alpha = 0.912$). From the content analysis of the interviews, participants highlight learning as the acquisition (68%) of knowledge (61%), through a process (35%), that must be a lived experience (65%). Participants highlight that supervision is monitoring (62%), sharing (60%) and guidance (45%) to increase and develop knowledge (39%) and experiences (53%), and reflection about this.

Conclusions: Initial education of Speech and Language Therapy (SLT), as formal adult education, implies experiential learning that must be supervised, in the sense of learning to be a healthcare professional. Academic expectations about the student include autonomy in their learning process, critical reasoning, awareness of their knowledge, and problem-solving skills, moral compass, among other competences that should be measured and monitored along the way.

Keywords: Clinical education

PO 042

(1156) - ASK THE EXPERT? LANGUAGE PROFICIENCY IN SLT-STUDENTS

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Objectives: Language skills are an important factor in academic achievement. A positive and significant correlation is found between students' language test scores and exam results (De Wachter & Heeren, 2013). For the SLT-student, the use of language skills is twofold: first, they need it for their own academic achievement and second, they are instruments in their future profession. After all, the SLT is the professional responsible for human communication and related disorders. It is to be expected that SLT-students have at least affinity with the topic language. The primary objective of this study is to find out if this affinity is reflected in their scores on an academic literacy test and academic achievements.

Methods: To do so, over the last four years (2014-2017), all first-year students of the Rotterdam University of Applied Sciences – Institute of Health Care Studies participated in an academic literacy assessment. This test, developed at the Leuven Language Institute (Belgium), focuses on comprehension and production of written language and can be used to inform students about their chances on successful academic achievement.

Results: Comparisons between the SLT-students and other students in the Institute of Health Care will be presented, based on results on the academic literacy assessment and academic achievements. It appeared that SLT-students do not outperform other students in the Department of Health Care Studies, neither on academic literacy nor on academic achievement.

Conclusions: Although the SLT is specialized in remediating language disorders, SLT-students do not necessarily show an excellent language proficiency. Affinity with language does not implicate a high level of academic literacy. These results endorse the importance of educating language skills during tertiary education. If these findings can be generalized to other universities, or only apply for the Rotterdam students, has yet to be determined.

Keywords: Quality of education

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PO 043

(1148) - USING SOLUTION-FOCUSED METHODS IN DISCUSSIONS OF PROFESSIONAL GROWTH WITH GRADUATING STUDENTS OF LOGOPEDICS

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Objectives: This study explored the use of solution-focused methods in discussions of professional growth with students after their last clinical practice period. During clinical studies teachers should help students to recognize their own strengths, weaknesses, emotions, and anxieties and their effects on clinical work (Rodriguez et al., 2016). Reflection is a multidimensional learning process, combining cognitive and affective domains of learning; it is partly an intrinsic and partly a collaborative process (McCormick, 2015). It is important for students to share their meaningful learning experiences with clinicians (McAllister & Lincoln, 2004). Solution-focused methods are based on interaction, where the main focus is on analyzing the strengths of a person, and using strengths and resilience as tools in problem-solving, pursuing goals, and enhancing changes (Grant, 2011). Earlier, the discussions of professional growth were based on students' written report and were mostly teacher-led. Consequently, it was important to find ways of enabling students to verbalize their learning experiences.

Methods: I used the action research method, i.e. doing small interventions in the real-world, with the aim of developing a better practice. I collected the data during four years through discussions with 140 students. I used the same solution-focused questions to promote good dialogue with students, and my actions were guided by principals of appreciative interaction, which means conscious and global listening and giving space to students' narratives (Whitworth et al., 2009). Also, the students' professional strengths and needs for development were observed together.

Results: Preliminary results showed that solution-focused techniques highlight the themes, insights, and learning experiences important for professional growth.

Conclusions: In these discussions, questions were raised concerning the past, the presence and the future. The students viewed the discussions as a good way to stop and think about their own growth just before graduating. The methods were helpful in activating students to better verbalize their learning.

Keywords: Clinical education

PO 044

(1236) - HONOURS EDUCATION: DIDACTICS AND COACHING OF HONOURS STUDENTS

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Educating talented students requires a specific approach, consistent with the needs and requirements of this specific target group (Wolfensberger, 2012)

Objectives: Within the education of speech therapists, an increasing number of students follow an honours education. Honours programs are specially designed for gifted and motivated students who want to do more and can do more than regular education offers them. In the learning environment of honours students 'active learning' and 'building community' are important concepts (Wolfensberger 2012). Both are part of the internal internship lessons, where honours students work under supervision with actual clients. They learn therapeutic skills by applying diagnostics and therapy within a setting in which students are required to critically reflect on their own and each other's professional conduct.

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Methods: The expectations of honours students concerning the quality of education, didactics and coaching strategies of their teachers were explored by conducting 2 focus group discussions with 16 students.

Results: Students experience a lot of freedom and responsibility. They tend to learn together and support each other. Experiences with their teachers vary. Students express a need for feedback (both positive and negative), and endorsement; many times they require more than they receive. Honours students desire 'the best' and are highly intrinsically motivated. Some appreciate the independence and the practical components, while others need more time to get used to this approach and seek confirmation in the literature or by turning to a teacher.

Conclusions: A sense of freedom, their own responsibility and flexibility are important (Wolfensberger 2012). At the same time, the teacher needs to keep coaching the students. A highly motivated teacher who expects a lot from students (Scager et al 2014), with knowledge of didactic principles that meet the needs of honours students provides the best fit (Hermsen en Coopulse, 2014).

Keywords: Quality of education

PO 045

(1311) - INTRODUCING STUDENTS TO SLP CLINICAL ISSUES

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Objectives: To present students of the first year of a five-year program in Phonoaudiology (dual certification in Speech-Language Therapy and Audiology) to the methods and challenges of clinical practice in language disorders.

Methods: During the two first semesters of the undergraduate program, students observe language therapy sessions with persons with different disorders (ASD, Phonology Disorders, Hearing Impairment, Learning Disorders) carried out in different settings (out-patient clinic, primary health-care facility, screening service). Observations are rotated weekly so that all students have a comprehensive experience. Different themes are proposed each week, and discussed during supervisions regarding different aspects of the clinical practice such as management of behavioral issues, different uses of toys and tools, contact with caregivers, intervention objectives, assessment alternatives, diagnostic hypotheses and other issues that derive from the student's doubts and proposals.

Results: The inclusion of students in clinical activities from the first weeks of the undergraduate program provides opportunities for understanding the full scope of the profession and to link the several aspects of professional education. Students tend to be involved with the observations and seek contact with the therapists, asking about the patients' characteristics and evolutions. Students report that they are able to make associations between the observations and the issues focused on in theoretical courses. There was also an increase in the number of students that enrol in research projects.

Conclusions: The experience described has been conducted for eight years and had different designs, including rotation of supervisors and videos. The rotation of practical observations has shown to elicit more interest in the students and results in a more productive overall performance.

Keywords: Clinical education, quality of education

E-Poster Presentations

PO 046

(1185) - INTELLIGIBILITY IN CONTEXT SCALE: PRELIMINARY NORMATIVE AND VALIDATION DATA FOR SLOVAK-SPEAKING PRESCHOOLERS

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Objectives: Speech intelligibility can contribute to the early identification of children with phonological disorders. The aim of this study was to obtain preliminary normative and validation data on the Slovak adaptation (ISC-S) of the Intelligibility in Context Scale (ICS - McLeod, Harrison, McCormack, 2012) using 2 clinical measures of severity of speech sound disorder: a) percentage of phonemes correct (PPC), b) percentage of consonants correct (PCC).

Methods: The speech skills of 150 preschool children were assessed with the Slovak Test of Articulation. Parents completed the 7-item ICS-S, which rates the degree to which children's speech is understood by different communication partners (parents, immediate family, extended family, friends, acquaintances, teachers and strangers) on a 5-point scale. The group of four-to-five year old preschoolers consisted of 100 children (with normal speech development - ND), and 50 children (with suspected non-normal speech development - NN), where teachers expressed serious concerns about the development of the children's speech.

Results: The mean ICS-S score in ND group was 4.74 (MED=4.86; SD = 0.25), however the mean score for the NN group was 3.97 (MED= 4.0 ; SD= 0.47) out of a possible score of 5. There were significant differences between the scores of the ND and NN groups ($U=95.5$, $p=.000$). We set a cut-off at the 10 percentile (4.43) score ICS-S from the ND group. 96% children in the NN group achieved a score of less than 4.43. The ICS-S had excellent internal consistency ($\alpha=.906$). Criterion validity was established through significant correlations between the average ICS and PPC ($r = .549$, $p= .000$), PCC ($r = .546$, $p=.000$).

Conclusions: Our preliminary data suggest that the Slovak version of the ICS is a sensitive screening tool for the identification of Slovak-speaking children with phonological disorders at the age of four to five years. Our data show promising evidence on reliability (internal consistency) and criterion validity of the ICS-S.

Research supported by grant VEGA 1-0352-16.

Keywords: Phonological disorders, assessment, screening

PO 047

(1336) - THE CROSSLINGUISTIC CHILD PHONOLOGY PROJECT - EUROPEAN PORTUGUESE (CLCP-PE) CONSTRUCTION AND VALIDATION

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Stemberger, Joseph - University of British Columbia, Canada

Objectives: Our main goal is to present the construction and validation of the CLCP-EP, an assessment tool developed in Crosslinguistic Child Phonology Project (CLCP), hosted at the University of British Columbia (Canada), and used to assess the phonological development of Portuguese children.

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Methods: In order to validate the CLCP-EP, the European Portuguese version of the CLCP test, validity and reliability procedures were considered, and both linguistic and non-linguistic criteria were taken into account. The phonological variables, selected under the nonlinear phonological framework, were: i) the EP consonantal inventory; ii) the syllable constituents; iii) the word stress; iv) the position within the word; v) the word length. The initial version of the CLCP-EP, validated under this investigation, includes 157 words elicited on the basis of 44 pictures (grouped by semantic network contexts). The tool was tested with a sample of 87 typically developing monolingual Portuguese children (organized by age groups) and a sample of 3 monolingual Portuguese children with phonological disorders. The data were transcribed with the PHON software, and a statistical analysis was performed.

Results: The phonological variables were valid to discriminate age groups; the most problematic structures were: i) fricatives (namely the [\pm anterior] contrast within sibilants); ii) the prosodic distribution of liquids; iii) syllable constituency (branching onset and coda); iv) word stress (unstressed syllables in the youngest children); v) position within the word (medial coda); vi) word length (polysyllabic words). Validity (of construct and of content) and reliability of the CLCP-EP will be demonstrated during the presentation. A final version of the CLCP-EP (with 150 words and 42 complex pictures) will be proposed.

Conclusions: The CLCP-EP is a valid phonological assessment instrument, useful for clinical and academic purposes. The variables set on the basis of the nonlinear phonological framework turned out to be productive to discriminate age groups. Further investigation is required in order to standardize the CLCP-EP.

Keywords: phonological development, nonlinear phonology, assesement, test construction

PO 048

(1381) - ANALYSIS OF SYLLABIC STRUCTURES - CODA AND CONSONANT CLUSTERS - IN CHILDREN WITH SPEECH DISORDERS

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Objectives: The aim of this study was to describe the pre-therapeutic data of syllabic structures, coda and consonant clusters, in children with phonological disorders.

Methods: The research is a cross-sectional descriptive study, approved by the research ethics committee of a higher education institution under number 026225. We evaluated the therapeutic speech data of 31 children with a diagnosis of phonological disorder of both sexes, aged 5 years to 7 years and 12 months, who were monolingual speakers of Brazilian Portuguese. We analyzed the syllabic coda structures in medial and final position with the archiphonemes /S/ and /R/ and all consonant clusters allowed in Brazilian Portuguese. A descriptive statistical analysis was performed to evaluate the results.

Results: The results show that 70% of the subjects had medial coda, and 40% had a final coda with the archiphoneme /S/. The final coda with the archiphoneme /R/ is produced correctly by 16% of the sample, already in coda medial the percentage reaches only 6.5%. The main phonological processes observed is deletion (in structures with archiphoneme /S/) and semi-vocalization (in structures with archiphoneme /R/). With respect to the consonant clusters it was verified that most of the sample simplifies the structure. The correct productions were observed in the consonant clusters formed by labial plosives and labiodentals fricatives (mainly compounds with lateral liquid).

Conclusions: The results point out the difficulties of children with phonological disorders in performing more complex syllabic structures. The coda and consonant clusters structures are considered more marked and less frequent (especially the consonant clusters) in the world's languages than the simple onset structure. This reinforces the importance of more targeted

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studies for the process of intervention at the prosodic level, with a better therapeutic orientation and better results in therapy.

Keywords: speech therapy, phonological disorder, syllabic structures

PO 050

(1345) - A DEVELOPMENTAL PROFILE OF PHONOLOGY FOR TRINIDADIAN ENGLISH CREOLE: A PILOT INVESTIGATION

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Objectives: The purpose of this descriptive pilot investigation was to determine the ages at which children who speak Trinidadian English Creole (TrC) - the native creole of the island of Trinidad in the Caribbean - demonstrate customary production, acquisition and mastery (Sanders, 1972) of every consonant phoneme in TrC. The ages of customary production, acquisition and mastery were determined. In addition, comparisons of ages of customary production, mastery and acquisition of phonemes between TrC and Mainstream American English were made.

Methods: Twenty-four typically-developing preschoolers, ages 3 years, 6 months to 4 years, 11 months who are native speakers of Trinidadian English Creole (TrC) named pictures during three trials. Pictures represented three lists of words that were deemed more culturally and linguistically appropriate than standardized measures developed in the United States or in the United Kingdom that are often used with this population. Percentage of productions was calculated and ages of customary production (50% of each age group produces phoneme), mastery (75% of each age group produces phoneme) and acquisition (90% of each age group produces phoneme) were determined. Comparisons to phoneme acquisition in Mainstream American English were also made.

Results: Results illuminated possible age differences in the development of consonant phonemes in speakers of Trinidadian English Creole (TrC) when compared to speakers of Mainstream American English, particularly with phonemes that develop later in Mainstream American English. Results also highlighted possible undifferentiation (Seymour & Seymour, 1981) as not all dialectal features of TrC were present.

Conclusions: Speakers of Trinidadian English Creole (TrC) are not considered in the norming processes of assessments. Furthermore, their linguistic varieties are seldom discussed by speech-language pathologists. This study highlights the need for such considerations as the developmental trend in the acquisition of phonemes may differ for speakers of TrC when compared to speakers of mainstream dialects.

Keywords: multilingualism, assessment, screening.

PO 051

(1312) - ARTICULATORY DATA DURING SPEECH THERAPY OF A CASE OF CHILDHOOD APRAXIA

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Freitas, Karine - *Universidade Federal de Santa Maria, Brazil*

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Bolli Mota, Helena - *Universidade Federal de Santa Maria, Brazil*

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Objectives: The purpose of this study was to investigate the articulation (tongue ultrasound imaging) of liquid consonants /l/ and /r/, during speech therapy of a childhood apraxia of speech case and to compare it to the target speech pattern. A boy aged 4;6 diagnosed with childhood apraxia of speech and an adult without speech disorders took part in this research.

Methods: Three data collections of speech were performed during the therapeutic process using target words represented by images and included in a carrier sentence. Each sentence had to be produced five times. The auditory perceptual and articulatory data of /l/ and /r/ were analyzed.

Results: Variability was observed in the tongue curves in the consonant repetition in the first collection, associated to tongue tip elevation in some repetitions. This occurred even when the target-sound omission was recognized. In the second collection, the auditory perceptual analysis recognized the correct production of /l/, and /r/ was replaced by [l] one time. The ultrasound images showed better organization in the five articulation patterns, the tongue body elevation was observed, with a small tip elevation in some repetitions. The articulation in the third collection was similar to the tongue gestures described in the previous collection, with increasing stability in the attempts to produce the same target.

Conclusions: Thus, the data analysis could show the attempt to produce articulatory gestures needed to produce the analyzed target sounds, even the ones not heard. Besides, the therapeutic process promoted a more stable production in the speech with apraxia.

Keywords: Dyspraxia

PO 052

(1417) - THE SKILLS OF PHONOLOGICAL AWARENESS IN CHILDREN

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Objectives: To reveal the concept of phonological awareness (PA) and PA skills in preschool children.

Methods: Aiming to reveal the meaning of PA, the analysis of theoretical sources was carried out. The research was carried out with a questionnaire / test of PA skills evaluation. The survey included 104 six year old children from Lithuania.

Furthermore *quantitative and qualitative analysis* of the data was performed.

Results: Empirical survey data have demonstrated that preschool children's abilities to manipulate different linguistic units are unequal. The survey data revealed by the PA skills assessment indicates that in the period around the age of six years, children have a higher capacity to manipulate the lower complexity of linguistic units: word, rhyme, syllable, but a worse capacity to manipulate the higher linguistic unit – the phoneme. The study analysis has revealed that the typical preschool age child replaces the heavier sounds of articulation in words with lighter sounds or skips them altogether. Also, there are some typical errors such as: there is a lack of coherence of words in sentences longer than four words, only one component of a compound word is indicated, the syllabic structure of the word is not considered by division in syllables, the syllable boundaries are incorrectly determined, there is no sound sequence.

Results: PA skills mean that children are able to manipulate sounds. It includes the following linguistic units: word, syllable, rhyme, phoneme. Authors prove that children start demonstrating sensitiveness to linguistic units of lower complexity (words and syllables) before gaining abilities related to linguistic units of a higher complexity (phonemes). Empirical data showed that the PA skills in preschool children are not enough. It is important to note that poor PA skills could be related with difficulties in reading and writing in school age.

Keywords: Phonological disorders, Specific learning disorders

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PO 053

(1231) - TRAINING WITH A DICHOTIC LISTENING APP IN DYSLEXIA

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Objectives: Dichotic listening (DL) has been applied to many clinical disorders to assess impairments within attention, working memory and executive functions. It has been validated through numerous studies using different methods and showing that the response pattern in dyslexia deviates from the typical pattern. In this study, we assessed whether training with a DL app would result in changes in free and directed recall of dichotically presented syllables in children with and without dyslexia.

Methods: Participants were a control group which participated in DL pre- and post-testing only (Control no Training, CnT, n= 16), and two groups that took part in DL training; a control group (Control Training, CT, n= 15) and a dyslexia group (Dyslexia Training, DT, n=16), all attending 3rd grade of elementary school. DL pre- and post-testing of all three groups took place before and after the training period. The CT and DT groups trained once a day for five days. The DL tasks were free recall and directed recall, and DL measures were laterality, magnitude and attention.

Results: Whereas the CnT group showed nearly no change in their response pattern from pre- to post-test, a change in the two training groups CT and DT emerged. Change in the CT group was seen both in the free recall and directed recall conditions, while change in the DT group was mainly seen in free recall.

Conclusions: The significance of the study is that DL app training resulted in different response patterns in the dyslexia and control groups. These findings are promising for establishing new ways for dyslexia intervention. Therefore larger projects using the DL app in a broader setting should be encouraged as an incentive to further explore these mechanisms, and as a gateway to a deeper insight into the nature of dyslexia.

Keywords: **Dyslexia, intervention**

PO 054

(1405) - READING INTEREST – PREREQUISIT FOR SUCCESS IN STRUGGLING READERS

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Objectives: The aim of the study is to figure out the correlation between reading interest and achievements in reading skills for children with reading disabilities.

Methods: 32 3rd grade pupils with reading disabilities in mainstream schools were selected to investigate what is the impact of reading interest on the development of reading skills. Questionnaires for parents were used. To verify validity and reliability Cronbach's alpha and Factor analysis methods were used.

Results: There are tasks and exercises, which raise reading interest – tasks with creative elements, practical activities with texts; teacher's involvement, co-operation with parents also will improve the reading interest. Words and their understanding in sentences must be appropriate to keep up reading interest. There is a possibility to carry out specific out-of-class activities to promote reading interest. Using Cronbach's alfa method two quotients were obtained – quotient of adequacy and quotient of selectivity. Due to the small amount of data, we must work on symptoms of validity in following research. But the totality of the symptoms is valid (>0.333). Factor analysis

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was carried out at the end of the research to state the factors which promote reading interest and which prohibit reading interest. Matrices of the results was made and analysed and the most important factors were stated. Reading habits were analysed.

Conclusions: There is strong correlation between reading interest and the development of reading skills. Factors, which hinder reading interest are watching TV, playing video games, low reading skills and teacher's disinterest in the pupil's achievements. Strong impact on reading interest in grade three is from teacher's attitude, teacher's suggestions for reading and the teacher's reading aloud to create interest. Out-of-lessons and family activities also have a great influence on reading interest.

Keywords : **Dyslexia, – specific learning disorders, reading interest, struggling readers**

PO 055

(1322) - PROMOTION OF PHONOLOGICAL AWARENESS IN PRE-SCHOOL CHILDREN – POSSIBILITY TO PREVENT WRITING DISABILITIES

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Objectives: The aim of the research is to state the possibility of the prevention of writing disabilities through early intervention, promoting phonological awareness in pre-school children.

Methods: 23 children were selected to observe the development of phonological abilities at the age of 5. Appropriate evaluation of oral speech was carried out, questionnaires for parents were used and data processed and analysed.

Results: Problems found expression in the substitution of voiced and unvoiced consonants (mostly voiced consonants pronounced as unvoiced) and without intervention, they would manifest as correspondent mistakes in writing. In the Latvian language there are many words, which differ only by this one feature (as *cold* and *gold* in English); there are findings about specific learning (writing) problems and misunderstandings in words, even texts. Therefore early intervention is crucial in preventing writing disabilities. Substitution of sounds differs, but in pre-school settings intervention mostly is carried out face-to-face.

Sometimes intervention is organized in small groups of 2-3 children to play different games. These games are guided to specify pronunciation and to stabilize the differentiation of these consonants. 19 children of 23 improved their understanding and promoted phonological skills.

Conclusions: Early intervention in the promotion of phonological awareness is crucial in the prevention of writing disabilities.

Keywords: **phonological awareness, pre-school children, writing disabilities.**

PO 056

(1059) - WHAT DOES THE LACK OF THE INFORMATION ABOUT DYSLEXIA CAUSE?

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Objectives: The main objectives of this study was the proper identification and diagnosis of Dyslexia, taking in consideration the lack of information and the lack of specialists of this field in the city of Korça, Albania. Also, another objective was to raise awareness and to give some valid information about Dyslexia to the pupils and to the teachers.

Methods: This study was attended by 60 pupils 35 boys and 25 girls, respectively. The pupils were in the Third grade and in the Fourth grade. The age of the pupils was 9 - 10 years. Two measuring instruments were used for the realization of this study: Teacher's Questionnaire and

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Child's Dyslexia Questionnaire. The compilation of the questionnaires of the study was based on the symptomatology of Dyslexia and on a certificated online questionnaire of Dyslexia.

Results: The results of the first phase, the teacher's questionnaire, targeted 6 children who raised doubts about Dyslexia, who passed on an individual questionnaire. In the individual questionnaire only two children (a girl, 9 years old in the Third grade and a boy, 10 years old in the Fourth grade) managed to score less than 70% of the questionnaire compared to the other children.

Conclusions: During the realization of this study, it is concluded that the evidence of Dyslexia in the schools of Korça, Albania is very difficult. Often, Dyslexia is badly diagnosed or not diagnosed at all. This study motivates teachers to find the right methods and to build an individual education program that meets the needs of children with Dyslexia; it leads teachers and pupils towards awareness; it is a good way to fight bullying; and, it gives opportunities for inclusion in society of these pupils.

Keywords: Screening

PO 057

(1241) - ASSESSMENT OF DYSLEXIA IN A BROADER CONTEXT: ACTIVITIES AND PARTICIPATION QUESTIONNAIRES FOR CHILDREN WITH DYSLEXIA

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Objectives: The ICF classification (International Classification of Functioning, Disability and Health) provides a framework to describe a client's functioning from a holistic view. Due to this model the focus shifts - in assessment, as well as in treatment - from a client's disabilities to his *possibilities*, his *everyday activities* and his *social functioning*. Also in the treatment of children with dyslexia, it is important that therapy goals include goals concerning these activities and most of all participation in social life. To find out what specific problems our clients encounter we developed questionnaires concerning everyday activities related to reading and writing.

Methods: There are two questionnaires: one to be filled in by the client himself and one to be filled in by the parents and/or teacher. The questions relate to school activities, non-school activities and socio-emotional aspects.

Results: The obtained information can be used for goal setting by putting activities that are very important to our client on top of our list.

Conclusions: Shared-decision making is facilitated by using the answers to further examine specific problems and possible solutions. The use of the questionnaires also facilitates the formulation of goals to be used in the GAS (goal attainment scale).

Keywords: Dyslexia, specific learning disorders, intervention

PO 058

(1386) - EXAMINING DOUBLE DEFICIT HYPOTHESIS – ARE THERE SUBTYPES OF DYSLEXIA IN ORTHOGRAPHICALLY TRANSPARENT LANGUAGE?

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Objectives: It is widely accepted that phonological awareness, rapid automatized naming and working memory are the core deficits of reading impairment. However, there is still

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open debate regarding their relative importance and the impact they have on reading in different orthographies. While a dual-route model of reading gives clear assumptions for opaque orthographies which are confirmed by the substantial pool of research, evidence for transparent orthographies is still rather scarce. The goal of this study was to investigate whether different subtypes of dyslexia suggested by the dual-route model may be identified in an orthographically transparent language.

Methods: To test this, cluster analysis is conducted based upon a test battery of a reading list of words and pseudowords, phonological awareness measures, rapid automatized naming and digit span. Reading was examined using the list of words and pseudowords, where reading speed and accuracy were measured. Phonological awareness was examined using deletion, addition and spoonerisms and, in rapid automatized naming, colours were used as stimuli. The target group were children with reading disorder at the age of 10.

Results: The results were interpreted in relation to existing data in orthographically transparent languages.

Conclusions: Since transparent orthographies are still underrepresented in this area of research, the obtained results can give important insights in the processes which support reading in different orthographies and can help in planning the effective remediation techniques.

Keywords: Dyslexia

PO 060

(1262) - 1 HZ. NEURONAVIGATED RTMS INHIBITION OF RIGHT HEMISPHERE PARS TRIANGULARIS ANTERIOR DECREASES STUTTERING DURING READING, INCREASES DURING SPEAKING

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Objectives: Developmental stuttering is a speech fluency disorder that starts during childhood, affects 1% of the population and is characterized by repetitions, prolongations and blocks during speech. According to Orton and Travis, the reason of stuttering is the failure of hemisphere lateralization. Functional neuroimaging studies reveal anatomical and physiological differences between persons who stutter and controls. One of the differences is the over activation of speech and language related homologues in the right hemisphere and either the compensatory or disruptive effect of right hemisphere over-activation has been debated. In this study we aimed to show the effects of rTMS on stuttering severity in right hemisphere Broca homologue and M1 mouth area with inhibitory protocols.

Methods: Eight male participants over 18 years old, right handed and native Turkish speakers participated in the study. They had no history of neurological disease, hearing loss or language disorder. 800 stimuli at 1 Hz at 90% of each individual's motor threshold in the right hemisphere (pars opercularis-BA 44, pars triangularis anterior and posterior-BA45) and right primary motor area (M1 mouth area, orbicularis oris-BA 4) was conducted in a random order on different days. There was also a sham condition. Participants were asked to read a text aloud and talk spontaneously before and after each rTMS session in front of a 3 people audience. The language samples were videotaped and later analysed with percentage of syllables stuttered.

Results: Inhibition of anterior pars triangularis resulted in a significant increase in speech fluency during reading and a decrease during speaking.

Conclusions: Our results show different hemisphere involvements for different tasks in persons who stutter and inhibition of the right hemisphere.

Keywords: Fluency disorders, stuttering

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PO 061

(1242) - FAMILY HISTORY OF STUTTERING IN PRESCHOOL CHILDREN WITH AND WITHOUT CONCOMITANT SPEECH DISORDERS

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Objectives: Stuttering seems to have a strong genetic basis and to run in families. Children with a family history of stuttering struggle more to overcome their fluency difficulties than children without a family history of stuttering. This study's aim is to investigate differences in family history of stuttering between children presenting stuttering and those presenting stuttering and concomitant speech disorders.

Methods: A detailed case history about stuttering was completed by parents of 20 children with stuttering and of 21 children with stuttering and concomitant speech disorders. All 41 children of our sample were aged between 4;0 and 6;0 years and were diagnosed with stuttering and/or other speech disorders by a public service for children and adolescents.

Results: 33.3% of children with stuttering and concomitant speech disorders had a family history of stuttering from their father's side, while only 5% of children with stuttering only had a family history from their father's side ($p=0.045$). Regarding the mother's side, no family history was found in children with fluency and speech disorders, whereas 15% of children with stuttering only had a family history of stuttering ($p=0.080$), which showed a trend.

Conclusions: This study demonstrates that family history of stuttering plays an important role in the development of stuttering in preschool children with fluency and other speech disorders, especially from the father's side. The heritability of stuttering from the mother's side appears not to be such a strong factor as it is from the father's side.

Keywords: Fluency disorders, stuttering

PO 062

(1068) - LIFE PARTNERS' PERCEPTIONS ON THE EMOTIONAL IMPACT OF STUTTERING

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Objectives: The purpose of this study is to compare the self-report about speech-related emotional response of adults who stutter (AWS) and their life partners.

Methods:

Participants

The participants in this study will be AWS (age 18 and higher) and their life partner who reside in the USA. Participants will be recruited through Board-Certified Fluency Specialists.

Materials

The Speech Situation Checklist (SSC; Brutton & Vanryckeghem, 2016), a Behavior Assessment Battery subtest, has two components: Emotional Reaction (SSC-ER) and Speech Disruption (SSC-SD). These measures evaluate a client's negative emotional reaction to and degree of dysfluency across a variety of different speech situations. In the present study, only the SSC-ER

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is being used for data collection. The SSC-ER assessing the Affective component of stuttering, contains descriptions of different speech situations that a client rates according to the strength of negative emotional reaction (i.e. anxiety, fear, worry) experienced (Vanryckeghem, Matthews, Xu, 2017). Responses to each of the 38 speech situations are rated on a five-point Likert scale, "1" signifying "not at all" and "5" indicating "very much" anxiety, Scores are obtained by adding the individual's responses. A parallel SSC-ER form was created for the life partner to report the level of anxiety that he/she perceived as it relates to his/her partner when in the speech situations described.

Procedure

The participants will be individually administered the SSC-ER or partner form via Qualtrics, an online survey software program.

Results: Data for the present study are currently being collected, will be analyzed in January 2018, and be available for the May CPLOL 2018 congress.

Conclusions: The study will shed light on how life partners perceive the level of anxiety of their partner who stutters. This information will potentially be therapeutically useful and important in light of an AWS' quality of life.

Keywords: Fluency disorders, stuttering

PO 063

(1212) - EVALUATING THE PERCEIVED EFFECTIVENESS OF A 'STAMMERING AT WORK' PROGRAMME TO FACILITATE CHANGES IN ATTITUDES AND VIEWS OF STAMMERING IN THE WORKPLACE

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Objectives: Individuals who stammer often state that their stammer influences their aspirations and experiences at work (Klein and Hood, 2004). Lack of education about stammering at the workplace could influence the attitudes of colleagues, posing significant challenges for people who stammer (Emmons, 2009). The aims of this study were:

1) To understand the barriers and challenges that people with a stammer perceive at work, and;
2) To explore factors that could enable learning and promote changes in attitudes and views of stammering in the workplace.

Methods: The 'Stammering at Work' programme consisted of three interlinked workshops conducted over a period of five months. The programme examined work-related beliefs and attitudes towards stammering and their influences on feelings, behaviours and performance at work. Twelve participants from the Employers Stammering Network (age range: 30-50 years) were invited to attend the workshops and participate in two sets of semi-structured telephonic interviews. Responses from 11 participants (pre-workshops) and 9 participants (post-workshops) were transcribed and analysed to determine overarching themes (Braun and Clarke, 2006). Pre and post measures were also analysed from responses to the questionnaire "Self-Stigma of Stuttering Scale (4S)" (Boyle, 2013).

Results: Participants reported to have experienced significant barriers and challenges at work, which resulted in them avoiding certain situations (e.g. talking on the phone/in meetings). Avoidance, shame and frustration appeared to be prominent. Self-advertising and being involved in stammering awareness campaigns were overarching themes in changing perceptions/attitudes at work.

Conclusions: The communication demands at work were often high. Many participants reportedly experienced considerable changes in their attitudes towards stammering after attending the programme. Being open about stammering facilitated greater confidence, and, during the

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course of the workshops, participants were able to identify key support mechanisms to meet their personal goals and professional aspirations.

Keywords: Fluency disorders, stuttering, intervention

PO 064

(1209) - THE IMPACT OF THE THERAPEUTIC GROUP FOR PEOPLE WITH STUTTERING ON LIFE QUALITY.

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Rosa, Maiana - Universidade Federal da Bahia, Brazil

Objectives: To check the impact of the Therapeutic Group for people with stuttering on life quality and communication of participants.

Methods: An uncontrolled experimental study with a group of five people selected through a semi-structured interview with specific questions about communication, resulting from the waiting list of the Speech and Hearing Therapy Clinical Teaching Assistance of the Federal University of Bahia / Brazil. There was no correlation between the life quality and the Stuttering Severity Instrument-3 (SSI-3) -related fluency index from a speech sample. All members participated in the group with an-hour-and-a-half meetings for twelve consecutive weeks, mediated by a speech therapist.

Results: Without Wilcoxon paired test, the life quality index among participants before and after an intervention was ($p = 0.043$), which was statistically significant, and the average reduction was 2.8 to 1.4 representing a negative impact reduction in the life quality dimension of 50%. In the overall OASES-A speech evaluation, the reduction of the average or negative impact index on speech was from 3.09 to 2.22, representing a reduction in the negative perception of speech of 27.8%. No Wilcoxon paired test between SSI-3 fluency index before and after a group intervention resulted in an average reduction from 30 to 15 representing reduction without a SSI-3 index of 50%, corresponding to an increased fluency in the participants of the group ($p = 0.042$).

Conclusions: The present study suggests that it is possible that being integrated in the stuttering Therapeutic Group had an impact on the participants' positive perception about their life quality and communication.

Keywords: Multilingualism, fluency disorders, stuttering, -intervention, quality of life

PO 065

(1047) - CHANGE IN VOICE IN CHINESE UNILATERAL CORD PALSY PATIENTS AFTER INJECTION LARYNGOPLASTY

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Yu, Ka Man Karen - Education University of Hong Kong, Hong Kong

Objectives: The present study examined the change in perceptual voice quality and tone production performance in Chinese patients of unilateral cord palsy (UCP) after injection laryngoplasty using hyaluronic acid (Restylane).

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Methods: Subjective measures including GRBAS rating provided by practicing speech therapists, self-reported Voice Handicap Index (VHI-30), and tonal confusion were obtained before, one week and one month after the injection laryngoplasty. A total of 30 UCP patients who were adult native speakers of Cantonese were recruited and they were instructed to read aloud a short passage at a comfortable pitch and loudness level, and to produce Cantonese words of different lexical tones embedded in a carrier phrase. In addition, they also completed the VHI-30 questionnaire regarding voice-related perceived quality of life (QoL). All measurements were obtained once before, one week after, and one month after the procedure.

Results: Confusion matrices of tones produced by the UCP patients were perceived by 10 healthy listeners who were also native speakers of Cantonese. The Cantonese words were first isolated from the carrier phrase and then randomized for the perception experiment. During the experiment, the speech stimuli were perceived by the listeners who had to respond on an answer sheet by circling the word they thought they had perceived. As revealed by GRBAS and VHI scores, voice quality and perceived QoL were significantly improved after the injection thyroplasty. The improvement appeared to be sustainable up to one month after the procedure. In addition, confusion matrices showed a big improvement in tonal production after the surgery (mean accuracy = 59% pre-op to 70% one week post-op).

Conclusions: Injection laryngoplasty is effective in helping UVFP patients achieve better voice quality and improved QoL. The procedure also appears to show an immediate and sustainable effect.

Keywords: Voice disorders, intervention

PO 066

(1422) - GLOBAL IMPLEMENTATION OF EFFICACIOUS VOICE TREATMENT FOR PARKINSON DISEASE: LSVT LOUD GERMANY AND FRANCE

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Objectives: This project was designed to evaluate the implementation of an efficacious voice treatment, Lee Silverman Voice Treatment (LSVT LOUD), developed in the USA and designed to improve speech and voice disorders in Parkinson disease (PD) into scope of clinical speech practice in Germany and France. Implementation science is the study of methods that influence the integration of evidence-based interventions into real world practice settings (Center for Research in Implementation Science and Prevention (CRISP), 2015). Evidence-based rehabilitation without successful implementation has limited impact on patient care. This presentation will describe the implementation of LSVT LOUD, an efficacious voice treatment for PD, with three Randomized Control Trials (RCTs) documenting the short and long-term efficacy in the USA, into the clinical speech practice in Germany and France.

Methods: The translation pathway recommended by CRISP was followed, with emphasis on treatment fidelity. Thus a key element in the implementation process was training of speech clinicians. Seventeen LSVT LOUD Training Courses were held throughout Germany and 12 throughout France since 2000, resulting in more than 1,400 LSVT LOUD Certified clinicians in Germany and 1200 in France. To assess implementation and treatment fidelity of LSVT LOUD, an online survey was administered to LSVT LOUD Certified clinicians in Germany and France.

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Results: Preliminary results from Germany revealed 88% of clinicians surveyed felt they had received effective training in LSVT LOUD, 81% felt confident in their delivery of treatment, 66% felt they were achieving better outcomes with LSVT LOUD, and 75% felt their patients were satisfied with treatment outcomes.

Conclusions: LSVT LOUD is being implemented successfully into scope of clinical speech practice in Germany and France. This successful implementation of science into clinical practice model provides a road map for other countries where LSVT LOUD clinicians are trained (over 20,500 LSVT LOUD clinicians in 75 countries).

Keywords: Speech disorders, dysarthria, voice disorders, neurodegenerative disorders, Parkinson's Disease, intervention

PO 067

(1153) - VOCAL QUALITY AND ARTICULATION IN FEMALE STUDENTS TRAINING TO BE SPEECH LANGUAGE PATHOLOGISTS

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Cosyns, Marjan - *Ghent University, Belgium*

Desomer, Els - *Ghent University, Belgium*

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Van Maele, George - *Ghent University, Belgium*

Van Lierde, Kristiane - *University of Pretoria, South Africa*

Objectives: The purpose of this retrospective study was to determine the speech characteristics regarding speech intelligibility, voice, articulation, and fluency in future speechlanguage pathologists (SLPs). Additionally, in 31 SLP students the differences in speech characteristics between the first bachelor and the master year were measured.

Methods: The data of the screening assessments of 600 future SLPs (mean age: 18.4 years) of the first bachelor year were analyzed (period 1995–2010). To evaluate the students' progress during the program, the speech data of 31 female subjects (mean age: 21.4 years) were evaluated at the end of the program and compared to the original data. A consensus evaluation by 2 SLPs was used.

Results: Speech intelligibility and fluency were evaluated as normal in 99% of the students. Perceptual evaluation of vocal quality revealed disordered vocal quality in 27%. The most prominent articulation errors were distortions of vowels and dental and interdental articulation of alveolar consonants. A significant decrease in these distortions after 3 years of education was found ($p > 0.05$).

Conclusions: Although an improvement in distortions in the master students was measured, articulation errors and dialect were present in SLP students who intended to work with speech and language disorders.

Keywords: Professional speaking voice, speech disorders, dysarthria

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PO 069

(1216) - THE RELATIONSHIP BETWEEN VOICE HANDICAP INDEX (VHI) AND THE SIZE OF THE VOCAL NODULES

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Christos Loizou - Cyprus Association of Registered Speech-Language Pathologists

Objectives: The present study aims to evaluate the relationship between the Voice Handicap Index (VHI) and the size of vocal cord nodules in Cypriot patients of both sexes. VHI is an instrument that evaluates the emotional, natural and functional parameters of voice quality.

Methods: The sample of the present study consisted of 25 female and 5 male patients (n=30) diagnosed with vocal cord nodules. The ENT diagnosis was carried out by indirect laryngoscopy (flexible rhinolaryngoscope or 70 – degree rigid endoscope) and following this, the patients underwent a full speech therapy evaluation, including the administration of the Greek version of the VHI questionnaire and the "A grading scale for adults vocal folds nodules". The location of the study was in the ENT clinic of Dr. Savva Georgios and the speech therapy centre «Logodromio».

Results: The mean age of the patients was 37.87 years (range 22-63, SD 10.8). There was no significant statistical correlation between the VHI variables and the size of the vocal fold nodule. However, both Pearson's correlation coefficient ($r = -.156 > 0.05$) and Spearman's non-parametric correlation ($r = -.063 > 0.05$) showed a negative relationship between the size of the vocal nodules and VHI, not however reaching statistically significant results ($p > 0.05$).

Conclusions: The size of the vocal cord nodules was not found to have a statistically significant relationship with the VHI scale in our sample. However, further study including a larger number of patients is needed to confirm or reject the present findings.

Keywords : Voice disorders, professional speaking voice

PO 070

(1276) - THE IMPACT OF VOICE ERGONOMICS ON TEACHERS VOICE QUALITY

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Objectives: Voice overloading, neglect of vocal hygiene, inappropriate room acoustics, and air quality, stress and health problems are the main groups of risk factors promoting occupational voice disorders in the teachers' population. The aim of the study was to investigate teachers' voice ergonomic factors and determine the acoustic changes of teachers' voices during the workday.

Methods: Twenty-three classrooms were observed during the study. Twenty-one teachers were included in the study. The Voice Ergonomics Assessment in Work Environment checklist, the modified Voice Risk Factors questionnaire, and the Voice Handicap Index were used in the study. The voice acoustic assessment in teachers was carried out twice – before and after lessons. $F0_{sv}$, $F0_{cs}$, SPL, Jitt, Shim, AVQI were determined.

Results: The mean value of simultaneous noise caused by noise sources in the empty classroom was $LA_{eq1min} 47dB(A)$. The primary sources of the noise were a computer, data projector, and lamps. The mean value of the noise from outdoors was $LA_{eq1min} 52dB(A)$. The mean activity noise in the classrooms $LA_{eq1min} 73dB(A)$. 90% of classrooms had a high level of reverberation. The mean temperature in the classrooms was 21°C, relative humidity of the air 32%, the presence of dust in 96% of classrooms. 44% of the teachers kept the head in turn posture, 26% turned the body on the side, and 26% tensed and rose up shoulders while speaking. Three teachers had 2 voice

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symptoms every day, and/or weekly, seven teachers had 1 voice symptom. 86% of teachers have never attended ENT for laryngeal examination. The mean VHI was 13.11(8.01). Statistically significant differences were found for the $F0_{cs}$, $p < 0.001$, and for afternoon AVQI and a number of teaching hours $r = 0.575$, $p < 0.01$.

Conclusions: The assessment of voice ergonomics in the classrooms identifies problems in acoustics, noise conditions, and indoor air quality. There is a tendency for $F0$, SPL, and AVQI to change during the workday.

Keywords: Voice disorders, prevention

PO 071

(1013) - VOICE CHARACTERIZATION IN TEACHERS AND NON-TEACHERS WITH AND WITHOUT SELF-REPORTED VOICE DISORDERS

Trinite, Baiba - *Liepaja University, Latvia*

Objectives: To investigate whether voice parameters differ in teachers with and without self-reported voice disorders, as well as in non-teachers.

Methods: Several questionnaires assessed two teachers' groups – teachers with voice disorders, teachers without voice disorders and a non-teachers' group (members of the medical staff). Aerodynamic, acoustic (MDVP, VRP, SRP) and auditory perceptual (GRBAS) investigations of voice were made. The Dysphonia Severity Index (DSI) was calculated for all respondents.

Results: 29% of teachers had noted two or more vocal symptoms daily or weekly. Statistically significant differences ($P < 0.005$) between the teachers' groups (teachers with and without voice disorders) and the non-teachers' group were observed in the MPT score, the phonation quotient (PQ), $F0$, and Jitt. Comparing both teachers' group, we found that teachers with self-reported voice disorders had lower median DSI score (2.65) than teachers without voice disorders (3.21), $P = 0.001$. Teachers with voice disorders had a higher perceived stress level ($Me = 18$, $P = 0.009$) and higher VHI-30 score ($Me = 25$, $P < 0.001$) than the control group teachers ($P = 0.009$). Statistically significant differences between teachers with and without voice disorders were not found in vital lung capacity, MPT, PQ, $F0$, Jitt, Shimm, and HNR.

Conclusions: Teachers with self-rated voice disorders had lower DSI score and higher VHI score, therefore the Dysphonia Severity Index and the VHI-30 can be used for the identification of voice problems in the teachers' population. Acoustic ($F0$, Jitt) and aerodynamic (MPT, PQ) measurements may show the voice differences between teachers and non-teachers.

Keywords: Teachers, non-teachers, Dysphonia Severity Index, Voice Handicap Index, professional speaking voice

PO 073

(1154) – SPEECH PRODUCTION DISORDERS IN CHILDREN WITH FETAL ALCOHOL SPECTRUM DISORDERS

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Objectives: Fetal Alcohol Spectrum Disorders (FASD) are a highly prevalent (2-5%) spectrum of patterns of congenital defects resulting from prenatal exposure to alcohol. Approximately 90% of the cases involve speech impairment. Yet, to date no detailed symptom profiles and no

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dedicated treatment plans are available for this population.

After the presentation the attendant will be able to (1) characterize the speech impairment in FASD, (2) explain the main mechanisms underlying impaired speech development in FASD, and (3) to identify targets for clinical intervention.

Methods: The session will be based on a recent study of ourselves.

Ten boys with FASD (4.5–10.3 years) and 26 typically developing children (4.1–8.7 years; 14 males, 12 females) participated in the study. Intelligibility, auditory discrimination, speech production, -perception, and oral motor data were collected by standardized tests.

Results: The boys with FASD showed reduced scores on all tasks, as well as a deviant pattern of correlations between production and perception tasks and intelligibility compared to the typically developing children. Speech motor profiles showed specific problems with non-word repetition and tongue control. The specific profile of the speech errors indicates that speech development in children with FASD is both delayed and deviant.

Conclusions: The findings indicate that the speech impairment in boys with FASD results from a combination of deficits in multiple subsystems and should be approached as a disorder rather than developmental delay. The results suggest that reduced speech motor planning/programming, auditory processing and oral motor abilities should be considered in long-term, individually tailored treatment.

Keywords: Speech disorders, cognitive impairment

PO 075

(1287) - ARTICULATION AND PHONOLOGY DISORDERS IN ALBANIAN SPEAKING SCHOOL CHILDREN

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Baruti, Miranda - Kolegji-heimerer, Albania

Objectives: The aim of this study was to determine the prevalence of articulation and phonology disorders in Albanian speaking school children in Mitrovica city in Kosova.

Methods: The study has a qualitative approach and children of first and second classes of 8 primary schools in Mitrovica were selected for the study. For the evaluation of children, the Articulation Test (Kostić, Vladislavljević & Popović, 1983), modified in Albanian, is used, with sounds in initial, medial and final word position. A questionnaire for teachers is also used about the impact of the disorder in children's performance, and their emotional and social condition.

Results: Results of this study show that out of the estimated 1120 students, 90 children, approximately 8% of the total sample, had articulation disorders. The disordered sounds were: c (37.8%), dh (37.8%), ll (34.4%), r (24.4%), rr (56.7%), s (35.6%), sh (41.1%), th (37.8%), x (33.3%), z (26.7%). These disordered sounds accompanied by four forms of articulation disorders: 20% have omissions, 47.7% have distortions, 86.7% substitutions and 7.7% additions. Speech disorders impact on children's performance, in reading in 42.2% and presentation in 41.1% of them. Approximately 31% of the children experienced bullying and 33.3% experienced shame and fear when speaking.

Conclusions: We conclude that Albanian speaking school children have articulation and phonology disorders. The most disordered sounds are c, dh, ll, r, rr, s, sh, th, x and z. The four forms of articulation are present, but mostly substitution. Children experienced low performance at school. They also experienced bullying, and fear when speaking.

Keywords : Functional diagnosis

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PO 076

(1177) - SPEECH DISORDERS IN CHILDREN BEFORE AND AFTER ADENECTOMY

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Gžibovska, Inese - *Latvian Children's Hearing Centre, Latvia*

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Circene, Māra - *RSU, Faculty of Rehabilitation, Audiology and Speech Therapy study programme, Latvia*

Objectives: Some of the most common consequences of enlarged adenoids are hearing problems and speech impairment. The most frequent clinical signs noted by a speech-language therapist in the case of enlarged adenoids and in the postoperative period include:

preoperative and postoperative – half-open position of the mouth, breathing through the mouth, reduced hearing of whispering voice before and after operation, impaired speech before surgery, which persists even after surgery.

Methods: Data of 30 children who were received in the Latvian Children Hearing Center with complaints of decreased hearing were analysed. All children were born in 2009 and an adenectomy operation was performed in 2015 for all these children. Data on parents' complaints, clinical findings, objective and subjective evaluation before and after surgery were analysed.

Results: The average age when adenectomy is performed is 4.6 years. In most cases of hypertrophic adenoids, parents notice that children are hearing poorly, they frequently have a running nose and impaired breathing through the nose, frequent diseases of the upper respiratory tract, unclear speech, nocturnal snoring and opened mouth position. The most common clinical signs in the speech—language therapist's evaluation are: opened mouth position, breathing through the mouth, hearing reduction for the whispered voice, impaired sound pronunciation. After the surgery, the children keep the opened mouth position, (breathing through the mouth), and impaired sound pronunciation. When performing tonal audiometry, hearing loss is observed before surgery, but after the operation, the hearing threshold for all children is within normal limits.

Conclusions: Half-opened mouth position and speech impairment persists even 6 months after adenectomy, if myofunctional therapy is not carried out after the surgery.

After adenectomy, hearing status and comprehension improve in 100% of cases, but impaired sound pronunciation and opened mouth position persist. Children should continue to cooperate with a speech-language therapist and myofunctional therapy is recommended.

Keywords: Hearing impairment

PO 077

(1344) - COMPREHENSION AND PRODUCTION OF RELATIVE CLAUSES IN CHILDREN WITH AND WITHOUT PHONOLOGICAL DISORDER

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Objectives: To analyze the performance of children with phonological disorder (PD) and typical language development (TLD) between the ages of 4 years to 8 years and 11 months in the skills of comprehension and production of relative clauses, and to verify if there is difference between the groups, and in the comparison between the ages.

Methods: 53 children, out of which 26 children had PD and 27 children had TLD were assessed. In both groups, tests of relative sentences were applied, based on the Adapted Test by Costa

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et al., 2009. For the evaluation of the Test of Production the test of preference was used, and for the test of Comprehension of Relative Clauses the Test of Identification of Images was used.

Results: The results showed a statistically significant difference in relation to the mean of the percentage of correct answers in the tasks of producing relative of subject and object (PRSO), with better performance in the children with TLD in relation to children with PD. A significant statistical difference in the tasks of relative comprehension of subject (CRS) was not obtained, but we obtained a statistically significant difference in the object relative comprehension task (CRO), with a better performance in children with PD in relation to children with TLD. In the comparison between the means of correctness by age there was no statistically significant difference.

Conclusions: Children with TLD presented better performance in relative subject clauses (ORS) relative to relative object clauses (ORO), and that both are acquired gradually during development. Children with PD presented inferior performance in the tasks of PRSO with greater difficulties in ORO, although there were no statistically significant differences between the comparison of the means of the ages, a better performance was noticed in older children than in the younger ones.

Keywords: Phonological disorders

PO 078

(1303) - EMERGENT NAME WRITING SKILLS: A COMPARISON BETWEEN CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDERS AND THEIR TYPICALLY DEVELOPING PEERS

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Objectives: Children's reading success is highly linked to their emergent literacy skills in the preschool period. Fluent and skilled reading abilities are acquired through the connections between alphabet knowledge, print concepts, phonological awareness and emergent writing skills. Children's name writing skills are one of the earliest measure of emergent writing skills, so emergent literacy. The aim of this study was to determine the name writing skills of typically developing children and children with developmental language disorders.

Methods: 20 typically developing children compared to a group of 20 children with developmental language disorders participated in the study. The Test of Early Language Development-Turkish Version, 'TEDİL' was used to assess the receptive and expressive language of the children and to discriminate developmental language disorders from typical language development. Children were asked to complete a task of writing their first names.

Results: Their results were analysed by two speech and language pathologists. Comparisons between the groups were assessed by using two sample t-tests and inter-rater reliability was tested by Cohen's kappa coefficient. The results of the study show that children with developmental language disorders tend to have lower performances in the task of name-writing and the differences in the scores of name writing tasks were statistically significant between the two groups of children.

Conclusions: This finding highlights a risk factor for their current phonological awareness and later reading success in their academic life.

Keywords: Developmental language disorders

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PO 079

(1296) - A THERAPEUTICAL STRATEGY FOR DEVELOPING THE GRAPHOMOTOR ABILITIES OF CHILDREN WITH SLI

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Marinov, Martin - *Liliya Yancheva-Velinova, Bulgaria*

Marinov, Emil - *Liliya Yancheva-Velinova, Bulgaria*

Objectives: The development of fundamental manual skills at pre-school age is important for the subsequent development of graphomotor abilities in school. In kindergartens, children spend much of their day in activities with pencil, paper, scissors. The development of graphomotor skills begins at the pre-school age, with the most significant development at the age of 5 and 6 years. At that age the active use of graphomotor means - pastels, markers, pencils- begins. A principal factor in carrying out graphomotor activities is the proper grip of the writing tools. Several important conditions are needed for the proper grip of the writing tools - adequate development of fine and general motoric skills, retained sensory abilities, proper motor planning. The objective of the present study is to research manual and graphomotor skills and to correct the irregular grips in children with specific language disorders.

Methods: - Manual skills were examined with the test of I. Lesnii (1987), and the study of the grips was done according to McCleskey's methodology (2002, 2008). The following therapeutic activities are used to correct the irregularities: correct positioning and positioning of the body, planning and programming of the successive movements of the grip, development of the strength of the small arm muscles, crossing of the median line with the dominant hand, development of the kinesthetic feedback.

Results: The analysis of the results shows that more than half of the children with SLI have an incorrect grip. The most common irregularities are lateral, pincers-like, modified triple and multi-grip. Two children showed hyperextension grip on the forefinger and thumb. In the case of children within the norm, the wrong grip was found in only 9% of them.

Conclusions: Applying adequate therapeutic strategies improved the grip.

Keywords: Specific language impairment

PO 080

(1415) - EFFECTIVE INTERVENTION IN WRITTEN LANGUAGE DISORDER BY NILD EDUCATIONAL THERAPY

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Objectives: The acquisition of written language is a crucial stage in children's language development. Auditory and visual processing, phonological and morphological development, the formation of metalinguistic skills, grapheme-phoneme correspondence and a well-functioning orthographic memory are all involved in this acquisition (Mann-Stoel-Gammon 1996, Ziegler-Goswami 2005). NILD Educational Therapy is an approved intervention in dyslexia in English – the original language of the therapy (Keafer 2010).

Methods: The present research examines the NILD ET's effectiveness in case of group intervention in the public school system, using the Hungarian adaptation of the program, approved by the Hungarian Ministry of Education. 30 students were involved in the study in 7 age groups (from age 8 to 14 years) who were diagnosed with written language disorders. Students received group intervention two times a week, using Educational Therapy techniques with interactive language,

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stimulating the cognitive functions involved in written language acquisition. Speech processing, phonological awareness, verbal and visual short term memory, reading and writing skills were measured before and after the 8-month-intervention. The results were statistically analysed.

Results: Each age group and every student developed significantly in all of the examined areas according to the paired T-test.

Conclusions: Since most of the students receive intervention only at school, it is important to use techniques with predictable outcomes.

Keywords: Developmental language disorders, dyslexia, phonological disorders

PO 081

(1228) - PRESENTATION OF THE MESEZENE METHOD: AN EMOTIONAL BRIDGE BETWEEN CHILDREN AND GRAPHEMES

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Objectives: The goal was to prepare children between the ages of 6-7 for the process of learning to read. The method chosen to use was tales and specially, the applied form of music as a motivational system. This invites the children into a magical tale world where letters are impersonated by loveable balloons and exciting fairytale characters.

THE KEY POINTS IN PREFORMING READING

Methods: The method does not use teaching as a technique. It stays within the borders of sensitization, while it still provides children between the ages of 6-7 with an effective, targeted preparation for reading.

1. Phoneme isolation

Children are given the opportunity to learn the isolated form of phonemes by the adventures in the fairytale world. The method provides the possibility of developing phonological awareness, an ability which is necessary for academic success.

2. Separating vowels from consonants

The vowels are symbolized by different colored, faced balloons while the consonants are represented by distinct fairytale figures. The two groups are effortlessly separable thus the children 'unconsciously' learn to categorize them.

3. Grapheme-phoneme correspondence

During active play in a fantasy world, they learn the association between a visual object and an acoustic vocal sign (phoneme) which is basically a preformation of the actual grapheme-phoneme correspondence.

4. Preparation for reading syllables

Within the framework of active gaming and the fantasy world, children can be trained for one of the most difficult mental operations of the reading process, which is reading syllables.

Results: The method is beyond multiple processes of measuring. The Mesezene group read vowels 2.3 times faster, consonants 2 times, and the mixed reading range 1.8 times faster, making significantly less mistakes than the control group.

Conclusions: Between 2013-17 the method has been successfully used to prepare the abilities for reading for almost three thousand children in 100 kindergarten teachers all across Hungary.

Keywords: Assessment, quality of education

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PO 082

(1289) - TYPEWRITING IS BETTER THAN HANDWRITING – A CASE REPORT

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Objectives: In everyday life new generations increasingly use typewriting instead of handwriting. This change may cause different types of errors, according to the neuropsychological model of writing. In literature, there are already some reports on this issue.

Methods: We report the case of a 36 year-old right handed woman (I.W.), chemical engineering student, presenting right hemiparesis predominantly brachial, right homonymous hemianopsia and anomic aphasia as a result of ischaemic stroke two years ago.

Results: I.W. uses the left hand to write and type and usually makes phonological errors in both modalities. However a significant difference ($p=0.03$) was noticed between the two writing modalities, with typewriting having significantly less errors. The nature of the errors is similar in both tasks, hence excluding a defect in the orthographic working memory processing. Probably this may result from a failure in the allographic/letter-shape conversion route of handwriting, which cannot be the case for typewriting.

Conclusions: This finding may have implications since new generations with aphasia will use preferential typewriting. As such it should be considered in language assessment and intervention.

Keywords: Aphasia

PO 083

(1357) - A RANDOMIZED CONTROLLED TRIAL IN THE CLASSROOM – MEASURING THE EFFECT OF TEACHER TRAINING ON CHILDREN'S LANGUAGE SKILLS

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Objectives: The overall aim of the project is to create communication fostering classroom environments in the mainstream setting. The project includes the implementation of an intervention program introducing evidence-based language learning interaction and modification techniques to primary-school teachers, and an evaluation of the effect of changes in teaching behavior on student language ability. The design and some preliminary results on uptake of the ongoing study will be described.

Methods: The intervention is delivered to teachers serving children in the first two years of Swedish school (7- and 8-year-olds). The intervention stretches over 10 weeks, with weekly 90-min sessions in which the SLT introduces target areas to groups of teachers. Between the sessions

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the teachers implement the target items in their teaching, and evaluate the perceived effect with a critical friend. Target items are based on the results of classroom observation with the Communication Supporting Classroom Observation Tool. Teachers film each other during lessons while they implement the intervention target items. The study uses a combined between- and within participant design. Comparisons are made to controls both within the same school setting and in another school in the same area, controlling for possible contamination effects. Teacher self-efficacy and accommodation and goals in students' Individualized Education Programs (IEPs) are evaluated before and after the intervention. The language ability of the students in the teachers' classes is assessed before, during and after the intervention.

Results: We present the design and evaluation of an ongoing study of the effects of a teacher-intervention program.

Conclusions: Preliminary evaluation of the program indicates that the content of the intervention is transferable to mainstream setting teaching. Participating teachers are receptive and active during intervention sessions. They come well-prepared to group sessions with concrete examples of challenges they want to share and learn from. Preliminary results from students' uptake will be discussed.

Keywords: Intervention, - prevention

PO 084

(1249) - EXTRAVERSION IN SLOVENIAN PRESCHOOL CHILDREN WHO STUTTER

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Objectives: While genetics and neurophysiology appear to be related to the underlying causes of stuttering, environmental factors, temperament, personal characteristics and speaking demands may influence a child's reactions to stuttering. In contemporary research stuttering is linked with certain personal characteristics, among which extraversion plays an important role. In Slovenia there was no such research which would identify personal characteristics in preschool children who stutter, so the aim of this study was to investigate the personality dimension of extraversion in preschool children who stutter, and to compare them with their peers who speak fluently.

Methods: Extraversion as a personality dimension was assessed in 49 children in the experimental group and in 75 children in the control group, aged 3 to 6 years, by a parent administered questionnaire on individual differences in children and adolescents (Inventory of Children's Individual Differences, Zupančič, Kavčič, 2009).

Results: The results showed that preschool children who stutter, compared with preschool children who are fluent in the dimension of extraversion, on average achieved a statistically significant lower score. Children who stutter are not as extraverted, active, sociable and open to experience as children who speak fluently.

Keywords : Fluency disorders, stuttering

PO 085

(1419) - THE STUDY OF INHIBITORY CONTROL IN CHILDREN WHO STUTTER

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Objectives: Inhibition refers to the ability to actively suppress, interrupt or delay an action. Several authors have alluded to a possible role in self-regulatory processes, attentional control processes, and more specifically inhibitory control in the development of stuttering. Therefore, the aim of this study was to investigate differences in inhibitory control performance between children who stutter (CWS) and children who do not stutter (CWNS).

Methods: Participants consisted of 30 children diagnosed with developmental stuttering and 30 typically developing nonstuttering children, matched by age and gender to the children who stutter. The mean age was 9;5 years (SD = 1;61 years; range = 7;02–13;00) for the CWS and 9;8 years (SD = 1;69 years; range = 7;01–13;00) for the CWNS. An Auditory Go/No Go task was used to assess the inhibitory control in CWS and CWNS.

Results: Between-group differences in error percentages of Go/NoGo task variables were evaluated using a t-test. Between-group differences emerged for Commission errors and Omission errors showing that the mean percentages of Commission errors and Omission errors were higher in the stuttering group than in the nonstuttering group, but no significant differences were found for Commission errors and Omission errors ($p>0.05$). Differences in baseline speed RT were evaluated using a t-test. The mean reaction time was higher in the stuttering group than in the nonstuttering group. But the mean reaction time for CWS and CWNS was not significantly different ($p>0.05$).

Conclusions: The purpose of this study was to test experimentally previous findings of differences in inhibitory control between CWS and CWNS, using an Auditory Go/No Go task. Our results, based on the Auditory Go/No Go task, provide further support for the hypothesis that CWS and CWNS differ in inhibitory control. CWS, as a group, were lower in inhibitory control, which suggests a lowered ability to inhibit prepotent response tendencies.

Keywords: Fluency disorders, stuttering

PO 086

(1254) - TEMPERAMENT, ANXIETY AND EXECUTIVE FUNCTIONS IN PORTUGUESE SCHOOL AGE CHILDREN WHO DO AND DO NOT STUTTER.

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Rato, Joana - Center for Interdisciplinary Research in Health, Universidade Católica Portuguesa, Portugal

Yaruss, Scott - Michigan State University, USA

Objectives: To investigate executive functions, temperament and anxiety levels of Portuguese school age children who stutter and compare their performance with children who do not stutter.

Methods: Participants were 60 children, aged 7 to 12 years-old ($M=9.28$, $SD=1.69$) recruited from different cities of Portugal. All children were native speakers of Portuguese and the 30 children who stutter were collected from speech therapist cases and through referral of teachers and other professionals. The 'Stuttering Severity Instrument-4' was used to assess fluency severity, the 'Multidimensional Anxiety Scale for Children' was applied to measure the anxiety level; and the 'Children's Color Trails Test' to evaluate the executive functioning. Socio-demographic characteristics and temperament were provided by parents through a 'sociodemographic checklist' created purposely for the study and through the 'Temperament in Middle Childhood Questionnaire'. All instruments were used in their Portuguese version.

Results: Our results reveal group differences in some temperament aspects with the children who stutter showing a lower performance related to attention/focusing and perceptual sensitivity. The same trend was observed in the executive functioning in which the children who stutter were slower in performing the first task with more warnings from the evaluator. Notwithstanding, there were no group differences related to anxiety.

Conclusions: The group differences found in our study may indicate that children who stutter struggle more on attention and executive functions abilities compared to children who do not

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stutter. The absence of differences in anxiety corroborates the literature that advocates that anxiety is not the cause of stuttering, but a consequence that may appear later in older children and adults.

Keywords: Fluency disorders, stuttering

PO 087

(1259) - APPLICATION OF EEG BIOFFEDBACK METHOD IN STUTTERING

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Poposka, Ana - *Institution for Hearing, Speech and Voice – Skopje, Macedonia*

Dimitrovska, Zhivanka - *Institution for Hearing, Speech and Voice – Skopje, Macedonia*

Kacka, Muljaim - *College Heimerer*

Torbica Marinkovic, Svetlana - *Torbica +, Serbia*

Objectives: Stuttering is one of the types of speech fluency disorder. It is conscious, and an intentional intermittent speech that occurs as a result of inadequate muscle tension of speech organs, phonation, articulation and respiration. A person who is stuttering, is not in a position to control speech, and adds tension, that leaves consequences on the psycho-social plan of functioning. The cause of stuttering is not fully clarified, and it is considered a result of the interaction of the internal (hereditary, congenital and acquired dispositions) and external factors (fears, excessive expectations from the environment) which the child is not able to overcome independently.

Methods: The EEG Biofeedback method has been proven as a method, for permanently changing the “bad” patterns and training the brain to function better, thus reducing or completely eliminating the symptoms of the impairment. The subject of this paper is to illustrate the functionality of the EEG Biofeedback method in stuttering through two case reports. The goal is to show the treatment of stuttering by learning control over one’s own brain and physiological functions, that is, how the response of the physiological functions influences the control of stuttering.

Results: Results have shown that most important is training of the SMR cerebral waves, that occur in the frequencies of 13- 15 Hz in the brain region, that is responsible for controlling pulse motions, and occur when inhibiting some motor response.

Conclusion: By brain training, we strengthen the operational patterns, making the reactions more balanced and more efficient. Research suggests that the training curve increases the plasticity of the brain, which gives the individual a better ability to solve the physical and emotional difficulties.

Keywords: Fluency disorders, stuttering, intervention

PO 088

(1453) - STUTTERING AND MULTILINGUALISM: PRACTICAL IMPLICATIONS

Aerts, Glenn - *Artevelde University College, Belgium*

Objectives: Nowadays, more and more children are raised in a multilingual environment. Hence, in our daily practice, we are confronted with more multilingual children (and adults) who also stutter. In recent years, there has been a lot of research on both stuttering and multilingualism separately, but there have been few studies on the combination of both topics. Or as Mamdoh & Goomah (2015) would say: “Data on bilingualism and stuttering are scanty”.

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Methods: This poster will try to give an overview of recent literature on the prevalence of stuttering in multilingual children, will discuss flaws within recent research and the possible influence of multilingualism within the development of stuttering. It will also give a hint of practical implications, both for assessment and intervention and will give suggestions for further research.

Keywords : Multilingualism, fluency disorders, stuttering

PO 089

(1198) - TEMPERAMENT IS ASSOCIATED WITH THE USE OF COMMUNICATIVE GESTURES IN INFANCY

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Nolvi, Saara - FinnBrain Birth Cohort Study, Turku Brain and Mind Center, Institute of Clinical Medicine, University of Turku, Finland

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Karlsson, Linnea - FinnBrain Birth Cohort Study, Turku Brain and Mind Center, Institute of Clinical Medicine, University of Turku, Finland; - Department of Child Psychiatry, Turku University Hospital and University of Turku, Finland

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Objectives: The associations between temperament and verbal language in toddlerhood have been explored in the existing research. Whether these relations can be seen already in preverbal communication in infancy is, to our knowledge, currently scarcely explored. The aim of the present study was to explore the relations between temperament and the use of communicative gestures in infancy.

Methods: The participants were 91 infants from a general population pregnancy cohort in Finland. The study used parent reports; The Infant Behavior Questionnaire (IBQ) was used to assess temperament at 6 and 12 months postpartum and the Communicative Development Inventory (CDI) was used to assess use of communicative gestures at the age 12 months.

Results: Several dimensions of infant temperament were associated with early use of communicative gestures. The temperament dimensions activity level, duration of orienting and soothability at 6 months were positively correlated with gesture use at 12 months, and the same was true for concurrent duration of orienting and smiling and laughter at 12 months. After adjusting for child gender and other temperament traits, only soothability was associated with gesture use and explained 22% of the variance in use of gestures at 6 months, whereas duration of orienting and smiling and laughter contributed to 28% of the variance at 12 months.

Conclusions: Significant associations were found between temperament and the early, preverbal stages of language development. Temperamental characteristics associated with favorable preverbal communicative development seem to be high attentiveness, positive emotionality and self-regulation. Possibly these characteristics promote interaction between the infant and others, and thereby support communicative development. Results implicate the need to compensate for the possible disadvantage in communicative development certain temperamental traits may entail already in infancy.

Keywords : Prevention

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PO 091

(1268) - RELATIONSHIP BETWEEN LANGUAGE DEVELOPMENT AND SENSORY INTEGRATION IN PRESCHOOLERS

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Rocha, Joana - *Universidade Fernando Pessoa, Portugal*

Antunes, Eva - *Universidade Fernando Pessoa, Portugal*

Peixoto, Vânia - *Universidade Fernando Pessoa, Portugal*

Objectives: This study aims to verify the existence of a relationship between language development and sensory integration in children between 4 and 6 years old.

Methods: 23 Portuguese preschoolers aged 4:11 to 5:11 were recruited from two kindergartens in Aveiro District. Data were collected through the questionnaire of sensory integration behaviours of children (provided by caregivers): SENSOR-C and Language Assessment of Preschool Language: ALPE.

Results: Results showed no significant relations between sensory integration and language development.

Conclusions: Although results showed no relations, further research is required for this study to understand this relationship.

Keywords: assessment, evidence-based practice

PO 092

(1217) - SIBLINGS: THEY'RE MORE THAN JUST ANNOYING

Isufi, Flaka - *Heimerer College, Albania*

Rexhepi, Genc - *Heimerer College, Albania*

Mahmuti, Redina - *Heimerer College, Albania*

Halili, Nexhmije - *Heimerer College, Albania*

Objectives: Considering that language usage at home is considered to be a very important factor for linguistic development, the purpose of this research study is to investigate the presence of a sibling and the language development of a child at home, by also identifying the most difficult words for children with and without siblings.

Methods: A sample of 80 preschool children (52% boys) was recruited from 4 public preschool centers in Prishtina. The mean age was 4.8 years old (SD = 0.9). All participants were Albanian and monolingual. Half of them had a sister or a brother, meanwhile the other half were the only children at home. Data were collected using the Standardized tool for Receptive and Expressive Language in Albanian (Uka et al, 2015). In total, 100 questions were used to assess the receptive and expressive language of the preschool children. Data were analyzed using the Statistical Package for Social Sciences.

Results: Results show the influence of siblings on language development among children. The T-test results identified significant differences between children who do not have siblings in the family and the ones who have siblings. Additionally, Chi square was conducted in order to find the differences between children with and without siblings regarding their receptive vocabulary. It was shown that for the words "raspberry", "snail" and "hippopotamus" the differences are significant.

Conclusions: The findings of this research show that early years practitioners need more support to create sensitive language learning environments. As such, siblings may be an important way to foster language acquisition, as well as language development among preschoolers. However,

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as claimed by different authors, this study confirms as well the need for further research and discussion on the prerequisites of language development among preschoolers.

Keywords: Developmental language disorders

PO 093

(1214) - MUSIC INFLUENCE ON LANGUAGE DEVELOPMENT IN 3 YEARS OLD

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Vigário, Marina – CLUL, Portugal; – FLUL, Portugal

Objectives: Music influence in typical language development has been investigated in phonemic and phonological awareness, learning to read, verbal perception and articulation, mostly between 4 and 9 years old. Music and language share mechanisms in learning linguistic and musical categories (Degé & Schwarzer, 2011) and share their structure, brain resources and cognitive processes, which can create the same representations and highly related abilities (Hannon & Trainor, 2007). Our goal is to analyze music influence on phonetic and phonologic development, phonological awareness and prosodic development with a randomized control study, with three years old, right before and after a period of Music (experimental group) and Visual Arts classes (control group) in kindergarten.

Methods: A convenience sample was recruited in a kindergarten (Pilot Study: N=18; Larger Study: N=31). The children were randomly assigned to the Music or Visual Art Groups. Pre- and post-assessment included phonetic, phonologic, phonological awareness and prosodic skills. Both groups received 30 weekly classes between pre- and post-assessment.

Results: In the pilot study, at pre-assessment there were no significant differences between groups in phonological awareness. Significant differences (*p=0.039) were found between the groups in the post-assessment, showing that music impacts phonological awareness. When comparing pre- and post-assessment, the results showed no significant differences in the Visual Art Group, but significant differences were found in the Music Group (**p=0.003). In the larger study the results also showed that music promotes phonological awareness development.

Conclusions: The results indicate that at an early stage music is already a positive influence on phonological awareness. We expect to see similar effects of music in phonetic and phonologic, as well as in prosodic development. The results will be presented in this talk.

Keywords: Quality of education

PO 094

(1399) - MICROSTRUCTURE OF THE NARRATIVE AT THE END OF PRIMARY SCHOOL

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Faria, Paula Cristina - Escola Superior de Saúde - Instituto Politécnico do Porto, Portugal

Moutinho, Paula - Escola Superior de Saúde - Instituto Politécnico do Porto, Portugal

Objectives: Narratives are composed of macro and microstructural elements that have not been explored in detail by the existing literature in Portugal. Thus emerged the need to define and give substance to the microstructure of narrative language, which forms the basis for this study. The overall aim of this study is to “Characterise microstructural elements present in the written narrative at the end of primary school”. The following elements were considered: overall productivity, sentence length, lexical diversity, syntactic complexity, and types of grammar errors.

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Methods: This is an observational and descriptive study, using a quantitative cross-sectional method with a convenience sample of 35 students from a primary school located in the north of Portugal, that fulfilled the inclusion criteria – children attending the 4th year of primary school for this first time, in regular education, and with a typical development; no student was excluded on the basis of a clinical diagnosis regarding language disorders (exclusion criterion). A qualitative data analysis was conducted for narrative description. Statistical tests were performed with the Kolmogorov-Smirnov and parametric t-student $p < 0.05$ for the statistically significant relation.

Results: The various elements under study are close to those found by Portuguese researchers, but the average number of words produced and the index of lexical diversity were higher in this study, while the average sentence length was lower. No comparisons were undertaken regarding the use of subordination and the different type of errors, because the authors did not find published data available. Nouns and verbs were the most used word classes and quantifiers. No statistically significant differences were found between overall productivity, mean length of utterance, and index of lexical diversity between genders.

Conclusions: Despite the small sample size, indicative values were described for the various parameters under study.

Keywords: Developmental language disorders

PO 095

(1355) - UNPACKING THE EVIDENCE FOR AND THEORY OF INTERVENTION IN CHILDHOOD LANGUAGE IMPAIRMENT: SYSTEMATIC REVIEWS ACROSS COMPONENTS OF LANGUAGE

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Jensen De Lopez, Kristine (Denmark) - Aalborg University, Denmark

Vulchanova, Mila (Norway) - Norwegian University of Science and Technology, Norway

Laasonen, Marja (Finland) - University of Turku, Finland

Kunnari, Sari (Finland) - University of Oulu, Finland

Frizelle, Pauline (Ireland) - University College Cork, Ireland

Saldana, David (Spain) - University of Seville, Spain

Objectives: Children with primary language impairment or developmental language disorder (PLI/DLD) have persistent language difficulties, not explained by another primary diagnosis. Interventions aim to address weakness across the components of grammar, vocabulary, phonology, and pragmatics and differ in the theoretical assumptions on which they are based. While there are a number of systematic reviews of the evidence base, none has explicitly sought to uncover the theoretical bases for these interventions. Aims of these reviews are to:

- (1) identify the theories and mechanisms of change underpinning interventions in PLI/DLD;
- (2) evaluate the efficacy of interventions.

Methods: We searched for relevant articles from peer-reviewed journals between 2006 and 2016 in international databases. We followed the PRISMA framework for reviews with protocols registered prior to data extraction. Over 7,000 items were double-screened. Included full texts described intervention studies for language impairment in PLI/DLD, age range 3-18 years, with experimental control and empirical data on the efficacy of grammar, vocabulary, phonology and pragmatic language interventions. Separate review teams per language area critically appraised included articles and coded included full-texts for language, country, theory, mechanism of intervention and impact and outcome variables. Data were extracted independently by two reviewers.

Results: We identified variation in strength of evidence across included studies with mixed designs in use. Composite measures pre and post intervention limit data on theme specific outcomes.

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Interventions for vocabulary typically involve larger sample sizes and include a greater number of classroom-based interventions. The pragmatics review had the smallest number of eligible studies, with the largest pool of studies in phonology. The dominant theoretical paradigms are linguistic and behavioural. Processing weaknesses are used to explain children's impairment, but there are few effective processing-based interventions.

Conclusions: The field needs to increase not only the evidence base of the interventions being used, but to clarify their relationship with different theoretical paradigms.

Keywords: Developmental language disorders

PO 096

(1220) - SENTENCE REPETITION AS AN INDICATOR FOR LANGUAGE DEVELOPMENT IN AN AGGLUTINATING LANGUAGE: DATA FROM 5-, 7-, 9-YEAR-OLD HUNGARIAN CHILDREN

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Váradi, Viola - *ELTE Eötvös Loránd University, Hungary*

Jordanidis, Ágnes - *ELTE Eötvös Loránd University, Hungary*

Bóna, Judit - *ELTE Eötvös Loránd University, Hungary*

Objectives: Sentence repetition is a simple task which is often used for testing working-memory. This task reliably reflects properties of early morphology and syntax in typically and non-typically developing children, and also the characteristics of language processing systems and language production mechanisms (Nag et al. 2017). The aim of this study is to analyse the sentence repetition of 5-, 7- and 9-year-old Hungarian children. Since Hungarian is an agglutinative language, the types of errors may reflect on the properties of language production mechanisms (grammatical and phonological encoding) during the sentence repetition task.

Methods: Sentence repetitions of 120 Hungarian speaking children were analysed from the GABI (Hungarian Child Language and Speech Database and Information Repository; Bóna et al. 2014) speech database. The 15 repeated sentences were varied in terms of length and grammatical complexity. There were both simple and complex sentences, and they contained common and rare words too. The ratio of the correct repetitions was defined and the errors were also analysed. Speech errors were analysed at sentence, word, and affix levels as in Nag et al. 2017.

Results: Our results show big individual differences in every age group. There are children who performed without fail, while there are others who had many mistakes even at the age of 9.

Conclusions: Results show that the sentence repetition task is useful as a clinical tool for the measurement of children's speech production abilities in Hungarian as well.

References:

Bóna, J., Imre, A., Markó, A., Váradi, V. & Gósy, M. (2014). GABI – Gyermeknyelvi.

Beszédatbázis és Információtár, Beszédkutatás 2014, 246-252.

Nag, S., Snowling, M., & Mirkovic, J. (2017). The role of language production mechanisms in children's sentence repetition: evidence from an inflectionally rich language. *Applied Psycholinguistics*, doi:10.1017/S0142716417000200

Keywords: Developmental language disorders

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PO 097

(1165) - CAREGIVER'S AWARENESS OF EARLY LANGUAGE DIFFICULTIES IN 3- AND 4-YEAR OLD GERMAN CHILDREN

Haupt, Christina - *University of Applied Sciences Osnabrueck, Germany*

Objectives: In Germany, a lot of young children at risk for language difficulties still go undetected or are not assessed before preschoolage. For children where parents may suspect a disorder, this practice causes a lot of emotional distress alongside lost time for intervention. Thus, what contribution can parents and nursery staff make for the earlier detection of language difficulties?

Methods: 34 children from four German kindergartens were tested with a standardized preschool screening for language problems by an SLT. Parents and nursery staff completed a questionnaire (FEE 3-4) that was designed to collect potential risk-factors and included the rating of children's abilities across the main language domains. Outcomes from the FEE 3-4 were compared between parents and nursery staff, as well as triangulated with results from the standardized screening.

Results: Agreement between parents and nursery staff re. individual children's potential language difficulties was moderate (Kappa = 0.44, $p = .050$). Overall, nursery staff rated children's language abilities more strictly and precisely than parents. Especially their ratings for 'word order' ($p = .022$) and 'verb endings' contributed significantly to the identification of potential language difficulties similar to the standardized screening. The screening identified two children at risk without caregiver's concern, but not two others who were at risk of language disorder and for whom caregivers expressed concern.

Conclusions: Caregiver's awareness of early language difficulties appears to be rather intuitive. Young children at risk are most reliably detected if standardized instruments are used in combination with caregiver questionnaires. Ideally, this process includes data from parents and nursery staff to be interpreted by an experienced SLT, as the use of a standardized screening alone may lead to missed or mistaken identification where essential information about the child's environment (e.g. risk factors) is not provided. If parents are concerned about children's language, full assessment is clearly justified.

Keywords: Screening, prevention, specific language impairment

PO 098

(1012) - WORD-FINDING SKILLS AND PHONOLOGICAL SHORT-TERM MEMORY IN PRESCHOOL AGED CHILDREN WITH AND WITHOUT LANGUAGE IMPAIRMENTS.

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Anastasopoulou, Ioanna - *Association of Registered Speech and Language Pathologists, Cyprus*

Objectives: According to Gathercole and Baddeley (1989), the ability to learn new words is also associated with working memory, the authors suggesting that children with language impairments (LI) exhibit difficulties in creating long-term representations of words due to limited short-term phonological memory capacity. Various studies have found that, supporting that children with LI have difficulty in recalling sentences (Laws & Bishop, 2003). Children with language impairments (LI) experience difficulties in word finding skills or vocabulary acquisition deficits, as well as in their phonological short-term memory. Research suggests that the ability to learn new words is also associated with working memory, therefore children with LI exhibit difficulties in creating long-term representations of words due to limited short-term phonological memory capacity. Sentence repetition tasks are widely used clinically for identifying children with language difficulties and more specifically children with short-term memory limitations. The aim of the present research is to examine whether

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Cypriot-Greek preschool children exhibit deficits in the above domains. Moreover, to compare the errors of children with language impairment with the errors of typically developing children.

Methods: The experimental assessment tool 'Aphroditi' will be administered to fifteen children with LI aged 4;8-6;0 years and fifteen children with typical development (TD) of the same age group between September 2017 to March 2018. The children with LI will be individually matched with the typically developing children for chronological age (CA) and gender. The data will be analysed with the Rash model.

Results: Results of the current study are expected at the end of March 18.

Conclusions: The research hypotheses state: a) preschool Cypriot-Greek speaking children with LI will exhibit more word-finding deficits compared to TD children; b) LI children will perform significantly worse in sentence repetition tasks compared to TD children indicating that LI children are experiencing more phonological short-term memory difficulties compared to TD children.

Keywords: language impairment, word-finding skills, phonological short-term memory, preschool.

PO 099

(1043) - SOUND, RHYTHM, MELODY AND HARMONY IN LANGUAGE DISORDERS

Nastasia, Antonella - N/A

Objectives: To analyze the effects of music therapy on language disorder.

Methods: The research was conducted on a sample group of twelve patients aged 5 to 7 years. For each of them the diagnosis is characterized by: a deficiency in the acquisition of language, a production deficit, a deficit of understanding, and in structuring the sentence and speech. The patient group was subdivided: an "effective" part, which received treatment with musical exercises; and a "placebo" part that received the same treatment, but without the musical exercises. After observing and supporting the work of the speech therapist, I composed the music for the chosen exercises

Results: Thanks to the practice of exercising with the music, the placebo group showed an improvement in executive functions. The executive functions, in turn, stimulated an improvement in the effects of the speech therapy. Moreover, the emotional system may have stimulated the executive control system. This system manages emotions and stimulates empathic ability to others. Music evokes emotions, and this evocation is important for children with language disorders, because they learn to handle the negative emotions caused by the frustrations of the disorder.

Conclusions: To associate language treatments with music therapy produces faster results.

Keywords: Developmental language disorders

PO 100

(1030) - MORPHOLOGICAL DIFFICULTIES IN PEOPLE WITH SPECIFIC LANGUAGE IMPAIRMENT

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Mora, Eva - *Castilla-La Mancha University, Spain*

Pulido, Noelia - *Castilla-La Mancha University, Spain*

Carchenilla, Teresa - *Castilla-La Mancha University, Spain*

Objectives: One of the great difficulties of people with specific language impairment (SLI) lies in the use of morphology. Although some types of morphology have been studied in this group

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(such as the flexive), it has not been possible to determine or to elaborate a concrete profile in terms of the most common morphological errors, in order to be able to base linguistic intervention on them. Therefore, the objective of this research is to investigate how people with SLI use the different types of morphology and to what degree it is altered.

Methods: The participants were 49 people diagnosed with SLI between 5 and 19 years who were evaluated in the area of morphology through the BLOC-C test. The following areas were measured: plural formation, adjectives, regular and irregular verbs, participles, comparatives and superlatives, derivative nouns, derived adjectives, personal pronouns, reflective and possessive.

Results: The results indicate that people with SLI present difficulties in all areas of morphology.

Conclusions: These data support the need for specific linguistic intervention in the morphological area and the practical implications of these findings are discussed.

Keywords: Specific language impairment

PO101

(1095) - HOW VOCABULARY ASSESSMENT INFORMS TREATMENT: A CASE STUDY IN MULTILINGUAL SLI

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Grohmann, Kleanthes K – University of Cyprus, Cyprus

Objectives: There is not much research on assessing and treating vocabulary deficits in multilingual children with SLI. Aim is to report on (i) expressive vocabulary deficits in the 3 languages of a multilingual school-aged child with specific language impairment (SLI); and (ii) whether cognates—words that share similar phonological information and identical meaning across languages (e.g., camel/καμήλα/ камила)—could be used as a vocabulary learning strategy by exploiting the phonological information in the one language as a mechanism for language (phonological) transfer to the other (untrained) languages.

Methods: The participant (I.S.) had acquired Bulgarian (mother's language) and Cypriot Greek (father's language) from birth and was exposed to English (immersion schooling) and Standard Modern Greek (classroom instruction) on a daily basis for five years.

She was assessed using an equivalent-based measure of expressive vocabulary common to her 3 languages on 3 separate occasions for each language, 10 days apart and later trained over a one-month period on 20 non-identical triple cognates that shared meaning and phonological features in the proficient language only, English, using a picture-based naming task.

Although comprehension of the target words in each language (Bulgarian, English, Greek) was normal, the results revealed a marked naming deficit across languages. Cognate therapy was provided in English by the school's special education teacher after training.

I.S. received phonological intervention only using a cueing hierarchy technique.

Results: Cross-linguistic transfer effects were evident during and after therapy, and were maintained one month post intervention. Generalization to non-treatment words was evident especially for English during and post intervention. Attention to cognates for multilingual children with developmental language impairment is a topic ripe for further investigation

Keywords: Specific language impairment, naming, cognates, phonological intervention

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PO 102

(1121) - MICROSTRUCTURE OF NARRATIVES BY RUSSIAN - ESTONIAN BILINGUAL CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT

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Padrik, Marika - *University of Tartu, Estonia*

Lahtein, Marju - *Clinic of Logopedics, Estonia*

Objectives: The aim of the research was to identify features that differentiate the narratives of bilingual children with specific language impairment (BSLI) from the narratives by typically developing bilingual children (BTD) and monolingual children with specific language impairment (MSLI).

Methods: Two different narratives, retells and generated narratives, were elicited in Estonian from 14 Russian-Estonian successive BSLI, 20 Russian-Estonian successive BTD and 17 Estonian MSLI using two different picture series and the assessment protocol. The narrative transcripts were coded and measures of cohesion, language productivity, verbal fluency, and grammaticality were compared between the groups' narratives.

Results: The results revealed statistically significant differences between groups in grammatical characteristics of narratives (the amount of morphological errors in general, of noun errors, and of grammatically correct clauses). A statistically significant difference was also found in the use of cohesive devices. Productivity and fluency characteristics were similar in the narratives of the three groups. The comparison of retell and generation task results did not reveal any advantages of the narrative type in differentiating children groups.

Conclusions: The data suggest that narration can be an ecologically valid method for studying bilingual children's communicative competence. The study confirmed that micro-level features of narratives differentiate between groups of children and thus are appropriate to be used in diagnostics. The results are useful in interpreting the performance of Russian-Estonian bilingual children during the preschool period.

Keywords: Multilingualism, - specific language impairment

PO 103

(1285) - THE INFLUENCE OF ATTITUDE AND MOTIVATION ON SECOND LANGUAGE LEARNING: THE CASE OF ADOLESCENTS LEARNING ICELANDIC AND ENGLISH

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Objectives: Studies on the acquisition of Icelandic as a second language (L2) show that over half of school-age L2 speakers score at 2 or more SD below native peers in Icelandic and further, that they score similarly in comparison to native peers in Icelandic and English in spite of not having lived in English speaking countries. One factor that might contribute to this pattern is the low economic value of Icelandic on a global scale. The goal of this study was to examine whether the Icelandic and English attainment of adolescents in Iceland is affected by their attitude towards these languages.

Methods: Participants were adolescents in grades 8 to 10 in Reykjavik schools: 27 from Icelandic-only homes (L1 speakers) and 23 exposed to another language than Icelandic in the home (L2 speakers). Detailed background information was collected on previous language exposure and socio-economic status. Participants were administered a standardized test of Icelandic (Milli mala, Thordardottir, 2011) and of English receptive and expressive vocabulary (PPVT, Dunn & Dunn, 2006 and EVT, Williams, 2007), and questionnaires addressing attitudes and motivation towards each language (adapted from Ibarra et al., 2008). Qualitative interviews were conducted to explore attitudes and current and future life goals.

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Results: Attitudes toward Icelandic were significantly lower among L2 than L1 speakers ($p=.039$). The groups did not differ in their attitude towards English ($p=.197$). For L1 speakers, attitudes were not correlated with language scores in either language; for L2 speakers, English scores were strongly correlated with attitudes toward English ($r=.653^{**}$) and Icelandic scores were marginally correlated with attitudes towards Icelandic ($r=.412$, $p=.051$).

Conclusions: Motivation and attitude contribute significantly to the language learning of L2 speakers of Icelandic. Results of qualitative interviews will be reported that shed further light on the way the participants view the two languages.

Keywords: Multilingualism

PO 104

(1274) - CHILDREN OF MIGRANTS FROM THE BALKANS BORN IN THE EU: VICTORY L2 AND DEFEAT L1

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Poposka, Ana - *Institute for the Rehabilitation of Hearing, Speech and Voice Skopje - Macedonia*

Filipova, Silvana - *Institute for the Rehabilitation of Hearing, Speech and Voice Skopje - Macedonia*

Objectives: To identify sources and factors for L2 occurrence.

To recognize what kind of words are the first ones that change from L1 to L2.

To define semantic fields with words that change most.

Methods: 1. Questionnaire 2. Descriptive method

3. Conversational analysis

3. Statistical method

Results: Expected results are:

Show which words are the most suitable for transfer from L1 to L2,

Show that media and the Internet are a serious factor in generating multilingualism.

Show the views of parents that indicate the removal of their children from their mother tongue and tradition.

Conclusions: Migration that began in the 1990s from the Balkans towards the countries of the European Union has never stopped. We already have the first generation born in the EU and they are finishing schools. It is a dominant phenomenon when children from the Balkans (speaking Bosnian / Serb / Croatian) come during their summer holidays to their homeland - to speak most of the time in the non-native language (L2), while their mother tongue (L1) is less and less familiar. Although the EU is struggling with our directives / recommendations to preserve the "small languages", the situation in this plan does not seem to work best, as large languages (above all English) have taken their positions globally in the fields of education and economics. Because of the increasing presence of bilingualism and the way of life, we will examine the mechanisms for the development of bilingualism in the Balkan population born in the EU. More precisely, based on conversational analysis, we will get an overview of the situation in the vocabulary, as well as the grammar. That is, we will see what kind of words are first "stricken" by L2, but also the types of words that are "most resistant" to L2.

Keywords: Multilingualism

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PO 106

(1257) - NARRATIVE SKILLS IN PRESCHOOLERS BORN EXTREMELY PREMATURELY

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Arancibia, Claudia - *Speech and Language Department, Medicine Faculty, University of Chile, Chile*

Objectives: To characterize the narrative performance of preschoolers that were born extremely preterm.

Methods: The participants in the study were 28 preschoolers belonging to a Polyclinic of Prematurity Monitoring in Santiago, Chile. Subjects were male and female within the age range of 4 to 5 years 11 months, presenting neither hearing loss nor neurological damage, with a history of extreme prematurity. The evaluation procedure applied was the Assessment Method of Narrative Discourse created in Chile, which consists of two sub-tests, one expressive and another comprehensive.

Results: 82.1% of the participant children with a history of extreme prematurity presented a deficit in narrative discourse, that mainly compromises the capacity to structure stories. Out of this percentage, 86.9% do not use formal categories in their narratives and 65.2% show comprehensive difficulties, particularly in inferential questions.

Conclusions: The deficit in narrative discourse is relevant in the sample studied. Considering the majority of the children are in the initial stages of narrative skill development, they still present failure to properly structure stories and show evident comprehensive difficulties.

Considering the relationship between narrative discourse and successful literacy, it is extremely important to approach the development of narrative skills in a timely manner in order to promote adequate school learning through specific intervention programs.

Keywords: Developmental language disorders, narrative discourse, extremely premature infants

PO 107

(1195) - LANGUAGE AND SPEECH DISORDERS IN KINDERGARTEN CHILDREN: STUDY OF PREVALENCE AND ASSOCIATED FACTORS

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Castro, Ana - *ESS/IPS & CLUNL, Portugal*
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Alves, Dina - *ESS/IPS & CLUL, Portugal*

Objectives: To characterize the prevalence of LSD in the ages of 3 to 5 year-olds integrated in a Kindergarten and associated factors.

Methods: Prevalence study, descriptive and correlational. Sample of convenience (n = 63) with 3 to 5-years-old children, in pre-school education on the date of the evaluation, with European Portuguese as their mother language. Language and speech were evaluated with TALC and TFF-ALPE tests. Sociodemographic and developmental information were also collected. In the analysis, in addition to the descriptive approach, the Chi-square test was used.

Results: The prevalence of LSD in this population is 76.2% (LD: 63.3%; SD: 10.2%; 26.5% of the cases are concomitant). There was a prevalence of LSD in 70% in the age group of 3 year-olds (n = 10) and 5 year-olds (n = 30) and 87% in 4-year-olds (n = 23). It was observed that 80.6% of the girls (n = 36) and 70.4% (n = 27) of the boys presented a type of disorder. The sex of the child, parents' age and schooling, perinatal factors, family size, family history of language / speech disorders, age of first words and phrases, oral habits and motor are not associated with LSD.

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Conclusions: The prevalence is higher than the one found in literature, being higher in females and in 4-years-olds. Given the discrepancy of the results, the prevalence found may be due to methodological limitations, such as the characteristics of the tests used and those of the sample itself. The variables under study do not appear significantly associated to LSD, possibly because of the homogeneity of the sample in relation to them, and may also be related to the characteristics of the study sample, which due to their specificity do not represent the population in general.

PO 108

(1031) - THE IMPACT OF THE SOCIOECONOMIC STATUS (SES) ON INFANTS' SPONTANEOUS SPEECH: A META-ANALYSIS

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Objectives: The scientific community has underlined variations in language acquisition patterns. One of the main aims among researchers is the study of the size effect of factors that influence language acquisition.

Recent interest is shown in the literature about the effect of the family's social and economic status on infants' language acquisition. There is evidence underlining a slower rate in the acquisition of linguistic milestones for infants from low SES backgrounds compared to peers from high SES.

Methods: The current study is a meta-analysis created to measure the influence of SES in infants' spontaneous speech. Spontaneous speech is considered one of the most representative measures of infants' language competence. Analysing papers in the literature, regarding inclusion criteria, linguistic measures were accepted when data was collected in spontaneous contexts. Studies with infants older than 6 years old were excluded. There were no restrictions about SES assessment, geographical areas and native languages. Nineteen papers studying the SES impact on spontaneous lexical production were found in the literature. Applying the inclusion criteria, six papers fitted the meta-analysis' aims.

Results: Statistical analysis of the current meta-analysis indicates that 9% of the variance in linguistic performances may be explained by SES, showing that SES plays a role in the variation of the different linguistic patterns among infants.

Conclusions: SES has a reliable but small effect on infants' spontaneous speech. Further works is needed with more significant samples, using shared linguistics and SES measures and assessments. Since there is an effect of SES on language development, the scientific and clinical communities are called upon to think about specific parental and school screening programs and interventions for infants from low SES income backgrounds.

Keywords: Developmental language disorders, screening, prevention, intervention

PO 109

(1039) - DO HEALTH PROBLEMS IN EARLY CHILDHOOD AFFECT SPEECH AND LANGUAGE DEVELOPMENT?

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Objectives: Common environmental factors influencing children's lives are infections where respiratory tract infections (RTI) are dominant. Young children under 5 years of age are the most likely to catch the virus. In spite of children having many RTI during the early years, a very important time for speech and language development, there have been few studies surveying the possible relationships between RTI and language development. The aim of the present study was to analyze a possible relationship between RTI during the first and second year of life and vocabulary skills at one and two years of age, together with other possible environmental factors influencing vocabulary skills at 13 and 24 months of age.

Methods: The research is a part of a cohort study, STEPS Study (Steps to the Healthy Development and Well-being of Children), where 1797 mothers and their 1827 children were recruited from a cohort of 9811 mothers. Data from 646 children with detailed information concerning RTI during the first two years of life was compared with results from the MacArthur Communicative Developmental Inventory (CDI) at 13 and 24 months of age. In the present study, we used the cut-off score of the 10th percentile most sick children.

Results: Children with a heavy burden of recurrent RTI did not have a smaller vocabulary compared to more healthy children. Instead the reported vocabulary showed a larger vocabulary for the most sick children. Female gender, the parent's socioeconomic status and level of education and chronic illness of the father had a significant positive association with vocabulary size, whereas mother's own receptive language problems as a child and if the child was in kindergarten in early age had a significant negative association with vocabulary development at 13 months of age.

Conclusions: Gender and demographical variables play a more critical role in vocabulary development at an early age than risk of RTI.

Keywords: **Developmental language disorders, prevention**

PO 110

(1442) - THE DYNAMICS OF EARLY PSYCHOPHYSIOLOGICAL DEVELOPMENT OF CHILDREN UNTIL THE 24TH MONTH OF LIFE CONCEIVED WITH INVITRO FERTILIZATION

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Objectives: For many years, it has been known that more couples cannot make the offspring through spontaneous fertilization. There are different reasons. Earlier it was considered that women were the main barrier for marital, or partner sterility, however, there are more and more cases where sterility is borne by both the man and the woman, or just the man. On the other hand, SLP practice shows a trend of enormous growth in early developmental disorders. In recent years, in regular SLP systematic examinations, we meet and then test children conceived with in vitro fertilization. Therefore, we have concluded that the data obtained through scientific research, in which we would monitor the dynamics of psychomotor and psychophysiological development in children conceived through the in vitro fertilization method, was of great importance for eventual recording of the at risk children (which IVF children are thought of being). The psychophysiological approach is an approach where a certain situation is a stressor, that

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directly affects conditions and the state of the organism as well as its psychosomatic reactivity. The focus of psychophysiological abilities is on the development of speech and language. There is the possibility of disagreements between speech and movements, which provides indications relating to various developmental disorders. Through this scientific research we decided to assess the dynamics of development, and its possible diversity and deviation in children conceived through in vitro fertilization.

Methods: *The Questionnaire for parents.*

The Questionnaire for a rough assessment of psychomotor development for children in the first year of life.

Scale for assessment of psychophysiological abilities of children 0 to 7 years old.

Results: In the process of analysis.

Conclusions: In the world, there are an increasing number of studies, dealing with the entire IVF procedure. Until now, the frequency of occurrence of certain diseases in children conceived through in vitro fertilization has been mainly investigated, but not longitudinal monitoring of their earliest development. We hope that this study is going to give us a lot of knowledge about development.

Keywords: **Developmental language disorders**

PO 111

(1192) - PREDICTORS OF COMMUNICATION DISORDERS IN EARLY STAGES OF CHILD DEVELOPMENT

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Objectives: Child development is a very dynamic process right from the early stage of reflective response as by means of movement the child will get to know the objects, will connect to other people and to the environment. The sensory integration process is the basis of praxis development. Whenever praxis processes are being synchronized with emotional processing and regulation, behavioral communicative models are generated.

Methods: All diagnostic and screening methods at an early age use the evaluation of movement and behavior. Through collecting anamnestic data on the developmental history, the most common symptoms of dysregulation in early development are - excessive crying, problems in sleep regulation and in those in the feeding process.

Results: Research shows in 295 cases that dysregulation makes it difficult for the mother to read the baby's behavioral signals and in the long run the interaction in the dyad "mother-child" changes.

Conclusions: The results show that a significant part of the cases of dysregulation behavior at an early age, have problems in sensory processing integration. Many of them subsequently (after 2;6 years) have been diagnosed with Autism Spectrum Disorder, ADHD and other communicative-related deficit nosologies. The state of dysregulation during the early stages of development is seen as a predictor of communication problems in child development and the relationship with the mother and the social environment.

In these sensitive periods, the impact methods are related to stimulating leading processes in development, such as sensory-motor mechanisms and communicative relationships with mother and family. In the concept of modern speech therapy, early detection of risks in child development is beneficial to the prevention of communication disorders.

Keywords : **Developmental language disorders, Autistic spectrum disorders, -prevention, early childhood, sensory integration, dysregulation, bonding**

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PO 112

(1049) - TESTING PRE MATHEMATICAL SKILLS – A PILOT STUDY

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Blaži, Draženka – Croatian Logopedic Association LOGOPEDIC ASSOCIATION, Croatia

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Objectives: One of the key factors for successful mathematical learning is pre-mathematical skills. Counting, classification, comparing and equalization, instruction following, orientation, visualization, visual grouping and assessing are necessary for the appropriate adoption of mathematical concepts. In Croatia there are no standardized measuring instruments for the assessment of early (pre)mathematical skills in children. The goal of this pilot research was to examine the metric characteristics of our Pre-mathematical Test designed according to Alison Breners' model published in a book "Mathematics without tears" by M.Sharma.

Methods: The sample consisted of 90 children aged from 4;00 to 7;00, divided into 3 age groups (4;00-4;11, 5;00-5;11, 6;00-7;00 years of age) of 30 children each. Testing was conducted individually. The child had to sort, compare, equalize, visually group, estimate quantity and add up given objects. Basic statistical parameters are given for each of the summatic variables with asymmetry and flattening coefficients. Normality in their frequency distribution was tested with the Kolmogorov Smirnov and Shapiro- Wilk tests. To determine diagnostic validity, data was processed in a program for factor analysis under a component model. The metric properties of the whole Test and every single particle were calculated.

Results: The frequency distribution of the summatic variables in the Pre-mathematical Test deviate from the Gauss curvature, while the metric characteristics of the whole Test and single particles (with the exception of the particle Mass conservation) are within the range of satisfying values. It is possible that inclusion of a greater number of examinees would contribute to slight differences in the results considering the stated particle, which would then require seclusion or further analysis.

Conclusions: However, the given results permit us to use this Test in clinical practice with the purpose of evaluating the developmental stages of pre-mathematical skills in the preschool age.

Keywords: Assessment, pre-mathematical skills, preschool age, mathematical concepts

PO 113

(1281) - RELATIONSHIPS BETWEEN LANGUAGE-SPECIFIC DISORDERS, EXECUTIVE FUNCTIONS AND DISORDER OF MOTOR COORDINATION IN PRE-SCHOOL ITALIAN CHILDREN.

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Cacopardo, Ilaria - Studio Roiate, Rome, Italy; 4 - Eirene' Project, Rome, Italy

Gazzellini, Simone - Child Neurorehabilitation Unit, "Children's Hospital Bambino Gesù, S. Marinella, Rome, Italy

Objectives: Children with "specific" language disorder (SLI) are characterized by very varied performance profiles that put in question its specificity (Ullman, 2004, 2005; Conti Ramsden 2010, Leonard, 2014). Many studies also show the simultaneous presence of a deficiency in performance functions and motor coordination in infants with SLI (Hill, 2001; Bishop, 2002; Marton, 2008; Henry, 2012). The aim of this study is to verify the presence in children with (SLI) of an executive deficit and motor coordination.

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Methods: We investigated linguistic skills, motor coordination abilities and executive functioning abilities in a sample of 20 children, aged between 4 and 6 years, using standardized test batteries for the Italian language.

Results: We are still working upon definitive results. Our preliminary data confirm the simultaneous presence of deficits of a different nature in children with SLI: motor coordination deficits, executive deficits and linguistic deficits.

Conclusions: According to our current state of knowledge, children with SLI seem frequently characterized as having a specific phonological deficit, accompanied by a motor coordination and executive deficit. These results also confirm that the treatment should be integrated to the non-verbal cognitive aspects. Finally, they suggest the need for assessing children with SLI with an assessment that concerns not only verbal skills.

For the future, it will be useful to check the evolution of such comorbidity at school age.

Keywords: **Developmental language disorders**

PO 114

(1221) - CAPTURE PRAGMATIC SKILLS IN CHILDREN

Spreer, Markus - *University of Leipzig, Germany*

Sallat, Stephan - *Martin Luther University Halle-Wittenberg, Germany*

Objectives: Describing communicative and pragmatic skills in children with and without language impairment between 1 and 9 years poses a challenge for therapists and researchers (Adams, 2001). Especially the standardised capturing of different aspects belonging to pragmatic and communication in short time is still an unsolved problem especially in German (Achhammer, Büttner, Sallat & Spreer, 2016). Developmental data are often only available for certain age groups (vs. longitudinal data) - developmental processes are not visible.

Methods: Aspects of current instruments (Interviews and Questionnaires) were transformed into a likert-scale-based instrument for parents and teachers (day care, preschool, school). During the process different samples of children were used to validate the quality of the focussed items [Sample 1: preschool children (1-7 years, n=333), SLI children (4-7 years, n=63); Sample 2: preschool children 4-6 years (monolingual: n=146 vs. bilingual: n=303)]. Further data are being collected continuously.

Results: The developmental increase of pragmatic skills can be shown with this instrument, as well as differences in SLI and bilingual children. However, the results do not reveal the theoretic based structure, so that the interrelationship between pragmatic skills and cognitive as well as social-emotional skills is still unclear.

Conclusions: Diagnosing specific components of pragmatics and their interrelationship to other developmental areas is still a challenge for speech language therapists and the research on language acquisition, as well as the consideration of pragmatic based writing and literacy skills in school.

Key words : **Developmental language disorders, pragmatics**

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PO 115

(1144) - WORD AND NON-WORD REPETITION IN CYPRIOT-GREEK SPEAKING CHILDREN WITH DLD

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Polycarpou, Andria - *SLT, Limassol, Cyprus*

Objectives: A number of previous studies have shown the poor non-word repetition ability of children who experience Developmental Language Disorder (DLD). As such, the task has been postulated as a potential clinical marker for identification of this population and has been incorporated as a sub test in several diagnostic tools.

For Cypriot Greek (the variety of Greek language under examination) (CG) both word and non-word repetition tasks, which include items that are consistent with the phonetic and phonological characteristics of CG, have been examined in order to evaluate their utility in the identification of children with language impairment. The current study has also examined qualitative differences in participants' performance, such as the number of correct consonants produced by children in terms of the phonotactic characteristics of each word.

Additionally, participants' performance is correlated with their performance on a complex sentence repetition task.

Methods: A total of 38 bilingual CG speakers were divided into four groups: two groups of children with DLD and two groups of age-matched typically developing (TLD) children; 5-year-olds in the younger and 7-year-olds in the older groups.

Results: The results showed that older children with DLD performed significantly poorer on both tasks, whereas no difference was detected between young children with DLD and their TLD peers. The comparison of groups with the same language status, showed significant improvement in real word repetition but no improvement was found on non-word repetition. The diagnostic accuracy of the non-word repetition task was validated, since regression analysis showed the task is sensitive and specific enough to identify children with DLD. Lastly, non-word repetition was found to be correlated with the performance of all participants on a sentence repetition task.

Conclusions: A non-word repetition task has the potential to be used as a screening task in order to identify children whose language needs to be evaluated further.

Keywords: Developmental language impairment, bilingual children, identification, diagnosis

PO 117

(1326) - DEVELOPING A NOVEL SYSTEM TO SUPPORT VOCABULARY ACQUISITION IN CHILDREN WITH CCN: AN ETHNOGRAPHIC STUDY

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Waller, Annalu - *University of Dundee, UK*
Zhang, Jianguo - *University of Dundee, UK*

Objectives: The aim of this research is to investigate a system to facilitate more natural and timely vocabulary acquisition in children with CCN. Computer vision technology (CV) combined with a child-friendly interface will be the basis for the envisaged system with the first author currently exploring the potential of Densecap. It is hypothesised that CV automation harnessed in this way may enable and enhance early intervention (EI), with positive implications for vocabulary acquisition. A secondary aim of this study is to apply and explore User Centred Design (UCD) approaches in developing the technical tool described.

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Methods: The focus of this presentation is upon the first phase of the research, an ethnographic investigation involving the collection and analysis of data reflecting current practices within a host special education school.

(i) Identifying vocabulary acquisition strategies;

(ii) Mixed methods of participant observation, field notes, and interviews with staff undertaken in 2017;

(iii) Participants included: 175 pupils, 30 teachers, 3 SLTs, and various support staff;

(iv) Vulnerable group(s) with a diverse range of cognitive, developmental, physical disabilities, presenting several ethical and logistical challenges.

Results: As a project currently mid-way through active data collection, initial results reveal: The variety of assessment tools in use at the host school.

A range of low and high tech AAC tools, access methods and strategies.

Several intervention strategies.

Common themes emerging in interviews with SLTs and teachers in relation to data collection and UCD within the school setting.

Practical solutions for the curation of research data and artefacts in a relatively chaotic environment.

Conclusions: This study explores the feasibility of conducting UCD involving children with CCN. Consultation with research partners and teachers yielded ways to address barriers to understanding children's experiences of interacting with an AAC system. These methodological insights will inform future research into a technical tool supporting EI and vocabulary development.

Keywords: Intervention, developmental language disorders

PO 118

(1316) - CONVERSATIONAL ANALYSIS OF CHILDREN WITH CEREBRAL PALSY: A MULTIPLE CASES STUDY

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Ciceri Cesa, Carla - Universidade Federal de Santa Maria, Brazil

Brandão, Lenisa - Universidade Federal do Rio Grande do Sul, Brazil

Objectives: The Speech-Language Pathologist can and should contribute more actively and more theoretically grounded in the linguistic aspects of the use of alternatives to oral communication. Investigative practices of language functioning in Augmentative and Alternative Communication are needed. The aim is to examine the conversational pattern of children with Cerebral Palsy and their communicative partners in speech-language therapy sessions.

Methods: Multiple, descriptive, cross and contemporary case studies. Three consecutive therapeutic sessions of three children with expressive resources were filmed in order to perform a conversational analysis.

Results: The communicative means used by both children and partners were oral, oral assisted, gestural, vocal and pictures. Adjacent pairs (protest, inquiries and requests) were more successful as the children are more dependent linguistically on conversational partners. Their partners presented directive and non-directive acts.

Conclusions: The different interlocutors evidenced an asymmetric pattern in the linguistic interaction with the children, with excessive use of the oral medium. The speech acts of the interlocutor were predominantly directive and the children responded better to orders and requests, which demand an execution and a response. Closed inquiries using the Augmentative and Alternative Communication seemed to facilitate the children's responses, while open-ended questions seemed unfavorable. There was a greater use of less successful inquiries than inquiries that produced adequate responses by Speech-Language Therapists in this study, resulting in poor communication. In this sense, it is recommended that the Speech-Language Therapist use more

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frequently closed inquiries of yes/no type via Augmentative and Alternative Communication, as well as closed inquiries that offer two alternatives of answers via Augmentative and Alternative Communication, besides providing the Augmentative and Alternative Communication resource for the child's expression, thus favoring the development of their language competence.

Keywords: Cerebral palsy

PO 119

(1416) - AUGMENTATIVE AND ALTERNATIVE COMMUNICATION INTERVENTION IN CHILDREN AND YOUTH WITH MULTIPLE DISABILITIES AND DEAFBLINDNESS

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Maia, Fátima - FCS/ESS - Universidade Fernando Pessoa, Oporto, Portugal

Meneses, Rute F. - FCHS/CTEC/FP-B2S/HE - Universidade Fernando Pessoa, Portugal

Vaz Freitas, Susana - FCS/ESS - Universidade Fernando Pessoa, Oporto, Portugal

Objectives: To analyze and systematize the literature regarding intervention with augmentative / alternative communication (AAC) with children and youth with Multiple Disabilities (MD) and Deafblindness (DB), in terms of how to implement and evaluate their effectiveness.

Methods: Systematic review of the literature, considering the conceptualizations established by the PRISMA Statement. The research was carried out through the data bases SciELO, LILACS, PubMed and B-On, until July 31st, 2017, using the terms "Multiple Disabilities", "Deafblindness" and "Augmentative and Alternative Communication", in Portuguese and English, combined with the Boolean operators "AND" and "OR". The articles were carefully analyzed, based on inclusion and exclusion criteria.

Results: Nine articles were selected, one referring to AAC intervention in children with DB and eight in children/youth with MD. The use of AAC was approached in the school and work contexts, considering teachers, therapists, parents, work/school colleagues and researchers as communication partners. A variety of media and programs were used (A-PMT, "Picture Dictionaries", VOCA, COMPIC symbology and tangible signs), the implementation of which took place mainly in individual sessions. Intervention with AAC always showed very positive results, and the participants increased their communicative skills, regardless of the program used. Evaluation of the AAC implementation presented some discrepancies, since they were not unanimous about the parameters evaluated, the forms of information registration, the moments of data collection and the analysis performed.

Conclusions: Although the results are indicative of the importance and effectiveness of AAC intervention in the communicative performance of children and youngsters with MD and DB, further research is needed to demonstrate the impact of the use of this tool at the level of communicative functionality, in the different contexts of life, with different interlocutors and in the main daily activities of its users.

Keywords: Developmental language disorders, multiple disabilities, deafblindness, Augmentative and Alternative Communication

PO 120

(1169) - DIGITAL READING AND VISUAL FUNCTIONAL PATTERNS ASSESSED WITH EYE-TRACKING

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Ribeiro, Margarida - SCML/Centro de Reabilitação Paralisia Cerebral Calouste Gulbenkian, Portugal

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Pinto, Inês - *SCML/Centro de Reabilitação Paralisia Cerebral Calouste Gulbenkian, Portugal*
Nunes, Maria Vânia - *Universidade Católica Portuguesa, Portugal*

Objectives: The aim of the study is to identify visual gaze processing patterns and their association with reading performance of Portuguese words and sentences in children with special educational needs.

Methods: 12 school aged children with special needs without phonological or cognitive impairment constituted our cohort. The age range was from 6 to 15 years.

Firstly, cognition and language were assessed with the WISCIII (*Escala de Inteligência de Weschler para crianças - Terceira Edição*) and the GOL-E (*Grelha de Observação da Linguagem - Nível Escolar*) respectively, for the inclusion criteria of the sample.

The study is composed of the assessment of reading performance (ALEPE) recorded with Gaze Viewer software using eye-tracking technology.

Results: The results are currently in the analysis process with the prospect of being concluded in December 2017.

Conclusions: Reading performance is correlated with both visual and phonological abilities. It is possible that children without phonological impairments may present difficulties on their visual processing skills that will certainly affect their reading learning abilities.

We expect that the visual patterns with less fixations points and fewer regression gaze tracking will be directly associated with a higher level of reading performance skills.

In children with special educational needs with no phonological impairment, it is fundamental to analyse such visual patterns that will lead to a better choice of specific strategies and will help to create an individual intervention plan.

Keywords : Assessment, evidence-based practice

PO 121

(1439) - CEREBRAL PALSY AND SPEECH THERAPY: RESULTS IN AQUATIC INTERVENTION SETTING

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Objectives: To verify if the intervention of a speech therapist in an aquatic setting promotes the improvement of communication in cases of cerebral palsy.

Methods: An exploratory design using a cross-sectional case study was carried out, in which a 10-year-old female child with a spastic cerebral palsy was included. M's speech intelligibility was limited by decreased range, strength and coordination of oral musculature. She could only say "mama", "papa" and "ahh" without complete lip closure. These words were vocalized with decreased breath support and volume. In initial aquatic sessions, she required maximal assistance for all movements. She was only able to maintain lip closure and sustain a sound for 1-2 seconds. When her face came close to the water, she demonstrated a strong startle response, which frequently caused bouts of coughing as small amounts of water were inhaled.

Results: After one year, M has progressed significantly in all aspects of therapy. In the pool, she initiates putting her face in the water with lips closed and holds her breath for about five seconds. When she loses her balance from standing or sitting and her face goes into the water, she now blows bubbles and requires only minimal to moderate assistance to recover.

Conclusions: M's case is one of many stories that we have encountered and can feel the benefits of aquatic therapy. She is rolling in both directions using controlled flexion of her neck and trunk while maintaining lip closure. M demonstrates increased ease of reach, grasp, and release patterns. The child has gained new skills through play and social activities that promote functional movement, communication, balance, and independence. The type of methodologies and strategies, like the one presented, suggest positive qualitative results, however, they need more research and

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comparison between subjects, therapists and even between institutions, with a larger sample size that allows significant conclusions.

Keywords: Neuromuscular disorders, Cerebral palsy, Dysarthria, Intervention in aquatic setting

PO 122

(1140) - THE EFFECTS OF SONG LEARNING ON AUTOBIOGRAPHICAL MEMORY, COGNITIVE ABILITIES AND ANXIETY IN PATIENTS WITH ALZHEIMER'S DISEASE

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Tillmann, Barbara - Lyon Neuroscience Research Center, France

Leveque, Yohana - Lyon Neuroscience Research Center, France

Objectives: Numerous neuropsychological studies have investigated the effects of music on patients with Alzheimer Disease. Findings suggest that music can reduce anxiety and improve behavioral symptoms, but also stimulate the cognitive abilities of patients. In the present study, our aim was to measure the impact of learning a song on cognitive abilities and anxiety in 12 patients with Alzheimer Disease at the mild stage.

Methods: For each patient, the training material was one favorite song of the patient and one positive autobiographical memory chosen by the patient. These two materials were associated to create a new song that was personalized for the text and based on a familiar melody. This song was taught to the patient throughout 10 sessions (20 min. twice a week). Testing sessions to assess cognitive abilities and anxiety (using the EFCL -a French speech and cognitive abilities test and the STAI-Y -anxiety scale) were performed before the training, after the training and after a period with no training. The training period and the period with no-training were proposed in a counterbalanced order between participants.

Results: After excluding one emotionally unstable patient, results showed a significant improvement in the retrieval of the autobiographical memory and in general cognitive abilities after the song training compared to after the period without training. In contrast, the anxiety measure was not influenced by the training periods.

Conclusions: Overall, our study suggests that the creation and use of personalized songs is a motivating tool based on music, able to efficiently stimulate autobiographical memory and general cognitive abilities.

Keywords: Neurodegenerative disorders, acquired language disorders, dementia, intervention

PO 123

(1076) - CAN PLAYING A GAME IMPROVE COMMUNICATION ON FOOD FOR PEOPLE LIVING WITH DEMENTIA?

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Van Den Berg, Julia - Hanze University of Applied Sciences Groningen, Netherlands

Objectives: To preserve pleasure during meal times, person-centred food and drink intake for people living with dementia is necessary. Effective communication between people with dementia and caregivers in nursing homes is essential to realize this person-centred care.

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However, communication problems in people with dementia have profound implications for effective interactions. Serious games are used to stimulate communication and social interaction in people with dementia and their caregivers. In this presentation, results of the first phase in the design cycle of the prototype of a food game are reported.

Methods: The food game is intended for one player (the person with dementia) and a facilitator (the caregiver). It is a tile matching game in which the player builds 3D food products placed on two separate tiles (such as carrots or lettuce). The caregiver gives the player enough time to match the tiles, provides positive feedback, and encourages the player in a variety of ways. The prototype of the game has been tested in a nursing home by asking caregivers to fill in a questionnaire on non-verbal communication before and after playing the game. A control group who did not play the game, were asked the same questions.

Results: Ten caregivers who played the game and six caregivers who did not play the game filled in the survey twice. Playing the game yielded some differences in both verbal and non-verbal communication about food related subjects. Caregivers were more aware of their non-verbal communication after answering the questions from the questionnaire.

Conclusions: In future research both people with later stage dementia and staff members will be engaged as the intended beneficiaries and users of the game. The food game will be considered effective if it reaches its goal of improving verbal and/or non-verbal communication about food preferences between the person with dementia and the caregivers.

Keywords: Dementia, prevention,- intervention

PO 124

(1141) - VALS: EVALUATION OF READING AND WRITING DIFFICULTIES IN ADULTHOOD

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De Cagno, Anna Giulia - *Aslrm3, Italy*

Mantione, Solene - *C.E,Lu.R, Italy*

Objectives: Learning disability (LD) is a chronic disorder, whose expression is modified in relation to age and environmental requirements. Its prevalence is higher in primary and secondary levels, but tends to persist throughout life to be a potential factor of vulnerability. By reason of a lack of standardized procedures and instruments that can be used over 18 years, we have found it useful to fulfil a series of tests, aimed at the evaluation of cognitive and linguistic skills, in adulthood. The assessment battery used in this study, has been adapted from a French test (Evalad 2001), and the purpose of this study was to determine the normative data relating to cognitive and linguistic skills in an adult population with different age, sex, and educational level.

Methods: The population of this study consists of 200 people, aged between 18 and 70 years old, native Italian speakers, with different degree. To reveal the data about the normative sample, inferential statistics were used. To investigate the efficiency of the battery, it was submitted to 40 adult dyslexics, then we compared the results.

Results: We obtained statistically significant data for the most part of the trials, so it seems that the battery is useful for the evaluation of cognitive and linguistic skills in adulthood.

Conclusions: In a European context it could be useful to have shared instruments, so we suggest the adaptation of this battery in other languages.

Keywords: Dyslexia

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PO 125

(1087) - VINTAGE : VIDEOS TO STUDY INTERACTION IN AGEING – A MULTIMODAL CORPUS TO CHECK ON PRAGMATIC COMPETENCE FOR FRAIL ELDERLY PEOPLE.

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Boutet, Dominique - Rouen University, France

Lacheret-Dujour, Anne - Paris Nanterre University ; - Grandin, Cyril - Lille University

Objectives: Our study VintAGE offers an analysis of the multimodal aspects of vulnerable language aging (Mild Cognitive Impaired profile) by examining a longitudinal corpus made up of intergenerational exchanges filmed in ecological situations. The study focuses on the identification of pragmatic markers. We hypothesize that the identification of multimodal pragmatic markers, produced by people who are a priori at risk of developing dementia or of anchoring themselves in pathological aging, can help us to characterize inter-individual variations and atypical compensatory communication skills in the aging process.

Methods: The data processing consists of 6 steps : (i) development of interview protocols, inspired both by those written in CorpAGEst (Bolly & Boutet, 2016) and our clinical experience, (ii) selection of participants, collection of field data for 14 months, sampling phase, digitization of video and audio data and their editing on the ORTOLANG french scientific platform, (iii) transcription and alignment of audio data, (iv) annotation of audio and video data, (v) multimodal corpus analysis, and (vi) systematic storage of original sources and annotated files.

Results: From the results of our first analyses on the multimodal communicative features that characterize language aging, we expect that verbal deficits are accompanied/compensated by an increase in non-verbal acts with a specialization of non-verbal manifestations. The more complex the verbal content becomes, the more the elderly person uses deictic gestures and intersubjective solicitations addressed to the interlocutor (signs of co-agreement, shared knowledge, interactive gazes) in order to keep communicating.

Conclusions: The observed trends commit us to thinking of language as a resource for detecting dementia signs and understanding compensation strategies. The significance of pragmatic marker functions in elderly speech, as well as approaches induced by linguistics and specifically pragmatics, contributes to broaden the urgent request to develop non-medicinal and psychosociable methods and evaluation tools for vulnerable old people to ensure their well-being.

Keywords: Screening, – cognitive impairment

PO 127

(1135) - SPEECH AND LANGUAGE ASSESSMENT TEST FOR THREE TO FOUR YEAR OLD ESTONIAN CHILDREN

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Raudik, Signe - University of Tartu, Estonia

Objectives: Taking the specificity of language into consideration makes adapting and translating language tests difficult. Although there is a small number of Estonian language speakers, SLTs have an urgent need for original language tests. Age 3-4 is the very last term for language intervention to begin. The purpose of the project was to construct a standardized screening test to identify Estonian children with language delay who need complex language assessment and intervention.

Methods: A test containing sentence comprehension, sentence production and repetition task, structured elicitation task of grammatical forms and vocabulary was constructed.

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Data from 582 children were used in the standardization and validation process of the test: 85% typically developing children (TD) and 15% children with delayed language development (DL). All children were aged between 2.11 and 4.5. The children with delayed language development were identified by an SLT.

Results: Construct validity of the test was assessed by the Mann-Whitney U-test and results showed that the test differentiated the results of the 3- and 4-year-old children, as well as TD and DL children ($p < 0.001$). The content validity was measured by two indices – S-CVI and S-CVI/Ave – and with feedback from speech and language therapists. The content validity indices were .95 and .98. Correlation coefficients of test-retest reliability were .90; internal consistency reliability .70–.90; convergent validity .40–.60 (based on Reynell’s test).

Conclusions: According to these statistical characteristics, the test is appropriate for screening purposes of children with language delay, but final confirmation of language impairment will be made through complex assessment procedures by the SLT.

Keywords: Developmental language disorders, screening

PO 128

(1244) - VALIDITY OF THE EARLY LANGUAGE SCALE (ELS) FOR THE IDENTIFICATION OF DEVELOPMENTAL LANGUAGE DISORDER

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Van Der Schans, Cees P. - Department of Health Psychology, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands

Luinge, Margreet R. - Research Group Healthy Ageing, Allied Health Care and Nursing, Hanze University Groningen, Applied Sciences, Groningen, The Netherlands

Objectives: Developmental language disorders (DLD) have a major impact on the child, the child’s family, and society as a whole. Unfortunately, only a small part of the children who could benefit from early intervention services are actually identified before reaching school age. Community paediatric services require a brief and valid tool to identify children with DLD early. We therefore developed the ‘Early Language Scale’ (ELS), a short questionnaire for parents with items regarding the language development of their child (i.e. language development, described by the domains of language comprehension, word production, sentence production, and communication). The aim of our study was to assess the validity of the ‘Early Language Scale’ (ELS), for the identification of DLD in children.

Methods: We recruited 265 parents and their children (aged 1-6) via kindergartens, well-child clinics, and primary schools. Parents filled out the ELS, and we tested the children with extended language tests (language comprehension, word production, sentence production, communication) as a reference standard. A composite score of two reference tests below -1SD or one reference test below -1.5SD was used as the criterion. The criterion validity (ROC analysis) and predictive values of the scale were determined.

Results: The area under the ROC curve was 0.88, implicating a good validity. Of the children, 11.3% had a deviant score on the composite score of the reference tests. The cut-off of the ELS was optimal at the 15th percentile, resulting in 12.8% of the children having a deviant ELS score. Sensitivity and specificity were 0.60 and 0.93, respectively. Positive predictive value was low (0.53), negative predictive value was high (0.95).

Conclusions: The ELS is a valid brief tool for the identification of DLD in children (aged 1-6), that can support the early identification of DLD. Further research is needed on its use in routine practice.

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Keywords: Developmental language disorders, specific language impairment, screening, prevention

PO 129

(1024) - APP USE TO INVESTIGATE PHONOLOGICAL DISORDER IN THE ROMANIAN LANGUAGE

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Objectives: Mobile devices and specific apps developed for speech and language therapy offer a new perspective in this field. The aim of this study was to investigate the most common phonological disorder in the Romanian language and to identify the most common affected sounds category using the app "Paşi prin lumea sunetelor!" (Steps in the world of sounds).

Methods: 408 children were investigated using the app "Paşi prin lumea sunetelor!". This app was developed to diagnose phonological disorders in the Romanian language. There were 245 boys and 163 girls, 4 children aged 0-3 years old, 219 children aged 3-6 years old and 185 children aged 6-9 years old in this study. The speech therapists recorded data regarding omission, distortion and/or substitutions of all the Romanian language sounds in initial, middle and end position in different words represented by pictures on the app.

Results: The results identify the most common phonological disorders and the most affected sounds category in the Romanian language. Substitution is the most common phonological disorder (mean 9.3768, std. deviation 14.43368, std. error mean .71457). The result demonstrated that alveolar sounds are the most affected (mean 60.4240, std. deviation 38.34292, std. error mean 1.89826) followed by affricate sounds (mean 64.8169, std. deviation 32.60304 and std. error mean 1.61409 and the least affected sounds are opened sounds. The most frequent language disorder found in this study was polymorphic dyslalia (38.7%) followed by simple dyslalia (38%).

Conclusions: The most common phonological disorder in the Romanian language for this sample is substitution. Alveolar sounds are the most affected sounds, while opened sounds proved to be the easiest to be pronounced. The results of this study cannot be generalized due to the small sample represented by this study, therefore new researches are needed in this field. The implications of using apps in speech and language therapy are discussed.

Keywords: Phonological disorders, app, substitution, alveolar sounds, dyslalia

PO 130

(1426) - A TEST OF PROSODIC ABILITIES FOR EUROPEAN PORTUGUESE SPEAKERS

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Frota, Sónia - Centro de Linguística, Faculdade de Letras, Universidade de Lisboa, Portugal

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Objectives: Given the absence of a procedure for the assessment of Portuguese prosody throughout the school years, we adapted an English test – the Profiling Elements of Prosodic Speech - Communication (PEPS-C; McCann & Peppé, 2003) – for use with European Portuguese speakers (Filipe et al., 2017).

Methods: The PEPS-C includes tasks at two levels: formal and functional. Whereas the formal level is related to acoustic skills, the functional level assesses the ability to understand and express prosody in the context of four communicative functions: (a) affect (liking vs. disliking), (b) turn-end (questions vs. statements), (c) chunking (prosodic phrasing), and (d) focus (contrastive stress conveyed by accent placement, i.e., nuclear prominence on a particular word). With the Portuguese version of the PEPS-C, we analyzed developmental changes of several components of prosody between 5 and 20 years of age (N = 131).

Results: Results showed prosodic performance improving with age. Cross-linguistic comparisons also showed that linguistic form–meaning relations do not necessarily develop at the same pace across languages. Some prosodic contrasts are hard to achieve for younger Portuguese-speaking children compared to younger English-speaking children, namely the production of chunking and focus.

Conclusions: The PEPS-C can be useful for scientific and clinical purposes offering a valuable tool for comparisons across different languages and clinical groups (e.g., Williams syndrome and high-functioning autism).

Keywords: Clinician-reported outcome measures (development or crosscultural adaptation and validation), Child language disorders

PO 131

(1457) - A PROCEDURE FOR MORPHOSYNTACTIC ANALYSIS OF EUROPEAN PORTUGUESE SPEAKING CHILDREN'S SPONTANEOUS LANGUAGE SAMPLES

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Marques, Carolina - Escola Superior de Saúde – Instituto Politécnico de Setúbal (ESS/IPS), Portugal; - MR Terapias, Portugal

Dôro, Catarina - Escola Superior de Saúde – Instituto Politécnico de Setúbal (ESS/IPS), Portugal; - Relicário de Sons, Portugal

Objectives: We aim at presenting an adapted and validated version of LARSP - Language Assessment, Remediation and Screening Procedure for European Portuguese (EP) - LARSP-PE (Castro, Marques & Dôro, 2017). LARSP-PE includes a chart for the analysis and register of the morphosyntactic development characteristics of spontaneous speech divided into seven stages, and enables the identification of a linguistic profile for children from 9 months to 4 years and 6 months.

Methods: Sixteen samples of spontaneous speech were selected from two EP speaking children with typical development for each age group, aged 9 months to 4 years and 11 months. The definition of the morphosyntactic development scale involved an analysis and counting of the frequency of occurrence of morphosyntactic structures and categories in each age group at the word, phrase and clause levels, in line with the original version of LARSP (Crystal, Fletcher, & Garman, 1976).

Results: The LARSP-PE chart is organized into two dimensions; horizontally, the detailed characterisation of the structures of EP at word, phrase and clause levels present in morphosyntactic development; vertically, the morphosyntactic acquisition stages - seven stages from 9 months to 4 years and 11 months.

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Conclusions: The LARSP-PE chart can be used as a complement to the assessment of language in the morphosyntactic domain for preschoolers. Moreover, it is a valuable tool for the assessment of Language Impairment since it allows one to characterize the spontaneous speech of children systematically and can provide a more precise and accurate diagnosis and guidance for intervention.

Keywords: Specific language impairment, screening, developmental language disorders, intervention, clinical-reported outcome measures (development or cross-cultural adaptation and validation)

PO 132

(1458) - FROM THE ASSESSMENT OF SPEECH SAMPLES TO INTERVENTION IN LANGUAGE IMPAIRMENT OF EUROPEAN PORTUGUESE SPEAKING CHILDREN

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Objectives: We aim at showing that a characterization of the morphosyntactic competences of children with Language Impairment (LI), using a procedure for morphosyntactic analysis of European Portuguese speaking children's spontaneous language samples, allows a clearer insight into their (dis)abilities in terms of language development and will enable more effective interventions.

Methods: Spontaneous speech samples of European Portuguese speaking children with LI were collected and transcribed, using CHILDES - Child Language Data Exchange System. All the utterances of the language samples were analysed following the categories proposed by LARSP-PE (Castro, Marques & Dôro, 2017): (un)grammatical, (un)intelligible or (in)complete, followed by a morphosyntactic analysis at the sentence, phrase and word-levels.

Results: The data collected is explored in order to assess the sensibility of the LARSP-PE for children with LI, as well as to better characterize their linguistic profile and the way it contributes to the assessment and intervention planning of these children.

Conclusions: The LARSP-PE procedure is a valuable tool for the assessment of Language Impairment since it allows one to characterize the spontaneous speech of children systematically and can provide a more precise and accurate diagnosis and guidance for intervention.

Keywords: Developmental language disorders, specific language impairment, screening, intervention, clinical-reported outcome measures (development or cross-cultural adaptation and validation)

PO 133

(1339) - THE ROSSETTI INFANT-TODDLER LANGUAGE SCALE (RITLS) - TRANSLATION AND VALIDATION FOR EUROPEAN PORTUGUESE

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Objectives: The aim of this study consists of the translation and adaptation of the Rossetti Infant-Toddler Language Scale (RITLS), as it fulfils the necessary requirements to maximize parental participation in the assessment and management of children's abilities from birth through 3 years of age, in the developmental domains of hearing, language and speech, communication and behavior and cognition.

Methods: The RITLS is a criterion-referenced instrument intended to evaluate the communication and interaction skills of children from birth to 3 years of age. This scale assesses skills in a variety of areas, including interaction-attachment, pragmatics, gesture, play and language comprehension and expression in children. It can be administered using a combination of observation, elicitation, and through the reporting of behaviors done by the parents. The RITLS results are plotted at three-month intervals, highlighting the strongest and the most troubling areas in a given child. Currently, the handbook provides severity rating guidelines, which assist the examiner in reporting the clinical findings to parents and caregivers, and which can assist in the development of intervention programs.

For the translation and cultural-linguistic adaptation of the evaluation instrument a methodology with standard steps was adopted, which included: preparation, translation, reconciliation, retroversion, retroversion analysis, pre-test, pre-test results analysis, final revision, final version and report.

Results: To date, it was only possible to complete the precursor stage of the pre-test and analysis of the results, among the previously enumerated steps. Therefore, the following RITLS resources were translated and retro-translated: Registration Form; Parent Questionnaire; Parent Interview Guide; Application Manual.

Conclusions: At the time of the congress it shall be possible to present the complete process of validation and the results of the ongoing pilot study.

Keywords : Clinical-reported outcome measures
(development or cross-cultural adaptation and validation)

PO 134

(1403) - TRANSLATION AND CONTRIBUTION TO THE VALIDATION OF THE "VFSS TEMPLATE FOR INFANTS AND CHILDREN CONSUMING PUREES THROUGH TABLE FOODS"

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- *Centro Hospitalar e Universitário de Coimbra, Portugal*

Objectives: To translate and contribute to the validation of the VFSS Template for Infants and Children Consuming Purees Through Table Foods, a tool used to study the deglutition, by videofluoroscopy, of children in the food's diversification stage.

Methods: Methodological study divided in two phases: a) translation through the translation and back translation technique B) adaptation and contribution for the validation, based on a Delphi's panel. The Delphi's panel was constituted by four experts and had analyzed both quantitatively and qualitatively (collecting opinions and suggestions) the translated version of the tool. Its validity was determined through the Intraclass Correlation Coefficient (ICC) and the Content Validity Index (CVI) both of individual items (I-CVI) and of the overall scale.

Results: As a result of the translation's phase, a consensual version was obtained. That version was submitted to the Delphi's method that took three rounds. As a consequence of this analysis, the translated version was modified and a user's manual was created. The final tool (registration sheet and manual) had a CVI that varied between 0.89 and 0.98, on the different aspects that were analyzed. Its SCVI/ Ave was 0.98 and its SCVI/ UA was 0.78, both in individual items (I-CVI) and in the overall scale.

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Conclusions: The Portuguese version of the VFSS Template for Infants and Children Consuming Purees Through Table Foods presents good levels of agreement and validity of content. The present study allowed the translation and contributed to the validation of the tool. However, further study must be made until this tool can be used in clinical practice and in investigation.

Keywords: Clinical-reported outcome measures
(development or cross-cultural adaptation and validation),
- feeding/swallowing disorders

PO 136

(1447) - REINFORCING THE NEED OF SPEECH AND LANGUAGE THERAPY IN FEEDING AND SWALLOWING DISORDERS AT NEONATAL AND PEDIATRIC UNITS

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Caçoeiro, Joana - Hospital D. Estefânia/Mac, Portugal

Reis, Raquel - Hospital D. Estefânia/Mac, Portugal

Objectives: The first aim of this study was to characterize the type of feeding and swallowing disorders in Neonatal and Pediatric Units. The second aim was to characterize the Speech and Language Therapy (SLT) intervention in multidisciplinary team work.

Methods: A descriptive, retrospective, cross-sectional study was carried out. Clinical data of 264 children aged less than 6 years with feeding and swallowing disorders were followed in Neonatal and Pediatric Units (Hospital D. Estefânia e Maternidade Alfredo da Costa, Lisbon) between 2016 and 2017.

Results: The sample was predominantly composed of preterm children (n=192, 72.7%). Clinical evaluation of all children with feeding and swallowing problems (n= 264) was done by an SLT, videofluoroscopic swallowing study was included in the detection of penetration and aspiration in 9 children. The most frequent etiology was prematurity (n=142, 53.8%), followed by mixed causes (n=50, 20%). Dysphagia was the most frequent feeding and swallowing disorder type (n=107, 74.6%), followed by combined type (n=36; 13.6%). Sensorimotor intervention was the most frequently used, followed by myofunctional therapy. The number of children with oral feeding before SLT intervention was 94 (35.6%) and after discharge they was 257 (97.3%). The SLT intervention had an average duration of 4.5 days and an average of 5.8 interventions /child. The multidisciplinary team involved in the study was composed of physician (98.5%), nurses (81.1%), nutritionists (53.8%) and physical therapists (43%).

Conclusions: This study reinforces the importance of characterizing the profile of children with feeding and swallowing disorders, as well as the importance of the role played by SLT in the multidisciplinary team. A collaborative, multidisciplinary team approach is also recommended because of the complexity of feeding and swallowing problems presented in Neonatal and Pediatric Units.

Keywords: Cleft palate speech, feeding, swallowing disorders

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PO 137

(1070) - THE CHALLENGES OF FEEDING - CONCEPTION AND VALIDATION OF A CHECKLIST FOR RISK ASSESSMENT IN INDIVIDUALS WITH FEEDING DISORDERS

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Dias, João – *ARCIL, Portugal*

Objectives: - To create and validate a checklist for risk assessment of feeding and drinking risk factors in individuals with feeding disorders;

- create a training module for caregivers of individuals with feeding disorders on the topic of risk assessment during mealtime;

- develop caregivers' awareness about myths and beliefs about feeding and drinking in individuals with feeding disorders;

- prepare caregivers for the risk assessment during mealtime when taking care of individuals with feeding disorders;

- prevent aspiration and other complications associated with inadequate feeding care to individuals with feeding disorders.

Methods: The project was conducted as a research-action investigation, aiming at improving the problematic situation of supporting individuals with disability in day care and inclusive educational settings, during mealtime. After a literature review, the project's team developed a questionnaire about myths and beliefs around drinking and feeding difficulties, as well as a checklist to assess risk factors during mealtimes. Both, the questionnaire and the checklist, had its content validated with a panel of experts in the fields of feeding and swallowing disorders. A training module was prepared and implemented with 10 caregivers and evaluated in terms of learning and satisfaction of the participants. To evaluate the efficacy of the training session, the myths and beliefs questionnaire and active learning activities were used.

Results: The main results of the project are the questionnaire of myths and beliefs about feeding difficulties and the checklist for risk assessment to be used by caregivers during mealtime. The materials to deliver training are also a relevant output, applicable in future projects. After the training session, improvements were shown in identifying risk factors and differentiating myths from facts related to feeding difficulties.

Conclusions: The evaluation of the training session showed to be effective, resulting in trainees' satisfaction and improvements in terms of knowledge and attitudes towards taking care of individuals with feeding disorders.

Keywords :Feeding/swallowing disorders

PO 138

(1269) - THE PERCEPTION OF PARENTS ABOUT THE IMPORTANCE OF FEEDING FOR SPEECH

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Marinho, Susana - *Universidade Fernando Pessoa, Portugal*

Peixoto, Vânia - *Universidade Fernando Pessoa, Portugal*

Objectives: The main objective was to characterize the profile of parents with children between 4 and 18 months and explore their perception about the importance of feeding in speech.

Methods: 297 parents of children with neurotypical development who had initiated the introduction of complementary feeding. To collect data, a self-report questionnaire was

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developed, the Parents Perception Scale on the Importance of Feeding in Speech [PPSIFS] which was available online.

Results: The Parents Perception Scale on the Importance of Feeding in Speech [PPSIFS] presented high reliability ($\alpha = .86$). In the analysis of the differences between groups of parents regarding the values of PPSIFS's overall score, no significant differences were observed except for the item related to food exploration. As for the PPSIFS results, comparing the parents' educational qualifications it was observed that higher qualifications corresponded to superior results. Analyzing the association between PPSIFS total score and the parents' professional situation, results show no statistically significant relation. The parental experience measured with reference to the number of children shows a statistically significant negative correlation with the PPSIFS total score, which seems to indicate that the increase in the number of children is likely to be associated with lower importance attributed to the relation between feeding and speech.

Conclusions: The consistency in which foods are presented, the shape, size, and variety of textures, have a direct influence on facial growth, which in turn seems to be related to speech. Speech language therapists may train parents on the relation between feeding and speech.

Keywords: Prevention

PO 139

(1251) - THE EFFECT OF BREATHING AND SWALLOWING ON THE DEVELOPMENT OF LINGUISTIC COMPETENCIES – CONTEMPORARY METHODS OF THERAPY, DOLPHIN ASSISTED THERAPY.

Konczanin, Małgorzata - Help in Communication Foundation, Poland

Dąbrowska, Oksana - Good Village Foundation, Poland

Objectives: The aim of this article is to draw attention to the shaping of a child's linguistic competencies, which affect the whole life of an adult. In order to participate in linguistic communication, a person has to possess certain competencies and skills. A linguistic competency is subconscious knowledge about creating grammatically correct and logical sentences. It is conditioned by mastering a linguistic system (code) on its three levels: phonological, morphological, and syntactic, while some skills, at least the ones which assume the form of realisation skills, do not appear without previously acquired competencies. The author concentrates on contemporary methods of therapy, which eliminate the breathing and swallowing dysfunctions. A proper swallowing and breathing action has a significant effect on the development of linguistic competencies.

Methods: NDT-Bobath method (Neurodevelopmental Treatment – NDT) and Dolphin Assisted Therapy, method called "Four Elements."

<https://www.youtube.com/watch?v=wGGNczi1HUU&t=32s>

Results: Research shows that the influence of therapy with dolphins in the water and assistance with the swallowing and breathing on the land improves swallowing and breathing acts to some extent. These pilot studies indicate this. 30 children were examined; in one case the salivation which was an improper way of breathing and decreased muscle tension was leveled. In the other 26 cases the swallowing and breathing functions were improved. Only in one case the swallowing act was not corrected. This concerned a girl with intellectual norm whose breathing act after the surgery trauma got better. In this case playing with dolphins in the water and the speech therapist's exercises influenced the breathing function very much. It leveled trauma connected with the surgery and encouraged the child to spontaneous and free pronouncements.

Conclusions: Dolphin Therapy can positively support the development of language competencies in children with autism, aphasia, SLI. Working in a multidisciplinary team of specialists including a psychologist, a dolphin therapist, a physiotherapist, and a neuro speech therapist brings great effects.

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Keywords: competencies and skills, communication, breathing , swallowing

PO 140

(1174) - PATIENT SAFETY GUIDANCE FOR SPEECH-LANGUAGE PATHOLOGISTS WORKING WITH CHILDREN

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Robinson, Tommie - *Children's National Health System, USA*

Objectives: The participants will be able to:

§ define patient safety as it relates to clinical practice with children

§ describe the role of speech-language pathologists in patient safety.

Methods: The World Health Organization (WHO) identified patient safety as an endemic concern. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) established national patient safety goals for healthcare accredited programs in 2016. Patient safety is a major issue; Australia, the United Kingdom, Canada, New Zealand, Denmark and some developing countries are actively reviewing data on procedural errors in health care systems. Most institutions collect data and educate staff about patient safety procedures to increase knowledge and establish a culture of patient safety that will minimize medical errors and negative patient outcomes.

Results: Patient safety is a relatively new area of concentration in the healthcare that emphasizes the need to report, analyze and prevent medical errors that often lead to adverse healthcare events. Healthcare has prioritized patient safety. In 1999, the Institute of Medicine (IOM) released a report, "To Err is Human: Building a Safer Health System." This report called for national efforts to address this issue. While medicine has been studying patient safety, allied health professionals in general and speech-language pathologists specifically, have not prioritized this topic.

Conclusions: This session will address patient safety issues applicable to clinical practice by speech-language pathologists working with children. While adverse healthcare events do not occur in the majority of SLP clinical sessions, there are practice areas where misdiagnoses or inappropriate treatment approaches could lead to death or less than adequate quality of life for individuals. Additionally, this session will address activities that require reporting, analysis or prevention. Communication; patient safety education; technology; electronic health records; health literacy; evidence-based practice; quality improvement and safety initiatives; as well as creating a "Patient Safe Culture" will be included.

Keywords: Prevention, developmental language disorders, clinical-reported outcome measures (development or cross-cultural adaptation and validation), safety

PO 141

(1342) - COMMUNICATION IN A PEDIATRIC EMERGENCY CARE WITH CHILDREN WITH COMMUNICATION DIFFICULTIES AND MEDICAL EMERGENCY PROFESSIONALS (INEM)

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Maia, Fátima - *Faculdade Ciências da Saúde / Escola Superior de Saúde – Universidade Fernando Pessoa, Portugal*

Vieira, Daniela - *Faculdade Ciências da Saúde / Escola Superior de Saúde – Universidade Fernando Pessoa, Portugal*

Santos, Luís - *Faculdade Ciências da Saúde / Escola Superior de Saúde – Universidade Fernando Pessoa, Portugal*

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Objectives: To explore how communication is performed in pediatric emergency care among children with communication difficulties and emergency medical professionals (INEM).

Methods: A qualitative study using in-depth interviews, semi-structured interviews applied to five psychologists, five nurses and ten prehospital emergency technicians who perform functions in different medical emergency environments, such as: support ambulances (SIV), Medical Emergency and Resuscitation Vehicles (VMER), Emergency Medical Helicopters, Mobile Psychological Support Unit (UMIPE) and Pediatric Inter-hospital Transportation (TIP). The anonymity of the participants and the confidentiality of the data were ensured, as were all ethical issues. The data were collected from August to September 2017, and were treated through the technique of content analysis.

Results: Preliminary results indicate four categories related to pediatric care: procedures, difficulties, strategies and main challenges.

Conclusions: It is important to emphasize the need for specific training in the area of communication for INEM professionals, as well as the implementation of some material that facilitates the professional in the process of communication with this specific population.

Keywords: Specific language impairment, emergency medical service, communicative barriers, children, communication difficulties.

PO 142

(1390) - TELE-REHABILITATION FOR LEARNING DISABILITIES: METHODOLOGIES AND RESULTS USING RIDINET TECHNOLOGY PLATFORM

M.Calanca, E.Pasqua - CRC Balbuze Roma, Italy

M.Massini, E.Pasqua - CRC Balbuze Roma, Italy

In Italy, Learning Disabilities treatment is based on scientific evidence and depends on clinical profile analysis. According to the 2007 Consensus Conference and the resulting National Clinical Advices (PARC 2011), intervention has to be early, systematic and intensive. Based on these theoretical assumptions, since 2013 the CRC Balbuze of Rome has adopted, amongst the various traditional therapy tools, the RIDInet technology platform for tele-rehabilitation.

RIDInet is a tele-rehabilitation platform for clinicians. It is designed to facilitate and support Learning Disabilities rehabilitation using different APP and activities developed according to recognized evidence based rehabilitation models. The platform it is among the first in Italy for tele-rehabilitation for Learning Disabilities rehabilitation.

The aim of this study is to:

1. Collect and share data about the different usages of the RIDInet technology platform;
2. Analyze the effects of different models of use compared to different clinical profiles.

Methods: The study was conducted on a sample of 50 subjects that used the RIDInet technology platform at CRC Balbuze of Rome in different ways in relation to:

- clinical history
- analysis of clinical profiles
- level of severity of the disorder

Results: The collected data in our study have documented the effectiveness and efficiency of the RIDInet technology platform in relation to objectives, adaptive functioning, and time monitoring of the effects of intervention.

Conclusions: The RIDInet technology platform is an effective rehabilitation tool.

The presented experience suggests an opportunity to find a shared way for the application of this tool.

Keywords : Dyslexia

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PO 143

(1142) - RAISING THE BAR: FROM PREVENTION TO INTERVENTION. SPEECH AND LANGUAGE PATHOLOGY SERVICES IN SCHOOLS

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Chircop Galea, Myriam - *Speech and Language Department, Ministry for Health, Malta*

Objectives: The practice of collaboration between Speech and Language Pathologists (SLPs) and educators may give rise to beneficial interprofessional learning opportunities. The effectiveness of such collaboration will bring about a working relationship that is more adept at preventing and /or intervening with speech and language difficulties. This study aims to investigate the impressions of the school staff in terms of their relationship with the speech and language service, from its role in prevention to intervention in Malta.

Method: A structured questionnaire survey was conducted in 29 schools across Malta.

The questionnaire consisted of 10 statements using a three-point Likert scale. These aimed to gather the perception of school staff about the speech and language pathology service in their school. A total of 342 surveys from amongst these schools was gathered.

Results: The surveys were analysed quantitatively. Findings indicated that the Heads of School, Assistant Heads, Teachers & Learning Support Assistants agreed that the SLP has an established role within the school. It also emerged that school staff recognised the need for greater in-class collaboration between the two parties.

Conclusion: This study calls for a paradigm shift in the roles of educators and SLPs. It presents the idea of increased role release by all team members. On the one hand, SLPs are called upon to become more familiar with the class curriculum and class expectations. At the same time, educators are encouraged to become better acquainted with communication disorders as well as the respective methods of intervention. This increase in awareness and knowledge is likely to assist in the understanding and prevention of speech and language difficulties and ensures that all team members are working collaboratively towards the same goal.

Keywords: Interprofessional learning, prevention, intervention, school

PO 144

(1145) - 'CONVERSAZIONE NARRATIVA': EFFECTIVENESS OF A GROUP THERAPY FOR PERSONS WITH APHASIA

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Muò, Rossella - *ASL Città di Torino, S.C. Recupero e Rieducazione Funzionale, Università degli Studi di Torino, Italy*

Monte, Stefano - *Centro Afasia CIRP - Fondazione Carlo Molo ONLUS, Torino, Italy*

Matera, Mariateresa - *Centro Afasia CIRP - Fondazione Carlo Molo ONLUS, Torino, Italy*

Objectives: 'Conversazione Narrativa' is a co-conducted operative group offered to help people with chronic aphasia (PwA) regain their best communication abilities in their life. The group's main purposes are 1) to support PwA in improving their expressive abilities, coping strategies and available communication resources and 2) to encourage communicative desire and psychological wellness, by promoting self-esteem and self-awareness of resources, rather than limits. Our study explores in depth the effectiveness of group intervention through both quantitative and qualitative assessment, in order to analyse outcomes, group process and group dynamics.

Methods: Six PwA were included in 'Conversazione Narrativa'. The group lasted from February 2016 to January 2017 and consisted of one hour and a half weekly sessions. Pre and post-

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treatment assessment included measures of linguistic function (AAT), functional communication abilities (I-ASHA-FACS), pragmatic abilities (Pragmatic Protocol) and quality of communication life (I-QCL); mood aspects and other psychological conditions were also explored. A rating scale (CIRSAG) and an observational grid, specifically created for research purposes, were used to monitor group participation during the treatment.

Results: I-ASHA-FACS Communication independence and Social communication domains improved significantly ($p = 0.043$ and $p = 0.042$, respectively). Linguistic skills and Quality of Communication Life results also improved, although they do not reach statistical significance. Pragmatic abilities were substantially preserved. All participants showed improved strategies to face communicative difficulties, achieved awareness of resources, higher acceptance of their disability and reduced negative emotions returning to a feeling of usefulness and value. Statistical analysis of results is in progress.

Conclusions: 'Conversazione Narrativa' showed to be a useful treatment to help PwA to deal with communicative difficulties and emotional, relational and social implications, helping PwA achieve the best possible quality of life.

Keywords: Aphasia, acute stroke, intervention

PO 145

(1178) - LOGOCLICKS: THE DEVELOPMENT OF AN ONLINE TOOL FOR COGNITIVE-LINGUISTIC APHASIA THERAPY

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Van Eerdenbrugh, Sabine - Thomas More Hogeschool Antwerpen, Belgium

Sloot, Petra - Hogeschool Rotterdam, Netherlands

Hoppenbrouwers, Lieke - Logoclicks, Belgium

Neijenhuis, Karin - Hogeschool Rotterdam, Netherlands

Van Ewijk, Lizet - Hogeschool Utrecht, Netherlands

Objectives: Aphasia after stroke reduces quality of life and causes higher emotional distress. To reach rehabilitation goals, intensive speech-and language therapy (SLT) is required, for which e-health can provide an effective and efficient means. Furthermore, the cognitive-linguistic approach has been defined as 'standard' in aphasia therapy.

Methods: A profound theoretical research was conducted, answering the central research question: "How can the cognitive-linguistic approach in aphasia therapy be incorporated into an online tool for the cycle of goal setting, diagnostics and therapy of aphasia?"

Results: Regarding goal setting it was found that people with aphasia want to be more included in setting goals for their (language) rehabilitation. To this purpose a method was developed to facilitate shared decision making by Logoclicks. Concerning the diagnostics a protocol was provided to help identify the impaired linguistic processes. Treatment consists of methodological and didactical content. The methodological content comprises tasks which are classified according to the Ellis & Young model, the difficulty of these tasks was defined by relevant linguistic parameters (such as word length, age of acquisition, concreteness). The didactical content was defined by consensus on feedback and resulted in a cueing hierarchy.

Conclusions: Logoclicks delivers a tool for the entire process of aphasia therapy: goal setting, diagnostics, and therapy. It is developed carefully to implement 'evidence based practice'. The methodological and didactical content is built on a firm theoretical basis. For persons with aphasia this means that they can practice more frequently to improve their language skills, and consequently become more independent. For SLTs this offers the possibility to combine e-health with face-to face sessions, increasing the frequency of therapy and creating more time to practice communication in real life situations.

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Keywords: Aphasia, acute stroke, intervention

PO 146

(1441) - COMPUTERIZED COGNITIVE REHABILITATION IN ACQUIRED BRAIN INJURY

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Notarnicola, Marilina (Italy) - *Federazione Logopedisti Italiani, Puglia*
Lafiosca, Caterina (Italy) - *Federazione Logopedisti Italiani, Puglia*
Tedesco, Angela (Italy) - *Federazione Logopedisti Italiani, Puglia*
Palmisano, Alessandra (Italy) - *Federazione Logopedisti Italiani, Puglia*
D'Argenio, Maria (Italy) - *Università degli studi di Bari*
Lavermicocca, Valentina (Italy) - *Federazione Logopedisti Italiani, Puglia*
Megna, Marisa (Italy) - *Università degli studi di Bari, Professore Associato*

Objectives: Cognitive deficits are common in Acquired Brain Injury (ABI). There have been a number of computerized programs aimed to train cognitive deficits. One of them, RehaCom - Cognitive Therapy, is a modular system to treat attention, memory, executive functions and the visual field. The aim of the study is to quantify computerized cognitive rehabilitation effectiveness and verify the impact in activities of daily living.

Methods: 17 patients with ABI (12 after stroke and 5 post-traumatic brain injury) underwent computerized cognitive training with the software RehaCom. The training comprised visual memory and attention exercises. The sessions were organized three times weekly, 30 minutes each. The training lasted 4 months in total. Pre and post-training assessment of cognitive functions was included. The quantification of disability, impairment in daily living activities and quality of life were examined with the following scales: Functional Independence Measure (FIM), Barthel Index (BI) and Short Form Health Survey 36 (SF36).

Results: A statistically significant improvement ($p < 0.05$) of cognitive functions was observed, especially of attention and memory. The improvement was more evident in the post-traumatic brain injury group.

Conclusions: Preliminary evidence suggests improvements in executive functioning following computerized cognitive rehabilitation training. Additional studies are needed.

Keywords: cognitive impairment, traumatic head injury, intervention

PO 148

(1113) - NAMING IMPROVEMENT IN PRIMARY PROGRESSIVE APHASIA FOLLOWING LEXICAL TRAINING

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Bimbi, Gloria - *Università di Modena e Reggio Emilia, Italy*
Chiari, Annalisa - *Università di Modena e Reggio Emilia, Italy*
Zamboni, Giovanna - *Università di Modena e Reggio Emilia, Italy*

Objectives: The effect of rehabilitation of naming difficulties in patients with Primary Progressive Aphasia (PPA) is difficult to test due to the heterogeneity and progressive nature of the disease. Only a few example cases have been reported. We set up a novel 12-week rehabilitation programme based on lexical cueing and tested its efficacy on a sample of patients recently diagnosed with PPA.

Methods: Twelve patients (7 women, mean age 73.2 years, mean education 8.2 years) with a recent diagnosis of PPA were recruited from the Cognitive Neurology Clinic of Modena and enrolled on a 12-week rehabilitation programme aimed to enhance lexical retrieval. The programme consisted in the visual presentation (either on paper or computer) of 60 visual stimuli in an initial 6-week

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phase, and another 60 stimuli in a consecutive phase. One third of the stimuli were taken from a naming test, so that improvement on the subsample of the trained stimuli could be examined. Patients were asked to train once daily. Performances on language and naming were assessed at baseline, after the first 6-week phase (when stimuli were changed) and at the end of the programme. We tested whether overall naming stimuli improved in the final assessment and if the improvement would be specifically driven by the treated subset. Finally, we tested if performance changes on naming of the sub-set of stimuli treated during the first 6-week phase would persist in the final assessment.

Results: There was an almost significant improvement on overall naming (paired-t11=-2.17, $p=0.052$, baseline mean correct=60.0%; final mean correct=65.9%) in the final relative to the baseline assessment, which was driven by a significant improvement of treated Laiacona stimuli (paired-t11=-3.07, $p=0.011$, baseline mean correct=68.3%; final mean correct=76.0%). Our results suggest that the novel 12-week programme has potential for rehabilitation of naming difficulties in patients with PPA.

Keywords: Intervention

PO 149

(1411) - ACTIVATION AND INHIBITION PROCESSES AND THEIR RELATIONS WITH NOUN VOCABULARY IN STROKE PATIENTS

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Viigand, Merje - Tartu Ülikool, Estonia

Nursi, Aaro - Tartu Ülikool, Estonia

Toomela, Aaro - Tallinna Ülikool, Estonia

Padrik, Marika - Tartu Ülikool, Estonia

Kolk, Liisa - Tartu Ülikool, Estonia

Objectives: The aim of the present study was to describe activation and inhibition processes in left middle cerebral artery stroke patients and investigate the relationship between these processes and noun vocabulary.

Methods: Three types of inhibition were distinguished: inhibition of task-irrelevant information, inhibition of task-relevant information that is necessary for keeping apart distinct sub-components of the complex plan, and dynamic inhibition of acts that have been already executed. Activation and three types of inhibition were estimated in the performance of two memory tasks – homogeneous interference task and free recall task. Naming accuracy was assessed using object and picture naming tasks. To evaluate understanding of word meaning, a categorization task with different degrees of generalization was used.

Results: The results of the study revealed that left middle cerebral artery stroke patients' naming, categorization and recalling accuracy were lower compared to the control group, but stroke did not affect inhibition processes. Nonetheless, there were examinees in both experimental and in the control group whose inhibition processes were disturbed due to age and other unidentified factors. In addition it was found that levels of activation and three distinct inhibition processes correlated with naming and categorization performance. While naming correlated with the level of task-irrelevant and dynamic inhibition, understanding of word meaning with activation processes was also correlated in the control group with task-irrelevant inhibition level. It was also found that correlations between activation-inhibition processes and noun vocabulary differed significantly in the experimental and the control group.

Conclusions: Results of this study prove that models of speech perception /speech production that include only activating links, are not sufficient. This knowledge is important for speech and language therapists, because it gives a new perspective for understanding

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the psycholinguistic mechanism of speech errors, which is important for planning and conducting effective and individualized speech therapy. Precise recommendations will be discussed in the presentation.

Keywords: Aphasia, acute stroke

PO 150

(1041) - AUDITORY PROCESSING IN PEOPLE WITH CHRONIC APHASIA WHOSE MOTHER TONGUE IS CROATIAN

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Kolundzic, Zdravko - County Hospital Požega, Croatia

Hedjever, Mladen - Faculty of Education and Rehabilitation Sciences University of Zagreb, Croatia

Filic, Martina - County Hospital Požega, Croatia

Objectives: Auditory processing is a necessary factor of normal language, speech and writing development during childhood. In adulthood, it enables normal speech and language communication. Auditory processing disorder (APD) has not yet been explored in Croatia regarding the processing of people with aphasia. Results from other languages confirm a negative impact of weaker auditory processing on the receptive and expressive language components. Also, poor processing extends the duration of rehabilitation of people with aphasia.

Methods: Research was conducted on a sample of 25 people with chronic aphasia and a control group. Inclusion criteria for people with aphasia were: poor language abilities due to CVI, which occurred at least six months prior to the study, regardless of type of aphasia, with normal hearing. People with aphasia who were not able to repeat a sentence of a minimum of six elements due to receptive or expressive difficulties and people with severe receptive problems (who could not understand the instructions needed to carry out the test) were not included in the study. The examination was conducted individually. The administration of the Test for Auditory Processing Disorders (TAPD) standardized for Croatian language lasted approximately 30 min.

Results: Results from this study showed statistically significant lower achievement on all subtests (filtered words, speech in noise, dichotic words test, and dichotic sentence test) in people with aphasia compared to the control group. Results from the "better ear" in people with aphasia showed statistically significant differences in a favour of better results in the left ear compared to the control group. In the control group, results from both ears were equal.

Conclusions: Auditory processing disorder is a factor important for the incidence of speech and language difficulties after CVI and demands extra therapeutic procedures aimed to reduce existing language difficulties.

Keywords: Aphasia

PO 151

(1459) - COST IS1406 PRACTITIONER SURVEY ON INTERVENTION WITH LANGUAGE IMPAIRMENT: RESULTS OF PORTUGAL

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Pereira Coutinho, Clara - *Centro de Investigação em Estudos da Criança – Universidade do Minho (CIEC-UMinho), Portugal*

Objectives: We present the results obtained by Portuguese respondents to a practitioner survey developed by members of COST Action IS1406 with the aim of painting a picture of how the needs of children with Language Impairment (LI) are understood and how those needs are being met across Europe.

Methods: A survey was completed by Portuguese professionals who have responsibility for managing children with LI focusing on issues regarding service delivery, the social and cultural context of intervention for children with LI, and theories that underpin planning and carrying out an intervention.

Results: The data collected were analysed in order to describe the professionals involved, the practices implemented, and the contexts in which interventions with children with LI happen in the country.

Conclusions: The survey is one of the first of its kind ever to be attempted across Europe. The data on the Portugal context are valuable to understanding the way that services for these children are delivered in the country and, when compared to what happens across Europe, will provide useful information to consider when addressing the improvement of the effectiveness of services for children with LI.

Keywords: **Developmental language disorders, specific language impairment, intervention**

PO 152

(1401) - EARLY DETECTION OF LANGUAGE AND COMMUNICATION DISORDERS IN GREEK PRESCHOOLERS: PILOT STUDY

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Objectives: It is well documented that language difficulties in young children may be a precursor for other more persistent learning and psychosocial difficulties in later childhood and adolescence, while they may even impact an individual's functioning throughout the lifespan. Furthermore comorbid neurodevelopmental disorders which have more complex outcomes may be discerned at a very early stage through language screening, since language difficulties appear to be early signs of these disorders. Reliable, standardized language screening is considered imperative in order to be in a position to administer the appropriate interventions to at risk children. The purpose of this study is to test the concurrent validity of a language screening tool for Greek children ages 2.0-5.0 years.

Methods: Participants consisted of 350 children attending public nurseries and preschools in the inner Athens area. Parents completed two questionnaires: 1) the M-Chat, a standardized screening tool investigating behavioural, pragmatic & social skills, and 2) Language Screening Test for Preschoolers (LSTP) developed by the Greek Association for SLTs (PAL). Concurrent validity of this tool was measured as a pilot procedure.

Results: Results showed that the M-Chat and LSTP were in concordance relating to more complex neurodevelopmental difficulties in all age groups. The LSTP was found to have a consistent 15% cut-off point for less serious language difficulties.

Conclusions: The LSTP appears to be a promising tool for the early detection of language disorders in children. Further research is needed to ascertain its predictive properties. Furthermore further diagnostic testing of the children detected is necessary in order to ascertain concurrent validity.

Keywords: **Developmental language disorders**

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PO 153

(1093) - LEXICAL DIVERSITY IN CYPRIOT GREEK-SPEAKING CHILDREN

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Christopoulou, Maria - Association of Registered Speech Pathologists Cyprus & Speech Program EUC, Cyprus

Objectives: Lexical diversity refers to the displayed range of vocabulary in a given text or a language sample. Lexical diversity measures are among the most studied quantitative parameters examined in child language research. The most straightforward measure is a simple count of the number of different words (NDW) in a language sample. It shows promise as a way to measure lexical development both in pre-school years and beyond. The objectives of the study were: to find the NDW of typically developing CYG - speaking children at four age points, 36, 40, 44 and 48 months; to examine the data for a possible correlation between age and NDW for these children and to examine the data to ascertain whether NDW for the children in this study varies according to gender.

Methods: The participants in this study were 36 monolingual Cypriot Greek (CYG) - speaking children (18 girls and 18 boys), with a typical course of language development. Four sessions in total were held for each child at ages 36, 40, 44 and 48 months. Lexical diversity was calculated from the children's spontaneous language samples of 50 utterances using NDW. NDW was counted by totalling up every new word (function and content words) in the 50 utterances.

Results: The NDW score was significantly higher compared with each previous age point. The effect of gender was not significant. There was no significant interaction between age and gender.

Conclusions: The findings confirmed that in the CYG context, NDW could be considered a useful developmental index that changes predictably for children within this age range. However, the correlation of NDW with age needs to be interpreted with caution. Regarding differences in NDW by gender, further studies are required to be carried out for other age groups as well, in order to determine whether girls or boys produce more words.

Keywords: Lexical diversity, Cypriot Greek-speaking children, typical language development.

PO 154

(1258) - UTILITY OF THE CORE LANGUAGE SCALE OF CELF-4 TO IDENTIFY CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT

Maggiolo, Mariangela - Speech and Language Department, Faculty of Medicine, University of Chile, Chile
Sbarbaro, Vanessa - Speech and Language Department, Faculty of Medicine, University of Chile, Chile
Carvalho, Xiomara - Speech and Language Department, Faculty of Medicine, University of Chile, Chile
León, Cassandra - Speech and Language Department, Faculty of Medicine, University of Chile, Chile

Objectives: To determine the usefulness of the Core Language Score (CLS) of the Clinical Evaluation of Language Fundamentals 4 (CELF-4) in the identification of Spanish speaking children with Specific Language Impairment (SLI).

Methods: The study included 30 children, both male and female, within the age range of 5 to 6 years 11 months old. 15 of them were diagnosed with SLI and the remaining 15 had typical language development, all of them attending either kindergarten or first grade (primary school). The CLS was applied to all children, establishing the test sensitivity, specificity and efficiency, as well as the predictive values.

Results: The CLS had sensitivity values of 66.6%, specificity of 86.6%, PPV of 83.3% and NPV 72.2%. The overall efficiency of the screening was 76%.

Conclusions: The CLS is a useful tool for an initial diagnosis of Spanish speaking children presenting SLI, due to its global efficiency and specificity values, making it an instrument of high

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screening accuracy, because statistical values obtained for the test are good when variables like language are measured.

Keywords: Screening

PO 155

(1056) - COLLECTING CLINICAL SPEECH DATA: HOW PORTUGUESE SLTS DO THAT

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Rodrigues, Susana - *University of Algarve and Centre of Linguistics of the University of Lisbon, Portugal*

Objectives: Collecting speech data is necessary for assessment and intervention for diverse Speech and Language Therapy areas, such as developmental and acquired speech disorders. For example, the ability of an SLT to phonetically transcribe speech data is crucial to perform an effective assessment and intervention process. Nevertheless there is a little research that seeks to understand the procedures for collecting speech data by Speech and Language Therapists. This study sought to determine how Portuguese SLTs collect speech data for clinical purposes.

Methods: In this study a questionnaire was drawn to collect the data using a digital tool (<http://docs.google.com>). The questionnaire was disseminated through the e-mail addresses of SLT colleagues.

Results: The results will be collected until the end of November.

Conclusions: Phonetic transcription of clinical speech data is a rich and valuable resource to assess atypical speech productions in SLT practice and is an important tool for SLTs who work with speech impairment.

Keywords: SLT; speech data; phonetic transcription speech disorders

PO 156

(1306) - QUALITY OF TEACHER-CHILDREN INTERACTIONS IN BELGIAN PRE-KINDERGARTEN CLASSROOMS

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Bergeron-Morin, Lisandre - *Laval University, Canada*
Maillart, Christelle - *University of Liège, Belgium*

Objectives: The objective of this study is to document the quality of teacher-children interactions, in the second year of nursery school (4-5 years old) in the French-speaking part of Belgium. In fact, to date, little is known about what children experience in Belgium pre-kindergarten, regarding language development support. The quality of teacher-children interactions is recognized as being the most determining aspect of educational quality, in particular regarding language development. It plays a protective role on language and communication development for vulnerable children. However, the quality of these interactions, especially those supporting language development, is not always optimal. It is of great concern in Belgium, where there is a need to prevent, during early childhood, an educational gap that too often depends on the socio-economic status of child's family.

Methods: Observations take place in 50 classes. All the teachers are voluntary. The CLASS-PreK (Classroom Assessment Scoring System, Pianta et al., 2008) is used for measuring teacher-children interactions. Trained observers have assessed the quality of these interactions along three domains: emotional support, classroom organization and instructional support including

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language modeling. Assessment of quality was done during four 30-minutes cycles, consisting of 20 minutes of observation and 10 minutes of rating. No activity was imposed.

Results: Actual results (25 classes) reveal a lower quality in instructional support which is the dimension the most linked to the language development. Quality of teacher-children interactions depends in particular on the type of activities proposed to the children. Scores increase when teachers propose activities deliberately dedicated to language.

Conclusions: Quality of teacher-children interaction must be improved in order to better support children's language development and, consequently, their later educational success. It is important to accompany pre-kindergarten teachers with the aim to help them to better support the language development of the most vulnerable children.

Keywords: initial education, quality of pre-kindergarten education, quality of teacher/children interactions

PO 157

(1351) - SUPPORTING COMMUNICATION AND LANGUAGE DEVELOPMENT IN NURSERIES/DAYCARES IN LEBANON: REALITIES AND ACTORS' REPRESENTATIONS

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Objectives: It is widely recognized that professional's representations and beliefs about language development can impact practices in the field of preventing language and literacy difficulties ((Piasta et al., 2009; Dickinson & Brady, 2006). This study focuses on the context of daycares in Lebanon. It aims to explore practices, identify needs, barriers and motivations for the implementation of a language intervention program, led jointly by Speech and Language Therapists and caregivers in the multilingual and multicultural Lebanese context. International recommendations highlight the necessity for SLTs to conceptualize their intervention, according to community based needs, focusing on primary prevention for early language difficulties, given their later impact on social and professional integration (Law et al. 2013).

Methods: A survey study through questionnaires developed according to Lebanese context specifications will be proposed to different publics: 1) nurseries/daycares directors, 2) educators/caregivers, 3) speech therapists. Each questionnaire will include items about language support practices, professional roles and the collaboration between SLTs and caregivers in Lebanese nurseries.

Results: Findings will be discussed in the context of the realities of nurseries in Lebanon by defining the beliefs and practices in the area of prevention as well as the opportunities of collaboration between caregivers and SLTs in prevention program models.

Conclusions: Cultural differences and backgrounds of various stakeholders would influence findings. This study is part of a wider project on prevention practices in Lebanon. Results will be analyzed along with the study targeting preschools/kindergartens in the same context.

Keywords: Developmental language disorders,- multilingualism, - prevention

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PO 158

(1350) - SUPPORTING LANGUAGE DEVELOPMENT IN PRESCHOOLS/KINDERGARTENS IN LEBANON : EXPLORING RESPECTIVE ROLES OF TEACHERS AND SPEECH AND LANGUAGE THERAPISTS.

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Objectives: It is widely recognized that the professional's beliefs about language development can impact practices in the field of preventing language and literacy difficulties (Piasta et al., 2009; Dickinson & Brady, 2006). This study focuses on the context of kindergartens in Lebanon. It aims to explore practices, identify needs, barriers and motivations for the implementation of a language intervention program, led jointly by speech therapists and teachers in the multilingual and multicultural context of Lebanon. International recommendations highlight the necessity for SLTs to conceptualize their intervention, according to community based needs, focusing on primary prevention for early language difficulties, given their later impact on social and professional integration (Law et al. 2013).

Methods: A survey study through questionnaires developed according to Lebanese context specifications will be proposed to: 1) school principals, 2) kindergarten teachers, 3) speech therapists. Each questionnaire will include items about language support practices, professional roles, and the collaboration between SLTs and teachers in Lebanese kindergartens.

Results: The expected results are intended to describe the realities of kindergartens in Lebanon, to define knowledge in the area of support and prevention for language difficulties in kindergarten. It will help to illustrate representations of the role of SLTs in language support and prevention, as well as opportunities of collaboration with preschool teachers, to adapt and implement a co-intervention program that partners teachers and SLTs.

Conclusions: We predict an influence of different factors such as *training, cultural differences, different conceptualizations of the role of language in learning*. This study is a part of a wider project on prevention practices in Lebanon. Results will be analyzed along with the study targeting nurseries/daycares in the same context.

Keywords : Developmental language disorders, multilingualism, prevention

PO 160

(1320) - MUSIC THERAPISTS JOINING EFFORTS WITH SPEECH AND LANGUAGE THERAPISTS: COLLABORATIVE WORKING WITHIN SPECIAL SCHOOLS

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Georgaki, Alexandra - Mapledown School, UK

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Objectives: Speech and Language Therapists (SLTs) often work alongside Music Therapists in educational settings for children and young people with complex needs. They are less often able to combine their specialties in the therapy room in order to meet the needs of a challenging client group. This workshop explores the strengths and limitations of conducting dynamic assessments and ongoing therapy work within a collaborative model. Participants will be introduced to key concepts of joint work theoretically and practically.

Methods: During the session, we will share practical activities and strategies for joint working with a range of students. These activities will be presented within the context of dynamic assessment groups, but we will also describe how this work could be applied more broadly to develop students' social and communication skills within therapy.

During the workshop, participants will have the opportunity to reflect upon key themes while engaging with practical tasks, specifically:

1. What are the "nuts and bolts" of running joint sessions?
2. How can we set joint goals and measure impact?
3. What are the areas of difference and similarity between therapies: how can we complement one another?

Results: In addition to presenting practical ideas to take away, we will share our own experiences of clinical outcomes from joint therapy groups and present ideas for setting shared goals and measuring the impact of therapy.

Participants will leave with:

- Practical ideas for running joint sessions;
- Ideas on how clinicians can work together to set joint goals and measure the impact of intervention;
- An understanding of how SLT and Music Therapy complement each other

Conclusions: Music Therapists and SLTs can join efforts to complement the work of one another. A collaborative model encompassing dynamic assessment; goal-setting; therapy and evaluating impact will be shared, with reflections on the strengths and limitations of joint working.

Keywords: Autistic spectrum disorders, cerebral palsy, cognitive impairment, intervention

PO 161

(1137) - SPEECH AND LANGUAGE CHARACTERISTICS IN INTERNATIONALLY ADOPTED CHILDREN WITH CLEFT PALATE: A PILOT STUDY

Bruneel, Laura - Ghent University, Belgium

Bettens, Kim - Ghent University, Belgium

D'haeseleer, Evelien - Ghent University, Belgium

Bastenie, Ruth - Ghent University, Belgium

Van Lierde, Kristiane - Ghent University, Belgium; - University of Pretoria, Belgium

Objectives: There is an increasing trend to internationally adopt children with special needs, such as patients with cleft palate. Given that internationally adopted (IA) children are at risk for developmental disorders, and the speech and language disorders associated with cleft palate, the purpose was to evaluate speech and language in IA children with cleft palate.

Methods: Speech (perceptual assessment and nasometry) and language (CELF-Preschool-2-NL; CELF-4-NL) were evaluated in three groups matched for age, each consisting of five participants: IA children with cleft palate (IACP), non-adopted children with cleft palate (NACP) and non-adopted children without cleft palate (NCP). The mean duration of exposure to Dutch of the IACP group was 36 months.

Results: For none of the assessments a significant difference between the IACP group and the NACP group was found. More phonetical and phonological errors, and poorer speech intelligibility were detected in the IACP group in comparison with the NCP group. Significantly higher nasalance values were detected in the NACP group and the IACP group compared to the

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NCP group. Regarding language, three children of the IACP group and one child of the NACP group had clinical scores on the language test. The IACP group scored significantly lower on the expressive language index than the NCP group.

Conclusions: Careful follow-up of language and speech development in internationally adopted children with cleft palate is recommended.

Keywords: Cleft palate speech

PO 162

(1157) - VELOPHARYNGEAL FUNCTION AND CONSONANT PROFICIENCY IN INTERNATIONALLY ADOPTED CHILDREN WITH UCLP AT AGE 5

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Mark, Hans - Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Sweden; - Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

Schölin, Johnna - Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Sweden; - Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

Jönsson, Radi - Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Sweden; - Department of Otorhinolaryngology and Audiology, Sahlgrenska University Hospital, Gothenburg, Sweden

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Objectives: The aim of this study was to examine velopharyngeal function, consonant proficiency and consonant errors in a group of internationally adopted (IA) children with unilateral cleft lip and palate (UCLP) at age 5. We compared this group's results with a control group of Swedish-born children with the same cleft type.

Methods: Velopharyngeal function was studied by calculating the VPC Sum, a measure in which both perceptual assessment of hypernasality and phonetic transcriptions at word level of active and passive cleft speech characteristics are combined into a composite score.

Consonant proficiency was measured by means of different PCC-scores (percent consonants correct) based on phonetic transcriptions of a standardized speech assessment at word level. Consonant error types, classified as cleft speech characteristics (CSCs) and developmental characteristics (DSCs), were also studied from phonetic transcriptions.

Comparisons were performed between 25 adopted children with UCLP (IA-children) at age 5 and an age, gender and cleft type matched control group of 20 Swedish-born children.

Results: The IA-group did not differ significantly from the controls regarding velopharyngeal function. However, more IA-children had an incompetent velopharyngeal function than the control group. All PCC-measures differed significantly between groups in which the IA-children performed lower than the controls. A high number of children in both groups had consonant errors classified as CSCs, but the IA-children had significantly more CSCs than the controls. Glottal articulation and oral retracted articulation were significantly more common among IA-children than in the control group. Also regarding DSCs, there was a high prevalence in both groups.

Conclusions: At this age the IA-children with UCLP had a high prevalence of velopharyngeal impairment. However their results did not differ significantly from the control group. The IA-

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children had severe speech difficulties with a significantly higher frequency of both oral and non-oral CSCs than the Swedish-born children.

Keywords: Cleft palate speech

PO 163

(1430) - IMAGING OF ANKYLOGLOSSIA CASES IN SPEECH THERAPY

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Sambor, Barbara - *University of Silesia, Poland*

Objectives: The presentation is focused on showing methods of video-imaging, assessing and archiving obtained observations of different ankyloglossia types. The authors pay special attention to some frequent mistakes in tongue, mandible and head positioning during the examination which may lead to the incorrect diagnosis of lingual frenulum in a given patient.

Methods: The authors provide numerous review videos and photos for comparison of different methods of lingual frenulum testing.

Results: The comparison of presented materials shows that not only the adopted evaluation method but also the method of archiving the results of the examination may affect the SLT's approach to the effectiveness of therapy and treatment in patients with ankyloglossia.

Conclusions: Speech therapists should use comparable and standardized methods of lingual frenulum assessment and imaging.

Keywords: Screening, speech disorders, prevention, feeding/swallowing disorders

PO 165

(1393) - IMEL.FR : ELABORATION PROCESS OF A FRENCH COMPUTERIZED ASSESSMENT BATTERY OF ACQUIRED COMMUNICATION DISORDERS

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Ferré, Perrine - *Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal, Canada;*
- École d'orthophonie et d'audiologie, Université de Montréal, Canada
Ansaldo, Ana Inés - *Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal, Canada;*
- École d'orthophonie et d'audiologie, Université de Montréal, Canada
Joanette, Yves - *Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal, Canada*

Objectives: The use of computerized tools in the context of speech language pathology practice is a subject of growing interest. First, a reminder of the methodological development of an assessment tool, whatever the medium, will be proposed by the authors. Then, a presentation of the literature on the benefits and limitations of computerized tools will be shared. Finally, the structure and methodological choices underlying the development of a new French communication assessment tool for adults with acquired brain injury on a digital tablet will be detailed.

Methods: As an example of the elaboration process, a naming task will be presented. First, the stimuli were carefully selected in accordance with the psycholinguistic criteria that may differentially influence performance of individual clinical profiles. Colored pictures, with a controlled level of visual complexity, were selected. In order to ensure the quality of the pictures selected, an evaluation of the name agreement was undertaken with 294 participants.

Results: First, the computerized format ensures precise standardized test administration rules. Also, the response time can be precisely calculated. This task offers an automatic calculation of the results, a live comparison of the patient's performance with the control group and a

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calculation of the effect of phonological and semantic cues given by the clinician when needed. The automation of part of the scoring process give back some precious time to the speech language therapist that can be used for the offline analysis of the patient's answers and for the definition of the intervention's goals.

Conclusions: Respect of established standards for the development of assessment tools, combined with the consideration of the advantages and limitations of the digital tablet reported in the literature, ensures the development of a tool that adheres to high methodological standards and may contribute to the scientific and clinical advancement of our discipline.

Keywords: Acquired language disorders, functional diagnosis

PO 166

(1120) - CROSS-CULTURAL ADAPTATION OF THE PROGRESSIVE APHASIA SEVERITY SCALE (PASS) IN GREEK

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Kartsaklis, Lykourgos - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Potamianou, Dimitra - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Vlachogianni, Aggeliki - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Lyras, Vasileios - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Pappas, Vasileios - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Papatriantafyllou, John - *Attikon University Hospital, Greece*

Sakka, Paraskevi - *Athens Association of Alzheimer's Disease and Related Disorders, Greece*

Kambanaros, Maria - *Cyprus University of Technology, Cyprus*

Objectives: Primary progressive aphasia (PPA) is a clinical syndrome that involves gradual deterioration of language function caused by neurodegenerative diseases.

The Progressive Aphasia Severity Scale (PASS) (Sapolsky et al. 2010) was developed to rate severity of impairment in ten domains of language. A global PASS score is derived from scores on all domains. Ratings are based upon informant reports, standardized assessment and clinical judgment. The aim of the study was to cross-culturally adapt the PASS Informant Questionnaire and evaluate inter-rater reliability of the PASS scale.

Methods: The cross-cultural adaptation of the PASS Questionnaire in Greek involved the following steps (MAPI Institute, 2012, WHO, 2013):

1. Forward translation from English to Greek
2. Review of the translation
3. Backward translation from a bilingual translator
4. Review of the backward translation
5. Pre-testing (cognitive interview)
6. Final version

12 patients with PPA participated in the next phase. PASS ratings were reviewed by a speech and language therapist, a neurologist and a psychologist, based on the patients' language test results, the PASS Informant Questionnaire and two spontaneous speech samples. All raters were blind to eachothers' scores and the neurologist and psychologist were blind to the patient's diagnosis. Inter-rater reliability was assessed using a two-way mixed, consistency, intraclass correlation coefficient (ICC). A consensus score was reached for validity analysis and PASS ratings were compared with scores on neuropsychological tests.

Results: Inter-rater reliability was good to excellent, with ICC=0.94 and a 95% confidence interval of 0.85-0.98. Significant correlations were found between PASS ratings and MMSE, CDR, language FTLD-CDR and BDAE aphasia severity scale.

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Conclusions: The Greek version of the PASS questionnaire is conceptually and culturally appropriate. PASS ratings were found to be reliable between raters and the scale is valid against other established measures. Further studies are needed to fully validate the PASS scale in Greek.

Keywords: Neurodegenerative disorders, acquired language disorders, dementia

PO 167

- (1168) - PROPOSAL FOR EVALUATION LOGICAL REASONING IN PATIENTS WITH NEUROGENIC LANGUAGE DISORDERS

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Sümegiová, Zita - Dialóg spol. s r.o., Slovakia

Objectives: To develop a new diagnostic battery for the evaluation of nonverbal logical reasoning test which requires minimal linguistic input and contains photos of real items. To map the results of the adult intact population and gather referential values for norms in the logical reasoning test (Test logického úsudku) and to map the results within patients with aphasia.

Methods: We chose the intact participants based on the results of The Montreal Cognitive Assessment. We examined by means of the developed test 54 intact participants, 9 participants with probable mild cognitive impairment and 9 patients with aphasia aged from 50 years and above. The data were processed with statistical methods.

Results: The results show that the educational level and age of the participants have any impact on the performance in the logical reasoning test. Further the findings suggest that patients with aphasia and participants with probable mild cognitive impairment show comparable quantitative performance, whereas they differ in the qualitative aspect. Internal consistency of the developed test expressed as Cronbach's alpha reached the value 0.84, which falls within the range of 0.90 to 0.80 considered as good internal consistency referring to reliability of the test.

Conclusions: That neurogenic language disorders may be accompanied by cognitive deficits including logical reasoning, are well known facts. It is helpful to have a test that does not demand verbal production, comprehension of complicated instructions and includes non-abstract images. Findings about affected logical reasoning may improve intervention, and give information about the patient's ability to function effectively in their everyday life.

Keywords: Acquired language disorders, aphasia, cognitive impairment, dementia, acute stroke, functional diagnosis

PO 168

(1438) - SPEECH-LANGUAGE PATHOLOGIST IN STROKE UNIT: AN ASSESSMENT PROTOCOL FOR DYSPHAGIA, APHASIA, DYSARTHRIA

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Tedesco, Angela - FLI Puglia, Italy

Di Leo, Virginia - FLI Puglia, Italy

Dellomonaco, Anna Rita - FLI Puglia, Italy

Objectives: Speech-language pathologists (SLP) are directly involved in the assessment and management of swallowing, communicative and cognitive disorders after stroke. The aim of this study was to propose a rapid and functional protocol for an early assessment of dysphagia, aphasia and dysarthria in the stroke unit.

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Methods: 15 patients in the acute phase of stroke were included. The assessment protocol consisted of a selection of standardized tests and scales recommended in acute stroke guidelines: Bedside Swallowing Assessment (BSA), Esame del Linguaggio al Letto del Malato (ELLM), the Robertson Dysarthria Profile and Level of Cognitive Functioning (LCF).

Results: The results showed that 25% of the sample were aphasic, 18% was aphasic and dysarthric, 12.5% was aphasic and dysphagic, 6% was dysarthric and 12.5% was dysphagic. The assessment protocol was found to have a rapid administration.

Conclusions: The SLP plays a significant role in the multidisciplinary team managing patients with acute stroke. Assessment for dysphagia and communication impairment is critical in working toward optimal outcomes for stroke survivors.

Keywords: Acute stroke

PO 171

(1075) - THE ROLE OF UNIVERSITY OF AVEIRO/ SCHOOL OF HEALTH (ESSUA) IN A SLT STUDY PROGRAM IN THE ERASMUS+ PROJECT: ABC – ASSISTING BETTER COMMUNICATION

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Monteiro Da Costa, Isabel Maria - Universidade de Aveiro, Portugal*

Introduction: In Georgia, initial education in speech and language therapy (SLT) does not exist. During the last 10 years the need for SLT services have become increasingly evident. In most cases clients with communication and swallowing disorders are being served by persons with no specific qualification in SLT, but from different related disciplines, such as linguistics, education, and/or psychology, which cannot assure the quality of the SLT services. The ABC project involves different institutions of education and health from Portugal, Netherlands, Croatia, Israel, Bosnia and Herzegovina and Georgia.

Objectives: The ABC project aims to enhance the profession of SLT in participating countries through courses and programs offered at different levels of professional education, namely: 1. Preparation of SLT programme contents; 2. Monitoring the created SLT curricula; 3. Use of modern teaching methodologies; 4. Dissemination of contemporary SLT issues.

Methods: Among others, we highlight the role of the quality assurance team; creation of thematic working groups in accordance to SLT general curricula content; creation of a technically sustainable and user-friendly online platform; training of trainers' (ToT) activities in the Netherlands, Croatia and Portugal; online lectures and a final international multidisciplinary conference.

Results: One of the preliminary results was the ToT week in ESSUA - University of Aveiro. During this week many workshops were delivered by the Portuguese team and some invited co-workers of ESSUA. The main topics presented were related to new teaching methodologies, voice and feeding disorders assessment, parental education on hearing and deafness, clinical educational models used in ESSUA, new trends in investigation and cross cultural adaptation and translation of clinical tools.

Conclusion: The long term goal of the ABC programme is the development of SLT education and profession in Georgia in compliance with the standards of the Comité Permanent de Liaison des Orthophonistes-Logopèdes de l'UE – CPLOL.

Keywords: Interprofessional learning, – clinical education

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PO 172

(1081) - NATIONAL EDUCATION PROFILE SLT BACHELOR IN THE NETHERLANDS

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Lindenberg-Meijerman, Carry - Windesheim University of Applied Sciences, Netherlands

Gunther, Thomas - Zuyd University of Applied Sciences, Netherlands

Objectives: Developing a national education profile for SLT-courses in the Netherlands.

Methods: In 2014 nine delegates from all Dutch SLTschools started developing a new profile for SLT students. The content has been checked against various existing frameworks, e.g. the Dutch professional SLT profile, the European Qualification Framework, competence profiles from other disciplines and the CanMEDS framework. Concepts were reviewed by SLTlecturers and other stakeholders. The profile was approved by the highest counsellor for health education in the Netherlands in January 2017 and presented at the SLT lecturer-congress in February 2017.

Results: The profile allows each SLTcourse to be customized in sync with its context. The descriptions match EQF level 6 and are aligned with current developments in the SLT field. The main framework of the profile is based on CanMEDS and describes seven roles: Speech/Language therapist, Professional, Communicator, Collaborator, Health Advocate, Entrepreneur and Scholar. Each role describes core activities, examples of professional activities and short narratives about the propedeuse level, internship level and bachelor level. In 2017 an app-based version was developed to use the profile on various platforms.

Conclusions: The profile is the result of a dynamic collaboration between partners of all Dutch SLTinstitutions. At this moment every SLTpartner implements the new profile in its curriculum and in a short time we will evaluate this process. Some elements may pose challenges to levels and roles. For example, the overlap between communicator and collaborator may lead to role-ambiguity. The separation of operating on a micro- and macrolevel in the role of health advocate can complicate the assessment of the roles. We are looking forward to seeing if our aim to customize the content of each course individually will help to further improve the quality of SLT-courses in the Netherlands.

Keywords: Quality of education

PO 173

(1328) - BIENNIAL STATISTICS EDUCATIONAL PROGRAMMES SURVEY FOR 2015 AND 2016

Iordanova, Nina – Biennial Statistics WG, Education Commission, CPLOL

Tlili, Catherine – Biennial Statistics WG, Education Commission, CPLOL

Tavares, Ana – Biennial Statistics WG, Education Commission, CPLOL

Roenev, Maria – Biennial Statistics WG, Education Commission, CPLOL

Kas, Bence – Biennial Statistics WG, Education Commission, CPLOL

Lieffrig, Lorraine – Biennial Statistics WG, Education Commission, CPLOL

Topbas, Seyhun – Biennial Statistics WG, Education Commission, CPLOL

Objectives: The Biennial Statistics working group is one of several working groups within the Education Commission of CPLOL. The aim of this group is to check the development of Speech Language Therapy training programmes in all CPLOL countries, as well as to ascertain the standards of initial SLT training and other post-qualification studies.

Methods: A questionnaire is sent out to the Education Commission delegates of all CPLOL member countries via Survey Monkey. The survey consists of 60 questions pertaining to the type

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of programmes offered in all countries in initial SLT training, employment of new graduates and further post-graduate training for SLPs.

Results: The results will be analysed using Survey Monkey. 31 respondents, 4 countries missing from all the members. 23 completed responses and 8 not completed. The answers show programme length, discipline and specialisations included, SLT population in the countries, employment of SLTs and recognition of the profession.

Conclusions: The information gathered from this biennial questionnaire helps CPLOL achieve one of its objectives, that is to promote the harmonisation of standards and quality of initial training and continuing education. Educational programmes register considerable changes from one two year period to the next. It is important to monitor these changes as they reflect the policies in our field throughout Europe.

Keywords: Quality of education

PO 174

(1016) - COMPARISON OF EDUCATION OF SPEECH AND LANGUAGE THERAPISTS IN SLOVENIA, BELGIUM AND PORTUGAL

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Objectives: For the comparison, I focused on the education of Speech and Language Therapists in selected European countries.

Methods: I presented and compared each study program in three European countries: Slovenia, Belgium and Portugal. In comparing the Speech and Language Therapy studies, I compared the data on the duration of studies, the credit system, the curriculum, the number of hours devoted to lectures, exercises, seminars, clinical exercises, students' independent work, student mobility and postgraduate education for all the countries. I have examined the differences and similarities between the study of Speech and Language Therapy in Slovenia, Belgium and Portugal and which of the three countries contain the most recommendations in their curricula as advised by the European Logopedic Association, Comité Permanent de Liaison des Orthophonistes / Logopedes de l'Union Europeenne - CPLOL. I received general information about the studies from professors and classmates in Belgium and Portugal, on the websites of each Faculty, but mostly on the exchange itself. In comparison, I have included the following undergraduate study programs: 1. Slovenia: University of Ljubljana, Faculty of Education; 2. Portugal: Escola Superior de Saude to Alcoitao, Lisbon; 3. Belgium: Thomas More, Antwerp.

Results: The results of the comparison show certain similarities and common points of education of Speech and Language Therapists in Slovenia, Belgium and Portugal. Undergraduate education in Slovenia and Portugal lasts for four years and in Belgium only three years. After completing undergraduate education in Belgium and Portugal, the graduate speech therapist is more qualified and ready to work independently in practice. In Slovenia, however, a graduate speech therapist is not fully qualified for independent work in practice and must enroll in a master's programme, which lasts for an additional year. Practical education is carried out in all three countries during studies. Slovenia has 570 hours of practice, Belgium 530, and Portugal requires 1834 hours.

Keywords: Quality of education

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PO 175

(1204) - WHAT DO I KNOW ABOUT DYSPHAGIA? - QUESTIONNAIRE RESULTS

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Trček Kavčič, Marjeta - *Slovenian Association of Logopedists, Slovenia*

Objectives: Diagnostics and treatment of patients with dysphagia occurs within a multi-disciplinary team, in which nurses play an important role. Their role begins with early recognition of swallowing difficulties at the very beginning of the rehabilitation program. Further professional work and knowledge about the specific needs of a patient with dysphagia significantly contributes to a comprehensive assessment and treatment of the disorder within nursing and rehabilitation institutions. The purpose of the research was to establish the level of knowledge regarding dysphagia and specific procedures of oral feeding among nurses working with patients with dysphagia.

Methods: The research included 35 nurses, with 18 of the participants employed by The University Rehabilitation Institute Republic of Slovenia, and 17 of them working in the Care and Working Center (CWC) in Ljubljana, in the area of long-term nursing and care. To evaluate the level of knowledge about dysphagia, we used the Feeding Skills Questionnaire with the permission of its author, Alexandra Ameen. The questionnaire was translated and adapted for the Slovenian speaking and cultural environment.

Results: The analysis of the questionnaire results revealed gaps in knowledge about the disorder and its symptoms. There was a lack of knowledge of specific procedures which must be carried out prior to and during feeding a patient with dysphagia. The employees working in rehabilitation have generally shown slightly better knowledge than employees working in the area of long-term nursing and care.

Conclusions: The questionnaire results will help us prepare adequate content for further courses on dysphagia management which would address the lack of specific knowledge on swallowing disorders and provide practical experience in efficient assistance to patients with dysphagia. Take home message: The continuous education of nurses, as well as other team members, is needed in order to recognize swallowing difficulties and prevent further complications in patients with dysphagia.

Keywords: **Dysphagia, - neurodegenerative disorders, traumatic head injury, prevention, intervention**

PO 176

(1277) - SEVERE OROPHARYNGEAL DYSPHAGIA AFTER CHANGES IN MEDICATION: A CASE REPORT

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Santos, Ana - *Master's student in Medicine, Universidade do Algarve, Faro, Portugal*

Canadas, Joana - *Master's student in Medicine, Universidade do Algarve, Faro, Portugal*

Anjo, César - *ENT, Centro Hospitalar do Algarve, Faro, Portugal*

Gonçalves, Ilídio - *ENT, Centro Hospitalar do Algarve, Faro, Portugal*

Objectives: Medication and changes of prescription can cause diverse side effects in which dysphagia is included. In this study the authors aim to review a clinical case of oropharyngeal dysphagia in an adult with a history of cerebral palsy, previously autonomous with total oral nutrition (FOIS 7), who after a change of the usual medication developed a severe swallowing disorder.

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Methods: Clinical case description, with clinical assessment of swallowing by SLP and FEES with ENT and SLP.

A 37-year-old man with cerebral palsy and treated with antiepileptics and anticonvulsants was previously autonomous in daily life activities. During neurological follow-up the patient had changes in liver function markers, and the medication was readjusted. A few days later the patient began to be disturbed and there was a new change in prescription with new medication (selective serotonin reuptake inhibitors, benzodiazepines, antiepileptics and anticonvulsants, tricyclic antidepressants), but there was deterioration of his general state, with impairments in feeding and walking. At hospital admission, a clinical evaluation was performed by the SLP and presented moderate changes in orofacial motricity with involuntary movements, increased oral time, residues in oral cavity after swallowing, wet voice and cough after swallowing. In the instrumental assessment: poor food ejection strength, leaking, decreased laryngeal sensitivity, food residue in the pharyngeal recess with escape in the retrocricoid region to the laryngeal vestibule was observed.

Results: After 26 days of hospitalization, with SLP intervention but without improvement in swallowing and reversal of neurological signs, the patient was discharged from the hospital to his home with a nasogastric tube for all nutrition and hydration (FOIS 1 and DOSS 1) and with referral for clinical nutrition consultation for PEG placement.

Conclusions: This case report highlights dysphagia as a side effect of medication and as an important comorbidity in the patient.

Keywords: - **Dysphagia, oropharyngeal dysphagia, medication, swallowing assessment.**

PO 177

(1341) - SYDNEY SWALLOW QUESTIONNAIRE: EUROPEAN PORTUGUESE TRANSLATION

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Objectives: Dysphagia is a swallowing disorder commonly diagnosed after stroke. Due to its serious consequences, an early diagnosis is fundamental. The patients with an early diagnosis should be referred for further clinical assessment. These assessments should include several evaluation techniques, including the use of self-administered Functional Health Status inventories. In Portugal, there is a lack of validated assessment scales and/or questionnaires related to dysphagia. The aim of this project is the translation and cultural adaptation of the Sidney Swallow Questionnaire (SSQ) to European Portuguese (EP).

Methods: The English version of the SSQ was translated into EP by two independent bilingual translators, fluent in both languages, with EP as their mother tongue. A common version was agreed. A bilingual translator fluent in both languages, and whose mother tongue is English, completed back translation. A panel of experts composed of several health professionals with experience in the area, analysed this version and classified all its items in terms of their semantic, idiomatic, experiential and conceptual equivalence (phase I). Some modifications were then suggested and incorporated. The new version was re-examined by the same group (phase II). The data resulting from both phases were statistically analysed using the Content Validity Index (CVI).

Results: The CVI values obtained for phase I were: 0.97, 0.98, 0.96 and 0.95, showing very good agreement between experts for semantic, idiomatic, experiential and conceptual domains. The CVI values for phase II were identical to the ones presented in phase I.

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Conclusions: The SSQ-EP version presented very good CVI values for semantic, idiomatic, experiential and conceptual domains. The SSQ is a quick and simple self-filling questionnaire and allows quantifying the symptomatic severity of oropharyngeal dysphagia as experienced by the patient. Further studies are needed in order to analyse its psychometric characteristics.

Keywords: **Dysphagia, acute stroke, patient-reported outcome measures (development or cross-cultural adaptation and validation)**

PO 179

(1021) - SCREENING RESULTS: EARLY IDENTIFICATION OF CHILDREN AT RISK FOR SPECIFIC LEARNING DISORDERS

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Raffaella, Zanon – Speech therapist AULSS 2 Treviso, Italy

Anna Chiara, Frigo – Professor of Medical Statistics, Padova University, Italy

Objectives: This contribution, based on the recommendations of the Consensus Conference (2007; 2011) and the indications of Law n. 170 dated October 8, 2010 for screening initiatives, describes an early screening project for Specific Learning Disorders (SLD), conducted from 2011 to 2015, within the ULSS 13 (Venice), with a sample of 5.237 children from the first year of the primary school.

Methods: The dictation of “16 words” (created by Prof. G. Stella, 2004) was administered to the first grade in January and in May by primary school teachers. The speech therapist of the NPI Service and the Italian Dyslexia Association collected and processed the data that was included in an Excel and analyzed with the SAS 9.4 program (SAS Institute Inc., Cary, NC, USA) for Windows. In scoring the writing test, the cut-off $\geq 8-16$ wrong items was used to identify a risk condition, as in the literature.

Results: The analysis of the results showed that 119 students (Italian children and without school certification), equal to 2.9% of the research sample, meet the risk criteria for a SLD, very close to the existing epidemiological data on SLD in Italian (2.5-3.5% assumed by the Consensus Conference on SLD, 2011). The data, compared with those achieved in previous experiences, show the reliability of the screening test («the 16 words test») and also underline the need to activate new shared actions in our country, for a more effective governance in early screening of children at risk of SLD (Regional and National Observatory - Guidelines of Tuscany Region on SLD, 2012).

Conclusions: We believe that this exchange of ideas, perspectives and actions, through which to look at the phenomenon of SLD, can become a breeding ground for the comparison of experiences in a dimension that goes beyond national borders.

Keywords: **Specific learning disorders, screening, prevention**

PO 180

(1359) - COMMUNICATION MATRIX AS ASSESSMENT TOOL FOR CHILDREN WITH SPECIAL NEEDS

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Vidmar, Alenka – Vrtec Kekec, Grosuplje, Slovenia

Zolgar, Ingrid – University of Ljubljana, Faculty of Education, Slovenia

Vovk, Mihaela - N/A

Jerman, Janez – University of Ljubljana, Faculty of Education, Slovenia

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Objectives: Communication matrix as an intervention tool enables parents, pre-school teachers and speech and language therapists greater insight into the child's communication, which means insight into their strong and weak communication skills. Knowledge of the child's development (especially in the field of communication) is an important cue for professional planning and implementation of speech and language therapy as well as education. How the child will progress and how successful s/he will be depends on the abilities and the competences of those who surround a child.

Methods: The basic aim of the research is to describe the communication skills through the Communication matrix and to discuss the importance of alternative and augmentative use of communication. The sample included 17 children (10 of them with special needs and 7 of typical development).

Results: The results showed significant differences in Communication matrix scores between the assessors: parents and speech and language pathologists. We also found that early use of alternative and augmentative communication is crucial. Parents generally overestimate the abilities of their child, but preschool teachers and speech and language therapists are those who can give an objective view of the communication skills of a certain child. According to this, the expectations of the various devices of alternative and augmentative communication were also expressed.

Conclusions: Communication skills were assessed by parents, preschool teachers, and speech and language pathologists. With this strategy we gained insight into the actual state of the communication capabilities of each child. The objectivity of the assessment of communication skills is crucial for a child's development. This is especially important for those parents who refuse to use alternative and augmentative communication and are waiting for the development of typical communication.

Keywords: Developmental language disorders, - intervention

PO 181

(1234) - EFFECTS OF A LANGUAGE BASED APPROACH ON LEARNING ABILITY: INSIGHTS FROM A CASE STUDY

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Theodorou, Eleni - *Cyprus University of Technology, Cyprus*
Pampoulou, Eliada - *Cyprus University of Technology, Cyprus*

Objectives: Developmental language disorder and learning difficulties are common conditions that can negatively affect academic performance. Assessment is, therefore, a vital clinical procedure that enables speech and language therapists to design the appropriate intervention plan for beneficial outcomes. This presentation focuses on a single case study of a student with language disorder and learning difficulties and includes the process that was followed for the initial assessment, the six month period intervention and the reassessment.

Methods: The participant was a 10-year-old student who was attending the fourth grade of a public elementary school in Cyprus during the period of therapy provision. For the purpose of the assessment, a battery of diagnostic tools was used to assess language abilities (Diagnostic Verbal IQ test, Bus Story Test, Action Picture Test, Expressive Vocabulary Test and Metaphon Test), learning abilities (Athina Test of Learning Difficulties) and non-verbal IQ (Raven's Coloured Progressive Matrices). Furthermore, the Wechsler Intelligence Scale for Children (WISC-III) was administered by an educational psychologist.

Results: The assessment revealed serious learning difficulties due to poor cognitive and language skills. More specifically, difficulties were found in memory, rate of processing and in arithmetic abilities. Poor performance was also found in literacy skills, phonological awareness,

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comprehension and production of complex morphosyntactic structures, lexicon and narrative speech. The intervention phase was based on implicit teaching of language skills. The six month reassessment showed significant improvement in language skills, as well as in learning abilities and school performance.

Conclusions: The presentation will focus on the assessment and intervention process, with the aim being to point out how assessment can inform intervention planning. It will conclude with a discussion on a number of clinical implications.

Keywords : Specific language impairment

PO 182

(1302) - RELATIONSHIP BETWEEN THEORY OF MIND AND SOCIAL COMPETENCE IN SCHOOL CHILDREN

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Rocha, Joana - Universidade Fernando Pessoa, Portugal

Peixoto, Vânia - Universidade Fernando Pessoa, Portugal

Objectives: The aim of the present study was to investigate the relationship between theory of mind and social competence (based on the perception of parents and teachers) in a sample of Portuguese school children.

Methods: 103 children aged 6 to 9 years with typical development were assessed using Dr. Martin Brüne (2003) The Four Picture Sequence Theory of Mind (TM) Cartoons (evolving questions about different types of ToM skills, e.g.: 1st , 2nd and 3rd order false beliefs). Parents and teachers answered the Two Factor Social Competence (SC) Measure Items and Selflessness Measure (Rydell et al., 1997; Odessey, Carlson & Martinez, 2003) and social demographic questions.

Results: Most of the participants achieved the performance expected in the tasks of 2nd order false beliefs, reality and reciprocity. In the task of 3rd order false beliefs, most participants missed the right answer, which is also to be expected between 6 and 8 years. Parents evaluate their children's SC superior to teachers, which can be explained by the homogeneity of family relationships and by social demands in the school context. Positive correlations were found between altruism and years of schooling which are similarly related to age and maturation of competences. Negative correlations were found between pro-social orientation and age of the father, and these results may be related to the greater protectiveness of older parents. Positive correlations were also found between SC and the number of siblings, which is supported by the existing literature. Children with siblings may have better opportunities to engage in interactions and conversations, using mental states, analyzing others' speech, managing conflicts, pretending and participating in strategy games. According to the evaluation carried out by teachers, it was verified that there are statistically significant associations between TM and SC.

Conclusions: Further research is needed to establish more correlations between variables.

Keywords: assessment and evidence-based practice.

PO 183

(1010) - THE EFFECTIVENESS OF THE PRE-LESION EXPERIENCE USING AUTOBIOGRAPHICAL MEMORY IN ADDITION TO TRADITIONAL TREATMENT OF CENTRAL FACIAL PARALYSIS

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Scharff Rethfeldt, Wiebke - Hochschule Bremen, Germany

Von Piekartz, Harry - Hochschule Osnabrück, Germany

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Objectives: About 196000 people suffer from first stroke every year (Germany). A typical consequence a patient sustains and needs to rehabilitate from is hemiplegia. If the face is affected by hemiplegia, it is called a facial paralysis (FP). Currently, an established best practice of therapy does not exist. The aim of this study is to examine the effectiveness of the pre-lesion experience using autobiographical memory in addition to traditional treatment of central FP.

Methods: An experimental pilot study was done. For that, six test persons were treated with one of the following methods: (1) therapy following the Neuromuscular Proprioceptive Facilitation (PNF) and motor imagery (n=3) or (2) therapy following PNF (n=3). Consequently, the pre-post-study with double measuring (t0 before and t1 after intervention) split the test persons into two treatment methods: Test persons with motor imagery (PwMI) and without motor imagery (PwoMI). Central outcomes are the change of severity of FP and disease-related quality of life (QoL). All test persons received intensive care of ten therapeutic units in the early stage after their first stroke. Severity of FP and QoL were measured by nine different instruments.

Results: It became clear that in total PwoMI showed more positive changes than PwMI. The severity of the FP was more minimized with PwoMI than with PwMI. However, the QoL and the impairment through the FP showed more positive changes in PwMI than in PwoMI.

Conclusions: For logopaedic therapy, the present study describes a critical consideration of motor imagery in the treatment of central FP. The possible impacts of motor imagery should be considered as a chance to improve the life quality of a patient. It could lead to a lower risk of depression due to the higher QoL. For future success, further research in pre-lesion experience using autobiographical memory and the expansion of the presented pilot study is recommended.

Keywords: Acute stroke, intervention

PO 184

(1346) - FROM AGGRESSION TO LESION: OROFACIAL DISTURBANCE OF WOMEN VICTIMS OF GENDER VIOLENCE

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Jimenez, Maria (Colombia) - UMB, Universidade Manuela Beltran, Bogotá

Rincón, Ana (Colombia) - UMB, Universidade Manuela Beltran, Bogotá

Objectives: Gender violence is any kind of aggression that affects the physical, psychological and emotional integrity of any person, models like the retrospective one, has naturalized shocks, confinement, nasty words, social punishment and femicide, as a consequence of social breach structurally imposed by the patriarchy; however, it is important to make visible that this social phenomena bring with it, temporary or permanent impacts on a structural and functional level. The objective of this study is to identify the effect of women's gender violence, at the level of orofacial disturbances, identifying their particular impact on the communicative function.

Method: Mixed study, focused on qualitative analysis, with a descriptive scope, and a phenomenological design. A sample of 10 women assaulted by their partners were selected. A structured evaluative - interview was developed with the tool dysfunction of orofacial functions and observation during a natural communicative situation. Women with evidence of orofacial disturbances were included.

Results: All the selected sample presented orofacial disturbances, secondary to gender violence exposure such as: violent blows, lacerations with punctured short weapon, and with chemical substances. 20% of them, showed absence of teeth, with difficulties in chewing; 10% presented total facial trauma and destruction, 80% showed bumps and bruises on the face; 60% presented lip inflammation; all the studied women presented difficulties keeping eye contact; also they presented difficulties in articulating some phonemes; when there was the intention of a smile, the common conduct was to look down, or to cover the mouth with both hands.

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Conclusions: There is a high myofunctional impact in assaulted woman; also, there are some more implications that affect the communicative wellness of this population; it is mandatory to keep working in many diverse ways in order to eradicate this phenomenon.

Keywords: Violence Against Women, Articulation Disorders, Communication.

PO 185

(1105) - 'THE CODE OF EMBOUCHURE': CONTENT VALIDATION OF A NEW ASSESSMENT TOOL FOR EMBOUCHURE IN BRASS PLAYERS

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Boschma, Hans - *Embouchurologist, Founder Foundation Sailing Brass, Netherlands*

Boonstra, Anne M. - *MD, PhD, Revalidatie Friesland Center for Rehabilitation, Beetsterzwaag, Netherlands*

Colman, Katrien S.F. - *PhD., post-doc researcher, thesis coordinator and lecturer at Department of Speech and Language Pathology and Master Healthy Aging Professional at the Hanze University of Applied Sciences Groningen, Netherlands*

Arendzen, Hans J. - *Prof.(em). MD, PhD University Leiden, Department of Rehabilitation Medicine, Netherlands*

Reneman, Michiel F. - *PhD, Center for Rehabilitation and Department of Rehabilitation, University Medical Center Groningen, University of Groningen, Netherlands*

Background: Many brass players experience embouchure problems (i.e. problems in the mouth area in the process of producing a tone in a wind instrument), which limit their playing. Various expert-opinion based therapies of embouchure problems are provided with limited outcomes. To improve outcome, it is important for speech and language therapists (SLTs) to treat embouchure problems in an evidence-based way. Validated and reliable assessment tools for embouchure problems are not available. Recently, a multi-item assessment tool of 62 items, the 'CODE of Embouchure', has been developed.

Objective: To determine the content validity of the 'CODE of embouchure'.

Methods: The 'five step' process for content validity determination was performed through a three-round Delphi survey among a selected international expert panel, consisting of 4 groups: scientists in embouchure, health practitioners, professional brass/wind players and other people with assumed relevant knowledge. Criteria for consensus were pre-determined before starting the study.

Results: 41 experts from 11 countries participated. In the first round, consensus was reached in over 64% of all closed-end questions and in the third round in over 73%. The second round was necessary to resolve intra-expert contradictory comments. Finally 5 items were added, 3 items removed and 23 items adapted in the instrument, before consensus was reached.

Conclusions: Content validity of the CODE of embouchure has been established in most (98%) items. Issues remain for further development and psychometric testing.

Keywords: Assessment – evidence-based practice

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PO 186

(1187) - EVALUATION OF DYSPHAGIA IMPACT IN PATIENTS' QUALITY OF LIFE AFTER TOTAL LARYNGECTOMY

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Silva, João - *Centro Hospitalar Entre Douro e Vouga E.P.E. - Hospital de São Sebastião, Portugal*
Matos, Maria Assunção - *Escola Superior de Saúde de Aveiro - Universidade de Aveiro, Portugal*

Objectives: Total laryngectomy is one of the most common procedures employed to treat patients with laryngeal cancer. This surgical procedure involves huge changes in patients' lives, interfering with their quality of life (QoL) in various aspects. The purpose of this study is to understand how dysphagia affects the daily life of the total laryngectomized patient, and consequently their QoL.

Methods: 23 patients from a Hospital in the north of Portugal, receiving Speech and Language Therapy services after total laryngectomy, completed The Quality of Life in Swallowing Disorders - Portuguese Version (SWAL-QOL-PT), composed of 44 questions, assessing 11 domains related to QoL (burden, desire to eat, feed duration, frequency of symptoms, food selection, communication, fear of eating, mental health, social functioning, sleep and fatigue). Data analysis was performed using SPSS version 23.0. Non-parametric tests were used.

Results: 56.5 % of all patients involved considered that dysphagia has no impact on their QoL. However, 69.0 % of those 43.4% of patients with impaired QoL, considered that dysphagia has a moderate impact on their QoL and 21% considered it has a severe impact on their QoL. The duration of feeding domain presented the worst score (25%), with burden, desire to eat, communication and mental health domains presenting a moderate impact, with averages between 53% and 70%. The domains of burden, duration of feeding, social functioning, sleep and fatigue, are considered QoL predictors, once they presented statistically significant values.

Conclusions: These preliminary results show evidence of low QoL in total laryngectomies. Dysphagia rehabilitation will continue to be challenging, requiring new interventions/strategies. More than ever, speech and language therapists need to act not only directly with the patient, but also indirectly through carers, family and peers, in order to reduce the adverse effects of cancer treatment on swallowing function and increase patients QoL perception.

Keywords: Dysphagia, head and neck oncology, intervention

PO 187

(1160) - DYSPHAGIA REHABILITATION AND MANAGEMENT AFTER STROKE: AN OBSERVATIONAL STUDY ON PATIENTS ADMITTED TO A NEUROREHABILITATION UNIT

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Galli, Federica Lucia - *Ancona University Hospital-Ospedali Riuniti UNIVERSITY HOSPITAL-OSPEDALI RIUNITI Neurorehabilitation Clinic, Ancona, Italy*
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Objectives: Oropharyngeal dysphagia frequently occurs after stroke, increasing mortality and morbidity risk. The study is aimed at evaluating the effects of swallowing therapy in patients with post-stroke dysphagia, providing useful data and tools for clinical practice.

Methods: 117 dysphagic patients with subacute stroke (ischemic or hemorrhagic) were enrolled in San Giovanni Battista Hospital in Rome and were treated every day by a speech therapist specialized in swallowing disorders. Each patient underwent clinical swallowing assessment and fiberoptic endoscopic evaluation of swallowing (FEES). Dysphagia severity was rated through

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the Dysphagia Outcome and Severity Scale (DOSS) and functional disability through the Barthel Index (BI). Clinical and instrumental swallowing assessment, DOSS and BI were performed on admission and on discharge from hospital.

Results: In the oral phase of swallowing significantly improved tongue, lips, jaw and cheeks movements ($p < 0.05$). Patients affected by impairments in the pharyngeal phase of swallowing showed minor improvement. Episodes of cough, raclage and gargling were significantly reduced ($p < 0.05$). Furthermore, we observed a significant improvement of dysarthria ($p < 0.05$). Lastly, we noticed even higher BI scores related with an improvement in swallowing abilities.

Conclusions: Detecting post-stroke dysphagia at an early stage is important for the right management and a good rehabilitation program. Our findings show that speech therapy for swallowing can affect the course of dysphagia through swallowing exercises, modifying meal consistency and using compensatory posture.

Keywords: -Dysphagia,swallowing disorders, stroke, speech therapy - rehabilitation

PO 188

(1119) - PRESENTING THE INITIATIVE AND DEVELOPMENT OF 1. CROATIAN GUIDELINES FOR NEUROGENIC OROPHARYNGEAL DYSPHAGIA (NOD). SLP IN A MULTIDISCIPLINARY TEAM

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Objectives: During the course of two years, the team of neurology ICU and the nutrition support team at the University Hospital Zagreb -Croatia worked together and came to a mutual conclusion that there is no unified national plan for diagnostics and treatment of NOD. Considering that neurological events are the leading cause of impairments, the number of patients suffering from dysphagia is vast, but there was no unified and systematic strategy to handle the issue. During that time, it was noticeable that scientific and practical procedures conducted in the world and in Croatia showed a big discrepancy. In the SLP area of expertise, there were notable unsubstantiated, even arbitrary, methods used, unjustified by the scientific evidence. By the end of the year 2015, an initial team was formed. The initial team represented each profession involved in the matter of dysphagia. It consisted of a speech language pathologist, nutritionist, pharmacist, two medical doctors, neurologist and an internal medicine specialist. Later on, the team spread and the national guidelines were formed. The main goal of this paper is to represent the pathway of forming interdisciplinary guidelines to present to our colleagues. Intention of presenting our work is to encourage further development of protocols in the SLP profession in order to consolidate the SLP profession in clinical work conditions as a part of a team and to standardize our professional procedures. The aim of the guidelines is multiple, to raise awareness about dysphagia, to provide a systematical approach, to raise awareness for the need of evidence based practice and to assure the multidisciplinary approach in everyday professional contexts. Guidelines were supported by the most prominent Croatian medical institutions and professional societies, they provide detailed description of current evidence

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based diagnostic and therapeutic procedures, recommend core members of the team and define each member's role in the management of dysphagia.

Keywords: Dysphagia – functional diagnosis

PO 189

(1052) - EARLY IDENTIFICATION OF SWALLOWING DISORDERS: THE PERCEPTION OF PATIENTS WITH NEURODEGENERATIVE DISEASES

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Objectives: To verify patients' perception of swallowing functionality and to know the perceptions of swallowing sensations that can promote early identification of airway penetration or aspiration.

Methods: It is a cross-sectional study with 44 patients with neurodegenerative diseases. All of them answered a questionnaire investigating the sensation perceived during swallowing and its intensity. The Fatigue Severity Scale was applied to measure fatigue. The Swallowing Disturbance Questionnaire was applied to detect swallowing complaints. The Functional Oral Intake Scale was used to classify swallowing functionality. Videofluoroscopy of swallowing was performed to verify the correspondence between the patient's perceptions and swallowing physiopathology.

Results: There was correspondence between the videofluoroscopy findings and the patient's perception in almost all cases. Sensations, such as discomfort and fatigue, were perceived during swallowing, especially of solids. Such feelings were reported, predominantly in the throat, from half-way to the end of the meal. There was an association between fatigue and odynophagia. Fatigue during swallowing was associated with worse functionality of oral intake.

Conclusions: The majority perceived the disorders in their swallowing. Sensations such as burning, discomfort, tiredness, pain, cramp or irritation were perceived by participants and were associated with symptoms that may suggest risk of aspiration due to fatigue, resulting from weakness, incoordination, and/or stiffness of muscles.

Keywords: Dysphagia, neurodegenerative disorders, neuromuscular disorders

PO 190

(1083) - SPEECH THERAPY APPROACH TO NEUROGENIC OROPHARYNGEAL DYSPHAGIA

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Objectives: In the Special Hospital for Medical Rehabilitation Krapinske Toplice in Croatia, the rehabilitation of neurogenic oropharyngeal dysphagia is primarily performed by speech-language pathologists. Since swallowing and speech share the same structure, speech-language pathologists with their specific procedures and swallowing treatments enable patients to remove the nasogastric tube and take food and fluid by mouth. Besides speech-language pathologists, the interdisciplinary team includes: doctor, physiotherapist, nurse, occupational therapist, family members. The goal of the study was to determine how long the speech rehabilitation lasted and how many patients with dysphagia established an oral diet.

Methods: The study included 50 patients (N=50), 34 men and 16 women, chronological age from 21 to 82 years, during the first eight months of 2017. Causes of dysphagia were stroke in 16 patients, traumatic brain injury in 21 patients, and in 13 patients dysphagia was the result of other neurological diseases.

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Results: Following everyday rehabilitation, which lasted for an average of 60 days during their stay at our hospital, 18 patients established oral nutrition.

Conclusions: Swallowing difficulties are a heterogeneous problem and as such require an individual approach to therapy. The establishment of oral nutrition represents successful rehabilitation. In order to perform the complete speech therapy, a certain level of patients' cognitive functioning is required. The results we have from 50 patients, is that only 13 of them (36 %) succeeded in obtaining an oral diet. One of the reasons of such a small percentage that were able to eat orally is that in the group of traumatic brain injury most of the patients were in MCD and were supplied with PEG. The rehabilitation process itself is long-lasting and requires a high level of expertise.

Keywords: Dysphagia – apraxia

PO 191

(1026) - USING TALKING PHOTONOVELAS FOR EDUCATION ABOUT STROKE: A DATA-DRIVEN TUTORIAL AND DEMONSTRATION

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Objectives: It is important to educate the population about stroke to prevent the high levels of death and morbidity. Therefore alternative education practices must be explored, especially when addressing minorities and low literate populations that are at higher risks of having strokes. This session presents a data-driven tutorial and an example of using Talking Photonovelas (TP) as an alternative approach to teaching clients about stroke. They reflect a culturally-appropriate storytelling format that may facilitate the learning experience.

- a. To describe the challenges faced with educating low-literate persons about stroke.
- b. To define health literacy, literacy and readability as it relates to using written information to educate patients and community members
- c. To discuss the development, use and effectiveness of "Talking Photonovelas" to educate about stroke.

Methods: A «Talking Photonovela» was designed containing scientifically based learning objectives. African American students (ages 26-62) from an adult literacy program. Pre- and post- tests were used to measure the effectiveness of using the Talking Photonovelas in seven learning objectives in three areas: Content Knowledge, Use and Affect.

Results: A significant growth in all areas taught and tested was statistically demonstrated. Correlation measures pointed to demographics (education, gender, reading level) as not being significant in outcome measures. Also, most participants stated that the Talking Photonovela was easy to understand and read, and that listening made it better. Finally, the participants expressed that they were able to better understand strokes, explain symptoms and take better care of themselves. They also stated that it was still hard to identify the symptoms.

Conclusions: These materials may be used for prevention (i.e. educating), assessment (i.e. explaining expectations during a particular clinical exam), and treatment (i.e. recommending pre-morbid dietary or post-morbid rehabilitation activities). It should be noted that viewing more than one time may increase the effectiveness of the educational experience.

Keywords: Prevention

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PO 192

(1181) - APPROACH OF SPEECH AND LANGUAGE THERAPY IDENTIFIED THROUGH THE EXPERIENCES OF APHASIC PATIENTS, THEIR RELATIVES AND SPEECH AND LANGUAGE THERAPISTS

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Grigenaite, Julija - Child Development Centre, Vilnius, Lithuania

Objective: To reveal the approach of speech and language therapy (SLT), identified through the experiences of aphasic patients, their relatives and SLTs in the framework of the bio-psycho-social approach.

Methods: Research is based on a qualitative research methodology. An individual semi-structured interview method was applied in the research. Aphasic patients (N= 5), their relatives (N=3) and speech and language therapists (N= 3) from Lithuania participated in the research. Empirical data was analysed using content analysis method.

Results: Experiences of the *SLTs* show that evaluation of the patients' abilities is based on body structure, functions, and language assessment. Therapy goals and strategies are mainly oriented towards the recovery of language skills, aiming at promoting the person's participation and communication, and the application of alternative and augmentative communication. According to the *SLTs*, the context is important for therapy success, i.e. psychological traits and the person's motivation; family support; stroke treatment and multi-professional support.

Patients' concerns primarily are based on limitations of their movements and language difficulties. Obstacles to participation relate to the alteration of relationships with friends, cancellation of work activity, and need for assistance. Contextual factors, which they maintain, are negative emotions, family and multi-professional support. Patients' beliefs concerning *SLT* services are concentrated on the recovery of language skills. Participants do not represent any examples of *SLT's* aims to improve their communication in daily life.

Patients' relatives reveal limited language, mobility skills, including communication of their family member after stroke. The changed health situation of the family member leads to less communication with close people, but also, relationships of family members become stronger, they find new strategies for communication. Relatives maintain changes in the family routine, and values.

Conclusions: The experiences of the participants show that *SLTs'* support is mainly based on language skills recovery, but not enough attention is paid on aphasic patients' needs, related to the improvement of communication and removing the barriers for social participation.

Keywords: Aphasia, acute stroke, intervention

PO 193

(1406) - FACE AND CONTENT VALIDITY OF THE SAQOL-39

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Objectives: For the development and evaluation of (patient reported) outcome measures, the COSMIN (COnsensus-based Standards for the selection of health Measurement INstruments) standards and checklists are widely used. Face and content validity have recently gained considerable attention. The steering committee of the COSMIN pose that these properties are the most important measurement properties of an instrument and recommend evaluation of face and content validity of the measurement instrument thoroughly. New COSMIN-boxes for

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evaluating *content validity* (including face validity) have been developed and added to the COSMIN checklist, to guide this evaluation.

Measuring Quality Of Life (QOL) after stroke has been a topic of interest for over two decades. Hilari et al. (2003) developed the first health related QOL questionnaire for people with aphasia after stroke. In the past few years the list has been adapted for numerous languages, and psychometric properties assessed to a greater or lesser degree (cf. Ahmadi et al., 2017 for an overview). The objective of the current study is to extend on the review of Ahmadi et al. and evaluate to what extent the available translations of the SAQOL-39 meet the requirements of the new COSMIN-boxes of face and content validity.

Methods: To evaluate the face and content validity of the SAQOL-39, recently developed COSMIN-boxes will be used. The SAQOL-39 developed by Hilari et al. (2003) is based on the SS-QOL (Williams et al., 1999). Therefore, face and content validity of this instrument will be evaluated first. Thereafter, compliance of the available SAQOL-39 lists available worldwide on face and content validity is evaluated.

Results: Results of the systematic evaluation according to the new COSMIN-boxes for face and content validity of the available SAQOL-39 lists will be presented.

Conclusions: Face and content validity are crucial psychometric properties that are currently often overlooked. COSMIN provides a new checklist for evaluating these properties.

Keywords: **Acquired language disorders, acute stroke, patient-reported outcome measures (development or cross-cultural adaptation and validation), clinical-reported outcome measures (development or cross-cultural adaptation and validation)**

PO 194

(1434) - QUALITY OF LIFE IN CHRONIC APHASIA: PATIENTS AND CARERS PERSPECTIVE

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Objectives: One of the major consequences of stroke is communication impairment, with immediate and potentially long-term implications for communication effectiveness and quality of life from the perspective of patients and caregivers.

The aim of this study was to compare the perception of quality of life from the point of view of patients and caregivers.

Methods: 10 chronic aphasic patients and 10 caregivers were selected. The assessment included the Italian versions of the Communication Outcome after Stroke scale for patients (COAST-IT) and caregivers (Carer COAST-IT).

Results: A linear relationship between patients and their carers' perception of disability was obtained. The carers' score results were worse than the patients', which is probably indicative of the negative impact of caring for a person with communication difficulties.

Conclusions: Assessing quality of life in chronic aphasic patients provides a useful addition to goal attainment approaches in clinical practice.

Keywords: **Aphasia**

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PO 195

(1260) - COMMUNICATION STRATEGY USE AND ACCEPTANCE OF HEARING LOSS OF OLDER ADULTS WITHIN THE PRELIMINARY GERMAN VERSION OF THE ACTIVE COMMUNICATION EDUCATION

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Objectives: Hearing Loss has a various impact on everyday life communication in persons with Hearing Loss (PHL) and their significant others (SO). The success of everyday life communication can crucially be influenced by an effective communication strategy use. The study objective was to investigate if the use of communication strategies and the acceptance of hearing loss, as one precondition of communication strategy use, can be improved by attending the preliminary German Version of the Active Communication Education (ACE) Program (Hickson et al., 2015).

Methods: In order to develop a final German Version of the ACE Program an intervention study was conducted with a preliminary German Version (pre-post-design). The study participants (N = 49, SO = 19, PHL = 30) were aged from 59 to 79 years (PHL) and from 54 to 78 years (SO). PTA - 4 for the better ear of the PHL was M = 45.75 (SD = 19.25, R = 26.25-120.00). The subscales verbal, nonverbal, maladaptive communication strategies, self-acceptance and acceptance of the German Communication Profile for the Hearing Impaired (Wisotzki & Mühlich, 1992) were used to assess the degree of self-reported strategy use pre- and post program (2 weeks and 6 months after the last session).

Results: Preliminary results of descriptive statistics showed increased verbal and nonverbal communication strategy use at different measure times and simultaneously a reduced use of maladaptive strategies. Self - acceptance was more enhanced compared to acceptance of hearing loss towards other persons. Further statistical analysis follows.

Conclusions: Attending the German ACE Programme supports effective communication strategy use and acceptance of older adults with hearing loss.

Keywords: Intervention

PO 196

(1162) - NON-LINGUISTIC ABILITIES IN POST-STROKE APHASIA

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Objectives: Current neuro-cognitive research focuses on the relationship between language and other cognitive processes. Although there is a significant amount of empirical evidence about this interaction, its nature is still one of the challenging questions of cognitive neuro-linguistics. Our goal was to investigate cognitive control processes in aphasia, based on an information processing framework. The conflict monitoring model describes monitoring as one of the control processes. Post-error slowing is a marker of monitoring, implying active control processes. Another aspect of the system's adaptability is related to changes in the level of activity in mental representations in response to repeated exposure to the same stimuli or conditions.

Methods: Besides the traditional diagnostic methods, we used computer-based tasks with E-Prime program to measure monitoring and implicit learning (repetition effect) in 6 individuals

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with aphasia and 6 control participants. The task was a simple semantic categorization task. In the monitoring task we compared pre and post-error reaction time of the participants. In the implicit learning task we focused on the participants' performance on repeated items.

Results: In the monitoring task participants with aphasia demonstrated lower post-error reaction time compared to pre-error performance. Thus, unlike the controls, participants with aphasia did not show post-error slowing. In the implicit learning task we found a significant difference in reaction time between the 2 groups but the groups exhibited similar learning curves.

Conclusions: The results reveal that cognitive control processes do not show a uniform picture in aphasia. Monitoring of performance seems to be impaired in aphasia which is manifested in the lack of post-error slowing. However, when individuals with aphasia are faced with repeated items and conditions, they show implicit learning reflected by decreasing response times. Systematic analysis of the linguistic and non-linguistic profile of individuals with aphasia is seen essential for therapists to elaborate the more personalized therapy.

Keywords: Aphasia, acute stroke, patient-reported outcome measures (development or cross-cultural adaptation and validation)

PO 197

(1122) - A FRESH APPROACH TO PROMOTING AWARENESS OF CPLOL IN UK

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Jayes, Mark - RCSLT CPLOL Action Group, UK; - Sheffield Teaching Hospitals NHS Foundation Trust, UK

Kaur, Raman - RCSLT CPLOL Action Group, UK; - Birmingham Community Healthcare Foundation NHS Trust, UK

Robinson, Andrea - RCSLT CPLOL Action Group, UK; - ICAN's Dawn House School, UK

Roddam, Hazel - RCSLT CPLOL Action Group, UK; - University of Central Lancashire, UK

Objectives: In September 2016 the UK's Royal College of Speech and Language Therapists (RCSLT) launched the "CPLOL Action Group", a working party tasked to promote greater awareness about CPLOL across the 16,000+ UK SLT membership. The group was formed to support the two UK CPLOL delegates by sharing the workload and promoting CPLOL-related activities about European SLT issues.

Methods: The CPLOL Action Group had an initial working meeting in London, followed by five conference calls in the first year. The group members mapped out their collective skills, networks, personal experiences and learnt about social media campaigning from RCSLT staff. The Action Group linked with the RCSLT's international campaign for SwallowAware (March 2017), to complement CPLOL's European Day focus on dysphagia.

Results: Over the first year, the Action Group published two articles about CPLOL in the RCSLT professional magazine "Bulletin". Awareness about CPLOL's strategic aims was also promoted through Twitter activities, especially during the #swallowaware/European Day campaign where Twitter posts and page view numbers on related websites increased.

For the first time in the UK, SLT students from many universities planned creative events to celebrate CPLOL's European Day; the winning poster for the CPLOL European Day was designed by a UK student.

Conclusions: This team approach to supporting the two CPLOL delegates has already achieved a significantly increased awareness of CPLOL and CPLOL's European day across UK SLT practitioners and students. This increased awareness nationally of CPLOL has been achieved with no budget (apart from the initial meeting, paid for by RCSLT) and despite some acknowledged limitations related to members' work settings. These activities have

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also assisted the RCSLT staff team in gaining deeper insights into CPLOL's strategic aims and operational functions.

Keywords: E-learning – team-based learning, interprofessional learning, continuing education, dysphagia

PO 198

(1432) - WHAT DO FAMILY PHYSICIANS THINK ABOUT THE REFERRAL PROCESS OF CHILDREN WITH SPEECH AND LANGUAGE PROBLEMS?

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An online survey was designed with 35 Likert-type (0-5) questions and a semi-open one. It was then sent to family physicians in Portugal according to a non-probabilistic sampling method from November 2015 to May 2016. Ethical considerations were taken into account.

Keywords: Interprofessional learning, child speech and language disorders, family physician, speech and language therapist, referral process

PO 199

(1069) - TELEPRACTICE IN SLT. RESULTS FROM AN EUROPEAN SURVEY.

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Münch, Heike - Medical University of Graz, University Hospital Graz, Graz, Austria; - CPLOL Professional Practice Commission; - Logopädie Austria

Kleer, Florence - CPLOL Professional Practice Commission; - Service de Consultation et d'Aide pour troubles de l'Attention, de la Perception et du développement Psychomoteur, Luxembourg;

Mészáros, Éva - CPLOL Professional Practice Commission; - National Institute for Medical Rehabilitation, Rehabilitation Department of Hemiplegics, Hungary;

Objectives: In speech and language therapy, telepractice can alleviate the effects of distance on access to care and can increase comfort in a patient's life. This study tries to gain more and relevant information concerning telepractice use and its importance in daily speech and language work all over Europe.

Methods: In order to get data, WG «Telepractice in Speech and Language Therapy», CPLOL - PP Commission, developed an online survey. The survey was translated into 5 languages and distributed by the CPLOL delegates within their countries. Data was collected in Survey Lime, exported to Excel and SPSS. Appropriate statistical analysis was applied.

Results: The survey was filled in by 337 participants from 26 countries. There were 287 complete answers. The most answers came from Hungary, Romania, Germany and Luxembourg, followed by other European countries. Most of the respondents were between 45-50 years old; 91% were female and 9% male; mainly working in schools and kindergartens (N=90), and in private practice and clinics (N 70). N 53 responded that telepractice is used in their country, 30 gave a negative answer and the majority (75%) are not sure. Only a small number (N 36) uses telepractice in SLT,

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but a higher number (N 107) would like to use it. Skype is widely used for telepractice sessions, followed by special programs for telepractice. 5.04% participants answered, that the insurance/healthcare system in their country accepts telepractice. Children and adults equally benefit from telepractice sessions, which are used with patients (25%) or with patients' caregivers (11 %). 43% participants think that intervention via Telepractice may be as effective as face to face sessions.

Conclusions: Telepractice in SLT/ SLP is beneficial in cases of distance or poor access to speech specialists in certain areas, but the challenges are high and special training and resources are needed for therapy sessions.

Keywords: Assessment, E-learning, – competency-based learning

PO 200

(1038) - A CASE OF DISAPPOINTED EXPECTATIONS IN SPEECH THERAPY

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Objectives: In this contribution we present an example of research methodology for all children who, in rehabilitation practice, give rise to a “disappointed expectation” in the speech therapist. We will proceed through “the deductive method of controls” indicated by K. Popper, because the problem-base arises from this “disappointment”. A new conjecture is conceived and then a “criticism” of rehabilitation interventions that appear inadequate for our child is conducted.

Methods: Paolo is a child with moderate specific language impairment who, despite the functional outcomes in speech therapy, shows difficulties in phonetic and phonologic stabilization during spontaneous speech. Our study elaborates Paul's “problem-need” (Preliminary Phase). It makes a review of the literature on the subject (E. Lennenberg; L. B. Leonard, etc.), and it conducts a new bibliographic search to find an answer that will have to be validated (L. Sabbadini e, A.G. Cagno; G. Rizzolati & M.A. Arbib; M. Gentilucci, etc.). “Metathetic reflection” shows few studies on the stabilization of the progress made by speech therapy in SLI. So it defines a new hypothesis of research and after it is created and carried out at the group rehabilitation laboratory (Project Phase) using cross-medial mechanisms (Executive Phase).

Results: After the new intervention, Paolo is re-evaluated. The specific tests show interesting results (better generalization of acquisitions). The expected modification validates the new hypothesis of Paul's problem-need interpretation (Elaboration Phase). The study can be prepared to be submitted to the criticism of the scientific community (Compilation Phase).

Conclusions: In this procedure it is of great pedagogical and epistemological importance to address the “error” (related to rational treatment) as it stimulates a critical and constructive attitude (new hypotheses/solutions) in the speech therapist in the rehabilitative practice, because the error is part of scientific knowledge and “... in our world next to each certainty there is a deception” (H. Poincaré).

Keywords: Case report, research methodology, problem-based learning

PO 201

(1250) - THE MINEFIELD OF EVIDENCE-BASED PRACTICE: A CRITICAL REFLECTION

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Objectives: Evidence-based practice (EBP) is key in clinical decision-making for providing quality services to clients and families. Speech and Language Therapists (SLTs) are fully cognisant of

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this; however, as a practicing SLT for 15 years, I recognise the substantial gap between best practice and reality. This paper aims to explore the reasons behind this, as well as barriers and facilitators regarding EBP usage in clinical settings.

Methods: This paper focuses on a critical reflection of my own thoughts, feelings and experiences of EBP, and its use in practice, from the viewpoint of a practicing clinician undertaking postgraduate study.

Results: My view of EBP has transformed from fear of a complex, poorly understood phenomenon to full understanding of what it constitutes and a competent feeling in how to approach it. This critical reflection confirmed the ideal in EBP is dynamic integration of the three key elements (scientific research, clinical experience and client preferences) in delivery of quality services, truly centred on the well-being of clients and their families. I now hold this view to the forefront of my clinical work. Recently, a fourth element of local context was added and is important as it may constrain the EBP usage. From both my experience and the literature, barriers to EBP usage in real-world clinical settings were identified: confidence, knowledge, time, limited evidence, applicability, and context. At the crux of facilitating effective and successful implementation of EBP in the clinical setting must be the fostering of a culture of EBP and all its pillars, at the levels of individual SLTs, departments and organisations.

Conclusions: I now approach my clinical work with renewed vigour and dynamism with regard to EBP, mindful of the potential and possibility available to me in my day-to-day clinical work. I utilise my skills to enhance my clinical competence, service delivery and client benefit.

Keywords: Evidence-based practice

PO 203

(1460) - A PHONOLOGICAL AWARENESS SCREENING AND ASSESSMENT TOOL FOR EUROPEAN PORTUGUESE SPEAKING CHILDREN

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Objectives: We present a phonological awareness screening and assessment tool, validated in European Portuguese speaking children from pre-school and primary school levels - ConF.IRA (Phonological Awareness – Screening and Assessment Instrument) (Castro, Alves, Correia & Soares, 2017).

Methods: Various analyses were carried out about the effect of (psycho)linguistics features as well as studies of correlation, validity and reliability to define the final version of the tool, to be implemented in educational and clinical contexts.

Results: ConF.IRA was subject to several revisions to match the cognitive, educational and psychosocial goals defined. The current version guarantees the systematicity and the uniformization of the administration, as well as the dissemination of the tool.

Conclusions: The stimulation of phonological awareness is crucial to prevent learning problems and rehab language disorders, these competences being addressed by many professionals such as educators, teachers, speech and language therapists/pathologists, logopedicians and

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psychologists. Considering this multi and interprofessional approach, the research team developed an assessment tool adapted to different professional contexts.

Keywords: Developmental language disorders, specific language impairment, phonological disorders, screening, prevention

PO 204

(1450) - ADVANTAGES AND DISADVANTAGES OF ARTICULATING DISORDERS ASSESSMENT TOOLS USED IN PORTUGAL: SPEECH THERAPISTS' PERSPECTIVE

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Objectives: The aim of this study is to identify the aspects that Speech Therapists find important to be included in articulation disorders assessment tools, as well as the advantages and disadvantages they identify in them. In addition, it was possible to verify if there is a unique instrument that includes all the aspects considered as important or advantageous.

Methods: This is a descriptive observational study. The sample was composed of 83 Portuguese speech therapists who intervene or have intervened with people with articulatory disorders for more than one year. The instrument used was an online questionnaire created for this study.

Results: The results showed that speech therapists place major importance on the time spent in the administration of the test, if the test includes naming tasks, and nonverbal tasks to assess oral motor skills. The evaluation of the production of all European Portuguese (PE) consonants in every position (initial, medial, final and consonant group) is also important, as well as oral and nasal vowels assessment, phonological processes, production of consonants and vowels in phrases, images to describe and normative data available. In addition to all these aspects, it is considered an advantage if the administration of the instrument takes less than twenty minutes and if a text to assess production in reading tasks is available. Administration time up to forty minutes is considered a disadvantage. It was also verified that there is no articulation disorder test available in Portugal that brings together all the aspects considered important/advantages by Portuguese speech therapists.

Conclusions: It may be important to create an instrument that would allow the assessment of verbal articulation that includes all the characteristics considered important/advantages by speech therapists.

Keywords: Speech disorders

PO 206

(1297) - ASSESSMENT OF SPEECH INTELLIGIBILITY FOR PRESCHOOL CHILDREN

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Objectives: The aim of this study is to construct and validate a record sheet that allows one to obtain, from a psychometric point of view, the intelligibility of the discourse of Portuguese-speaking children, aged between two and five years.

Methods: This is a descriptive study that uses a mixed research paradigm. In order to carry out this study, a convenience sample composed of six Portuguese-speaking children aged between two and five years will be used. The collection of spontaneous speech from each child will be based on predefined procedures that will be used in the same way by the researchers who collect the data. The record sheet will be filled with the transcription of the speech samples of each child and it will be verified if it measures the percentage of intelligibility of the child's speech. A panel of experts will be set up to validate these results and validate, consequently, the proposed record sheet.

Results: The expected results of this research, that is already in course, is obtaining a record sheet that allows one to measure the percentage of intelligibility of the child's speech, contributing to the diagnosis, evaluation and intervention of children referred for Speech Therapy with a Speech Sound Disorder.

Conclusions: Despite the lack of normative data in Portugal in the field of speech intelligibility, the record sheet will allow the percentage comparison of the child's pre and post intervention performance (assessment/reassessment) considering the degree of intelligibility.

Keywords: Speech disorders, clinical-reported outcome measures (development or cross-cultural adaptation and validation)

PO 207

(1293) - DIFFERENT CONTEXTS OF EVALUATION OF PHONOLOGICAL AWARENESS IN SCHOOLS WITH TYPICAL LEARNING DEVELOPMENT

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Objectives: To analyze the performance in phonological awareness skills in two different contexts of evaluation, in vivo and through video recording. To check the influence of the variables gender, age and schooling on these skills.

Methods: The participants in this study were 16 children with ages between 7 and 8 years old (average of 7.8 years), attending 2nd and 3rd grades of elementary grades and who had a good school performance. The evaluations were taken in three situations: 1- writing sample gathered through the Scholar Performance Test (TDE); 2 - Situation 1 (C1)- CONFIAS test (Phonological awareness: Sequential evaluation tool) application in vivo, following the test instructions; 3- Situation 2 (C2)- reapplication of CONFIAS test through a video recording. Children's performances were separately analyzed and the comparison between the situations (C1 and C2) was made. Besides that, the influence of the variables sex, age and educational level was examined. For the statistics, the McNemar and Wilcoxon tests were used.

Results: In C1, the score average on the CONFIAS test was 59.9 (± 5.1), where 36.8 points were on the syllabic level and 23.1 points were on the phonemic level. In C2, the total score average was 66.1 (± 2.8), where 38.3 points were on the syllabic level and 27.2 points were on the phonemic level. Comparing C1 and C2, a statistical difference is noticed on the syllabic level ($p=0.02$), on the phonemic level ($p<0.01$) and the total test score ($p<0.01$), where the biggest difference between the situations occurred in the phonemic level. Related to the variables sex and age, no significant difference was noticed. On the other hand, related to educational level, children in the 3rd grade showed better performance in C1, in the total test score ($p=0.04$) and in C2 (syllabic level).

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Conclusions: Children showed a better performance in the CONFIAS test in C2, on the syllabic and phonemic levels. There was only an educational level influence, noting a better performance in 3rd grade children.

Keywords: Phonological disorders, Developmental language disorders

PO 208

(1383) - ASSESSMENT OF AUDITORY SKILLS IN CHILDREN WITH SPEECH DISORDERS

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Objectives: To verify the auditory abilities, through the evaluation of auditory processing, in children with a diagnosis of phonological disorder.

Methods: The sample consisted of data from four boys (5 to 8 years old) with a diagnosis of phonological disorder attending the language sector of a school clinic. Assessment of auditory processing was performed using the Simplified Auditory Processing Test (SAPT), which was considered appropriate in the following responses: Nonverbal Sequential Memory test (understand the request and hit at least two sequences of four sounds in three presentations), Verbal Sequential Memory test (hitting at least two sequences of four syllables in three presentations), Localization of Sound (hitting at least four of the five directions provided, wherein the lateral location should be present), Pediatric Speech Intelligibility (PSI), Pitch Pattern Sequence Test (PPS) and Duration Pattern Sequence Test (DPS).

Results: All subjects in the sample demonstrated adequate localization, memory and sound sequencing skills, with 100% accuracy in all positions and sequences presented, including verbal sequential memory skills. From the results obtained in the Pediatric Auditory Audiometry test, it can be inferred that selective attention, figure-background and auditory closure abilities are adequate in these patients. In the tests of Temporal Pattern of Frequency and Temporal Pattern of Duration, it was verified that two subjects presented results below those expected for age. This result indicates that these subjects present difficulties in the abilities of recognition of patterns of frequency and duration, temporal ordering and naming.

Conclusions: It is not possible to make a direct relation between difficulties in these abilities and phonological deviation. Children with phonological disorders require longer time intervals to perceive the differences between sounds.

Keywords: auditory processing, phonological disorder, speech therapy

PO 209

(1307) - ANALYSING THE GAINS IN USING THE T2T MOBILE APPLICATION IN SPEECH AND LANGUAGE THERAPY INTERVENTION FOR CHILDREN WITH SPEECH SOUND DISORDERS

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Objectives: Speech Sounds Disorders (SSD) represent a large proportion of paediatric cases referred for Speech and Language Therapy (SLT). Mobile applications are increasingly used by Speech and Language Therapists (SLTs) in the intervention with this population, however information on their effectiveness is scarce. The present project aims to collect observational

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data from children with SSD when the T2T app [Jesus et al. (2015). The Table to Tablet (T2T) Therapy Software Development Approach. doi: 10.1109/CISTI.2015.7170549] is used during the therapeutic sessions, and to analyse the results obtained after the intervention.

Methods: A non-probabilistic convenience sample was used. Participants were 11 children with SSD (8 males and 3 females), aged between 4 years and 3 months and 6 years and 3 months. The following inclusion criteria were considered: Children diagnosed with SSD by certified SLTs; European Portuguese as mother tongue; aged between 3 years and 6 months and 6 years and 6 months. Two groups were formed (experimental and control). The therapeutic intervention was identical in both groups, and the same types of activities were performed with all the children, the only difference was the use of the T2T application in the experimental group. The scores of a standardised language test were used as outcome measures.

Results: There was an increase in the mean scores obtained at T1 (pre-intervention evaluation) and at T2 (post-intervention evaluation) in both groups, which means that the intervention had an effect. This increase was higher for the experimental group, that is, children in the experimental group achieved better results.

Conclusions: The results suggest that the use of the T2T app has a positive effect. These results seem to be in agreement with previous studies' results that show that the use of mobile applications in intervention can increase the efficiency and effectiveness of traditional therapy.

PO 210

(1256) - STORYTELLING INTERVENTION PROGRAM IN PRIMARY LANGUAGE DISORDERS

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Rocha, Joana - *Universidade Fernando Pessoa, Portugal*

Peixoto, Vânia - *Universidade Fernando Pessoa, Portugal*

Objectives: This study analyzes the contribution of a group reading program in the linguistic performance of children between 4 and 5 years old with Primary Language Disorders, measured by the Percentage of Consonants Correct (PCC), Mean Length of Utterance (MLU), Auditory Memory (AM), and speech intelligibility (SI). The main objectives were to calculate the PCC, MLU, AM and SI pre- and post-intervention in both groups and also to measure the possible differences in PCC, MLU, AM and SI between the experimental and control groups, with reference to pre- and post-intervention time-points.

Methods: The study was carried out at Hospital-Escola Universidade Fernando Pessoa, after a positive opinion from the Ethics Committee of this institution. The sample consisted of 14 children with primary language disorder, aged between 4 and 5 years, divided into two study groups, one experimental and one control group. The experimental group benefited from an intervention program in children's storytelling, along with individual speech therapy sessions. The control group received individual speech therapy sessions. The children were evaluated for the measures: Percentage of Consonants Correct, Mean Length of Utterance, Auditory Memory, and speech intelligibility.

Results: The results suggest improvements in the percentage of correct consonants and the Mean Length of Utterance, but there was no effect of intervention effectiveness on these measures. In auditory memory, the results seem to indicate a significant intervention effect on words and order's tasks. Regarding the intelligibility evaluation, there was a high agreement between evaluators, but the results in the experimental group (before and after evaluation) were questionable. The parents' opinion regarding the intervention in a group context was evaluated as favorable / very favorable.

Conclusions: The results reported after 8 sessions of storytelling group intervention can be seen as encouraging in order to increase studies using different types of reading strategies in primary language disorders speech-language therapy interventions.

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Keywords: Intervention, developmental language disorders

PO 211

(1127) - LEXICON PIRATE – AN EVIDENCE-BASED STRATEGY THERAPY FOR CHILDREN WITH LEXICAL DISORDERS

Ulrich, Tanja - *University of Cologne, Germany*

Marks, Dana-Kristin - *LMU München, Germany*

Objectives: Vocabulary disorders often occur within the context of developmental language disorders, and specifically, SLI. These children need to be supported by speech and language therapists in order to overcome their lexical deficits and catch up with their peers. Unfortunately, traditional intervention methods that focus on elaboration and retrieval training for a set of trained target words, could not yet show persuasive generalization effects on untrained words. According to this, the aim of the “Lexicon Pirate” therapy approach is to provide the children with general semantic and lexical learning strategies. These strategies enable the children to resolve their lexical deficits by themselves: once the strategies have been learned, they may be applied whenever they are needed.

Methods: This intervention method was developed in Germany and has since then been evaluated in several small case studies as well as in two randomized control trials (RCT). With sample sizes of N= 82 (study on preschool children aged 4-5 years) and N= 157 (study on school-aged children aged 9-10 years), these studies are currently the most extensive international studies on the effectiveness of lexical intervention.

Results: The results of the RCTs show that preschoolers as well as school-aged children do benefit from the “Lexicon Pirate” therapy. Generalization effects on untrained words are larger than those obtained when applying a “traditional” vocabulary intervention. The intervention method is also suitable for bilingual children as the strategies may be applied to every language of the child.

Conclusions: “Lexicon Pirate” is an evidence-based therapy approach for children with lexical disorders. Providing children with general lexical learning strategies can enhance the effectiveness of speech and language therapy for children with lexical disorders.

Keywords: Developmental language disorders, specific language impairment,- intervention

PO 212

(1282) - INTERVENTION PROGRAM ON THE DEVELOPMENT OF EXECUTIVE FUNCTIONS IN CHILDREN WITH SPECIFIC LANGUAGE IMPAIRMENT FROM 4 TO 6 YEARS.

Marotta, Luigi - *Child Neurorehabilitation Unit, Children Hospital Bambino Gesù, S. Marinella, Rome, Italy*

Cacopardo, Ilaria - *Studio Roiate, Rome, Italy; - Eirene' Project, Rome, Italy*

Objectives: Children with specific language impairment (SLI) demonstrate significant language impairments despite normal-range hearing and nonverbal IQ, but there is increasing evidence that they have difficulties with non-linguistic tasks including mental rotation, number skills and motor skills (Bishop, 2002; Cowan, Donlon, Newton & Lloyd, 2005; Johnston & Ellis Weismer, 1983). Many of these children also show marked deficits in executive function abilities, in particular in working memory, inhibition and planning (Henry et al, 2012). The interventions, however, are generally focused on exclusively linguistic abilities. The aim of this study is to verify the effectiveness of a specific intervention on non verbal executive functions in preschool children with SLI.

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Methods: We investigated the linguistic skills and executive functioning abilities in a sample of 12 children, aged between 4 and 6 years, using standardized test batteries for the Italian language. Subsequently, we offered 6 children specific training on non verbal executive skills and the other 6 were given a traditional training for a 12-week period. At the end of the treatment, we re-evaluated both language and executive skills in both groups.

Results: We are still working upon definitive results. The first results show a greater increase in language performance in children undergoing executive training than those trained "as usual."

Conclusions: A specific non-verbal training on executive functions, can significantly improve language development in children with SLI. Anyway children, after this initial treatment, still need to be supported in the development of language and phonological abilities, but their acquisition seems to be faster than other children with SLI who were not trained on inhibition and working memory abilities.

Keywords: Developmental language disorders,- intervention, specific language impairment

PO 213

(1330) - EDUCATIONAL COMPUTER GAMES USE IN SPEECH AND LANGUAGE PATHOLOGY

Stankova, Margarita - New Bulgarian University, Bulgaria

Todorova, Ekaterina - New Bulgarian University, Bulgaria

Ivanova, Valentina - New Bulgarian University, Bulgaria

Kamenski, Tzveta - New Bulgarian University, Bulgaria

Objectives: Many studies indicate that teachers have a positive attitude towards the use of video and computer games in learning. Overall, teachers believe that games can motivate children to learn and develop their skills in different areas (Razak et al., 2012). Positive results are also reported in the use of games for children with disabilities (Main, 2016). The present research is focused on the study of the use of educational computer games in the diagnosis and therapy of speech and language disorders.

Methods: 95 speech and language therapists have been included in the study, who work actively with children with developmental disorders. The method includes a questionnaire developed after reviewing the literature on the issue.

Results: The results show that speech therapists often use individual educational computer games in working with children with speech and language disorders - most often memory games, attention concentration games, games for reading, and language skills development. Games are most often found in online resources and professional websites, and expectations are related to acquiring additional knowledge and skills, motivation and reward. Educational computer games are most often used in children with learning difficulties, secondly - language disorders, third - specific language disorders and ADHD. The educational computer games are most rarely used in children with stuttering. Speech and language therapists believe that the use of computer games is accepted very positively by the children and moderately by the parents. They also consider that this has a positive impact on the effectiveness of the therapeutic process and the children acquire additional knowledge and skills. Over 80% of speech therapists indicate that they need additional information and training to work with educational computer games.

Conclusions: Educational computer games can be considered an appropriate auxiliary method of therapy in speech and language pathology.

Keywords: Intervention

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PO 214

(1182) - PAUSES INDICATING THE TYPE OF FLUENCY DISORDER IN ATYPICAL SPEECH AFTER TRAUMATIC BRAIN INJURY WITH AND WITHOUT NEUROGENIC STUTTERING

Kaasalainen, Iina - Cognimed Oy
Penttilä, Nelly - University of Tampere, Finland

Objectives: Linguistic problems and stuttering appear primarily in speakers' audible output e.g. as hesitations, naming errors and repetitions. These problems also appear in inaudible output as pauses. Pauses can be investigated as interruptions in speech flow, which can be classified as fluent or dysfluent types. In this study, dysfluent pauses were categorized into three classes: word-finding pauses, dysfunctional pauses and dysrhythmic pauses. The aim of this study is to investigate how pauses indicate speech fluency in atypical speech. The research questions were 1) How many of the pauses are dysfluent? 2) Do the two speaker groups differ by proportion of dysfluent pauses? 3) Do the two speaker groups differ by the dysfluent pause type?

Methods: Five male speakers with various communication disorders after traumatic brain injury (TBI) comprised group A (average age 44.5 years, range 38-56). Four male and one female speaker with neurogenic stuttering after TBI comprised group B (average age 31.4 years, range 20-63). The average length of pauses, dysfluent pause ratio, and the dysfluent pause type were analyzed from a semi-spontaneous speech sample.

Results: The two groups differed statistically in a number of ways. Pauses were longer in group A than in a group B. Dysfluent pauses were also longer in group A than in group B, with word-finding pauses the most common type for group A and dysrhythmic pauses for group B. Dysfluent pauses occurred more frequently in group B.

Conclusions: This study proposes that analyzing pauses in speakers with TBI can help both researchers and clinicians to identify and differentiate stuttering phenomena from linguistic difficulties. The study demonstrates that analyzing pauses both quantitatively and qualitatively helps researchers to understand the multifaceted phenomenon of fluency.

Keywords : Fluency disorders, stuttering, traumatic head injury

PO 215

(1053) - HOW DEPRESSION CHANGES THE WAY PEOPLE SPEAK: THE RELATION BETWEEN PHONOLOGICAL LANGUAGE DIMENSION, VERBAL FLUENCY AND COGNITIVE IMPAIRMENTS.

Trifu, Raluca Nicoleta - Medical Psychology Department, Iuliu Hatieganu University of Medicine and Pharmacy, Romania

Bodea Hațegan, Carolina - Special Education Department, Faculty of Psychology and Education Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania

Talaș, Dorina - Special Education Department, Faculty of Psychology and Education Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania

Cozman, Doina - Medical Psychology Department, Iuliu Hatieganu University of Medicine and Pharmacy, Romania

Objectives: Depression is a common psychopathological disorder, with more than 300 million people being affected by this diagnosis (WHO, 2017). Cognition, language and communication are altered during depressive episodes. The study aims to set the connections between particular language dimensions, such as phonological level and cognitive and executive functioning in depression.

Methods: The study design involves two group comparisons; test results of persons with clinical depression (N=73) - based on ICD-10 diagnostic criteria - and a control group (N=43) were

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analyzed. CogTest neuropsychological Battery provides the measurements of cognitive functions. Verbal Fluency Tests - COWAT scoring and Troyer (1997) scoring model were applied. The study used the content analysis approach to rate collected narrative language samples.

Results: The phonological language dimension is marked by a high rate of inversions in the language of persons with depression, 94.7% vs. 4.8% for control group. Ellipsis is uncommon in the control group, but with a high rate of 65.3% in the narrative language of persons with depression. The binary logistic regression model indicates no influence of age and education level on narrative language production. There is a direct positive relation between poor performance on the verbal fluency task and an increased number of inversion and ellipsis. The relation stays the same for memory, attention, strategic planning and set shifting.

Conclusions: The phonological language dimension measured in the case of depression is a fine indicator for cognitive impairments associated with depression and might act as an additional tool for depression diagnosis and intervention.

Keywords: Psychiatric disorders, fluency disorders, stuttering, cognitive impairment, functional diagnosis

PO 216

(1279) - QUALITATIVE INTERPRETATION OF VERBAL FLUENCY MEASUREMENTS IN LANGUAGE OF DEPRESSED PERSONS

Carolina, Bodea Hațegan - Special Education Department, Faculty of Psychology and Education Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania

Dorina, Talaș - Special Education Department, Faculty of Psychology and Education Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania

Raluca Nicoleta, Trifu - Special Education Department, Faculty of Psychology and Education Sciences, Babeș-Bolyai University, Cluj-Napoca, Romania; - Medical Psychology Department, Iuliu Hatieganu University of Medicine and Pharmacy, Romania

Objectives: Widely used to assess executive function and cognitive impairments, a verbal fluency task is a fine indicator for psychopathology. Verbal fluency quantitative listing is common in practice, but the qualitative one is more accurate and more relevant. The study aims to make a qualitative interpretation of verbal fluency measurements in depression based on two qualitative scoring models.

Methods: Verbal fluency tests were applied to two different groups: persons with clinical depression (N=45) and a control group (N=38). The Troyer (1997) and Abwender (2001) scoring models were applied. The study used a manual content analysis approach to score qualitative verbal fluency.

Results: The qualitative interpretation of verbal fluency, both phonemic (PVF) and semantic (SVF), indicates fine differences between groups. Troyer's model indicates lower scores for depression: C1 (words beginning with the same first two letters) - $t(71)=-4.2$, $p=.05$; C2 (differ only by their vowel sounds) - $t(71)=-5$, $p=.05$, C3 (rhyme) - $t(71)=-.54$, $p=.05$; C4 (homonyms) - $t(71)=-1.05$, $p=.05$; C5 (number of words produced in each cluster beginning with the second word) - $t(71) = -2.9$, $p=.05$; S (Switching) - $t(71) = -3$, $p=.05$. Results are similar for Abwender's scoring model: C1 (words that begin with the same sound, even if the spelling is different) - $t(71) = -4.5$, $p=.05$; C2 (words that end with the same sound) - $t(71)=-2.6$, $p=.05$, C3 (groups of words in which the second letter follows an alphabetical progression) - $t(71)=-1.6$, $p=.05$; on SVF task-discrepant clustering - antonyms- $t(71)=-0.8$, $p=.05$ and task-discrepant clustering - category hierarchic $t(1)=-.9$, $p=.05$.

Conclusions: Qualitative interpretation of verbal fluency in case of psychopathology of depression offers a better perspective for language. The number of clusters and switches is less in the group with depression, and decreased by severity of symptoms.

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Keywords : Patient-reported outcome measures (development or cross-cultural adaptation and validation), fluency disorders, stuttering, cognitive impairment, functional diagnosis

PO 217

(1349) - NEUROLOGICAL DYSFLUENCIES: WHAT ARE THEY LIKE?

Maramotti, Elisa - *Università di Modena e Reggio Emilia, Italy*

Budriesi, Carla - *Università di Modena e Reggio Emilia, Italy*

Objectives: To analyze samples of spontaneous speech in dysfluent patients with a variety of neurological conditions and to verify the correlation between perceptive evaluation and quantitative analysis in neurological stuttering.

Methods: 18 patients' speech samples were examined through a retrospective study. These patients presented dysfluency at the Speech and Language Evaluation and they have a history of neurological disease. We conducted a quantitative assessment of a sample of spontaneous speech for each patient and confronted the analysis with the perceptive judgement of 3 experienced SLTs.

Results: By confronting the two evaluations, we found that the dysfluency's auditory perception does not always agree with the quantitative analysis. Through a comparison between sample analysis and a literature review, correspondences were found for dysfluencies' loci, grammatical classes, presence of secondary behaviors and, partially, for features related to etiology.

Conclusions: The disagreement between the two analyses may depend on the evaluation criterion used, the size of the speech samples or due to concomitant problems, such as articulation difficulties or anomic latencies. The retrospective nature of the study has not allowed the analysis of all aspects of dysfluency, including adaptation, attitude and visible tension.

Key words: Dysfluency

PO 219

(1055) - POSTGRADUATE PROGRAM FOR SLTS IN A DISTANCE LEARNING MODALITY: THE EXPERIENCE IN UNIVERSITY OF ALGARVE

Baptista, Ana Catarina - *University of Algarve and Centre of Linguistics of the University of Lisbon, Portugal*

Rodrigues, Susana - *University of Algarve and Centre of Linguistics of the University of Lisbon, Portugal*

Objectives: To share experience in creating and implementing a specialization postgraduate course in Speech Sound Disorders for speech and language therapists (SLT) through distance learning (b-learning).

Methods: Blended-learning is an education program which combines some elements of distance learning in an E-Learning modality and some elements of face-to-face training. This modality allows one to reach a larger audience and to ensure a greater flexibility in the teaching-learning process of the students. Each student can define his/her learning pace and adapt it to his/her own context, being able to advance in the contents that are already familiar and dwell on those that need further study.

Results: This postgraduate course gives the students the opportunity to update, complement and extend their knowledge about Speech Sound Disorders (SSD) through moments of reflection, research and application of the contents, as well as the development of competences that aim at an adequate professional performance regarding the assessment and intervention in the scope of the SSD.

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Conclusions: This is the first postgraduate program for SLT in distance learning (b-learning) in Portugal, in close collaboration with colleagues from other national and international universities. The group of students that attends this program is geographically heterogeneous, since we have students from the south, central, northern of Portugal and also the island of the Azores.
Keywords: Distance learning; postgraduate program; SLT; speech sound disorders, E-learning.

PO 220

(1067) - INTERPERSONAL INTERACTIONS BETWEEN THE SUPERVISOR, STUDENT AND CLIENT

Christopoulou, Maria - Association of Speech Pathologists Cyprus & EUC Speech Pathology Program, Cyprus
Guryan Guzi, Beth - ASHA - American Speech-language Hearing Association, United States of America

Objectives: Effective clinical supervisors manage three different relationships: student - client relationships, supervisor - student relationships and supervisor - client relationships. Balancing the needs of people can be challenging for beginning clinical supervisors. Mentoring students to be change agents begins with the clinical supervisor modelling a professional relationship with the student. The aim of this session is to explicitly teach supervisors how to give positive, negative and neutral feedback and balance professional relationships. The need for students and supervisors to have a greater awareness of their interpersonal skills is paramount for quality relationships and best practice.

Methods: Introduction and analysis of the Triadic Supervision: A clinical supervision modality primarily used in counsellor education and combines elements of group, individual and peer supervision. The two main types of triadic supervision include split focus and single focus supervision. These methods will be analyzed and demonstrated through short video filming. The power of active and effective observation is found in this teaching approach. In group supervision the supervisor acts as a facilitator and models how to lead a group. Usage of motivational interviewing leading to beneficial change.

Results: The characteristic of an effective Clinical Supervisor and his/her attributes to be productive, inspiring and supportive.

The effectiveness and the productivity levels of the Triadic Supervision as the ending result and the benefits of this.

The effectiveness of the graded ongoing training which is based on the interpersonal relationships, good communication skills and a lot of self awareness of the task to be performed

Acknowledgement of the various learning styles and different personalities.

Conclusions: Triadic and group supervision can be used to teach interpersonal skills.

Effective ways to change perceptions based on observable facts and using motivational interviewing. Discrimination of the different stages of supervision and the graded differentiation of acquired skills needed from the clinician and the supervisor for maximum effectiveness.

Keywords: Clinical education, - team-based learning

PO 221

(1444) - CLINICAL COMMUNICATION SKILLS IN HEALTHCARE PROFESSIONS - COACHING AND SUPERVISION

Vital, Paula - Santa Casa da Misericórdia de Lisboa (SCML), Portugal

Objectives: The objective of this work is to present a conceptual map proposal in the development of transversal health communication skills that explores the monitoring, follow-up and intervention

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among health professionals, speech and language therapists included, using coaching and supervision, identifying the benefits of its use.

Methods: Narrative review of the literature on the use of coaching and supervision for the development of communication skills in health professionals and systematization of the author's professional experience. The construct proposed by the author forms a holistic approach to the communication process, the development of communication skills and the coherent and consistent use of these competences in the professional lived experience.

Results: The communication skills of health care professionals have been widely studied and valued in the care area, and training has been increased. However, it is known that learning these skills through initial training or continuing training is often not demonstrated in health care performance. Even the speech and language therapist as a communication specialist does not have specific health communication skills that are transversal to others health care professions. Diverse ways of accompanying these professionals in their personal and professional clinical communication development can be implemented, as is the case of coaching and clinical supervision.

Conclusions: Coaching and supervision as intervention methodologies are based on the development of competences and are processes of personal and / or team development that involve communication and learning and that produce change, leading to positive and lasting transformations, namely the increased satisfaction of people and teams.

Keywords: **Interprofessional learning**

PO 222

(1007) - TEACHING VOICE THERAPY

Kaufmann, Sara - *Logopädie Austria, Austria*

Objectives: To become a voice therapist, it is necessary to acquire a set of competencies. According to the constructivist theory of learning, knowledge cannot be transmitted from outside, but has to be developed within the learner. Biggs and Tang state in "Constructive Alignment" that intended learning outcomes, learning activities, and assessment tasks are closely related to each other and influence one another as well (Biggs & Tang, 2011).

Methods: This empirical cross-sectional study with partly standardised questionnaires investigated how teachers in German schools of logopaedics design lessons of voice therapy in order to enhance the acquisition of voice therapy competencies.

Results: Communication between teachers and students and the teacher's charisma seem to have a great influence on the acquisition of competencies. Beyond that, all respondents mentioned that the choice of didactic methods and manner of examination are related to the educational goal. No relation can be found between the choice of the didactic method and the manner of examination. A good connection to an internship and a rather small group size were also important.

Conclusions: Relations between educational objective, manner of examination, criteria for choosing didactic methods, and factors influencing acquisition of competencies were the main focus. The study shows that to impart and improve various aspects of competencies in voice therapy, teaching-learning methods concentrating on students are above all perceived as suitable. Self-instructed and active learning enhances the students' intrinsic motivation and the connection of the newly learnt with existing knowledge and experiences. Action and practice oriented teaching methods support the acquisition of competencies by connecting various skills. Didactic variety supports competency acquisition, and the respondents aim for competency or output oriented teaching. Additionally, relating the manner of examination would be important, since this also influences the learning behaviour. Other factors of influence on the learning process were identified e.g. the role of communication between teacher and students.

Keywords: **Evidence-based practice, Competency-based learning, Quality of education**



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145 Bd Magenta, F-75010 Paris

www.cplol.eu

ISBN 978-2-9552505-1-8

EAN 9782955250518



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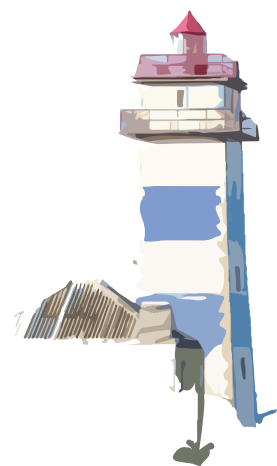
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Biographie

Alexandre Castro Caldas est un professeur de neurologie et à l'heure actuelle le directeur de l'Institut des Sciences de la santé de l'Université Catholique portugaise. Son sujet d'intérêt principal est la neurologie comportementale. Il fut le président de la Société Internationale de neuropsychologie en 2001, et il a publié des articles dans les principaux journaux de la spécialité.



Discours | Langage des sujets analphabètes

L'analphabétisme est dû à des raisons sociales qui sont communes dans le monde entier. Les premiers concepts à propos de l'aphasie au début du 19ème siècle étaient basés sur des patients qui n'étaient pas toujours alphabétisés, mais ce fait n'était jamais considéré comme important.

Nos résultats suggéraient que l'organisation du cerveau des sujets analphabètes diffère de ceux qui sont allés à l'école lorsqu'ils avaient atteint l'âge de la scolarité et que cela doit avoir un effet sur les signes de l'aphasie.

Biographie

Chris Code est un professeur chargé de recherche en psychologie, Collège de la Vie et des Sciences de l'environnement, Laboratoires Singer à Washington, Université d'Exeter, Angleterre, Fondation Professeur des sciences de la communication et des troubles (honorable) à l'Université de Sydney et fut directeur de la recherche pour Speakability (habilité du langage). Il fait partie du groupe de pression, britannique, et de plaidoyer pour l'oeuvre de charité pour les personnes atteintes d'aphasie et mène des recherches sur les conséquences psychosociales de l'aphasie et est le conseiller national de la Speakability sur l'aphasie. Il est le mécène d'AphasiaNow.



Les intérêts de la recherche incluent la neuropsychologie du langage et de la communication, les conséquences psychologiques de l'aphasie, l'aphasie et l'évolution du langage et de la communication, la récupération et le traitement de l'aphasie, la prise de conscience du public au sujet de l'aphasie, l'histoire de l'aphasie, l'analyse des données et l'apraxie.

Il est le rédacteur en chef, cofondateur du journal international Aphasiology, ancien rédacteur du journal international du langage et des troubles de la communication et du journal australien des troubles de la communication et il siège dans les Comités de rédaction d'un certain nombre de journaux scientifiques.

Parmi ses ouvrages, il y a la Thérapie de l'Aphasie (Aphasia Therapy) (1982 avec DJ Müller), Langage, Aphasie et l'Hémisphère droit (Language, Aphasia and the Right Hemisphere) (1987), Les Caractéristiques de l'Aphasie (Classic Cases in Aphasia) (1991) et les Cas classiques en Neuropsychologie (Classic cases in Neuropsychology) (Vol I, 1996; Vol II, 2002) (avec C-W Wallech, Y. Joannette & AR Lecour) et les Étapes importantes dans l'Histoire de l'Aphasie (Milestones in the History of Aphasia) (2008) (avec Juergen Tesak).

Il a une maîtrise en phonétique de la linguistique (Université d'Essex) et un doctorat en neuropsychologie (Université du Pays de Galles) et est membre de la Société britannique de psychologie et membre du Collège Royal des Thérapeutes du langage et de la communication. Il fut le présentateur invité du Cours annuel de l'École Mary en 2010. Parmi ses récompenses, il y a en 2010 le Prix de Robin Tavistock pour les Services rendus pour l'Aphasie pour le Tavistock Trust.

Discours | Est-ce que l'Aphasie est un trouble du langage?

Je passerai en revue la recherche contemporaine en suggérant qu'il faut souligner que les déficits 'linguistiques' ou 'verbaux' (symptômes de l'aphasie) qui sont des handicaps des mécanismes cognitifs non linguistiques. L'aphasie affecte les opérations cognitives liées spécifiquement au langage, mais il ne s'agit pas en soi d'un trouble du langage primaire.

De telles fonctions comme STM/ la mémoire de travail, les fonctions exécutives (exemple, l'attention, la (dés)inhibition, l'anosognosie), la praxis (processus d'action, exemple, apraxie du discours), les handicaps de perception (agnosie, aspects d'anomie) – le 'langage' est impossible sans ces fonctions cognitives d'aide qui sont handicapées. Mais ce n'est pas le cas des règles et des représentations qui sont gérées par les préparations d'aide cognitives.

Le modèle traditionnel des centres et des voies et la définition de l'aphasie sont généralement considérés comme une méthode et d'autres proposent les comptes de procédures et les calculs de l'aphasie (McNeil et al., 2015). Le modèle traditionnel propose des centres dans le cerveau où les règles et les représentations sont emmagasinées, et ils sont connectés par les voies anatomiques (exemple, les aires de Broca et de Wernicke reliées par le faisceau arqué).

Un nombre croissant d'aphasiologues sont d'avis que le poids de la preuve de cette deuxième méthode de calcul est écrasant et ne peut pas être négligé. La proposition suggère que l'aphasie est un trouble de la performance où les représentations ne sont pas 'perdues'. La 'perte' d'une composante du langage - phonème, morphème, objets lexicaux, unités syntaxiques- est considérée comme trop simple. L'accent est mis sur les procédures et les mécanismes responsables de la construction des représentations, ne construisant pas des blocs par eux-mêmes.

Je vais analyser ces évolutions fascinantes et examiner les implications significatives pour le traitement de l'aphasie.

Référence: McNeil, M, Hula, W. & Sung, L.E. (2011). Le Rôle de la mémoire et l'Attention dans la performance du langage aphasique (The Role of Memory and Attention in Aphasic Language Performance) . Chez Jackie Guendouzi, Filip Loncke et Mandy J. Williams (eds.), Le Manuel des procédures psycholinguistiques et cognitives (The Hanbook of Psycholinguistics and Cognitive Processes). (Hove, East Sussex: Psychology Press. Pp.551-577.

Biographie

James Law est professeur de sciences du langage et de la communication de l'Université de Newcastle au Royaume-Uni. Il étudia d'abord la linguistique à l'Université d'East-Anglia avant de se qualifier et de pratiquer comme thérapeute du langage et de la communication au Royaume-Uni pendant dix ans. Par la suite, il a cherché des fonds pour la recherche de l'ordre de quatre millions de livres sterling et a publié plus de 200 articles sur la spécialité et d'autres ouvrages. Il fut l'un des principaux chercheurs du département de l'éducation et créa un Programme de recherche pour une meilleure communication et il est aujourd'hui le chef des chercheurs au Centre australien NHMRC Centre pour l'excellence dans le langage de l'enfant. Il est le président du comité de gestion du réseau de recherche sur le coût de l'action (IS1306) connu sous le nom de "Renforcement des compétences orales du langage chez les enfants en Europe, et ailleurs : une collaboration se concentrant sur les interventions pour les enfants rencontrant des difficultés dans l'apprentissage de leur première langue".



Il a écrit toute une série de communication sur les troubles de la communication, mais son centre d'intérêt principal fut les enfants, en examinant et en détectant les premiers signes et le traitement à fournir chez les enfants souffrant de troubles du langage. En 2003, il publia la première revue Cochrane en la matière. Récemment, il concentra son attention sur les questions de santé publique et mentale, en publiant une édition spéciale des difficultés émotionnelles et comportementales intitulée le "Langage, la Communication et l'enfant souffrant de difficultés émotionnelles et comportementales : conséquences pour la pratique". Avec ses collègues, il a aussi mené une série d'analyses sur les cohortes de naissance au Royaume-Uni en publiant dans un grand nombre de journaux spécialisés, plus récemment sur l'évolution de l'enfant. Il s'est également impliqué dans les débats politiques liés au développement du langage chez l'enfant et plus spécifiquement par une consultation au sujet du langage et du désavantage social pour tous les partis des groupes parlementaires à l'House of Commons au Royaume-Uni. Il publia deux rapports sur le même sujet pour le centre du groupe de réflexion du gouvernement pour la justice sociale et deux autres pour l'organisation caritative internationale « Save the Children ». Finalement, il est membre du Comité des données probantes pour la Fondation sur l'intervention précoce, une organisation mise sur pied par le gouvernement en Angleterre afin de promouvoir la preuve basée sur les pratiques dans les services pour les enfants.

Discours | Intervention afin de promouvoir le développement du langage chez l'enfant : ce que nous savons, ce que nous ignorons, et quelle est la prochaine étape

Cette présentation commencera par résumer les découvertes importantes sur les interventions soulignant les preuves publiées sur les différents aspects du développement du langage et de la communication chez l'enfant. Le travail continuera sur ce que nous devons encore découvrir au sujet des mécanismes soulignant ces interventions et sur les implications pour la pratique et la politique en mettant en exergue le sujet sur lequel nous devons nous concentrer par la suite. L'exposé mettra l'accent sur une variété de sources, en incluant les récentes découvertes mises à jour de la Revue Cochrane de 2003, des études récentes pour le Royaume-Uni sur le fonctionnement des centres et des études et un questionnaire rempli par les membres du groupe COST Action IS1406, un réseau de chercheurs se concentrant sur la recherche dans l'intervention du langage de 35 pays en Europe et ailleurs.

Biographie

Margaret Walshe M.Sc. est une professeur associée détenant un doctorat du département Clinique des études du langage et de la communication au Trinity College à Dublin. Elle est une membre du comité de direction de la Société européenne des troubles de la déglutition et elle fut l'artisane de la création des premiers cours de post-graduation sur la dysphagie en Irlande. Ses recherches se concentrent sur la dysphasie, les troubles de la communication acquise et sur les preuves basées dans sa pratique. Elle a publié de nombreux ouvrages dans ces domaines et a reçu une bourse de la Cochrane Fellowship HRB en 2009. Elle est couramment impliquée dans un nombre d'études de recherches financées liées à la communication neurologique acquise et aux troubles de la déglutition.



Discours | 'Tracer l'itinéraire et voyager sur la preuve': une évaluation critique, basée sur les pratiques de la dysphagie neurologique acquise.

Cette présentation commencera avec un bref panorama sur les domaines clés des pratiques basées telles que l'utilisation de la recherche, la recherche clinique et les préférences du patient. La preuve de l'approche courante de l'intervention pour la dysphagie dans les cas progressifs et non progressifs neurologiques sera évaluée de manière critique. L'efficacité ainsi que la pertinence des stratégies populaires d'intervention seront examinées.

Les réflexions sur les progrès jusqu'à ce jour dans la recherche sur la dysphagie, 'une mauvaise science' et les conséquences de preuves limitées disponibles vont renforcer l'argument prônant une recherche accrue de grande qualité dans les interventions en dysphasie neurologique. Nous discuterons des défis ainsi que des opportunités dans la conception, l'application et les nouvelles en matière de recherche dans le domaine de la dysphagie clinique. Le concept de l'application de la science et sa pertinence pour les thérapeutes du langage et de la communication seront examinés.

En conclusion, nous confirmerons que le futur de la recherche dans le domaine de la dysphagie et l'incorporation de preuves doit être fermement fondé et étayé par la pratique clinique. Celle-ci doit être encouragée par des collaborations accrues entre les chercheurs universitaires et les cliniciens, confrontés aux questions cliniques pertinentes. Nous fournirons quelques exemples de ces collaborations fructueuses. La présentation se terminera par un appel lancé aux thérapeutes du langage et de la communication afin d'envisager leur rôle actif en fournissant dans le futur des soins de plus grande qualité aux personnes souffrant de dysphasie neurologique.

PRÉSENTATIONS ORALES



CO 001

(1252) - MISE EN OEUVRE MULTI-SITE DE CONVERSATION SOUTENUE POUR LES ADULTES APHASIQUES (SCA™) DANS LES HOPITAUX DANOIS

Isaksen, Jytte - University of Southern Denmark, Denmark

Jensen, Lise Randrup - University of Copenhagen, Denmark

Objectifs : SCA™ est une méthode pour former des partenaires de conversation afin qu'ils puissent soutenir une conversation avec des personnes aphasiques à travers des techniques simples et des procédures encourageant la participation sociale et conversationnelle. (Kagan, 1998). Au cours de la dernière décennie, de nombreux orthophonistes danois ont été formés intervenir auprès d'amis, de membres de la famille, et des partenaires de conversation professionnels tels que le personnel soignant des hôpitaux. Mise en oeuvre à grande échelle dans un hôpital de la grande agglomération de Copenhague où le personnel soignant de l'unité neurologique a été formé, la méthode SCA™ a déjà été, ou sera bientôt, introduite dans neuf autres hôpitaux au Danemark. Cette étude a pour objectif de fournir une description complète des obstacles et facilitateurs de la SCA™ selon les orthophonistes en hôpital et du point de vue de la recherche actuelle sur la mise en oeuvre de la méthode et les moteurs de cette mise en oeuvre. (Fixsen et al., 2005). L'objectif est de mieux soutenir les pratiques naissantes de cette méthode sur différents lieux.

Méthodologie : Un questionnaire constitué de questions ouvertes et fermées a été distribué à un orthophoniste de chaque hôpital participant à la mise en oeuvre de la méthode SCA™ et au personnel. Les analyses ont été effectuées à travers des statistiques descriptives et une analyse thématique.

Résultats : La mise en oeuvre de la méthode SCA™ dans les hôpitaux danois a été un processus mis en oeuvre en aval et dirigé en grande partie par les orthophonistes. Cela a eu pour conséquence de sensibiliser le personnel soignant à l'aphasie ainsi qu'à la communication avec les patients aphasiques. Cependant, les orthophonistes présents sur les différents sites font face à des défis similaires du manque de soutien de la part de la direction et de l'absence de mesures de résultats adéquates.

Conclusions : Afin de développer la mise en oeuvre de la SCA™ et de l'ancrer sur le long terme dans les hôpitaux danois, il faut poursuivre sa pratique parmi les orthophonistes sur de nouveaux sites et des sites plus anciens, et d'encourager la collaboration interprofessionnelle, y compris les directeurs des hôpitaux, ainsi que la conception de matériel et des mesures d'évaluation des résultats.

Mots-clés : Aphasie

CO 002

(1284) - QUE FAITES-VOUS À MON CERVEAU? UNE ÉTUDE EXPLORATOIRE DE L'IRMF AVEC DES PATIENTS ATTEINTS D'APHASIE ET D'ÉNONCÉS RÉCURRENTS

Rodrigues, Inês - Centre d'Investigation Interdisciplinaire en Santé Institut des Sciences de la Santé - Lisbonne, Université Catholique du Portugal, Portugal

Castro Caldas, Alexandre - Centre d'Investigation Interdisciplinaire en Santé Institut des Sciences de la Santé - Lisbonne, Université Catholique du Portugal, Portugal

Objectifs : Cette étude pilote a pour but d'examiner les différences de signal BOLD (de l'anglais blood-oxygen-level dependent, « dépendant du niveau d'oxygène sanguin entre les patients atteints d'aphasie avec et sans énoncés récurrents (RU).

Méthodes : Avec un outil d'IRM 3 Tesla, nous avons exploré l'activation cérébrale en réponse à des tâches verbales chez 15 patients aphasiques chroniques non-fluents (10 avec et 5 sans stéréotypes verbaux) et chez 5 sujets témoins. Nous avons effectué en particulier 2 séquences d'IRMf de conception de bloc correspondant à une tâche de catégorisation et une tâche de nommage. La tâche IRMf consistait en deux passages. Chaque stimulus était présenté sous la forme d'un mot ou d'une image, égaux au niveau de la fréquence lexicale et de la longueur des mots. Le but de la première série était de caractériser le traitement du langage global et la seconde d'étudier la production verbale chez les patients avec et sans langage stéréotypé. Afin d'analyser le schéma d'activation de tout le cerveau dans chaque groupe, une procédure d'étude multiple selon un modèle linéaire généralisé (MLG) a été réalisée.

Résultats : Les patients RU et contrôles présentaient des données similaires en : âges moyens (55 vs 57 ans, $t = 1,31$ (d 1,04), $p = 0,44$), temps après début de la maladie (26 vs 28 mois $U = 137,7$, $p = 0,21$), années d'éducation (4 vs 5 ans, $U = 120$, $p = 0,81$) et la taille de la lésion. Avec l'étude multiple FFX MLG, nous avons trouvé des augmentations du signal BOLD hémisphérique droit plus prononcé chez les patients atteints de RU dans les deux tâches. Les patients RU ont activé de manière significative, des zones hémisphériques droites, qui n'étaient pas sollicitées dans le groupe témoin.

Conclusions : Cette étude pilote s'est spécifiquement concentrée sur les données IRMf de patients aphasiques avec et sans production de langage stéréotypé. Parce que le rétablissement des RU est généralement très médiocre, nous avons émis l'hypothèse que les patients atteints de RU présenteraient une activation plus forte de l'hémisphère droit, ce qui appuierait la notion d'un schéma de rétablissement inadapté ou inefficace. Nos résultats ont souligné que l'activité de l'hémisphère droit reflète un processus de recherche et de langage augmenté, mais finalement inefficace chez les patients atteints d'aphasie chronique avec RU.

Mots-clés : Aphasie, troubles du langage acquis

CO 003

(1094) – DÉPISTAGE DES DÉFICITS SYNTAXIQUES DU LANGAGE CHEZ LES PERSONNES ATTEINTES DU VIRUS IMMUNODÉFICITAIRE (VIH)

Kambanaros, Maria – Université chypriote de technologie, Chypre

Objectifs : Les personnes porteuses du diagnostic de l'infection à VIH sont confrontées à une maladie chronique, mortelle impliquant la destruction du système immunitaire. Au vu de la neuropathogénèse de la maladie liée au système des noyaux gris centraux, il est surprenant que si peu d'information existe sur les déficits potentiels du langage faisant partie du profil cognitif hautement dysfonctionnel des personnes atteintes du virus. L'étude vise à élucider si les personnes positive VIH présentent des troubles du langage émanant ou étant intensifiés par les déficits des fonctions cognitives. De manière spécifique, on a analysé l'utilité clinique de la tâche de répétition de la phrase (TRP) pour distinguer les adultes atteints du VIH comparés aux individus sains. Les questions de la recherche adresse (i) les différences quantitatives sur les capacités à la tâche TRP entre les adultes porteurs de VIH ($n=40$) et les contrôles ($n=40$), (ii) l'influence de la longueur de la phrase comme celle mentionnée dans le laps de temps de la mémoire active sur la performance en TRP, et (iii) les corrélations des résultats de la tâche TRP et les mesures neurocognitives.

Méthode : Les capacités du langage sont analysées dans un contexte clinique en utilisant une tâche de répétition hors ligne impliquant des opérations syntaxiques complexes et spécifiques (exemple, propositions relative, négation, redoublement clitique) au niveau de la phrase ($n=36$ phrases). Les participants devaient répéter les phrases entendues textuellement.

Résultats : Pour le groupe VIH positif, les régressions linéaires ont été menées pour analyser la performance de la répétition de phrase selon l'âge chronologique, les années de formation, les

années de diagnostic et les mesures neurocognitives générales. Des corrélations significatives ont été trouvées pour la performance de la répétition de phrase par rapport aux années de formation, à la durée de la maladie, les scores du mini examen de l'état mental (Mini Mental State Examination), les scores de fluence sémantique et phonologique, les tests de mémoire verbale et les tâches des fonctions exécutives.

Conclusions : des recherches supplémentaires sont urgemment nécessaires au sujet des contributions possibles de chaque domaine cognitif pour le langage des individus porteurs du VIH

Mots clés : troubles du langage acquis, répétition de phrases, syntaxe complexe, cognition

CO 004

(1163) - L'INTERVALLE VOIX-ŒIL CHEZ LES ADULTES AYANT UNE DÉFICIENCE COGNITIVE LÉGÈRE (MILD COGNITIVE IMPAIRMENT - MCI) ET UN GROUPE CONTRÔLE SAIN

Lundholm Fors, Kristina - Université de Göteborg, Suède

Fraser, Kathleen C. - Université de Göteborg, Suède

Kokkinakis, Dimitrios - Université de Göteborg, Suède

Objectifs : Cette étude fait partie d'un projet axé sur le développement de nouvelles techniques pour l'identification des signes précoces des aspects linguistiques et extra linguistiques de la déficience cognitive, dans l'objectif ultime d'identification de la démence au stade préclinique. Dans une étude préalable, nous avons constaté que les mouvements oculaires au cours de la lecture peuvent être utilisés pour faire la distinction avec une précision de 86%, entre les participants atteints de déficience cognitive légère (Mild Cognitive Impairment - MCI) et le groupe contrôle. Dans cette étude, nous considérons le processus de lecture à voix haute, et comparons l'intervalle œil-voix chez les participants avec et sans MCI. Le but de l'étude est d'identifier les différences dans les processus de lecture et d'évaluer si ces différences peuvent être utilisées pour détecter les stades précoces de la démence.

Méthodes : L'intervalle œil-voix est une mesure de l'organisation temporelle et spatiale entre l'œil et la voix et qui est affectée, par exemple, par la mémoire de travail et l'automatisme, mais aussi par la familiarité des mots et leur longueur. Nous avons rassemblé des données audios et des suivis oculaires chez des participants avec MCI et du groupe de contrôle. En alignant les informations sur les endroits où les yeux des participants se fixent sur les informations des mots qu'ils produisent, nous pouvons calculer l'intervalle voix-œil à chaque instant. Nous pouvons ensuite corrélérer ces mesures avec la difficulté du texte, ainsi qu'avec les résultats des tests cognitifs et linguistiques des participants.

Résultats : Nous présentons une analyse quantitative et qualitative du processus de lecture chez les participants, en mettant l'accent sur les mesures générales de l'intervalle voix-œil, mais aussi sur les hésitations et les erreurs dans le discours, ainsi que les mouvements oculaires corrélés.

Conclusions : La détection précoce de la démence est importante pour plusieurs raisons, telles que donner à la personne l'accès à des interventions et des médicaments. En élargissant les connaissances sur les processus de lecture chez les sujets atteints de MCI, nous aidons à démontrer le potentiel de l'utilisation de l'analyse de la lecture pour détecter les signes précoces de la démence.

CO 005

(1176) - COMMUNICATION PATIENT-PRESTATAIRE DANS LES ÉTABLISSEMENTS DE SANTÉ

Altschuler, Tami - *NYU Centre Médical Langone, EUA*

Objectifs : Être incapable de communiquer dans des établissements de santé est émotionnellement inquiétant et peut entraîner une augmentation des événements sentinelles, des erreurs médicales et des séjours hospitaliers prolongés. Cette session met l'accent sur l'établissement d'un programme de communication augmentative et alternative (CAA) dans les établissements de santé pour permettre aux patients de communiquer leurs désirs, leurs besoins, leurs sentiments et de participer plus efficacement à leur propre traitement.

Méthodes : Il est actuellement reconnu par de nombreux spécialistes de la communication à travers le monde, que l'incapacité de communiquer à l'hôpital (mauvaise communication entre le patient et le prestataire de soins) impacte les soins, la sécurité des patients, le confort du patient, sa participation et son rétablissement et la satisfaction de la famille. La littérature révèle que la communication patient-prestataire réduite menace les résultats au niveau de la satisfaction des patients, la durée d'hospitalisation, la participation active des patients, le respect des sorties de l'hôpital, la qualité des soins et le bien-être personnel. Les orthophonistes peuvent soutenir les modifications dans la communication entre patient et prestataire dans leurs interventions.

Résultats : Pour de nombreux prestataires, certains d'obstacles sont évidents au sein de l'établissement hospitalier. Ceux-ci remettent souvent en question les efforts visant à mettre en œuvre les services de CAA en milieu hospitalier. En dépit de la prise de conscience croissante d'un besoin évident d'amélioration de la communication auprès du patient, la mise en œuvre des stratégies dans les unités de soins intensifs à travers le monde, est faible. Les institutions peuvent manquer de personnel, et, même si la dotation en personnel est suffisante, les références à un spécialiste de la CAA ne sont souvent pas faites, la mauvaise communication avec les patients n'est pas toujours reconnue comme ayant une influence négative sur l'état médical du patient ou sur son rétablissement. De plus, les prestataires de soins peuvent simplement ne pas avoir les connaissances essentielles des avantages des stratégies d'amélioration de la communication.

Conclusions :

Après avoir terminé cette session, les participants seront en mesure de :

1. Prendre conscience du rôle des spécialistes de la communication patient-prestataire à l'hôpital
2. Comprendre les différents obstacles de la mise en œuvre des mesures d'aide à l'amélioration de la communication
3. Apprécier le continuum du développement du programme.

Mots-clés : **Aphasie, accident vasculaire cérébral aigu, cancers de la tête et du cou, troubles neurodégénératifs, intervention**

CO 006

(1402) - DÉFICIENCE LINGUISTIQUE CHEZ LES ENFANTS PRÉMATURÉS TARDIFS

Helland, Wenche A. - *Université de Bergen et Helse Fonna Heath, Norvège*
Straume, Anne - *Université de Bergen, Norvège*

Objectifs : Il a été bien documenté que les enfants prématurés risquent davantage de souffrir de troubles du langage que les enfants nés à terme. Cependant, on en sait moins sur les enfants nés prématurément (34-0 à 36-6 semaines de gestation). Le développement de ces enfants était traditionnellement considéré comme semblable à celui de leurs pairs; cependant, des recherches plus récentes indiquent qu'ils courent un plus grand risque de développer des problèmes que

prévu. Le but de la présente étude pilote était d'étudier la déficience du langage chez un groupe d'enfants norvégiens de quatre ans nés prématurés tardifs.

Méthodes : Un total de 25 enfants prématurés tardifs (18 filles) ont participé à l'étude (âge moyen = 50,6 mois, SD = 3,99 mois). Les parents ont rempli la Deuxième Édition de la Liste de Contrôle de la Communication chez les Enfants (CCC-2, Bishop, 2011). La CCC-2 comprend 70 items répartis en 10 sous-échelles évaluant différents aspects du langage, pragmatique et structurel. Une mesure globale de communication, la Communication Générale Composite (GCC) fait une distinction entre les enfants ayant des déficiences de langage et les enfants en développement typique. Les résultats des enfants prématurés tardifs ont été comparés aux normes d'âge de la CCC-2.

Résultats : Le groupe prématuré tardif a obtenu des résultats significativement inférieurs (plus altérés) que les normes d'âge de la CCC-2 sur les quatre sous-échelles mesurant les aspects structurels du langage ainsi que sur deux sous-échelles mesurant les aspects pragmatiques. Les résultats de la GCC étaient également significativement inférieurs à la norme d'âge; $t(24) = -3,97$; $p < 0,001$. Un total de 5 enfants (20%) a obtenu un résultat dans la catégorie des troubles du langage de la CCG.

Conclusions : Les résultats de cette étude pilote indiquent que les enfants nés prématurés tardifs sont significativement déficients par rapport aux normes sur la majorité des échelles CCC-2 et que les symptômes de troubles du langage sont plus fréquents dans ce groupe que chez les enfants en développement typique. Les aspects structurels du langage ont été plus négativement affectés que les aspects du langage pragmatique.

Mots-clés: Dépistage

CO 007

(1273) – PRÉVALENCE DU LANGAGE ET DES DIFFICULTÉS LINGUISTIQUES À L'ÂGE DE 3 ET 5 ANS EN RÉPUBLIQUE D'IRLANDE, ET PRÉSENCE DANS LES SERVICES D'ORTHOPHONIE

Wright, Aileen - Université de Limerick, Irlande

O'Donoghue, Michelle - Université de Limerick, Irlande

Objectifs : Les données prévalentes renseignent sur la planification des ressources dans les services de santé et d'éducation. « Grandir en Irlande » est la première étude de cohorte nationale menée en République d'Irlande qui rapporte des données relatives aux difficultés de parole et de langage. L'objectif de cette étude était de rapporter la prévalence et la persistance des préoccupations des parents/gardiens concernant la parole et le langage des enfants de 3 et 5 ans, ainsi que les annonces aux Services d'orthophonie.

Méthodes : Une étude de cohorte de 11 134 enfants nés entre décembre 2007 et mai 2008 a été sélectionnée de façon aléatoire dans le Registre des Allocations Familiales. Les données ont été recueillies auprès de leurs parents/gardiens par des entretiens à l'âge de 9 mois, 3 ans et 5 ans.

Résultats : 19,2% des parents/gardiens ont exprimé des inquiétudes sur « la façon dont leur enfant parle et émet des sons de parole » à l'âge de 3 ans (15,4% «un peu», 4,0% «beaucoup») et 16,5% à l'âge de 5 ans (13,4% «un peu», 3,1% «beaucoup»). Parmi les parents/gardiens qui étaient très inquiets pour la parole et le langage de leur enfant à l'âge de 3 ans et qui ont été interrogés à nouveau à l'âge de 5 ans, 37% étaient encore très inquiets, 35% s'inquiétaient un peu et 28% n'étaient plus inquiets. Les parents/gardiens des enfants âgés de 3 ans dont les parents ne s'inquiétaient pas beaucoup, 3,6% étaient très inquiets à l'âge de 5 ans, 32% l'étaient encore un peu et 61% ne l'étaient plus. Parmi ceux qui n'étaient pas inquiets pour leurs enfants, à 3 ans, 3,9% ont signalé un peu et <1% beaucoup d'inquiétude à 5 ans.

À l'âge de 5 ans, 76% de ceux dont les parents/gardiens avaient signalé une grande d'inquiétude à 3 ans ainsi que 36% de ceux qui avaient déclaré être un peu inquiets, et 8% de ceux dont le parents/gardiens n'était pas inquiet, avaient été vus par un orthophoniste.

Conclusions : Tout comme des implications pour la planification des services locaux, ces données contribuent à notre compréhension de la prévalence et de la persistance des difficultés de parole et de langage à l'échelle internationale.

Mots-clés : Troubles développementaux du langage

CO 008

(1051) – POINT DE VUE DES ORTHOPHONISTES SUÉDOIS SUR LES CRITÈRES POUR LA DLD: UNE COMPARAISON AVEC CATALISE

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Objectifs : L'étude recherche jusqu'où les orthophonistes suédois et les étudiants en orthophonie approuvent les critères des troubles du développement du langage (TDL) présentés par les experts des pays anglophones (CATALISE ; Bishop et al., 2016). De plus, nous avons analysé le consensus au sein du groupe et l'influence des antécédents des participants sur les résultats. Le but était de contribuer au travail sur le consensus national et international concernant les critères de la TDL pour la pratique clinique et la recherche.

Méthodes : Les 27 déclarations de Bishop et al. (2016) sur les TDL furent traduites en suédois. Elles ont fait partie, avec les questions sur les antécédents (expérience, domaine de pratique, zone géographique), des personnes interrogées, d'une enquête envoyée sous forme électronique. Les 184 participants ont donné une note allant jusqu'à cinq sur une échelle de Likert, pour exprimer leur degré d'accord avec les déclarations. Ils pouvaient aussi ajouter des commentaires. Le mode, la portée et la proportion des participants exprimant un consensus ont été calculés pour chaque déclaration. Le consensus fut considéré comme atteint pour les déclarations lorsqu'au moins 80% des interrogés avaient donné une note de 4 ou 5. Les commentaires ont été analysés qualitativement. Des comparaisons et des analyses corrélatives furent menées à bien pour voir si les antécédents des participants influençaient leurs notes.

Résultats : Un consensus a été atteint pour 14 déclarations et 25 d'entre elles avaient une note de 4 ou 5. La plupart des déclarations ont eût des notes de 1 à 5. Le consensus le plus élevé a été atteint pour des questions concernant les critères de références et le plus bas pour celui concernant les opinions sur les relations entre les questions de la TDL et d'autres pathologies. Les commentaires indiquaient l'insécurité par rapport à la comorbidité, la différence entre les capacités verbales et non verbales, les marqueurs cliniques et le rôle des facteurs sociaux. Seules de faibles associations ont été faites entre les facteurs des antécédents et les notes attribuées.

Conclusions : Les orthophonistes suédois et les étudiants en orthophonie étaient largement d'accord au sein du groupe et avec le document du consensus CATALISE, mais ils étaient en désaccord sur les sujets tels que la comorbidité et la disparité. Le travail de consensus est nécessaire afin d'atteindre une prestation de service appropriée et égale pour les enfants présentant des troubles du langage.

Mots clés: troubles du développement du langage, trouble spécifique du langage

CO 009

(1361) - SCHÉMA DE REGARDS PRÉCOCES SUR DES VISAGES PARLANTS EN PORTUGAIS EUROPÉEN

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Objectifs : Le fait que l'attention sélective à l'audiovisuelle change avec le développement du langage a déjà bien été documenté. Les nourrissons exposés à un matériel audiovisuel dans différentes langues passent leur attention des yeux à la bouche entre 4 et 8 mois, quelle que soit la langue maternelle (Lewkowicz & Hansen-Tift, 2012, a.o.). Cependant, la question de savoir comment l'attention des nourrissons face aux stimuli audiovisuels change à travers le développement est encore inexplorée en portugais européen. Notre objectif est de répondre à cette question qui caractérise le regard des nourrissons alors qu'ils regardent une vidéo d'un personnage parlant d'un film.

Méthodes : 24 enfants monolingues apprenant le portugais européen typique (âge moyen : 5, 49 mois, tranche d'âge : 5-6 mois) ont participé. En utilisant le suivi oculaire à distance, nous avons testé s'il y avait des différences de regards entre les régions centrales (visage, yeux, bouche) et une région périphérique (bras). Dans une scène en gros plan, la vidéo montre un jouet animé ayant des propriétés humaines comme parler tout en hochant la tête et en faisant des signes. Quatre différents messages encourageants sont exprimés dans la vidéo, présentés à tous les participants dans le même ordre.

Résultats : Les différents messages encourageants n'ont pas eu d'impact sur les résultats. Nous avons observé que le regard était plus concentré sur le visage (temps de fixation moyen : 20184ms) que sur la région périphérique (temps de fixation moyen : 2448ms), et cette différence était statistiquement significative ($p = \leq .0001$). Pour les régions centrales, le regard était plus concentré sur les yeux (temps de fixation moyen : 10579ms) que sur la bouche (temps de fixation : 1655ms), et cette différence était également statistiquement significative ($p = \leq .0001$).

Conclusions : Le regard caractéristique des nourrissons de 5-6 mois, ayant un développement du langage typique pour le portugais européen, suit un modèle similaire à celui rapporté pour d'autres langues. Il montre des fixations du regard sur la région des yeux avant le début du babillage canonique. La recherche future devrait inclure d'autres tranches d'âges, ainsi que des populations cliniques, pour observer comment l'attention visuelle soutient le développement du langage. Ces résultats constituent un fondement important pour les études d'interactions sociales et d'interventions cliniques.

Mots-clés : Prévention

CO 010

(1219) - CORRELATION ENTRE PRODUCTION ET PERCEPTION DU LANGAGE CHEZ LES ENFANTS AGES DE 5 ET 7 ANS

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Objectifs : Le développement de la production de langage complexe est étroitement lié aux processus de perception de celui-ci. Des difficultés liées aux mécanismes de perception du langage peuvent engendrer plusieurs troubles d'articulation, une expansion du vocabulaire plus lente, ainsi que des performances réduites au niveau de l'élocution spontanée. L'objectif de cette présentation est d'examiner les corrélations existantes entre le traitement du discours, la mémoire verbale à court terme et les spécificités du langage spontané chez les enfants âgés de 5 et 7 ans.

Méthodologie : Quarante enfants de langue hongroise de chaque groupe d'âge ont participé à cette étude. Des enregistrements de ces enfants ont été effectués, basés sur le protocole GABI (Répertoire hongrois d'information et de base de données de discours et du langage des enfants; Bóna et al. 2014). De plus, les processus de perception du langage ainsi que la mémoire verbale à court terme ont été mesurés. Pour les fins d'analyse du discours spontané des enfants, nous avons eu recours à des récits provoqués basés sur une série d'images. Nous avons examiné l'étendue du vocabulaire, les éléments des contenus, et les occurrences où on observait une absence de fluidité verbale. Ces indicateurs ont été comparés aux résultats de traitement de la parole et des tests de mémoire verbale à court terme. Dans le cas où l'enfant présentait un trouble de l'articulation, celui-ci a également été analysé par rapport au traitement du langage.

Résultats : Les résultats montrent qu'il existe de grandes différences individuelles même au sein d'un même groupe d'âge. Des mécanismes de perception de la parole qui fonctionnent bien sont des prérequis nécessaires mais non suffisants pour la production de discours complexes. Le niveau de complexité du discours des enfants présentant des difficultés de perception est moindre.

Conclusions : Néanmoins, le développement de la complexité du discours spontané relève de la responsabilité des maternelles et des écoles pour les enfants ayant une perception adéquate du langage également.

CO 011

(1362) – UNE NOUVELLE ÉCHELLE DE PALPATION LARYNGÉE (LPS) DES PATIENTS SOUFFRANT DE DYSPHONIE MUSCULAIRE

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Objectifs : La palpation laryngée est une méthode plus pratique et plus accessible pour l'évaluation des patients souffrant de dysphonie musculaire (DMT). Le but de cette étude est de développer une nouvelle « échelle de palpation laryngée » complète (LPS) valable et fiable, basée sur des critères psychométriques. La LPS est capable d'évaluer les structures anatomiques influencées dans la DMT en utilisant une mesure quantitative.

Méthodes : Les items de l'échelle ont été développés à travers une analyse approfondie de la littérature et un groupe de discussion d'experts. De plus, l'échelle de génération d'items et la réduction des items ont été réalisées par une sélection de 45 items lors de l'évaluation psychométrique de la validité qualitative et quantitative du contenu LPS et de la validité qualitative du contenu et de la validité quantitative apparente, suivie par la fiabilité inter-évaluateurs. À cette fin, 531 patients ont été évalués et finalement 55 patients avec DMT pure (26 femmes, âge

moyen: 40,8 ans, S.D: 12,5, 29 hommes, âge moyen: 41,6 ans, S.D: 11,8) ont participé à l'étude. Une statistique kappa pondérée (k^*) utilisée pour examiner l'accord inter-évaluateurs pour chaque item individuel ainsi que la fiabilité inter-évaluateurs du total des résultats a également été évaluée en utilisant des coefficients de corrélation interclasse (ICC) entre deux évaluateurs. En outre, l'erreur type de mesure (SEM), une mesure de fiabilité absolue, a été déterminée.

Résultats : Dans la phase d'évaluation du ratio de validité du contenu (CVR), 3 items ont obtenu un résultat inférieur à 0,62 et ont été omis. Le reste des questions ont été évaluées pour l'indice de validité de contenu (CVI). Les résultats de la formule de calcul CVI ont montré que l'I-CVI de tous les items était supérieur à 0,79 et l'indice S-CVI était égal à 0,96. Enfin, l'accord inter-évaluateurs pour tous les items inclus dans l'analyse était de ICC = 0,97 (intervalle de confiance = 0,95-0,98), suggérant un accord presque parfait.

Conclusions : L'échelle de palpation laryngée (LPS) est un instrument fiable et valide pour l'évaluation des patients atteints de dysphonie musculaire (DMT). Cependant, de futures études concernant la validité concurrente sont nécessaires.

Mots-clés: Troubles de la voix, mesures des résultats cliniques (développement ou adaptation et validation interculturelles), cancers de la tête et du cou

CO 012

(1461) - EXPLORER LA MESURE ACOUSTIQUE DE LA VITESSE DE TREMBLEMENT À TRAVERS LE SYSTÈME DE LANGAGE

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Objectifs : Un modèle physiologique du tremblement de la voix a été proposé par Barkmeier-Kraemer (2010) : il décrit les contributions hypothétiques des structures vocales respiratoires, phonatoires et articulatoires dans un concept global : les tremblements affectant les structures spécifiques du mécanisme du langage résultent des modèles prévisibles des émissions acoustiques. L'oscillation de la paroi thoracique/poumons ainsi que l'adduction/abduction des cordes vocales sont supposées produire une modulation au niveau de l'intensité (IL). L'oscillation longitudinale des cordes vocales est supposée produire une modulation de la fréquence fondamentale (f_0), et l'oscillation des déviations laryngées verticales ainsi que le diamètre du pharynx et du canal oral devraient produire une modulation du premier et du second formants. Outre ce modèle, le suivi Pic de Proéminence Cepstral Lissé (Smoothed Cepstral Peak Prominence CPPS) et l'analyse de sa trace peuvent être utilisés pour traiter la modulation liée à la qualité de la voix.

Méthodes : Pour atteindre cet objectif, un script a été développé pour automatiser ces analyses dans le programme Praat (Paul Boersma et David Weenink, Institut des Sciences Phonétiques, Université d'Amsterdam, Pays-Bas). Ce script suit d'abord f_0 , IL, CPPS, F1 et F2, puis étudie s'il existe ou non une modulation de tremblement dans la représentation du domaine fréquentiel de ces pistes. Ceci a été appliqué dans un ensemble de 27 enregistrements [i:] de sujets atteints de la maladie de Parkinson, de dysphonie spasmodique touchant les adducteurs et du tremblement essentiel affectant la voix. Ces enregistrements ont également été examinés sur le plan perceptuel (visuel et auditif) concernant leur présence et le taux de tremblement dans ces enregistrements.

Résultats : Les corrélations entre les taux de tremblements estimés au niveau visuel et mesurés par spectre, se situent entre 0,01 et 0,62 lorsqu'elles sont appliquées à tous les enregistrements,

et entre 0,67 et 0,97 lorsqu'elles sont appliquées à des enregistrements avec une modulation claire des tremblements.

Conclusions : Lorsqu'elle est appliquée à des enregistrements (ou des parties d'enregistrements) sélectionnés présentant des tremblements évidents en fo, IL, CPPS, F1 et en F2, cette méthode acoustique est capable de quantifier objectivement le taux de tremblement dans le système vocal.

Mots clés : voix, tremblement, mesures

CO 013

(1152) - L'IMPACT D'UNE CARRIÈRE D'ENSEIGNEMENT OU DE CHANT SUR LA QUALITÉ VOCALE DE LA FEMME D'ÂGE MOYEN DE 67 ANS : UNE ÉTUDE PILOTE

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Objectif : Le but de la présente étude était d'évaluer la qualité vocale chez les femmes âgées entre 60 et 75 ans et déterminer l'impact d'une carrière d'enseignement ou de chant sur la qualité vocale. L'auteur a soulevé l'hypothèse qu'une carrière d'enseignement ou de chant peut entraîner une diminution de la qualité vocale à l'âge de 60 ans et surtout chez les femmes n'ayant pas embrassé une carrière liée à l'enseignement ou au chant.

Méthodologie : Soixante-quatorze femmes d'un âge moyen de 67 ans ont participé à cette étude. Vingt-et-une femmes étaient des enseignantes, 12 femmes étaient des chanteuses et 40 femmes étaient des professionnelles qui n'avaient pas embrassé une carrière vocale. Aucune différence significative d'âge n'a été trouvée entre les trois groupes. Pour déterminer la qualité vocale, un questionnaire (*Voice Handicap Index*), subjectif (évaluation perceptuelle) et des techniques d'évaluation instrumentales (aérodynamique, tessiture vocale, mesures acoustiques, index de sévérité de la dysphonie) ont été utilisés.

Résultat : La qualité vocale chez les professionnelles non liées à une carrière vocale était caractérisée par la présence d'une rugosité accrue ($p = 0,019$), par rapport aux chanteuses et plus tendue ($p = 0,018$), par rapport aux enseignantes. La performance vocale (intensité et gamme de fréquence) des chanteuses et des enseignantes avait significativement augmenté par rapport aux professionnelles non liées à une carrière vocale. Aucune différence significative n'a été trouvée concernant l'index de gravité de la dysphonie entre les femmes ayant une carrière de chant ou d'enseignement et les femmes non liées à une carrière vocale.

Conclusion : À l'âge de 67 ans, une carrière d'enseignement ou de chant n'a pas d'impact négatif sur la qualité vocale subjective et objective de la femme.

Mots-clés : Troubles de la voix

CO 014

(1159) - LA PRATIQUE MASSIVE PAR RAPPORT À LA PRATIQUE ESPACÉE EN VOCOLOGIE : L'EFFET D'UNE THÉRAPIE VOCALE INTENSIVE À COURT TERME PAR RAPPORT À UNE THÉRAPIE VOCALE TRADITIONNELLE À LONG TERME

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Objectif : Contrairement à la plupart des thérapies médicales et pharmaceutiques, le « dosage » optimal de thérapie vocale est inconnu. Le but de cette étude était de comparer l'effet d'une thérapie vocale intensive à court terme (TVI) par rapport à une thérapie vocale traditionnelle à long terme (TVT) identique au niveau de la qualité vocale et les capacités vocales des patients présentant une dysphonie. Une comparaison supplémentaire a été faite entre deux types de programmes TVI : un programme individualisé (TVI-I) et un programme de groupe (TVI-G).

Méthodologie : Un essai contrôlé longitudinal, pragmatique et conduit en simple insu avec un plan de base multiple a été utilisé. Quarante-six patients avec un diagnostic de dysphonie ont été intégrés dans l'un des trois groupes de traitement : TVI-I (n = 15), TVI-G (n = 15) et TVT (n = 16). Les groupes TVI suivaient une pratique d'une fréquence de 1h20 par jour et pendant une durée de 10 jours de travail consécutifs (2 semaines). Le groupe TVT suivait une pratique d'une fréquence de deux séances de 30 minutes par semaine et pendant une durée de 6 mois. Les deux programmes de thérapie étaient identiques en termes de contenu et guidés par le même thérapeute vocal. Une évaluation vocale standardisée à la fois subjective (vidéo-laryngo-stroboscopie, anamnèse, auto-évaluation du sujet, évaluation auditive-perceptuelle) et avec des mesures vocales objectives (tâche maximale de performance, mesures aérodynamiques, profil de gamme vocale, analyse acoustique, indice acoustique de la qualité vocale, index de sévérité de la dysphonie) a été utilisée pour estimer la voix des participants. Les moments fixés pour les évaluations ont compris le début (deux fois), puis 1 semaine, 2 semaines, 2 mois, 3 mois, 4 mois, 6 mois et 1 an plus tard. Des évaluations supplémentaires ont été effectuées les jours de la thérapie dans les groupes TVI.

Résultat : Les données sont en cours d'analyse et les résultats seront disponibles pour la conférence. Une étude pilote de Meerschman et al. (2017) sur des sujets sains a montré qu'une formation vocale intensive à court terme peut être tout aussi efficace qu'une formation vocale traditionnelle à plus long terme.

Mots-clés : Troubles de la voix, intervention

CO 015

(1352) - LES EFFETS AUTO-ÉVALUÉS D'UN PROGRAMME D'INTERVENTION SUR LES COMPÉTENCES DES ENSEIGNANTS EN COMMUNICATION ET BIEN-ÊTRE

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Objectifs : Le bruit est un défi pour la communication en classe. Des études antérieures démontrent également que le bruit influence l'apprentissage dans les salles de classe. La santé vocale des enseignants est mise à l'épreuve par le fait de parler constamment dans le bruit, provoquant des périodes d'enrouement. Les effets du bruit et d'une qualité de voix enrouée sur les enfants dépendent de la capacité cognitive, du langage et des capacités auditives de l'enfant. Les enseignants sont mal préparés aux exigences croissantes que l'environnement impose à la voix et à la communication. Il n'y a que peu de recherches sur la façon dont les enseignants communiquent et interagissent de façon non verbale avec leurs élèves dans des environnements d'apprentissage. Il y a un manque de connaissances sur les résultats de l'offre de formation pratique aux enseignants pour faire face à différents environnements sonores et leur fournir des outils pour améliorer les environnements d'apprentissage de la langue. Le but de cette étude est d'examiner les effets d'un programme d'intervention pour les enseignants du primaire.

Méthodes : Le programme a une approche d'action de réflexion-apprentissage et vise la formation de la voix et d'autres aspects de la communication non-verbale et des stratégies pour améliorer l'apprentissage de la langue en classe. Des enseignants (n = 25) et des élèves (n = 315) de sept écoles ont participé au programme. Les tests ont été réalisés pré/post intervention et à un suivi de 5 semaines et un de 3 mois. Les enseignants ont été évalués au moyen d'enregistrements vocaux ; mesures d'utilisation de la voix avec dosimétrie vocale (VoxLog) ; questionnaires sur la santé vocale, l'auto-efficacité, le stress et l'épuisement professionnel. Les élèves ont répondu à un questionnaire pour commenter à l'aveugle, les effets du programme.

Résultats : La comparaison des résultats post- et pré-intervention, mesurés par les questionnaires, ont montré une diminution significative des problèmes de voix à 3 mois de suivi, et du stress un résultat total pour l'épuisement à 5 semaines de suivi. L'évaluation de l'épuisement professionnel a également démontré une diminution importante dans l'évaluation des élèves aussi bien à 5 semaines de suivi qu'à 3 mois de suivi. L'évaluation de l'auto-efficacité a augmenté de manière significative à 5 semaines de suivi.

Conclusions : En conclusion, le programme d'intervention a permis d'aider les enseignants à améliorer leur santé vocale, à réduire leur perception du stress et le risque d'épuisement tout en augmentant leur auto-efficacité.

CO 016

(1367) - ÉTUDE LONGITUDINALE SUR LA RÉCUPÉRATION ET LA PERSISTANCE DU BÉGAÏEMENT DANS LA POPULATION ISLANDAISE

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Objectifs : Le but de cette étude longitudinale est d'estimer le taux de récupération du bégaiement et les facteurs la favorisant chez un groupe d'enfants islandais présentant un bégaiement. L'accent a été mis sur les éléments suivants : les antécédents familiaux, l'âge d'apparition, la durée du trouble, le genre, la sévérité et la variabilité rapportée du bégaiement et la réussite scolaire.

Méthodes : 38 enfants ont participé et ont été évalués à deux reprises ; la première lorsque les enfants avaient entre 2 et 5 ans et la deuxième lorsqu'ils avaient entre 9 et 13 ans. Les participants n'ont été inclus dans l'étude que, si les deux parents et deux orthophonistes étaient d'accord pour dire que l'enfant bégayait. Les orthophonistes ont observé la vidéo des enfants indépendamment les uns des autres et ont identifié les moments de bégaiement (voir Einarsdóttir et Ingham, 2008 et 2009).

Résultats : 22 cas sur 38 (58%) ont été classés comme ayant complètement récupéré, c'est-à-dire qu'ils ne montraient plus aucun signe de bégaiement sur les enregistrements vidéo et ni les parents et ni les enfants ne pensaient pas qu'ils bégayaient. Certains enfants ne se souvenaient même pas qu'ils avaient déjà bégayé. Les enfants étaient classés comme persistants si les parents

ou les enfants signalaient un bégaiement (même occasionnel) ou un signe de bégaiement pouvait être identifié sur les enregistrements. De plus, ils n'ont signalé aucun signe de crainte pour parler. 16 enfants ont été identifiés comme persistants (42%), seul 2 enfants (5%) ont bégayé plus de 2% SS sur la seconde vidéo et seul 3 enfants bégayaient régulièrement depuis la maternelle.

Conclusions : Le concept de récupération du bégaiement est complexe et doit être clarifié. Il est important d'en tenir compte en ce qui concerne les méthodes de thérapie et l'efficacité de la thérapie. Davantage de facteurs épidémiologiques sont nécessaires à propos du développement du bégaiement.

Mots-clés : bégaiement, récupération,

CO 017

(1366) - TRAITEMENT POUR LES ENFANTS D'ÂGE SCOLAIRE QUI BÉGAIENT - TOHP (PROGRAMME TIME OUT)

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Objectifs : La présente étude vise à étudier l'efficacité d'un programme de traitement du bégaiement à la maison (Time-Out Home Program ou TOHP, Seybold et Ingham, 2011), qui combine une formation time out et un traitement dépendant de la performance ainsi qu'un calendrier d'entretien (SGPC) destiné aux élèves qui bégaiement.

Méthodes : *Participants.* Les participants ont été référés à l'étude au travers d'un vaste réseau de sources de référence en Islande. Au total, 43 clients potentiels ont été référés, 28 ont été évalués dont 11 répondaient aux critères d'inclusion d'au moins 3% de syllabes bégayées, alors que 7 participants se sont portés volontaires pour participer ; ils étaient tous de sexe masculin, âgés de 10 à 13 ans.

Mesure. L'étude a été conçue pour tester l'efficacité du traitement en incorporant un modèle d'évaluation des résultats du traitement de bégaiement à trois facteurs (voir Costello et Ingham, 1984). La performance vocale de chaque participant a été enregistrée à plusieurs reprises sur vidéo et mesurée avant, pendant et après le traitement, à travers différentes situations de parole sur une période de deux ans (voir Ingham, Ingham & Bothe, 2012). Chaque séance de traitement a été enregistrée et évaluée par vidéo, à la fois la mesure de la performance de la parole et la fidélité au traitement. Les effets du traitement sur la qualité de vie des participants ont été évalués à l'aide du Questionnaire de Performance Linguistique (Perkins, 1981, Boberg & Kully, 1994), l'échelle de OASES pour les enfants de 7 à 12 ans (Yaruss & Quesal, 2006).

Résultats : Des données détaillées seront présentées lors de la conférence, ainsi que l'expérience du programme pour chaque participant et son effet sur la qualité de vie des participants. Les données de performance vocale résumées étaient les suivantes : le % de SS pendant la Phase de Référence était de 8,03%, mais réduit pendant la phase de suivi à 0,42%.

Conclusions : Cette nouvelle approche de traitement est efficace pour un groupe de clients défini qui ne pouvaient jamais parler sans bégayer. Un tel traitement complet pourrait ne pas convenir à toutes les personnes qui bégaiement. L'effet et les limites du programme seront discutés.

Mots clés : Troubles de la fluidité, bégaiement

CO 018

(1310) - FONCTIONS EXÉCUTIVES COMME PRÉDICTEURS DU SUCCÈS DE LA THÉRAPIE DU BÉGAIEMENT

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Objectifs : Les résultats individuels de la thérapie du bégaiement sont variables. Outre les problèmes cliniques et méthodologiques, divers autres facteurs liés au bégaiement, influencent les résultats thérapeutiques, à savoir le nombre d'années de bégaiement, la sévérité du bégaiement, les antécédents de bégaiement dans la famille, entre autres (par ex. Howell et Davis, 2011). Des facteurs personnels, tels que le développement moteur et du langage et le tempérament, ont été étudiés dernièrement (Anderson et Conture, 2000). Plus récemment, l'influence des fonctions neurocognitives dans le bégaiement a également été rapportée (par ex. Nejati et al., 2013). Cette étude visait à étudier l'impact des fonctions exécutives sur les résultats de la thérapie.

Méthodologie : Un groupe de sujets composé de 3 filles et de 9 garçons entre 7 et 11 ans présentant un bégaiement. L'outil Severity Instrument-3 (SSI-3) (Riley, 1994) a été administré aux enfants pour obtenir des échelles de cotation de la gravité du bégaiement avant le début du traitement et à nouveau après la fin du traitement. Avant la thérapie, le test des matrices progressives de Raven (Raven, Court et Raven, 1992, 1993) a été administré aux enfants pour mesurer les capacités de planification et de résolution de problèmes, ainsi que le test de classement de cartes du Wisconsin (Heaton, 1981, Heaton et al., 1993), pour évaluer l'inhibition des persévérations et les capacités de maintien, et le test de Stroop (Stroop, 1935, Spreen et Strauss, 1991) pour évaluer le contrôle des interférences. Les fonctions exécutives sont incluses dans cette étude. La thérapie a été administrée à tous les enfants par le premier auteur, basée sur les techniques de fluence. Les 12 enfants ont suivi 18 séances de thérapie individuelle, 6 jours par semaine et pendant 3 semaines. L'application du logiciel Smart PLS dans le traitement des modèles d'équations structurelles a donné lieu aux données statistiques utilisées pour mesurer le pouvoir prédictif des fonctions exécutives.

Résultat : L'inhibition des persévérations, le contrôle des interférences et les capacités de maintien ont permis de prédire les résultats thérapeutiques de manière significative.

Conclusion : Le fait de savoir quelles fonctions exécutives ont une incidence sur les résultats de la thérapie permettra au clinicien d'inclure ces fonctions dans le plan thérapeutique et d'améliorer ainsi ces résultats.

Mots clés : Troubles de la fluence, bégaiement

CO 019

(1255) - HARCELEMENT ET BEGAIEMENT: ETUDE DU PHENOMENE EN ITALIE

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Objectifs : Les personnes qui bégaiement disent qu'elles ont été harcelées à l'école en raison de leur bégaiement. Des recherches ont été menées dans de nombreux pays afin d'étudier ce phénomène et de comprendre son origine et son évolution. Les objectifs de la présente étude sont; a) recueillir des données quant à la fréquence, l'impact et la nature du harcèlement sur un échantillon de personnes qui bégaiement en Italie, puis b) de comparer les données entre les

personnes qui bégaièrent et leurs pairs qui ne bégaièrent pas, c) analyser les corrélations entre le harcèlement et d'autres paramètres tels que l'âge, le genre, le niveau socioculturel, la gravité du bégaiement, etc.

Méthodologie : L'étude a été menée sur 60 sujets divisés en deux groupes; 30 personnes qui bégaièrent, et 30 personnes qui ne bégaièrent pas. Les sujets étaient âgés de 9 à 19 ans. Des statistiques descriptives ont été utilisées pour fournir une synthèse concernant le niveau de harcèlement et les incidents de victimisation parmi les sujets présentant un bégaiement.

Résultats : L'analyse des résultats a montré que l'incidence de harcèlement chez les sujets présentant un bégaiement était de 68% alors que dans le cas des sujets ne présentant pas de bégaiement, cette proportion était de 32%. L'analyse de la corrélation montre la manière dont le harcèlement est affecté par différents facteurs.

Conclusions : Le harcèlement lié au bégaiement est répandu en Italie, et affecte surtout des adolescents présentant un fort degré des aspects dissimulés du trouble ainsi qu'une faible estime de soi.

Mots-clés: Troubles de fluidité, bégaiement

CO 020

(1028) – ÉVALUATION PERCEPTIVO-AUDITIVES DE LA FLUENCE DANS LES TROUBLES DU LANGAGE D'ORIGINE NEUROLOGIQUE

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Objectifs : Le but de l'étude est d'examiner comment les orthophonistes évaluent de manière perceptivo-auditive, la fluence du discours du langage atypique après traumatisme crânio-cérébral (TCC). Les questions de nos recherches étaient : 1) comment les orthophonistes évaluent la fluence chez les personnes atteintes de troubles de la communication d'origine neurologique 2) font-ils une différence entre les groupes de personnes, et 3) quels sont les caractéristiques agissant sur la fluence du discours?

Méthodes : Dix orthophonistes spécialisés dans les troubles de la communication d'origine neurologique se sont portés volontaires en tant que juges-experts pour évaluer 90 échantillons de discours narratifs de 120mm sur une échelle visuelle analogique (EVA). Des points de repère ont été placés sur l'échelle pour représenter les troubles de fluence du discours les plus graves (0mm à l'extrême gauche), trouble de la fluence modéré (40mm), fluence moyenne (80mm), et un degré élevé, voir exceptionnel de fluence du discours (120mm). Les échantillons – mélangés de façon aléatoire – provenaient de 70 sujets ne présentant aucun trouble neurologique (groupe témoin), 10 sujets avec divers troubles de la communication après TCC (groupe clinique A) et 10 sujets présentant un bégaiement neurogène après TCC. (groupe clinique B). Si les juges évaluaient la fluence du discours en deçà de la moyenne (en dessous de 80mm) on leur demandait de préciser, si la vitesse du discours, les pauses, le bégaiement, les difficultés de langage et/ou quelque chose d'autre, influençait leur décision.

Résultats : La moyenne du taux de fluence dans le groupe clinique B (GCB) était plus basse que dans le groupe clinique A (GCA). Ces deux groupes ne présentaient pas de différence statistique l'un par rapport à l'autre. Les difficultés de langage n'étaient perçues que chez les participants présentant une aphasie, et un bégaiement, seulement chez les participants présentant une apraxie du langage dans le GCA. Pourtant, aucune corrélation statistiquement significative n'a été trouvée entre ces caractéristiques et les valeurs de fluence. Pour le GCB, une corrélation significative a été trouvée entre les pauses et la fluence ainsi qu'entre le bégaiement et la fluence.

Conclusions : Les résultats de cette étude indiquent le besoin d'études supplémentaires concernant la nature neurogène du bégaiement et les différentes disfluences verbales, en maintenant la discussion de la relation entre la perception de la fluence et les mesures quantitatives traditionnelles.

Mots clés : troubles de la fluence, bégaiements, traumatismes cranio cérébraux

CO 021

(1097) – FONCTIONS EXÉCUTIVES DIMINUÉES DANS L'APHASIE : ÉVALUATION D'UNE NOUVELLE THÉRAPIE POUR AMÉLIORER LA FLEXIBILITÉ COGNITIVE DANS L'APHASIE

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Objectifs : En plus des déficits du langage, les personnes atteintes d'aphasie peuvent présenter des handicaps dans les fonctions exécutives, y compris au niveau de l'inhibition, de la mémoire de travail ou de la flexibilité cognitive. La flexibilité cognitive est la capacité d'adapter le comportement rapidement et de manière flexible dans un environnement changeant. Ce déficit peut restreindre la compétence de communication, par exemple, la capacité de changer de sujet ou de répondre à un malentendu dans une conversation au quotidien. Jusqu'à ce jour, ces déficits ont été négligés dans la thérapie de l'aphasie, même leur prise en compte dans le cadre du traitement du langage pourrait être bénéfique pour les personnes aphasiques. Le but de cette étude est d'évaluer si une thérapie de l'aphasie incluant la flexibilité cognitive conduit à une amélioration significative des compétences langagières et aux capacités communicatives en comparé à une thérapie conventionnelle.

Méthodes : Une série de 10 études de cas a été menée. La personne aphasique ont suivi – dans des ordres divers (cross-over design) – aussi bien une nouvelle thérapie, c'est-à-dire la thérapie de l'aphasie comprenant la flexibilité cognitive (Cognitive Flexibility in Aphasia Therapy - CFAT), et une thérapie conventionnelle. Chaque méthode de thérapie présentait 20 sessions sur une période de deux semaines. Pour évaluer les effets de la thérapie, une batterie d'évaluation a été appliquée à cinq différents moments et incluait les compétences linguistiques, les compétences de communication et la flexibilité cognitive.

Résultats : Au niveau du groupe, les personnes aphasiques ont bénéficiés de la CFAT au niveau des compétences linguistiques (Dépistage des capacités de trouver un mot en allemand, Benassi et al., 2012: pré vs post CFAT, la version exacte du test somme des rangs Wilcoxon, unilatéral $p < .001$), de la compétence communicationnelle (Test de scénario, Nobis-Bosch et al., sous presse: pré vs post CFAT, version exacte du test somme des rangs Wilcoxon, unilatéral $p < .001$) et de la flexibilité cognitive (Test de fluence du mot en allemand, Aschenbrenner et al., 2000: pré vs post CFAT, version exacte du test de McNemar, unilatéral, $p < .001$). De plus, si on la compare à la thérapie conventionnelle, la CFAT était plus efficace en ce qui concerne la compétence communicationnelle et la flexibilité cognitive.

Conclusions : La flexibilité cognitive dans la thérapie de l'aphasie (CFAT) offre une nouvelle opportunité d'entraîner directement la flexibilité cognitive dans les contextes communicatifs et de compléter la thérapie conventionnelle avec un résultat optimal pour le patient.

Mots clés : Aphasie, handicap cognitif, intervention

CO 022

(1271) - STRATÉGIES DU PARTENAIRE DE COMMUNICATION AVANT L'INTERVENTION

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Objectifs : La formation des partenaires de communication a montré des effets positifs permettant la participation des personnes aphasiques (PA) dans la conversation. Le programme « Supported Conversation for Adults with Aphasia™ (SCA) » initie le partenaire de communication afin de soutenir la compréhension (« entrer ») et l'expression (« sortir ») du PA, et de vérifier qu'ils se comprennent correctement. Certains partenaires de communication trouvent spontanément des stratégies pour faciliter leur interaction avec les PA. Le but de la présente étude était d'explorer le type de stratégies que les partenaires de communication utilisent avant d'obtenir des informations sur le soutien à la communication et différentes méthodes de communication.

Méthodes : Les partenaires de communication de 54 PA ont été invités à écrire leurs réponses aux questions : « Comment discutez-vous avec la personne atteinte d'aphasie ? Qu'est-ce qui l'aide à mieux vous comprendre ou à mieux s'exprimer ? ». 43 partenaires de communication ont donné leurs réponses. Celles-ci ont été analysées avec l'analyse de contenu en utilisant les catégories des trois principes de SCA.

Résultats : La plupart des réponses pourraient être classées dans les trois principes de la SCA. La plupart des stratégies rapportées ont été utilisées pour « entrer », en tout 61 commentaires. 47 d'entre eux ont décrit comment le partenaire de communication change son propre discours pour être plus facile à comprendre et 14 d'entre eux décrivent comment ils utilisent d'autres méthodes de communication. Les commentaires sur les « sorties » étaient au total de 27, dont 21 concernaient la façon d'aider la PA à parler ou dire les mots, et 6 concernaient des demandes d'utilisation de méthodes de communication alternatives. La vérification a été utilisée pour assurer « l'entrée », et non pour vérifier si le, la partenaire de communication avait bien compris les PA.

Conclusions : Les partenaires de communication sans formation semblent se concentrer davantage sur « l'entrée » que sur la « sortie » et la communication est davantage basée sur l'utilisation de la parole que sur d'autres méthodes de communication. Les partenaires de communication ont besoin de conseils pour soutenir l'expression de la PA et pour vérifier la compréhension mutuelle afin de permettre une meilleure participation du PA à la conversation.

Mots-clés : Intervention

CO 023

(1033) – APHASIE À TRAVERS D'UN PROJET DE THÉÂTRE SOCIAL ET COMMUNAUTAIRE: RECHERCHE DE L'IMPACT SUR LE PUBLIC

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Objectifs : L'approche « Life Participation Approach to Aphasia (LPAA) » est une philosophie de prestation de service qui vise à permettre la meilleure insertion sociale possible à la personne aphasique (PA). Le centre Afasia CIRP –Fondation Carlo Molo Onlus à Turin suit le modèle d'intervention LPAA. Le théâtre social et communautaire™ est une des activités proposées pour permettre à la personne PA de regagner son identité. Le "Teatro Babel" est un groupe de

théâtre où les PA, jeunes étudiants et des professionnels présentent des pièces de théâtre pour promouvoir l'insertion sociale et l'information au sein de la communauté. Le but du projet était d'analyser l'impact de la dernière pièce "Parole Dentro" du "Teatro Babel" sur le public, afin de pouvoir vérifier si la performance du théâtre peut être un moyen d'informer, de sensibiliser et d'éduquer le public sur les conséquences de l'aphasie.

Méthodes : Trois questionnaires différents ont été créés et distribués au public à trois moments différents : avant le drame (T0, n=216), immédiatement après la fin du spectacle (T1, n=213) et un mois après la représentation (T2, n=96). Nous avons enquêté sur les connaissances des spectateurs, leurs impressions et considérations sur l'aphasie et la PA. Les statistiques descriptives ont été utilisées pour présenter les données qualitatives et quantitatives à chaque étape de l'étude et les comparer.

Résultats : nos résultats ont montré 1) un impact émotionnel et positif important de la pièce sur le public, 2) une amélioration significative du niveau d'information au sujet de l'aphasie, 3) une plus grande prise de conscience des caractéristiques réelles des PA et 4) des ressources et une identité soutenue de la PA. La majorité des participants considéra la pièce utile et suggérerait/recommanderait aux autres personnes, même les professionnels d'y prendre part en tant que spectateurs.

Conclusions : Les résultats ont montré que la pièce "Parole Dentro" du "Teatro Babel" peut être considérée comme un bon outil d'information, de sensibilisation et d'éducation de la communauté au sujet de l'aphasie.

Mots clés : Aphasie, Théâtre social et communautaire™, approche sociale, information

CO 024

(1172) - L'EXPRESSION DE LA TÉLICITÉ DES ACTIONS CHEZ DES INDIVIDUS HONGROIS SOUFFRANT D'APHASIE AGRAMMATIQUE

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Objectif : De nombreuses études longitudinales linguistiques montrent que les individus souffrant d'aphasie agrammatique ont des difficultés à produire le type aspectuel des phrases. Ces difficultés n'affectent pas toutes les formes aspectuelles de manière égale. L'expression des temps passés est plus vulnérable (ou altérée sélectivement) que les autres temps. En hongrois, les formes verbales perfectives et la télicité sont indiquées par la morphologie (affixes verbaux) sur les verbes. Dans cet exposé, nous présentons comment les aphasiques agrammatiques expriment les formes verbales perfectives / la télicité d'une action en cas de déficience sélective d'usage du plus-que-parfait.

Méthodologie : 27 paires de photos colorées ont été recueillies. Une photo de chaque paire montrait une action en cours et l'autre représentait la même action déjà accomplie (les résultats de l'action pouvaient être vus). Nous avons présenté une phrase incomplète avec chaque photo, contenant un sujet, un objet et un adverbe de temps pour obtenir des formes verbales à l'imparfait de l'indicatif ou au plus-que-parfait. Des paires de photos ont été présentées sur un écran PC et les participants (dix personnes souffrant d'aphasie post-AVC et dix personnes en bonne santé) ont été invitées à compléter les phrases avec les formes verbales correspondant le mieux à l'adverbe de temps de la phrase et à l'action.

Résultat : Les résultats indiquent que les individus présentant un agrammatisme ont assez bien produit des formes verbales à l'imparfait de l'indicatif pour exprimer une action continue (sans résultat). Cependant, leur performance s'est modifiée en produisant des formes de verbes au plus-que-parfait, qui exprimaient non seulement la télicité, mais aussi le résultat d'une action. La plupart des paraphrasies a été produite.

Conclusion : Nos résultats suggèrent que les aphasiques agrammatiques hongrois ont des difficultés à exprimer le plus-que-parfait à travers des verbes morphologiquement complexes.

Cependant, ils sont sensibles à la télicité d'une action et ils peuvent l'exprimer par des paraphrasies, en utilisant des formes verbales morphologiquement plus simples. Ces résultats peuvent avoir des implications au niveau de la rééducation des différents temps, du type aspectuel de la phrase et des adverbes de temps au cours de la thérapie.

Mots-clés : Aphasie, troubles du langage acquis

CO 025

(1343) - PAS D'AVANTAGE DU BILINGUISME POUR DEUX GROUPES D'ENFANTS D'ÂGE SCOLAIRE SUR DEUX TÂCHES DE FONCTION EXÉCUTIVE

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Objectifs : Un certain nombre d'études ont conclu que les enfants bilingues surpassent les enfants monolingues pour les tâches de fonctions exécutives (Barac et Bialystok, 2011), alors que d'autres études n'ont pas réussi à trouver un avantage dans le bilinguisme (Namazi et Thordardottir, 2010). Bon nombre de ces études ont utilisé les tâches de Tri de Cartes « Dimensional or Wisconsin Card sorting tasks » (Bialystok, 1999 ; Bialystok et Martin, 2004), qui oblige les participants à déterminer et à classer les critères de tri des cartes et à les modifier face à des preuves contradictoires. Cette étude a comparé les enfants monolingues aux enfants bilingues sur deux tâches de la fonction exécutive.

Méthodes : 76 enfants d'âge scolaire, en première et troisième année d'école française à Montréal ont participé à l'étude. Chaque niveau comprenait des enfants monolingues et deux sous-groupes bilingues, équivalents selon l'âge, l'éducation maternelle et le QI non verbal, mais différents selon l'âge d'exposition au bilinguisme (AoE) et le niveau général d'exposition au bilinguisme. Les variables d'origine ont été soigneusement documentées grâce à un rapport détaillé des parents. Les groupes monolingues et bilingues différaient précédemment de manière significative sur les mesures de vocabulaire. Deux mesures de la fonction exécutive, la tâche de Tri de Cartes Wisconsin (WCST, Heaton et al 1993) et l'Odd one Out (OoO, Henry, 2001), une tâche de portée visuelle WM ont été administrées à tous les participants. Le WCST a été noté pour le total de réponses, le nombre tris corrects, et le nombre d'éléments à trier. L'OoO a été noté pour le total de réponses correctes et la portée (le plus long ensemble rappelé).

Résultats : Les enfants monolingues ont obtenu les meilleurs résultats aux deux niveaux scolaires ; cependant, les différences au sein des groupes entre les enfants monolingues et bilingues n'étaient pas significatives. Les analyses de régression considérant la quantité d'exposition bilingue et la zone d'influence comme variables continues, ont donné des résultats marginalement significatifs pour les scores de la fonction exécutive du groupe plus jeune ($p = 0,077$), ce qui suggère une meilleure performance des enfants bilingues. La régression n'était pas significative pour le groupe plus âgé ($p = .432$).

Conclusions : L'étude n'a pas trouvé de preuve d'un avantage du bilinguisme pour la fonction exécutive.

Mots-clés: Plurilinguisme

CO 026

(1233) - RHYTHM OF CARRIER PHRASE AFFECTS SPEED AND ACCURACY OF JUDGEMENTS OF LEXICAL STRESS

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Objectives : Children with Developmental Language Disorder (DLD) have difficulty making accurate judgements of lexical stress (an integral part of the prosodic structure of words in English). We investigated whether presenting the target word following a rhythmically congruent or incongruent carrier phrase affected the speed and accuracy of lexical stress judgements.

Methods : 14 children with DLD, 22 age-matched typically-developing children (AMC) and 20 younger, language-matched typically-developing children (YLC) listened to 20 sentences in four conditions: i) correctly stressed target following a rhythmically congruent carrier; ii) correctly stressed target – rhythmically incongruent carrier; iii) incorrectly stressed target – rhythmically congruent carrier; iv) incorrectly stressed target – rhythmically incongruent carrier. Children indicated whether the target word was correctly or incorrectly stressed. Reaction Times were also recorded.

Results : Children with DLD tended to perform less accurately on this task than the AMC group, but not significantly so. The YLC group were significantly less accurate than the AMC group indicating a developmental trend in accuracy of lexical stress judgments. Sentences in which the Target was rhythmically congruent with (i.e. continued) the rhythm of the Carrier Phrase led to more accurate judgements of whether the target word was correctly stressed. This was found to be the case for both AMC and DLD groups. Congruence of carrier phrase rhythm did not lead to differences in reaction times, however responses for carrier phrases following an alternating Strong-weak rhythm were found to be faster than those using a weak-Strong rhythm for the AMC and YLC groups. Carrier phrase rhythm did not influence reaction times for the DLD group.

Conclusions : The rhythm of the preceding carrier phrase affects accuracy of judgements of lexical stress. Targets which continue the rhythm of the carrier phrase are judged more accurately. Typically-developing children are faster to judge lexical stress when carrier phrases have an alternating Strong-weak rhythm.

CO 027

(1057) – PROGRAMME DE PRISE DE CONSCIENCE PHONOLOGIQUE AU JARDIN D'ENFANTS

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Hall, Andreia - University Of Aveiro

Objectifs : La prise de conscience phonologique est un prédicteur et marqueur de pronostique largement reconnu pour la réussite dans l'apprentissage précoce de la lecture (Carroll & Snowling, 2004; Catts, Fey, Zhang, & Tomblin, 2001). Cette étude analysa les effets du programme de prise de conscience phonologique pour les enfants en âge préscolaire ayant développement typique du langage.

Méthodes : Soixante-quatorze enfants portugais âgés de 4.0-6.4 ans ont participé à cette étude : 63 enfants ont reçu 12 sessions de prise de conscience phonologique (groupe expérimental), étaient comparés à un groupe de 14 enfants suivant un programme habituel d'alphabétisation. Le groupe expérimental a reçu 12 sessions de groupe (6-8 enfants dans chaque groupe) concentrées sur les compétences de prise de conscience phonologique (assemblage, segmentation et manipulation des syllabes et des phonèmes). L'instrument de prise de conscience phonologique CONFIRA (qui inclut 4 sous tests) a été utilisé pour évaluer les enfants avant et après le programme. Une évaluation du suivi a été analysée dans les deux groupes avec l'instrument ALEPE, 11 mois après le programme.

Résultats : Les résultats ont montré que les enfants dans le groupe expérimental se sont améliorés de manière significative après le programme dans tous les sous tests de prise de conscience phonologique ($p = 0.000$). Il n'y avait pas de différences significatives dans le groupe contrôle,

pour tous les sous tests de prise de conscience phonologique ($p > 0.05$) sauf pour celui des syllabes, où les deux groupes se sont améliorés. Une explication possible pour ces résultats est que les compétences syllabiques requièrent moins d'instruction directe que les compétences phonémiques et peuvent se développer dans le programme général à l'école enfantine (Gillon, 2004). Une évaluation de suivi faite 11 mois après le programme a révélé que le groupe expérimental continue de présenter des scores significativement bien plus hauts ($p = 0.031$) que le groupe contrôle dans les sous tests de prise de conscience phonologique.

Conclusions : Le programme de prise de conscience phonologique est efficace. Les résultats mettent en exergue le rôle important que les orthophonistes peuvent jouer en rehaussant la prise de conscience phonémique chez les enfants au développement normal, en tenant compte du fait que la prise de conscience de cette petite unité demande des instructions plus précises.

CO 028

(1353) - L'IMPACT DE L'EXPOSITION DES MÉDIAS ÉLECTRONIQUES SUR LE DÉVELOPPEMENT DU LANGAGE DES JEUNES ENFANTS

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Cameron-Faulkner, Thea - École des Arts, Langues et Cultures, Université de Manchester, Royaume-Uni

Serratrice, Ludovica - École de Psychologie et de Sciences du Langage Clinique, Université de Reading, Royaume-Uni

Objectifs : Examiner l'impact de la quantité, qualité et du contexte social de l'exposition aux médias électroniques (à la fois télévisuels et mobiles) sur le développement du langage chez les enfants saoudiens âgés de 1 à 3 ans.

Méthodes : Nous avons utilisé des agendas-emplois du temps et des questionnaires pour suivre les habitudes d'utilisation par les enfants des médias électroniques et les contextes sociaux dans lesquels ils sont utilisés. Le développement du langage des enfants a été évalué en utilisant l'Inventaire Arabe du Développement Communicatif JISH (JACDI) (Dashash & Safi, 2014), l'adaptation arabe officielle des Inventaires du Développement Communicatif MacArthur-Bates (CDI) (Fenson et al., 1993).

Résultats : Nos résultats indiquent que sur les trois paramètres de visualisation des médias électroniques (quantité, qualité et contexte), le prédicteur le plus significatif du développement du langage chez les 12 à 16 mois était le contexte des médias mesuré par la fréquence des actions interactives conjointes avec l'enfant et les médias. Plus des parents covisionnaient les écrans avec leurs jeunes enfants et plus ils interagissaient avec eux pendant le covisionnement, plus les résultats au niveau du vocabulaire expressif et réceptif de leurs enfants étaient élevés. Chez les enfants plus âgés (17 à 36 mois), la quantité de médias, mesuré par le temps passé devant les écrans, la prévalence de la télévision en arrière-plan et la moyenne d'âge de visionnement des médias ont eu l'impact négatif le plus élevé sur les résultats du vocabulaire expressif des enfants et la longueur moyenne des trois énoncés les plus longs qu'ils ont produit (M3L).

Conclusions : Pour les enfants âgés de 16 mois et moins, les médias électroniques peuvent être bénéfiques pour le développement du langage, mais seulement lorsque les parents interagissent avec leurs enfants pendant le covisionnement. Malgré la tendance dans le discours sur les médias électroniques qui demande aux parents de ne pas être obsédés par le temps passé devant les médias électroniques et qui demande davantage d'attention à la qualité des contenus des médias électroniques qu'à la quantité d'exposition, la présente étude confirme des recherches préalables indiquant une association négative entre la quantité de temps d'écran et les résultats du niveau du langage chez les enfants de 17 à 36 mois.

Mots-clés : Troubles développementaux du langage

CO 029

(1084) – DEMANDE DE CLARIFICATION POUR LES JEUNES ENFANTS AVEC/SANS TROUBLE DU DÉVELOPPEMENT DU LANGAGE : UNE ÉTUDE DE LA CONVERSATION ANALYTIQUE

Porter, Lorette - Université de Leeds Beckett, Royaume-Uni

Muskett, Tom - Université de Leeds Beckett, Royaume-Uni

Golonka, Sabrina - Université de Leeds Beckett, Royaume-Uni

Objectifs : Un risque élevé existe pour les enfants présentant des difficultés de réceptivité du langage de présenter un handicap permanent et à de faibles résultats. Une des composantes de la réceptivité du langage est la capacité à contrôler notre compréhension et de demander une clarification si nécessaire. Cette compétence apparaît pendant la période préscolaire chez les enfants ayant un développement normal, mais elle peut constituer un problème pour les enfants présentant des difficultés de réceptivité de langage. L'étude décrite ci-dessous est la première de trois études faisant partie des études de doctorat dans ce domaine du premier auteur. L'étude a pour but de trouver quand et comment les jeunes enfants font des demandes de clarification et comment ces comportements influencent la conversation en cours.

Méthodes : après avoir obtenu l'approbation éthique, huit enfants ont été recrutés dans les écoles et crèches locales dans les tranches d'âges allant de 2;6 - 5;6 ans. Quatre enfants avaient un diagnostic de trouble de développement du langage (TDL) avec un handicap au niveau de la réceptivité, les quatre autres avaient un développement normal. Environ quarante minutes de données vidéo sont recueillies pour chacune des situations de jeu dans un environnement naturel : avec un parent et avec un adulte inconnu.

Résultats : Les résultats préliminaires sont présentés à partir de l'analyse des conversations provenant des vidéos. La vidéo se concentre sur des moments où les adultes corrigent et identifient les antécédents de ces corrections dans les comportements verbaux et non verbaux de l'enfant. Les stratégies utilisées par les enfants d'âges différents, dans diverses conditions (avec un adulte familial ou non) et par participant (avec ou sans TDL) sont comparées par rapport à leurs différences qualitatives. Le langage adulte dans les énoncés avant et après les demandes de clarification est également comparé.

Conclusions : Les cliniciens peuvent bénéficier d'une compréhension conceptualisée en tant qu'entité partagée négociée conjointement par les participants dans une conversation. L'analyse des voies émergentes selon lesquelles les enfants avec et sans TDL indiquent les interruptions dans la compréhension et la manière dont les adultes répondent, peuvent améliorer notre compréhension des déficits fonctionnels de la communication. Nous offrons des suggestions sur la manière dont les cliniciens peuvent incorporer cela dans leurs pratiques d'évaluation.

Mots clés : troubles du développement du langage, pragmatique, diagnostic fonctionnel

CO 030

(1222) - COMPETENCES LINGUISTIQUES ET TROUBLES DU LANGAGE CHEZ LES ENFANTS PRÉSENTANT UNE PERTE DE L'AUDITION LÉGÈRE ET MODÉRÉE

Sahlén, Birgitta - Université de Lund, Suède

Asker-Årnason, Lena - Université de Lund, Suède

Ibertsson, Tina - Université de Lund, Suède

Hansson, Kristina - Université de Lund, Suède

Objectifs : Le risque de difficultés de développement du langage chez les enfants présentant une perte auditive est plus élevé que chez leurs pairs qui n'en présentent pas. Une grande partie

des enfants ayant une déficience auditive remplissent les critères de diagnostic pour trouble du langage, même si les écarts au sein même de ce groupe sont élevés.

Une grande partie des recherches portant sur le développement du langage chez les enfants présentant une perte auditive se concentre sur ceux souffrant d'une perte grave ou profonde, ou ceux ayant des implants cochléaires. Dans notre étude, nous nous consacrons aux enfants présentant une perte auditive légère et modérée. Ils sont souvent traités comme un seul groupe, et la mesure dans laquelle ils diffèrent en terme de compétences linguistiques ne semble pas claire. Nous avons comparé les deux groupes afin de savoir si l'un des deux avait plus de probabilité de présenter des troubles du langage tels qu'indiqué par des mesures considérées comme étant les marqueurs cliniques ou les facteurs de pronostic pour troubles du langage. Nous avons également examiné s'il existait des différences en raison de l'âge lors du diagnostic ou de l'âge lors du début du port d'un appareil auditif.

Méthodologie : Les participants étaient 41 enfants présentant une perte auditive neurosensorielle âgés de 4 ans, 11-15 ans, et de 10 ans, dont 19 présentant une perte auditive légère (BEHL 23-39 dB) et 22 avec perte auditive modérée (BEHL 40-70 dB). L'évaluation a tenu compte de l'âge lors du diagnostic, de l'âge lors du début du port d'un appareil auditif, leurs capacités à répéter des non-mots et la compréhension de phrase.

Résultats : Les enfants présentant une perte auditive légère avaient tendance à être diagnostiqués plus tard et ont débuté le port d'appareil auditif beaucoup plus tard que les enfants ayant une perte auditive modérée. Nous n'avons pas relevé de différences notables entre les deux groupes en ce qui concerne la répétition de non-mots ou la compréhension de phrase. Environ 20% des enfants des deux groupes ont eu une performance de 2 SD ou plus en dessous des contrôles dans les deux mesures de langage.

Conclusions : Conformément à d'autres recherches récentes, les résultats indiquent que les enfants présentant une perte auditive minimale ou légère risquent tout autant de rencontrer des difficultés d'apprentissage de la langue que les enfants ayant une perte auditive modérée, mais qu'ils ne commencent à porter un appareil auditif que beaucoup plus tard que ces derniers. Le diagnostic précoce ne suffit pas; il est également important de conseiller les patients avec clarté et détermination en ce qui concerne la nécessité de l'amplification, même pour les cas de perte auditive minimale ou légère.

Mots-clés : Déficience auditive

CO 031

(1080) – CONSTRUIRE DES COMPÉTENCES POUR LA RECHERCHE EN ORTHOPHONIE - PERSPECTIVE D'UN ÉTUDIANT DU PREMIER CYCLE

Osen, Christina – Faculté de médecine Heidelberg, Allemagne

Wensing, Prof. Dr. Michel – Faculté de médecine Heidelberg, Allemagne

Berger, Sarah – Faculté de médecine Heidelberg, Allemagne

Objectifs : Afin de fournir la meilleure pratique pour le soin du patient, les orthophonistes ont besoin d'avoir accès aux indices actuelles mais de plus en plus aussi de fournir des preuves pour entreprendre la recherche dans leur pratique clinique. Une exposition des étudiants du premier cycle à des opportunités de recherche avec un mentor adéquat pour encourager, aider et faciliter leurs propres initiatives de recherche pourrait accroître l'engagement pour la recherche dans la pratique. Ce rapport de cas décrit l'expérience d'un étudiant qui, en tant que licencié, entreprend un projet de recherche examinant les facteurs d'entrée dans la pratique pour les nouveaux diplômés en orthophonie en Allemagne.

Méthodes : Sous supervision, un bachelier a planifié et conduit une étude qualitative basée sur les entretiens d'expert avec deux orthophonistes allemands expérimentés. Les lignes directrices

d'une entrevue semi-structurée contenant des questions mettant en évidence les preuves actuelles liées à « l'entrée en pratique » et « l'intention de rester » dans la profession. Les entretiens ont été enregistrés en mode numérique et transcrites textuellement. L'analyse des données proposée par Emerson a été effectuée par la méthode inductive déductive appuyée par le logiciel qualitatif de recherche Atlas.ti.

Résultats : L'analyse du contenu des réponses transcrites a permis l'identification de quatre thèmes clés (chacun associé à des sous-thèmes) liés à l'objectif de l'étude : a) les facteurs inhibiteurs de l'entrée dans la profession, b) les facteurs facilitant l'entrée dans la pratique, c) les facteurs démotivant l'intention de rester dans la profession et d) les facteurs motivant à rester dans la profession.

Conclusions : Les résultats de ce projet de recherche de cet étudiant indiquent le besoin d'une plus grande professionnalisation de l'orthophonie en Allemagne afin d'améliorer la satisfaction au travail et éviter les départs prématurés des praticiens. De plus, ce rapport de cas démontre qu'aider les étudiants du premier cycle à appliquer les méthodologies de recherche et de mener la recherche avec le mentorat approprié est une étape importante dans la formation des praticiens. Avec le temps, ceci pourrait nettement augmenter l'efficacité de l'orthophonie dans la science et la pratique.

Mots clés : Méthodologies de recherche, pratique basée sur les preuves

CO 032

(1106) – ORTHOCORPUS : UN PROJET TERMINOLOGIQUE POUR L'ORTHOPHONIE EUROPÉENNE

Brin-Henry, Frédérique - ATILF - CNRS Université de Lorraine Centre Hospitalier de Bar-le-Duc, France

Objectifs : Depuis la rédaction du dictionnaire d'Orthophonie (Ortho-Edition 1997, 2004, 2011), nous avons été engagés dans la clarification de la terminologie orthophonique (par exemple pour les concepts et termes de la pathologie du langage) basée sur l'analyse sémantique et syntaxique d'un large corpus spécialisé. Nous explorons la relation entre les unités linguistiques spécifiques et la représentation de la pathologie du langage et de l'ordinaire à la frontière pathologique. Le projet OrthoCorpus (2015-2017), cofinancé par le CNRS, la région Lorraine et la FNO, vise à explorer la diversité de la terminologie orthophonique, en utilisant l'extraction de texte semi-automatique sur un corpus élaboré spécialement.

Méthodes : OrthoCorpus a construit un corpus de 3 millions de mots recueillant plus de 850 articles sur la rééducation orthophonique publiés entre 1997 et 2014. En plus de la création appréciable de méta données (domaines, auteurs, mots clés, etc.), nous avons extrait les termes les plus fréquents ("difficultés") et les termes stratégiques ("évaluation") et mené une analyse linguistique (concordances, spécificités). Nous avons aussi examiné les mots clés et les divers phénomènes linguistiques, comme la référence nominale à l'humain et la distribution de verbes légers et avons trouvés des propriétés conceptuelles. Avec l'aide d'un consortium d'experts, notre ambition est d'appliquer des projets à une plus grande échelle et la création d'une plateforme européenne multilingue en libre accès.

Résultats : Les résultats préliminaires montrent des aspects intéressants, tels que la dynamique et l'évolution de la pathologie (par exemple, développemental versus acquis). Nous espérons qu'il y aura un impact sur la formation initiale et continue à travers l'indexation, une classification originale non biomédicale et les descriptions linguistiques. La participation d'experts aidera à finaliser certaines lignes directrices et un modèle pour la pathologie du langage basée sur les analyses linguistiques du matériel écrit professionnel et scientifique orthophonique (par exemple, rapports anonymes, articles).

Conclusions : La présentation montrera comment en analysant le discours orthophonique, une meilleure compréhension des concepts de la pathologie du langage pourrait être liée à la terminologie spécialisée en Europe. Nous montrerons comment l'orthophonie peut contribuer et être bénéfique à la construction d'un corpus multilingue exclusif, rendu disponible pour les chercheurs et les praticiens.

Mots clés: méthodologies de recherche, terminologie

CO 033

(1125) – CONFIDENTIALITÉ : DÉFIS ET SOLUTIONS

Balandin, Susan – *Université de Deakin, Australie*

Objectifs : Des chercheurs de qualité travaillant dans des domaines modestes comme la communication augmentative et alternative (CAA) peuvent être mis au défi par l'équilibre entre un reporting adéquat des résultats de la recherche et le maintien de la confidentialité des participants. L'accent accru mis sur l'implication des comités-conseils ou les panels de consommateurs dans le processus de la recherche augmentent la difficulté d'assurer une confidentialité complète. Cette présentation se concentrera sur différentes vues de la recherche qualitative éthique, y compris l'auto-ethnographie, et questionneront s'il est raisonnable pour les chercheurs de promettre aux participants que leur confidentialité soit maintenue.

Méthodes : Une recherche sur les lignes directrices sur la confidentialité dans la littérature en recherche qualitative et un ensemble de lignes directrices éthiques d'organisations nationales de recherche, comme le Conseil national de la santé et de la recherche médicale, a été effectuée. Des exemples de cas où la confidentialité était questionnable, ont été extraits des articles de recherche et de rapports de cas.

Résultats : Dans l'ensemble, la confidentialité est traitée avec une certaine superficialité et fait peu de cas des problèmes qui peuvent surgir dans les domaines modestes où un minimum d'information permet d'identifier une personne. Malgré l'intérêt accru dans l'utilisation de l'auto-ethnographie, particulièrement pour les personnes qui désirent 'raconter leur propre histoire', cette méthode apparaît rarement dans la discussion sur la confidentialité et n'est pas abordée dans les lignes directrices de la recherche explorée.

Conclusions : Les chercheurs comprennent l'importance de la confidentialité et sont prêts à promettre rapidement aux participants de la recherche que leur confidentialité est assurée. On garantit aux participants que leurs données seront anonymes et qu'aucun nom ou autre information sur l'identité ne seront rapportés. Néanmoins, ceci ne suffira pas pour assurer la confidentialité et ne résout pas le problème de la personne qui désire être identifiée pour défendre ou donner de la crédibilité à un sujet particulier. Plus d'attention doit être consacrée aux questions de confidentialité. Les comités d'éthiques dans la recherche humaine et les participants devrait mieux comprendre que tout sera fait pour protéger leur confidentialité, mais la protection complète ne peut être garantie.

Mots clés : méthodologies de recherche

CO 034

(1019) EDUCATION CLINIQUE EN ORTHOPHONIE: APPORT DE L'ÉTHIQUE

Kerlan, Mireille - *FNO, France*

Objectifs : l'objectif est de montrer pourquoi l'enseignement de l'éthique est nécessaire à la formation en orthophonie dès lors qu'elle est envisagée dans la plénitude de ses caractéristiques cliniques.

Méthodes : Cette communication développera son argumentaire sur plusieurs plans :

- elle procèdera à une analyse de la clinique orthophonique, pratique de soins dont l'objet est le langage et la communication, propre de l'humanité.
- Elle illustrera cela par un ensemble d'exemples cliniques issus de la pratique
- Elle fournira des éléments issus d'une expérience en formation initiale et en formation continue en appui sur des considérations éthiques. (En France, l'éthique fait partie du cursus universitaire des étudiants en orthophonie et fait l'objet de formations spécifiquement orthophonique pour les professionnels).

Résultats : Le questionnement éthique, ancré sur des principes et des valeurs, accompagne la clinique orthophonique dans tous les champs et aux différents moments de la prise en charge. Cela fonctionne comme une méthodologie de cas devant les problématiques rencontrées dans la pratique orthophonique. L'enseignement de l'éthique permet d'éduquer les praticiens à la clinique orthophonique faite de prises de décision où se croisent les données probantes, le savoir expérientiel du praticien, et le respect de la demande du patient, selon le modèle de référence de l'Evidence Based Practice. Cela permet une évaluation des pratiques professionnelles incluant la relation thérapeutique.

Conclusion : Depuis longtemps, en médecine, on sait que les savoirs scientifiques ne suffisent pas à répondre aux questions posées par les pathologies rencontrées puisque la pathologie s'inscrit dans une problématique particulière à chaque situation, à chaque patient. La question du sujet est souvent évacuée au profit de la description des symptômes et des traitements qui peuvent être apportés, laissant parfois le praticien et le patient insatisfaits. La relation thérapeutique doit considérer la personne du patient, vivant sa maladie, son trouble ou son handicap, comme sujet-sachant avec son savoir expérientiel.

Mots-clés **Domaine spécifique - Éducation clinique**

CO 035

(1111) – DONNER UNE VOIX À TRAVERS LES RÉCITS ORAUX. HISTOIRES D'ORTHOPHONISTES.

Stansfield, Jois – *Université Metropolitan de Manchester, Royaume-Uni*

Objectifs : Au Royaume-Uni, l'association professionnelles des orthophonistes (RCSLT) a reconnu le besoin de parler aux plus anciens membres de la profession pour enrichir l'histoire écrite de l'orthophonie au Royaume-Uni avec des récits oraux. Les objectifs de cette présentation sont :
1. Faire ressortir les difficultés méthodologiques du recueil des récits oraux dont l'identification et le recrutement des participants, la logistique, l'enregistrement, la transcription, l'analyse et le montage.
2. Présenter les résultats des interviews d'orthophonistes du Royaume-Uni pour l'archive du récit oral de l'association professionnelle.

Méthodes : Les orthophonistes qui ont terminé leurs études avant 1970 étaient invités à contribuer au projet. Ils étaient recrutés au Royaume-Uni via le réseau des retraités de l'association, du réseau des directeurs écossais à la retraite et par effet boule de neige, en utilisant les premiers participants comme passage obligé. Les participants ont reçu guide introductif au sujet et furent interviewés à leur domicile ou sur un lieu de leur choix. Les conversations étaient enregistrées et transcrites. Les analyses thématiques ont pu identifier les thèmes généraux, illustrés par des citations individuelles.

Résultats : Le plus ancien diplôme a été obtenu par un participant confirmé en 1943 et le plus récent en 1969. Les récits oraux ont démontré certains thèmes communs : l'impact des individus charismatiques pendant la formation initiale ; l'intensité des 'stages pratique ; les défis de la vie ; la flexibilité et l'adaptation aux changements dans la pratique professionnelle ; la reconnaissance professionnelle et les salaires. Les participants étaient fiers de leur contribution au bien-être de leurs clients ainsi qu'à la profession et à son engagement vers son évolution future.

Conclusions : Les orthophonistes seniors ont contribué de manière importante à la profession de l'heure actuelle et à la manière dont la pratique s'est développée. En écoutant leurs histoires, on a une image marquante du chemin parcouru depuis la création de l'association professionnelle RCSLT en 1945. Cela donne également confiance dans le futur et dans l'évolution de la profession à travers ses membres actuels et futurs.

Mots clés: apprentissage basé sur la compétence

CO 036

(1394) - «FEMMES QUI DONNENT LA PAROLE «: RÉDACTION DE L'HISTOIRE ORALE DES FEMMES SLT EN ESPAGNE

Rodriguez, Lidia - Université de Castilla-La Mancha et AELFA-IF, Espagne

Velasco, Carmela - Université P. de Salamanque, Espagne

Nieva, Silvia - Université Complutense de Madrid, Espagne

Objectifs : Il y a encore un manque de recherche sur les femmes faite par des femmes d'une perspective de la narration biographique. «Femmes qui donnent la parole « est un projet basé sur la valorisation des pionnières de l'Orthophonie en Espagne à travers des récits de femmes à la première personne, inspirés de celui développé au Royaume-Uni (Stansfield 2017). Nos objectifs sont les suivants: 1. Créer une archive historique d'histoires professionnelles et personnelles liées aux premières femmes Orthophonistes en Espagne; 2. Réécrire l'histoire récente de l'Orthophonie espagnole d'une perspective féministe avec une équipe de recherche exclusivement féminine travaillant sur un documentaire. Dans cette présentation, nous partagerons le premier souffle, l'origine du projet, la conception méthodologique et les résultats préliminaires du projet.

Méthodes : Les participants sont des femmes âgées orthophonistes qui ont contribué avec leur pratique professionnelle au développement de la discipline dans toute l'Espagne. La méthodologie suivie est basée sur la recherche biographique-narrative: Histories de Vie. Les participantes ont été interviewées pour un film documentaire autoproduit. Les données collectées ont été traitées à travers d'une analyse de réseau thématique. Par ailleurs, les liens professionnels entre les participantes ont été représentés par un sociogramme pour mettre en évidence les dynamiques sociales.

Résultats : La récupération de l'histoire orale à partir de récits a révélé le réseau sous-jacent parmi les femmes, qui se reconnaissent les unes les autres comme référentes mutuelles. Des biographies croisées ont été identifiées concernant leurs difficultés et défis, les participantes semblant convenir que leur réseautage personnel, social et émotionnel a été crucial pour renforcer le développement professionnel de la discipline.

Conclusions : Comprendre toutes ces biographies remettra en question un cadre global des réalisations historiques de notre discipline. Regarder le passé du point de vue du genre (dans une discipline majoritairement féminine) pourrait être un moyen de consolider l'identité scientifique des futures Orthophonistes. L'Histoire des Orthophonistes/Féminhistoire – Herstory - n'est pas complète sans toutes ces femmes. Les participantes au congrès du CPLOL sont invitées à participer, à rejoindre notre projet et à le développer dans différents pays européens.

Mots-clés : Méthodologies de recherche, apprentissage interprofessionnel

CO 037

(1354) - EXAMEN SYSTÉMATIQUE DE LA MÉTHODE « RAPID PROMPTING METHOD (RPM) » : RÉSULTATS ET IMPLICATIONS POUR LES ORTHOPHONISTES AU NIVEAU MONDIAL.

Hemsley, Bronwyn - Université de Newcastle NSW Australie

Schlosser, Ralf - Université Northeastern, États-Unis

Shane, Howard - Children's Hospital, Boston, Université Harvard, États-Unis

Mostert, Mark - Université Regent, États-Unis

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Objectifs : Les familles des personnes autistes sont souvent confrontées à de nouvelles approches de traitement qui affirment des avantages sans précédent. Une de ces approches alléguant ces avantages extraordinaires pour les personnes autistes est la méthode rapide d'incitation (Rapid Prompting Method (RPM)) (Mukhopadhyay, 2008). La RPM est une technique qui implique un facilitateur tenant et déplaçant un tableau de communication pendant que la personne autiste déplace sa propre main pour communiquer. La RPM est décrite comme étant une autre forme de communication facilitée (FC).

Méthodes : Une revue systématique a été effectuée pour déterminer l'efficacité de la RPM en termes de motricité corporelle, d'aptitude à la parole, d'aptitude à la communication, d'aptitude cognitive, et/ou des comportements problématiques. Le protocole de cette revue a été enregistré auprès de PROSPERO, un registre international prospectif des revues systématiques. (voir Schlosser et al., 2016, http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016047871)

Nous avons effectué des recherches dans la bibliothèque Cochrane, ComDisDome (ProQuest), Index cumulatif des littératures des soins infirmiers et paramédicaux (EBSCOhost), Revues éducatives (ProQuest), Education Research Complete (EBSCO Host) Centre d'information sur les Ressources Éducatives (ProQuest), Google Scholar, Linguistics et and Langage Behaviour Abstracts (ProQuest), Medline (via Pubmed), ProQuest Dissertations et Thèses Globales, PsycINFO (ProQuest), Psycholog and Behavioral Science Collection (ProQuest), Web of Science. En outre, des recherches ont effectuées dans des bases de données d'éditeurs spécifiques : Sage Journals Premier, ScienceDirect (Elsevier), SpringerLink Journals et Taylor & Francis Online.

Résultats : Malgré une recherche approfondie, nous n'avons trouvé aucune preuve de recherche à l'appui des déclarations faites par les développeurs et les autres partisans de la RPM. Dans ce papier, nous examinerons les études sur la RPM et les raisons de son exclusion de la revue.

Conclusions : Il n'y a aucune preuve appuyant l'utilisation de la RPM. Son utilisation n'est pas recommandée et expose les cliniciens au risque d'enfreindre les normes éthiques. Nous discuterons de la façon dont les cliniciens peuvent répondre aux fausses prétentions de la RPM, en nous appuyant sur des preuves dans le domaine de la CAA qui fournissent un contre-argument et des informations sur des interventions de communication efficaces pour les enfants autistes.

Mots-clés : Troubles développementaux du langage

CO 038

(1392) - INTÉRÊTS CHEZ LES ENFANTS EN ÂGE PRÉSCOLAIRE COMME INDICATEURS DE DIAGNOSTIC

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Objectifs : Les intérêts reflètent l'infrastructure cognitive spécifique de chaque enfant et sont des facteurs clés dans l'apprentissage actif. Les critères diagnostiques soulignent l'importance de l'évaluation des intérêts de l'enfant pour faire la différence entre les troubles du spectre de l'autisme (TSA) et la déficience intellectuelle, ainsi que les troubles de la communication et les troubles sociaux (pragmatiques). Bien que les critères de diagnostic des TSA exigent qu'un clinicien détermine si les intérêts de l'enfant sont « très restreints, fixes ou anormaux en termes d'intensité ou de concentration », il existe un grand manque de mesures objectives pour l'évaluation de tous les aspects cliniques des intérêts - intensité, durée et contenu. Le but de cette étude était d'examiner les intérêts des enfants typiques d'âge préscolaire en développement et de comparer divers aspects de leurs intérêts avec ceux des enfants atteints de TSA, de déficience intellectuelle, de troubles du langage et de déficience auditive.

Méthodes : Les parents ont rempli le questionnaire sur les intérêts de leurs enfants d'âge préscolaire qui a été conçu pour cette étude. L'étude a porté sur 260 enfants âgés de 3 à 6 ans: enfants en développement, enfants atteints de TSA, enfants présentant une déficience intellectuelle/retard de développement global, enfants présentant des troubles du langage et enfants malentendants. Les questionnaires ont été analysés qualitativement et quantitativement.

Résultats : Les résultats indiquent que ces groupes d'enfants présentent des différences dans divers aspects de l'intérêt. Tous les enfants manifestent de l'intérêt pour des jouets/sujets similaires, mais leurs champs d'intérêt varient grandement. Les enfants atteints de TSA manifestent généralement la plus grande aberration d'intérêts - leurs intérêts ont tendance à être très restreints et largement non orientés vers la société. Des résultats quantitatifs différencient les enfants atteints de TSA et des enfants en développement typique avec une précision de 90%. Les enfants ayant une déficience intellectuelle montrent avoir également des intérêts plus restreints, mais ne manifestent pas le manque d'intérêts sociaux. Les enfants présentant des troubles du langage et des déficiences auditives présentent généralement le même contenu et la même gamme d'intérêts que les enfants en développement typique, avec certaines caractéristiques mineures spécifiques.

Conclusions : Les intérêts de l'enfant peuvent et doivent être évalués objectivement dans le processus de diagnostic différentiel, surtout si le diagnostic des TSA est un diagnostic candidat.

Mots-clés: Troubles du spectre de l'autisme, déficience cognitive, diagnostic fonctionnel

CO 039

(1092) – LA FAIBLE COHÉRENCE COMPTE DANS LES TROUBLES DU SPECTRE DE L'AUTISME: PREUVE DE DÉFINITIONS COMPOSÉES

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Objectifs : Les capacités du langage des enfants présentant des troubles du spectre de l'autisme (TSA) sont très variables. Les mécanismes sous-jacents aux handicaps de comorbidité du langage chez les enfants atteints des TSA confronté à des phénomènes lexicaux complexes et/ou grammaticaux, particulièrement pour les langues en dehors de l'anglais doivent encore être mieux être investigués. Cette étude a testé la compréhension et la production de mots composés de 2 éléments au niveau de développement langagier de l'énoncé à un élément en grec (exemple, *pondikopayitha* 'piège à souris').

Méthodes : Le test des mots composés (Kambanaros, 2014), jaugé sur une série de variables psycholinguistiques, a été utilisé pour évaluer la compréhension, la définition et la production de noms composés de 2 éléments chez quatre enfants en âge scolaire, présentant un diagnostic de TSA. La compréhension a été évaluée par rapport aux éléments des mots, pour lesquels l'interprétation sémantique impliquait une explication de la signification de chacun des éléments. La production de mots composés a été testée par une tâche de dénomination d'images.

Résultats : Les résultats ont montré que les enfants présentant un TSA avaient moins de difficultés dans l'analyse sémantique des éléments composés, mais présentaient un déficit évident à comprendre la signification composée des mots, comparé à leurs pairs du même âge ayant un développement typique du langage (DTL). Nommer les mots composés était exceptionnellement difficile pour le groupe TSA comparé au groupe DTL malgré une compréhension généralement intacte des images d'objet.

Conclusions : Les résultats suggèrent une dissociation entre connaissance linguistique et conceptuelle pour les éléments et pour le mot composé. De plus, les enfants présentant un TSA ont fourni de mauvaises réponses au niveau sémantique (exemple, 'le raisin qui a du pain' pour 'le pain aux raisins') lorsqu'on expliquait la signification des mots composés, erreur qui n'apparaissait pas chez leurs pairs DTL. Ils semblent donc transmettre un rapport inversé au monde plus vaste révélé par le mot composé. Ce résultat tend à soutenir l'hypothèse de faible cohérence (*Weak Central Coherence Hypothesis* - Happé & Frith, 2006), capturant ce qui apparaît comme une capacité inférieure à intégrer les parties d'information comme un tout cohérent.

Mots clés: troubles du spectre de l'autisme

CO 040

(1078) - UNE EXPLORATION DES PROCÉDURES D'ÉVALUATION CAA SUIVIES PAR LES ORTHOPHONISTES À CHYPRE

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Objectifs : La Communication Augmentative et Alternative (CAA) fait partie de la pratique clinique des orthophonistes et est utilisée par des personnes dont le langage ne peut pas répondre à leurs besoins quotidiens en communication. Ses avantages positifs ont été largement documentés pour ceux qui ont des difficultés de communication complexes, à la fois dans les formes développementales et acquises, pour les personnes de tous les âges. Pour leur assurer la réussite des interventions et une prestation de services de haute qualité, une évaluation complète revêt une importance primordiale. L'évaluation de la CAA n'est ni évidente, ni simple. Cependant, la documentation relative à l'évaluation de la CAA ne donne pas encore d'évaluation complète recouvrant tous les éléments d'évaluation pour différents troubles et groupes d'âge. Compte tenu du fait que la CAA est un nouveau domaine à Chypre, la compréhension de la pratique actuelle fait défaut et, par conséquent, il est vital que cela fasse l'objet d'une recherche.

Méthodes : En conséquence, et pour ce projet de recherche, le processus d'évaluation CAA suivi par les orthophonistes grecs de Chypre a été étudié.

À cette fin, des questionnaires contenant 31 questions ouvertes et à choix multiples ont été élaborés à partir des Technologies d'Assistance aux Activités Humaines (Cook et Hussey, 2002) et des Modèles de Participation (Baukelman et Mirenda, 2005).

Résultats : Cent quatre-vingts orthophonistes travaillant au Ministère de l'Éducation et de la Culture de Chypre ont été contactés. Le taux de réponse a été de 60%. Les résultats montrent que les orthophonistes fondent leur évaluation de la CAA sur des décisions cliniques, prenant en compte un certain nombre d'éléments, tels que le langage, la communication et les compétences sociales. Cependant, le processus exposé à travers cette recherche ne peut être qualifié de complet ou systématique. En ce qui concerne l'évaluation plus spécifique des technologies d'assistance, celle-ci est principalement réalisée par des collègues spécialisés dans le domaine concerné.

Conclusions : Les résultats indiquent qu'une formation complémentaire sur l'évaluation de la CAA est justifiée, assurant ainsi une qualité élevée des services aux personnes ayant des besoins de communication complexes.

Mots-clés: Communication Augmentative et Alternative (CAA)

CO 041

(1060) – LES PERSONNES AUTISTIQUES NE MODIFIENT PAS LEURS STRATÉGIES DE LECTURE COMME FONCTION D'OBJECTIFS DE LECTURE : UNE VISION DES COMPÉTENCES DE PLANIFICATION

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Objectifs : Les personnes souffrant du trouble du spectre de l'autisme (TSA) rencontrent généralement des difficultés au niveau de la compréhension de la lecture. Le rôle des compétences orales et cognitives a été largement exploré, mais on connaît très peu l'influence des fonctions exécutives dans la compréhension de la lecture chez les TSA. Nous voulions étudier les compétences de planification chez les TSA en observant la capacité des lecteurs atteints d'autisme à adapter leurs stratégies de lecture selon les différents objectifs de lecture.

Méthodes : Les participants présentant un TSA ou non, lisent trois histoires ayant trois conditions pour les objectifs de lecture : les loisirs, l'étude et la lecture rapide et la recherche d'information à propos d'une question présentée précédemment. Pendant ce temps, le regard est enregistré.

Résultats : Les résultats n'ont montré aucune différence entre les groupes dans la précision des réponses aux questions. Les données de mouvements oculaires ont montré que le groupe contrôle lit plus lentement, en fixant plus longuement les textes et se considère comme étant plus précis la question lorsqu'ils répondent aux questions durant la lecture sur l'étude comparé à la lecture sur des loisirs. Ces différences entre les objectifs de lecture et la perception de la performance n'ont pas été observées dans le groupe TSA. Le groupe contrôle a adopté, et était conscient de l'utilisation de différentes stratégies pour les différents objectifs de lecture. Au contraire, le groupe TSA n'a pas changé son comportement de lecture selon les objectifs de lecture et a montré un niveau approfondi de traitement des stratégies lorsque c'était nécessaire.

Conclusions : Les problèmes de compréhension chez les TSA peuvent être partiellement expliqués par les difficultés d'ajustement à la tâche et à la planification. L'intervention au niveau de la compréhension de la lecture peut inclure une formation sur la planification et la mise à disposition d'instructions aux individus atteints d'TSA sur l'avantage possible d'utiliser différentes stratégies de lecture pour différents objectifs de lecture.

Mots clés : troubles du spectre de l'autisme, troubles du développement du langage

CO 042

(1077) – PROMOUVOIR LES BESOINS DES PATIENTS PRÉSENTANT DES TROUBLES DE LA COMMUNICATION DURANT LES ÉVALUATIONS DES APTITUDES COGNITIVES.

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Objectifs : La loi sur la santé mentale (2005) requiert du personnel de santé et social en Angleterre et au pays de Galles qu'il fasse passer un test des capacités mentales si un patient apparaît comme ayant des difficultés à prendre des décisions éclairées. L'évaluation de la capacité mentale est complexe, surtout lorsqu'il s'agit de patients ayant des troubles de la communication, qui pourraient avoir besoin d'aide pour comprendre l'information sur des décisions à prendre ou pour exprimer leurs choix. Cette étude vise à développer une boîte à outils afin de faciliter et d'améliorer l'évaluation de l'aptitude cognitive et de tester la faisabilité de l'utilisation de la boîte à outils dans les contextes cliniques.

Méthodes : Un concept de méthodes mixtes a été utilisé. Une récension des preuves dans la recherche et la jurisprudence a été menée. Le personnel multidisciplinaire a été interviewé sur sa pratique. Cette preuve a donné une spécification conceptuelle pour la boîte à outils. Le prototype de la boîte à outils a été développé avec des méthodes dont le concept est axé sur l'utilisateur. Des modifications dans la conception ont été identifiées à partir de l'enquête, de l'entrevue et des données ethnographiques recueillies par le personnel, les utilisateurs du service et les comptes-rendus des experts sur les versions du prototype. Le personnel a utilisé la boîte à outils pour évaluer les patients présentant différents diagnostics : infarctus, démence, délire et lésion cérébrale. L'analyse du document, les enquêtes auprès du personnel et les entrevues avec le patient et des membres de sa famille ont été utilisées pour vérifier l'utilité de la boîte à outils, son acceptation et ses effets sur la pratique.

Résultats : L'étude a identifié que la pratique varie et que le personnel a besoin d'appui pour améliorer ses capacités d'évaluation, spécialement avec des patients souffrant de troubles de la communication. La boîte à outils est une aide à l'évaluation de la capacité mentale (MCAST) et a été conçue pour permettre au personnel multidisciplinaire de : i) préparer, compléter et documenter les évaluations des aptitudes ; ii) identifier et aider les patients souffrant de troubles de la communication durant les évaluations de leurs aptitudes. La plupart du personnel ayant participé a déclaré que le MCAST était facile à utiliser et les aidait à évaluer les aptitudes. Tous les patients et les membres de leur famille ont considéré que le MCAST était acceptable et potentiellement bénéfique. L'utilisation du MCAST a été associée à une évaluation améliorée de la documentation et permettait une plus grande confiance du personnel.

Conclusions : Le MCAST dispose d'un haut potentiel à faciliter et améliorer la pratique et à augmenter l'accès à l'aide aux personnes présentant des troubles de la communication durant les évaluations de l'aptitude cognitive.

Mots clés : troubles du langage acquis, attaque cérébrale grave, handicap cognitif, démence, lésion traumatique cérébrale

CO 043

(1365) - DÉFICITS PRAGMATIQUES ET RESSOURCES COMMUNICATIVES DANS LES TROUBLES NEUROCOGNITIFS : PREUVES DU TCC ET DE LA DÉMENCE

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Objectifs : Les troubles neurocognitifs de la communication (DSM-V) peuvent survenir après un traumatisme crânio-cérébral (TCC) ainsi que dans le cadre d'une maladie neurodégénérative. Les déficits cognitifs et linguistiques peuvent conduire, chez ces patients, à des troubles de la communication ayant un impact sérieux sur l'interaction sociale, l'autorégulation, les activités de la vie quotidienne ainsi que les performances scolaires et professionnelles. L'objectif de notre étude est double : tout d'abord, nous voulons examiner l'ampleur des déficits pragmatiques chez les patients atteints de TCC et de démence, deuxièmement, nous voulons mettre en évidence les ressources dans le comportement communicatif chez ces patients. Les troubles neurocognitifs de la communication peuvent résulter de dysfonctionnements sélectifs et imbriqués au niveau du système cognitif, langagier et du comportement.

Méthodes : Sur la base d'une étude de cohorte prospective (n = 66) avec des témoins sains et des patients atteints de démence Alzheimer et de TCC, nous avons examiné les performances des patients au niveau du traitement du langage pragmatique, des fonctions cognitives (p.ex. Mini-Mental-Status-Test) et de la communication sociale. Nous avons utilisé la version allemande du « La Trobe Communication Questionnaire (LCQ) » (Douglas et al., 2000, Büttner et al., 2016) pour mesurer les différences d'évaluation de soi et des autres dans le comportement communicatif, la version allemande du « Protocol Montreal d'Evaluation de la Communication-MEC» (Scherrer et al., 2016) et le test MAKRO pour le dépistage des actes de discours indirect et des productions de textes narratifs. De plus, nous avons testé la capacité d'empathie avec le *Test de lecture de l'état d'esprit dans les yeux* (RMITE, Baron-Cohen, Bölte et al).

Résultats : Les deux groupes de patients ont présenté des résultats significativement plus faibles sur les tests pragmatiques (par exemple MEC-Test, $z = -2.50$). Il y avait une forte corrélation entre les fonctions cognitives et la performance pragmatique (ex: MMST x MEC-Test: $r = 0.81$ * (actes de l'ind.) La capacité d'empathie était préservée dans le groupe démence ($z = 1.1$, RMITE x MMST = $r = 0,01$).

Conclusions : Selon les directives de la CIF, le résultat principal de la réhabilitation est dû à l'amélioration de la participation. C'est pourquoi la thérapie du langage devrait se focaliser sur le niveau pragmatique.

Mots-clés : Troubles du langage acquis

CO 044

(1086) – COMMUNICATION EFFICACE, COMPÉTENCES ET EFFICACITÉ DU 'LANGAGE FACILE' POUR LES PERSONNES PRÉSENTANT UN HANDICAP MENTAL

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Objectifs : Les personnes présentant un handicap mental (HM) sont exposées à un risque accru de problèmes médicaux comparé à la population en général. Ils sont souvent confrontés à des problèmes de communication avec les professionnels de la santé, car ils ont des capacités verbales et de communication limitée. La structure dans le discours joue un rôle crucial dans la communication efficace entre le personnel médical et les patients qui habituellement relatent leurs problèmes médicaux durant l'anamnèse au début du processus d'évaluation. Cette étude examine les compétences pragmatiques utilisées par les personnes présentant un handicap mental dans le contexte de communication thérapeute-patient. On a cherché à savoir spécifiquement si les personnes HM parviennent à produire des discours structurés et si l'utilisation d'un « langage facile » soutient leurs compétences narratives.

Méthodes : Cette étude empirique s'est déroulée lors des Jeux olympiques spéciaux nationaux de 2012. Une recherche se concentrant sur le style de communication du patient a été menée dans une étude quantitative (N = 80 participants HM) liée aux différents critères de communication. De plus, les récits de personnes avec ou sans HM (N = 160) ont été comparés au niveau de la structure. Dans ce contexte, on a aussi analysé la variante « langage facile ».

Résultats : 25% des participants HM étaient en mesure de produire des récits structurés ; toutefois, ils étaient plus courts et moins élaborés. L'utilisation du « langage facile » a constitué une aide hautement significative à la compréhension et au processus de répétition des récits (0.003; $p < 0.01$). La communication centrée sur le patient s'est avérée être efficace, permettant à 75% des participants HM de communiquer de manière autonome.

Conclusions : Pour 75% des participants HM, la répétition de récit était difficile. Ceci démontre le besoin important de support tel que l'utilisation du « langage facile ». Les facteurs les plus importants d'une communication efficace est une structure claire du dialogue, un délai suffisant et une attitude bienveillante et ouverte. L'avantage potentiel d'amélioration des compétences en communication - à part l'amélioration de leur santé - est la possibilité pour les personnes HM d'être autonomes et autoreprésentés.

Mots clés : handicap cognitif, dépistage

CO 045

(1201) - LA (DYS) PROSODIE DANS LE CAS DE LA MALADIE DE PARKINSON: IMPACT DU TRAITEMENT MEDICAMENTEUX ET EVOLUTION DE LA MALADIE

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Objectifs : La présente étude examine l'impact de la maladie de Parkinson sur deux des principales fonctions de la prosodie, cruciales à la communication: la fragmentation de la parole et la modalité phrasale. Cet impact n'a pas encore fait l'objet de recherches au cours des précédentes études sur la (dys) prosodie dans la maladie de Parkinson. (Tykalova et al. 2014, Martens et al. 2011, a.o.).

Méthodologie : Nous avons tenu compte du temps écoulé depuis le diagnostic (G1: 1-3 ans; G2: ≥ 10 ans) et le traitement (i-e AVEC ou SANS médicaments). Vingt phrases élicitant des schémas prosodiques spécifiques ont été prononcés par 10 personnes d'un groupe témoin du même sexe et du même âge, et 20 patients atteints de Parkinson (10 en G1; 10 en G2) AVEC et SANS traitement médicamenteux. (Une heure après absorption d'un médicament dopaminomimétique). L'analyse prosodique de la modalité phrasale et de la fragmentation de la parole a été effectuée par PRAAT en ayant recours au système P-ToBI (Frota et al. 2015). Une échelle de déviation de '1' à '-1' a été consigné par ordinateur établissant la performance des membres du groupe contrôle comme étant '1', et en évaluant les patients atteints de parkinson par rapport à cette référence. La performance du groupe a été examinée avec la méthode unilatérale ANOVA (G1, G2). Une ANOVA mixte a servi à évaluer les effets AVEC et SANS médicaments dans les deux groupes atteints de Parkinson (G1, G2).

Résultats : Les résultats indiquent que la modalité phrasale est différente chez les deux groupes ($F(2.47)=7.92, p=.001, \omega=.47$), où les patients ont performé moins bien que les membres du groupe

témoin, mais sans que cette performance ne soit affecté par le temps écoulé depuis le diagnostic (G1, G2). Par contraste, la prise de médicaments améliore considérablement l'expression de la modalité ($F(1.18)=5.29, p<.05, r=.48$). Par ailleurs, la présence ou l'absence de la fragmentation de la parole ne différencie pas les deux groupes ($F(2.47)=1.86, p=.17$). Malgré qu'aucun effet majeur n'ait été constaté selon que les patients aient été soumis à la prise de médicaments ou non, il y a eu une interaction significative entre le groupe soumis à un traitement et le groupe Parkinson ($F(1.18)=4.70, p<.05, r=.46$): la fragmentation de la parole chez G1 s'améliore lors de la prise de médicaments mais pas dans le cas de G2. La prise de médicaments a eu un effet important sur la modalité phrasale mais n'a pas amélioré la fragmentation dysprosodique, qui évolue différemment.

Conclusions : Les résultats suggèrent que différentes fonctions prosodiques sont affectées différemment par la maladie de Parkinson, avec des implications pour la neurophysiologie du Parkinson et la thérapie.

Mots-clés: Maladie de Parkinson

CO 046

(1203) - TRAITEMENT DE L'INTELLIGIBILITÉ DU DISCOURS BINAIRE : NOUVEAU TRAITEMENT PROPOSÉ POUR LES LOCUTEURS PRESENTANT UNE ATROPHIE MULTISYSTEMATISÉE

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Objectifs : Cette étude présente un nouveau traitement de la parole ; le traitement de l'intelligibilité du discours binaire permettant d'améliorer la fonction communicative chez les individus présentant une atrophie multisystématisée. L'atrophie multisystématisée est une maladie neurodégénérative rare impliquant une progression rapide des symptômes moteurs. Le trouble moteur du langage appelé dysarthrophonie, caractérise le langage des individus souffrant d'atrophie multisystématisée et se développe généralement au cours des premières années à partir du début de la maladie. Cependant, et malgré la rapide détérioration des capacités communicatives des individus atteints, il n'existe pour l'instant aucune recherche basée sur les preuves pouvant guider le traitement du langage chez cette population.

Méthodologie : Une femme âgée de 82 ans est le sujet de cette étude. De langue maternelle espagnole, elle présente une grave dysarthrophonie à prédominance de dysarthrie hypokinétique. Au départ, une interview guidée a été menée avec une évaluation orthophonique en face à face. Un traitement intensif a été effectué par vidéoconférence pendant un mois. Le traitement combinait des exercices de voix intensifs et des techniques d'entraînement par script afin de cibler les besoins linguistiques et cognitifs typiques à l'atrophie multisystématisée. Les partenaires de communication primaires de la locutrice ont évalué ses capacités de communication avant et après traitement. L'évaluation a été effectuée sur une échelle comprise entre 1 et 7 (1 = compétence faible ; 7 = très bonne compétence).

Résultats : Les résultats pré-traitement pour toutes les compétences se situaient entre 2 et 3 points, tandis qu'après traitement, ces résultats oscillaient entre 3 et 6 points. Le taux d'intelligibilité perçue avant le traitement se situait à 2 (c'est à dire relativement faible) et l'impression générale du discours et de la voix du participant a été évalué à 3. L'initiation du discours avec des interlocuteurs familiers est passé de 3 à 5 points après le traitement. Immédiatement après le traitement, l'intelligibilité perçue a été évalué à 5 et le discours global à 6, ce qui laisse croire à des résultats bénéfiques à court terme des interventions orthophoniques.

Conclusions : Le traitement de l'intelligibilité du discours binaire répond à une lacune dans la littérature des troubles de langage moteur impliquant l'atrophie multisystématisée et pourrait

améliorer substantiellement l'intelligibilité et les capacités communicatives des patients. Une étude plus vaste est en phase de développement afin d'évaluer la faisabilité du traitement de l'intelligibilité du discours binaire chez cette population.

Mots-clés : Troubles neurodégénératifs, troubles du langage, dysarthrie

CO 047

(1371) - DIRECTIVES INTERNATIONALES POUR LA GESTION DE LA COMMUNICATION DU SYNDROME DE RETT

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Bartolotta, Theresa E - École d'Éducation, Université de Monmouth, New Jersey, États-Unis

Urbanowicz, Anna - Centre du Queensland pour de la Déficience Intellectuelle et Développementale, MRI-UQ, Université du Queensland, Australie

Curfs, Leopold Mg - Centre d'Expertise Rett Pays-Bas - GKC, Centre Médical Universitaire de Maastricht, Maastricht, Pays-Bas;

Objectifs : Le syndrome de Rett est un trouble neurodéveloppemental rare associé à d'importantes difficultés de communication, dont certaines caractéristiques pour le syndrome. Il n'existe pas de directives cliniques publiées et les soignants signalent qu'ils éprouvent des difficultés à avoir accès à un soutien approprié, bien informé, opportun et continu, adapté aux besoins de communication spécifiques de leurs enfants. Le but de ce projet est de développer des directives cliniques internationales rigoureuses pour l'évaluation, l'intervention et la gestion à long terme de la communication chez les personnes atteintes du syndrome de Rett.

Méthodes : Un groupe d'experts composé de 36 professionnels chevronnés et soignants a examiné les directives provisoires en deux étapes dans le cadre d'une étude Delphi modifiée. Ces directives étaient fondées sur les résultats d'un passage en revue de la littérature et d'enquêtes internationales en ligne destinées aux professionnels de la communication et aux soignants. Les experts ont fait part de leur accord avec les énoncés figurant dans le projet de directives en utilisant une échelle de Likert et ajouté des commentaires supplémentaires en réponse aux questions sur les déclarations. Le dernier ensemble de directives qui ont été élaborées par consensus, comprend des énoncés qui ont atteint un seuil d'accord de $\geq 70\%$.

Résultats : Les directives sont basées sur plus de 300 articles, tirés de la littérature relative au syndrome de Rett ainsi que des documents de communication augmentative et alternative et des documents de pratique clinique. Plus de 400 soignants et 120 professionnels de la communication de plus de 30 pays ont répondu aux sondages en ligne. Le groupe d'experts a passé en revue une liste complète des énoncés du processus Delphi, dont nombre d'entre eux ont atteint le niveau de consensus prédéfini. Les résultats de l'étude Delphi modifiée et les directives internationales finales pour la gestion de la communication chez les personnes atteintes du syndrome de Rett seront décrits dans cette présentation.

Conclusions : Les directives doivent être flexibles et adaptées aux variations entre les pays, la culture et la langue, ainsi que les situations économiques et politiques. Ce projet a mis à profit les connaissances et l'expérience de personnes à travers le monde et est fermement ancré dans l'expérience vécue du syndrome de Rett.

Mots clés : Syndrome de Rett, directives cliniques

CO 048

(1082) – PRISE DE POSITION NÉERLANDAISE AU SUJET DES ENFANTS PRÉSENTANT DES TROUBLES DE L'AUDITION : DÉVELOPPEMENT

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Neijenhuis, Karin - Université de Rotterdam en Sciences appliquées, Centre de recherche des innovations dans les soins, Rotterdam, Pays-Bas

Luinge, Margreet - Université des Sciences appliquées de Hanze, groupe de recherche sur le bien vieillir, Soins de santé et nursing regroupé, Groningen, Pays-Bas; - Université de Groningen, Centre médical universitaire de Groningen, Département d' Oto-rhino-laryngologie, Chirurgie crânienne et du cou, Groningen; Pays-Bas

Ce résumé est en lien avec le résumé de K. Neijenhuis.

Objectifs : Les enfants présentant (soupçonnés) des troubles du traitement auditif (TTA - suspecté) peuvent rencontrer des difficultés en présence de bruit de fond malgré une audition périphérique normale. Pour la plupart, il n'est pas clair si ces difficultés d'audition sont causées par un handicap sensoriel, cognitif, ou les deux. Les incertitudes liées aux ITA suspectés engendrent parmi les professionnels néerlandais des centres d'audiologie des différences dans les procédures et le conseil. Compte tenu de la discussion au niveau national au sujet des TTA - suspectés, nous avons élaboré, en mai 2014, une déclaration sur la prise de position néerlandaise pour les enfants souffrant de difficultés de l'audition. Le but est d'offrir aux professionnels néerlandais une base de preuves pour une approche uniforme dans l'identification, le diagnostic et le traitement des enfants présentant des TTA suspectés.

Méthodes : Afin de fournir une base de preuves pour la prise de position néerlandaise, nous avons mené : (1) deux études systématiques séparées ; (2) un groupe d'étude focus ; (3) une étude Delphi ; et (4) une enquête. De plus, nous avons tenu deux réunions avec les professionnels des centres d'audiologies (n=44 and n=29) afin d'informer les professionnels sur la mise à jour des connaissances sur le sujet, et aussi pour stimuler le partage d'idées et d'expériences. Le projet sur la prise de position a été présentée aux professionnels affiliés à la Fédération néerlandaise des centres d'audiologie (FENAC). Les représentants de quinze centres d'audiologie ont donné leur avis sur le projet. Après avoir analysé les commentaires, la version finale fut adoptée.

Résultats : La version finale du projet de prise de position est composée de 9 déclarations, sur lesquelles les professionnels des centres d'audiologie néerlandais sont d'accord.

Conclusions : L'approche des méthodes mélangées produit un document de base de preuves venant aussi bien de la science que de la pratique. En incluant les perspectives des professionnels, nous avons augmenté les chances d'application réussie. Le contenu de la prise de position néerlandaise sera discuté lors d'une présentation orale de **Karin Neijenhuis**, intitulé : « **La déclaration néerlandaise de prise de position sur les difficultés d'auditions : contenu** ».

Mots clés : troubles spécifiques d'apprentissage, troubles auditifs, diagnostic fonctionnel

CO 049

(1116) – PRISE DE POSITION NÉERLANDAISE POUR LES ENFANTS ATTEINTS DE DIFFICULTÉS DE L'AUDITION : CONTENU

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De Wit, Ellen - Université des Sciences appliquées de Hanze, groupe de recherche sur le bien vieillir, soins de santé et nursing regroupé, Groningen, Pays-Bas; - Université de Groningen, Centre médical universitaire de Groningen, Département d' Oto-rhino-laryngologie, chirurgie crânienne et du cou, Groningen Pays-Bas; - Université de Groningen, École supérieure des Sciences médicales, École de recherche en neurosciences du comportement et cognitive, Groningen, Pays-Bas

Luinge, Margreet - Université des Sciences appliquées de Hanze, groupe de recherche sur le bien vieillir, soins de santé et nursing regroupé, Groningen, Pays-Bas; - Université de Groningen, Centre médical universitaire de Groningen, Département d' Oto-rhino-laryngologie, chirurgie crânienne et du cou, Groningen, Pays-Bas

Ce résumé est lié à au résumé d'Ellen de Wit : Prise de position néerlandaise pour les enfants atteints de difficultés de l'audition : développement

Objectifs : Les enfants présentant (soupçonnés) des troubles du processus de l'audition (susAPD) peuvent rencontrer des difficultés en présence de bruit de fond malgré une audition périphérique normale. Pour la plupart, il n'est pas clair de savoir si ces difficultés d'audition sont causées par un handicap sensoriel, cognitif, ou les deux. Il n'est pas clair non plus de savoir comment on doit appeler ces difficultés. En juillet 2017, nous avons mis au point la prise de position néerlandaise pour les enfants atteints de difficultés d'audition afin d'accroître l'uniformité de la pratique dans les centres néerlandais d'audiologie.

Méthode : Cette prise de position basée sur la pratique a été élaborée en appliquant une méthode d'approche mixte, où les preuves de la science et de la pratique furent intégrées (voir présentation orale d'Ellen de Wit, appelée 'Prise de position néerlandaise sur les difficultés d'audition : développement').

Résultats : La version finale de la prise de position est composée de 9 déclarations, sur lesquelles les professionnels des centres d'audiologie néerlandais sont d'accord. Ces déclarations concernent la définition, la référence, le diagnostic et le traitement des enfants avec des difficultés d'audition. L'approche multidisciplinaire et le vaste point de vue du développement (par rapport au seul point de vue de l'audiologie) sont les principaux points où un consensus a pu être atteint. Dans la prise de position, le nom « difficultés de l'audition non expliquées » a été choisi pour remplacer celui de « troubles du traitement auditif ».

Conclusions : Ce document consensuel vise à clarifier les questions controversées au sujet des enfants présentant de difficultés de l'audition. Nous pensons que l'implication de tous les acteurs durant le processus de développement, facilite l'application en douceur de la prise de position pour les centres néerlandais d'audiologie. Néanmoins, on peut s'attendre à ce que tous les centres d'audiologie ne trouvent pas son application facile. Ainsi, le processus d'application devrait être contrôlé pour éviter qu'il ne soit pas inutilisé.

Mots clés : troubles spécifiques de l'audition, handicap de l'audition, diagnostic fonctionnel

CO 050

(1448) - FONCTIONS EXÉCUTIVES, RÉOLUTION DE PROBLÈMES ARITHMÉTIQUES ET TROUBLES D'APPRENTISSAGE SPÉCIFIQUES

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Objectifs : Le but de cette étude est d'explorer le rôle de la mémoire de travail, la planification/organisation et l'attention dans la résolution de problèmes arithmétiques, en comparant les différentes fonctions exécutives (FE) entre les solutionneurs faibles et qualifiés et les enfants avec des troubles d'apprentissage spécifiques (SLD).

Méthodes : Quatre-vingt-cinq enfants fréquentant la quatrième année de l'école primaire à Rome (47 F, 38 M, 74 avec un développement typique et 11 diagnostiqués avec des troubles d'apprentissage spécifiques) ont été évalués moyennant: six problèmes arithmétiques; Matrices Progressives Colorées (CPM), test de Mémoire d'Écoute, test de la Mémoire de Chiffres vers Avant et vers l'Arrière, test de Bells et test de la Tour de Londres (TOL). Les enfants se développant normalement ont été divisés en deux catégories: les bons et les mauvais solutionneurs, avec un résultat inférieur au 15e percentile (n = 14) et supérieur au 80e percentile (n = 15).

Résultats : Les bons et mauvais solutionneurs de problèmes ont obtenu des résultats significatifs différant uniquement dans le test de 120 secondes de Bells (1,93 vs 0,92, $p < 0,001$). Presque statistiquement significative est la différence observée dans le test de la Mémoire de Chiffres vers l'Avant et vers l'Arrière (3,8 vs 3,0, $p = 0,05$). Dans les tests de Résolution de Problèmes, les enfants atteints de SLD ont une performance légèrement meilleure que les mauvais solutionneurs (4,27 vs 2,0, $p = 0,05$), mais une performance significativement plus mauvaise dans la notation des manquements dans les tests TOL et Mémoire d'Écoute (0,82 vs 1,64 $p = 0,01$; 0,73 contre 1,93 $p = 0,01$). Tous les tests mettent en évidence les performances significativement meilleures des solutionneurs compétents par rapport aux enfants diagnostiqués avec SLD, sauf dans les résultats en matière de Temps et d'Équité et dans le test de Mémoire de Chiffres vers l'Avant et vers l'Arrière.

Conclusions : Notre étude confirme la valeur de l'attention soutenue et de la mémoire de travail de chiffres dans la résolution des problèmes arithmétiques. Celle-ci souligne également un large éventail de difficultés chez les enfants atteints de SLD, confirmant ainsi l'importance de l'étude des fonctions exécutives dans cette population et des traitements intégrés dans les fonctions exécutives et les compétences spécifiques de lecture, d'écriture et de calcul.

CO 051

(1235) - COMPÉTENCES LINGUISTIQUES CHEZ LES ENFANTS ATTEINTS D'ÉPILEPSIE À POINTES CENTRO-TEMPORAL : RÉSULTATS PRÉLIMINAIRES

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Objectifs : L'épilepsie infantile bénigne à pointes centro-temporal est l'un des troubles de l'enfant les plus fréquents, affectant de nombreux enfants. Malgré l'aspect bénin souvent associé à ce syndrome épileptique, plusieurs études ont démontré que les enfants qui en sont atteints

souffrent de morbidité cognitive, particulièrement au niveau de l'attention et de la mémoire, mais aussi du langage. Cependant, les troubles du langage ont été les moins étudiés parmi ces symptômes. Cette étude a pour objectif de présenter quelques résultats d'une étude plus vaste qui est en cours.

Méthodologie : Nous avons évalué les compétences linguistiques de 24 enfants atteints d'épilepsie infantile bénigne à pointes centro-temporal (11 filles et 13 garçons) dans plusieurs domaines du langage) et qui sont suivis dans trois hôpitaux à Lisbonne, ainsi que 48 enfants au développement typique fréquentant la même école (22 filles et 26 garçons) appariés en âge et genre. Les tests d'évaluation ont couvert les domaines de la sémantique, de la morphologie, de la syntaxe et de la phonologie.

Résultats : Les résultats ont montré qu'au moins la moitié des enfants atteints d'épilepsie infantile bénigne à pointes centro-temporal présentaient des déficits linguistiques dans certains domaines particuliers et d'autres dans tous les domaines du langage. De façon plus globale, ces enfants avaient plus de difficultés dans le domaine de la sémantique (l'identification de mots d'une même famille lexicale) et de la syntaxe (organisation de la phrase, expansion et construction).

Conclusions : Les enfants atteints d'épilepsie infantile bénigne à pointes centro-temporal ont fait état de compétences linguistiques moindres comparés à leurs pairs, et ce, dans différents domaines du langage. L'évaluation précoce de ces compétences et l'éventuel besoin d'une intervention thérapeutique doit être mise en évidence afin de minimiser l'impact sur leur performance scolaire et leur qualité de vie.

Mots-clés : Troubles du développement du langage, cognition, épilepsie

CO 052

(1295) - UTILISER TWITTER POUR TROUVER DES SOURCES CRÉDIBLES ET CONSTRUIRE DES COMMUNAUTÉS DE RECHERCHE CLINIQUE: LA COMMUNAUTÉ #RESNETSLT

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Roddam, Hazel - Université du Lancashire Central, Royaume-Uni

Fillingham, Joanne - Amélioration du NHS, Service National de Santé, Royaume-Uni

Objectifs : #ReSNetSLT est une communauté de hashtags Twitter, lancée en 2016, dans le cadre du Réseau de Soutien à la Recherche pour les orthophonistes du Royaume-Uni et en Europe. Deux objectifs du réseau de soutien à la recherche sont de « soutenir le développement des capacités de recherche » et d'aider « les cliniciens expérimentés à contribuer aux bases de données professionnelles ». La communauté #ReSNetSLT vise spécifiquement à améliorer l'intervention et les soins. Le but de cette étude hashtag était de déterminer : (a) la nature des interactions sur les tweets marqués #ReSNetSLT, (b) les catégories de contenus de tweets #ReSNetSLT, et (c) les opinions des tweeters sur les avantages ou les limites de l'utilisation de Twitter dans le Réseau de Soutien à la Recherche.

Méthodes : L'étude a été approuvée sur le plan éthique à l'Université de (Anonymisé). Tous les tweets marqués #ResNetSLT de septembre 2016 à octobre 2017 ont été recueillis à l'aide du logiciel Spredfast et examinés dans un tableur Excel pour le comptage de fréquence et le codage de contenu inductif.

Résultats : Au total, l'échantillon comprenait 1652 tweets (1010 tweets originaux, 642 retweets), par 254 groupes de @User : 135 @Users ont posté 1 tweet ; 1 @User a publié 338 tweets ou retweets ; et 118 tweeters ont publié en moyenne 9,9 tweets ou retweets. Ainsi, le contenu de #ReSNetSLT dépend d'un petit nombre de tweeters influents et d'un plus grand réseau de tweeters soutenant la diffusion de ce contenu. Les principales catégories de contenu dans le corps des tweets étaient : (a) la construction d'une identité en tant que chercheur ou clinicien-chercheur ; (b) les cultures de recherche, la formation et le financement ; et (c) les avantages et

les limites de l'utilisation de Twitter pour trouver des sources crédibles et des discussions axées sur la recherche.

Conclusions : Les tweets reflétaient le soutien aux objectifs principaux du réseau, mais l'impact de #ReSNetSLT sur les décisions des cliniciens n'est pas encore connu. Les thèmes du réseau Twitter #ReSNetSLT et les thèmes du contenu des tweets seront abordés en relation avec la littérature sur l'utilisation de Twitter pour l'engagement de la recherche et la traduction des données probantes en pratique.

CO 053

(1179) - SPÉCIALISATIONS POUR L'ORTHOPHONIE : UNE DÉCISION DIFFICILE

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Heerkens, Yvonne - Institut néerlandais des membres du personnel paramédical, Pays-Bas

Boersma, Anieke - Université des sciences appliquées de Windesheim, Pays-Bas

Objectif : Aucune spécialisation formelle n'est disponible aux Pays-Bas pour les orthophonistes, bien qu'il existe plusieurs groupes d'orthophonistes qui prétendent avoir beaucoup d'expertise dans un certain domaine, comme les spécialistes de la fluidité et les orthophonistes préverbaux. L'association néerlandaise des orthophonistes (NVLf) et les programmes de licence en orthophonie travaillent conjointement afin de développer des critères aidant à décider quelles et combien de spécialisations seraient nécessaires, sachant qu'il existe des opinions différentes sur la nécessité de se spécialiser et sachant aussi que les orthophonistes sont peu nombreux (6 000) par rapport à d'autres professions comme les soins infirmiers (> 200 000) et la thérapie physique (env. 27 000) aux Pays-Bas.

Méthodologie : La méthodologie utilisée a compris : 1) des entretiens individuels et des entretiens collectifs avec des représentants de groupes d'orthophonistes ayant une expertise supplémentaire, des programmes de licence en orthophonie, d'autres professionnels de la santé (y compris les médecins traitants), des associations de patients et des compagnies d'assurance-maladie ; 2) la réalisation d'un inventaire international des spécialisations existantes via les organisations professionnelles des orthophonistes dans d'autres pays européens ; 3) la consultation de la littérature sur les développements de l'éducation et du travail dans le domaine de la santé, se référant aux 20 prochaines années aux Pays-Bas.

Résultat : Les résultats attendus sont les suivants : 1) une analyse des forces, des faiblesses, des opportunités et des menaces (analyses SWOT) de la spécialisation des orthophonistes ; 2) une description des différents scénarios de réalisation des spécialisations (description des différents groupes, critères de spécialisation, niveau d'études, etc.) ; 3) un plan de travail.

Conclusion : La spécialisation peut avoir des avantages (profilage plus poussé) ainsi que des risques (fragmentation) pour une profession. Les critères peuvent aider à faire les bons choix et à rendre la profession plus « à l'épreuve du futur ».

Mots-clés : Qualité de l'éducation

CO 054

(1305) - PRISE DE DÉCISION CLINIQUE EN MATIÈRE D'ORTHOPHONIE AU ROYAUME-UNI

Lowe, Jane - Collège Royal d'Orthophonie, Royaume-Uni

Objectifs : La recherche vise à obtenir un aperçu des principales opinions cliniques des orthophonistes lors des séances initiales d'évaluation des clients.

Méthodes : Des entretiens approfondis ont été menés avec des orthophonistes à travers le Royaume-Uni. Les participants étaient des thérapeutes dans différents rôles cliniques, pratiquant à la fois au sein et en dehors du système de santé publique (NHS). Les cliniciens ont été invités à réfléchir à leurs décisions cliniques récentes. La collecte et l'analyse de données par l'utilisation la méthodologie « théorie classique à base empirique » a permis d'identifier une théorie importante autour de la prise de décision clinique initiale commune à la profession. Un processus en deux étapes a été choisi : Étape 1 Des entretiens non structurés avec des orthophonistes hautement expérimentés ont servi à établir un guide de l'entretien pour l'étude principale. Étape 2 Entretiens à demi-structurés avec un éventail plus large d'orthophonistes. Les participants ont été invités à réfléchir sur leurs décisions cliniques récentes afin de connaître leurs perspectives et procédés au cours de l'évaluation initiale.

Résultats : Les résultats ont enregistré des facteurs intrinsèques aux clients tels que les résultats de l'évaluation, la stimulabilité et la préférence, et des caractéristiques extrinsèques, comme les modèles de prestation de services et la philosophie clinique du thérapeute. Les résultats ont montré une tendance à s'appuyer davantage sur des facteurs subjectifs que sur des mesures objectives.

Conclusions : Il est nécessaire que les décisions concernant le client soient personnalisées et holistiques tout en maintenant une rigueur scientifique claire. À cause de l'austérité, les financeurs externes sont encore plus vigilants. La profession doit pouvoir justifier les décisions cliniques et la pratique. Afin d'être aussi efficace que possible pour nos clients, il faut qu'il y ait une transparence quant à l'utilisation par la profession des éléments de base, du choix du client et de l'expertise clinique.

Mots-clés : Évaluation

CO 055

(1091) – LES EXPÉRIENCES DES ORTHOPHONISTES DANS LE DÉVELOPPEMENT PROFESSIONNEL PAR APPRENTISSAGE ÉLECTRONIQUE

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Adams, Catherine – École de Santé, Université de Manchester, Royaume-Uni

Objectifs : Maintenir les compétences professionnelles est essentiel pour la qualité des services en matière de santé. Les orthophonistes du Royaume-Uni ont accès à très peu de fonds pour la formation ou de temps disponible pour développer leurs compétences. De telles limites soulèvent des questions sur la confiance que peuvent avoir les orthophonistes que leur pratique garantisse une haute qualité basée sur les meilleures preuves. Les programmes de formation en ligne rendent le développement professionnel continu (DPC) disponible et accessible à un vaste public et sont élaborés de manière à offrir des opportunités formation modulable. Pour l'instant, nous n'avons que peu de preuves des mérites de la formation par ce moyen en l'orthophonie. Ce document présente les résultats d'une étude qualitative explorant l'expérience des orthophonistes au sujet des deux programmes de formation en ligne, examinant l'avis des praticiens et l'impact de l'formation sur la compréhension et la pratique.

Méthodes : L'étude a utilisé une méthode de recherche qualitative avec dix orthophonistes travaillant sur deux programmes en ligne en 2017/18 sur la pratique basée sur les preuves et l'actualité en aphasiologie. Des échantillons ayant un but précis ont garanti que les participants se trouvaient à divers stades de leur carrière professionnelle et reflétaient de ce fait, différents besoins en DPC. Des entrevues semi-structurées ont porté sur (i) l'avis des participants sur le fait de se former de manière indépendante par l'utilisation des programmes en ligne et (ii) les changements rapportés par les participants dans la façon de penser et la pratique. Les réponses ont été examinées en utilisant des analyses thématiques pour identifier les thèmes et les sous-thèmes.

Résultats : L'étude montre les résultats rapportés par des orthophonistes ayant suivi un programme général et spécialisé d'formation en ligne. Les résultats nous informent de la perception des orthophonistes de (i) la viabilité des programme DPC en ligne (ii) des bénéfices pour les orthophonistes au niveau des connaissances, de la compréhension et de la pratique, (iii) des obstacles rencontrés dans les formations, dus à l'utilisation du matériel en ligne.

Conclusions : Les résultats devraient permettre de mieux comprendre comment l'formation en ligne contribue à développer les compétences professionnelles, permettant d'une part d'avoir un regard sur le contenu des deux programmes spécifiques à la discipline ainsi que sur l'utilisation de ce moyen pour la formation.

Mots clés : apprentissage électronique, qualité de l'éducation

CO 056

(1230) -LIGNES DIRECTRICES CLINIQUES POUR LA THERAPIE DU DISCOURS ET DU LANGAGE: LA PROPOSITION DE L'ASSOCIATION PROFESSIONNELLE PORTUGAISE

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Branco, Regina - *Centro de Medicina de Reabilitação de Alcoitão*

Caldas, Joana - *Escola Superior de Saúde do Instituto Politécnico do Porto*

Cardoso, Rita - *Clinical Pharmacological Unit, Instituto de Medicina Molecular, Faculdade de Medicina, Universidade de Lisboa, Lisboa; - CNS - Campus Neurológico Sénior, Torres Vedras*

Canossa Dias, João - *Associação para a Recuperação de Cidadãos Inadaptados da Lousã (ARCIL)*

Carvalho, António - *Laboratório de Estudos de Linguagem, Faculdade de Medicina da Universidade de Lisboa*

Fonseca, José - *Laboratório de Estudos de Linguagem, Faculdade de Medicina da Universidade de Lisboa; - Instituto de Medicina Molecular, UNIC*

Franco, Débora - *Universidade de Lisboa, Faculdade de Letras e Centro de Linguística da Universidade de Lisboa; - Escola Superior de Saúde do Instituto Politécnico de Leiria, Unidade de Investigação em Saúde do Instituto Politécnico de Leiria*

Loureiro, Rita - *CNS - Campus Neurológico Sénior, Torres Vedras*

Lousada, Marisa - *School of Health Sciences, University of Aveiro and Center for Health Technology and Services Research (CINTESIS.UA; UID/IC/04255/2013)*

Margarido, Elsa - *Escola Superior de Saúde do Alcoitão*

Paixão, Rita - *Centro de Medicina de Reabilitação de Alcoitão*

Pestana, Pedro - *PMP-Terapias, Esposende*

Rocha, Mónica - *Centro de Medicina Física e Reabilitação do Sul*

Santos, Helena - *CNS - Campus Neurológico Sénior, Torres Vedras; - Clinical Pharmacological Unit, Instituto de Medicina Molecular, Faculdade de Medicina, Universidade de Lisboa, Lisboa*

Vaz Freitas, Susana - *Serviço de Otorrinolaringologia, Centro Hospitalar do Porto - Hospital de Santo António; - Faculdade de Ciências da Saúde - Universidade Fernando Pessoa, Porto*

Viana, Rita - *Serviço de Medicina Física e Reabilitação, Instituto Português de Oncologia, Porto*

Vidal, Maria Manuel - *Universidade de Lisboa, Faculdade de Letras e Centro de Linguística da Universidade de Lisboa*

Domingues, Diana - *CERCIPOM - Cooperativa de Ensino e Reabilitação de Cidadãos Inadaptados de Pombal*

Gomes, Susana - *Associação Portuguesa de Pais e Amigos do Cidadão Deficiente Mental (APPACDM) de Coimbra*

Morgado, Maria João - *Raríssimas - Casa dos Marcos (Consulta de Perturbações da Fluência)*

Tavares, Ana - *Associação Portuguesa de Terapeutas da Fala*

Objectifs : Développer des lignes directrices pour la pratique clinique recouvrant toute la gamme des pratiques pour guider les professionnels dans le domaine de la thérapie du langage et de

la parole dans les domaines suivants: langage des adultes, langage des enfants, déglutition, myologie oro-faciale et de la parole, maîtrise linguistique ou fluidité, et troubles de la voix.

Méthodologie : L'Association portugaise des thérapeutes de la parole et du langage (*Associação Portuguesa de Terapeutas da Fala - APTF*) a nommé une unité qui a formé et coordonné une équipe de cliniciens et de chercheurs. L'équipe s'est réunie de manière régulière et a procédé à une analyse de la littérature basée sur les lignes directrices cliniques internationales bien connues. Cette analyse a été complétée par une recherche structurée dans les bases de données PubMed/Medline, EBSCO, speechBITE ainsi que d'autres bases de données scientifiques, en tenant compte des meilleurs preuves scientifiques. Après une analyse interne, un panel de 7 experts a été recruté afin qu'ils procèdent à une analyse indépendante de la première version du document.

Résultats : Un document final fera état de tous les domaines de la pratique clinique ci-haut mentionnés. Des sujets transversaux ont été analysés, tels que; les méthodes d'évaluation, les approches thérapeutiques, la gestion des informations graphiques, ainsi que des questions d'ordre éthique et déontologique.

Conclusions : Les lignes directrices pour la pratique clinique de l'Association portugaise des thérapeutes de la parole et du langage (APTF) représente les principaux domaines auxquels les thérapeutes du langage sont confrontés dans leur travail quotidien au Portugal. Ces lignes directrices, basées sur des preuves scientifiques, se veulent être une ressource pratique et fonctionnelle.

Mots-clés: Education clinique, pratique basée sur des preuves scientifiques.

CO 057

(1136) - QUALITÉ DE VIE LIÉE À LA SANTÉ DES PATIENTS PRÉSENTANT UNE FENTE PALATINE : VALIDATION DE LA VERSION NÉERLANDAISE SUR LE QUESTIONNAIRE "VELO"

Bruneel, Laura - Université de Gand, Belgique

Keppler, Hannah - Université de Gand, Belgique

Bettens, Kim - Université de Gand, Belgique

Corthals, Paul - Université de Gand, Belgique

De Groote, Evelien - Université de Gand, Belgique

Van Poel, Esther - Université de Gand, Belgique

Van Lierde, Kristiane - Université de Gand, Belgique; - Université de Pretoria, Afrique du Sud

Objectifs : Les questionnaires sur qualité de vie liée à la santé (QVLS) spécifique selon les maladies, fournissent au clinicien les informations importantes par rapport à l'impact de la maladie sur le fonctionnement et le bien-être. Pour les patients avec une insuffisance vélopharyngée (IVP), le questionnaire (VELO) sur les conséquences sur la qualité de vie a été mis au point et validé en anglais par Skirko et al. (2012), évaluant la parole, la déglutition et l'influence de ces aspects sur le fonctionnement. Néanmoins, une traduction néerlandaise de ce questionnaire n'était pas encore disponible.

Méthodes : Une procédure de traduction « aller-retour » a été utilisée. Elle a été basée sur les réponses des 39 parents des patients présentant une fente palatine (FP) (rapport des parents) et les réponses de 14 patients âgés de plus de 8 ans (rapport de l'enfant), une validation linguistique et une évaluation par substitution du parent, la consistance interne et la corrélation entre les réponses et l'âge du patient ont été effectuées. En se basant sur les réponses du groupe de contrôle sans FP, la validité discriminatoire a été évaluée. De plus, la validité concomitante a été évaluée en comparant les résultats sur le rapport du parent et le P-VHI (Pediatric Voice Handicap Index).

Résultats : Le rapport du parent était facile à compléter pour tous les parents. Neuf des quatorze patients ont été en mesure de remplir le rapport de l'enfant indépendamment. La traduction néerlandaise a montré une bonne validité discriminatoire et une consistance interne entre le rapport du parent et celui de l'enfant. Les réponses des parents étaient similaires à celles des

réponses de l'enfant. Une corrélation significativement positive a été trouvée entre le résultat du rapport du parent et l'âge des patients. De plus, une corrélation significativement négative a été trouvée entre le rapport du parent et le P-VHI. Les résultats par rapport à la fiabilité du test/retest et la pertinence du questionnaire pour les changements QVLS sont en train d'être analysés et seront présentés lors du congrès.

Conclusions : Le questionnaire néerlandais "VELO" est une mesure de résultats rapportée par le patient qui est valable, fiable et facile à utiliser, et qui fournit une information importante aux orthophonistes au sujet de la QVLS des patients avec FP.

Mots clés : parole lors de fente palatine, mesure de résultats rapportée par le patient (mise au point ou adaptation interculturelle et validation)

CO 058

(1184) - ATTITUDE DES PAIRS DONT LE DÉVELOPPEMENT EST NORMAL ENVERS LE DISCOURS DES ENFANTS PORTEURS DE FENTE PALATINE ENTRE 7 ET 12 ANS

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De Meulemeester, Lara - Université de Gand, Belgique

Van Lierde, Kristiane - Université de Gand, Belgique

Objectif : En plus des problèmes anatomiques et physiologiques, les enfants avec une anamnèse de fente (labiale et) palatine (FLP) doivent souvent faire face à des difficultés psychosociales. Une interaction complexe entre le patient et son environnement peut induire ces problèmes. Nous basant sur la littérature, les troubles de la parole peuvent influencer négativement le jugement d'un locuteur. Par conséquent, le but de la présente étude était d'enquêter sur les attitudes des pairs envers le discours des enfants porteurs de FLP.

Méthodologie : Soixante-neuf enfants dont le développement est normal (7-12 ans, 34 garçons et 35 filles) ont jugé des échantillons audio enregistrés de huit enfants porteurs de FLP et trois enfants témoins à partir de trois composantes de l'attitude. De plus, un pourcentage d'intelligibilité de la parole a été calculé pour chaque locuteur sur la base de la transcription du discours spontané par 23 adultes non spécialistes et un pourcentage d'hypernasalité a été déterminé en utilisant la nasométrie. Une corrélation a ensuite été calculée entre les composantes de l'attitude et le pourcentage d'intelligibilité de la parole et les composantes de l'attitude et le pourcentage de nasalisation, en prenant en compte l'influence possible de l'âge et du sexe des auditeurs.

Résultat : Une corrélation significativement positive a été trouvée entre le pourcentage d'intelligibilité de la parole et les composantes de l'attitude : quand un enfant était mieux compris, des attitudes plus positives étaient mesurées. De plus, une corrélation significativement négative a été trouvée entre la nasalance et toutes les composantes de l'attitude : la présence de plus d'hypernasalité entraînait des attitudes plus négatives. D'autre part, les garçons et les enfants plus jeunes semblaient avoir des attitudes plus négatives que les filles et les enfants plus âgés.

Conclusion : Cette étude montre que les attitudes des pairs dont le développement est normal envers les enfants porteurs de FLP sont influencées par la quantité de troubles de l'articulation et de la résonance chez ces enfants. Ce résultat souligne la nécessité d'une sensibilisation sur les enfants porteurs de FLP dans les écoles primaires, ce qui peut être intégré dans les initiatives déjà existantes contre les stéréotypes négatifs et les taquineries. D'autres recherches peuvent évaluer l'effet de telles campagnes de sensibilisation sur les attitudes des enfants.

Mots-clés : Troubles du discours dus à la fente palatine

CO 059

(1199) - LA FONCTION ORO-FACIALE CHEZ UN GROUPE D'ENFANTS ET D'ADOLESCENTS PRESENTANT DES TROUBLES PHONOLOGIQUES

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Sjögreen, Lotta - *Mun-H-Center, Suède*

Barr Agholme, Monica - *Karolinska Institutet, Suède*

McAllister, Anita - *Karolinska Institutet, Suède*

Objectifs : Cette étude examine et décrit la fonction oro-faciale, les caractéristiques du langage et les facteurs liés aux troubles phonologiques auprès d'un groupe d'enfants et d'adolescents âgés de 6-16.7 ans.

Méthodologie : Soixante participants (ayant une moyenne d'âge de 8.3 ans; 14 filles et 46 garçons) ont été recrutés suite à une orientation vers un centre de ressource oro-faciale pour un examen de la parole et de la fonction orale-motrice. Un questionnaire sur l'hérédité, l'état de santé, les troubles du développement neurologiques et sur le développement de la parole a été administré. La fonction oro-faciale a été évaluée, en ayant recours au test de dépistage oro-faciale norvégien (Nordic Orofacial Test-Screening /NOT-S). La production de la parole et l'intelligibilité ont été évaluées en utilisant le test suédois de nasalité et d'articulation Test (Swedish Articulation and Nasality Test /SVANTE) et l'échelle de l'intelligibilité en contexte (Intelligibility in Context Scale /ICS).

Résultats : Les troubles de la parole variaient de léger à très grave. L'intelligibilité était affectée à 92%. Une majorité des participants (87%) présentaient des difficultés des fonctions oro-faciales. Les fonctions les plus affectées étaient la mastication et la déglutition (42%) ainsi que les muscles de la mastication et les fonctions de la mâchoire (38%). Des difficultés de motricité globales coexistantes (29%) et un diagnostic neuropsychiatrique confirmé étaient commun (14%).

Conclusions : Les résultats de cette étude soulignent le besoin d'effectuer des évaluations additionnelles en plus des évaluations de langage et d'articulation auprès des enfants présentant des troubles phonologiques. L'étude confirme également que ces enfants présentent aussi des déficiences oro-faciales sensorimoteurs concomitantes.

Mots-clés : Troubles du langage, dysfonctionnement oromoteur, troubles myofonctionnels.

CO 060

(1360) - PROPOSITION POUR UNE NOUVELLE INTERVENTION NEUROREHABILITATIVE POUR LES PATIENTS ATTEINTS DU SYNDROME DE MOEBIUS APRÈS UNE « CHIRURGIE DU SOURIRE »

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Ferrari, Pier Francesco - *Institut des Sciences Cognitives Marc Jeannerod UMR 5229, CNRS, Université de Lyon, Bron Cedex, France*

De Stefani, Elisa - *Département de médecine et de chirurgie, Université de Parme, Parme, Italie*

Bianchi, Bernardo - *Division de chirurgie maxillo-faciale, Département de la tête et du cou, Hôpital universitaire de Parme, Parme, Italie*

Bertolini, Chiara - *Unité d'audiologie et d'otorhinolaryngologie pédiatrique, Hôpital universitaire de Parme, Parme, Italie*

Objectifs : Les patients atteints du syndrome de Moebius sont incapables de bouger les muscles du visage et font face à un défi après avoir subi une chirurgie correctrice : réanimer les muscles

transplantés pour obtenir le contrôle volontaire du sourire. Nous proposons deux nouvelles approches complémentaires de réadaptation, basées sur l'observation / imitation thérapeutique (Facial Imitation Therapy, FIT) et sur les synergies motrices main-bouche (Synergistic Activity Therapy, SAT). Les résultats préliminaires montrent que notre protocole d'intervention est une approche prometteuse pour la neuro-réadaptation des patients atteints de MBS.

Méthodes : Nous présentons une étude de cas d'un patient atteints du syndrome de Moebius ayant subi une chirurgie du sourire suivi de 6 mois de traitement FIT-SAT. Une analyse périodique en mouvements 3D de la performance du patient a été planifiée pour mesurer l'efficacité du protocole de rééducation. Nous avons reconstitué la cinématique du mouvement du sourire du patient, l'ouverture maximale des lèvres (% IDD), qui est considérée comme un indice de mobilisation effective du muscle transplanté. Les conditions expérimentales sont divisées en deux blocs d'imitation ou pas d'imitation, combinés avec trois conditions motrices (sourire, sourire et contraction de la main, sourire et recroqueviller les orteils).

Résultats : Le mouvement du sourire est plus grand lorsque le patient Moebius a réalisé le bloc d'imitation en fermant la main ($F(5.45) = 3.7, p = 0.007, p2 = 0.3$). Nous avons comparé les données du patient Moebius avec celles du groupe témoin : les valeurs Δ ont été calculées et exprimées comme la différence existant entre les IDD de chaque condition FIT-SAT et la condition de base. Les valeurs delta du patient pour les conditions SO-HC et HC étaient au-delà de la limite supérieure de l'IC.

Conclusions : Nous proposons une intervention neuroréhabilitative pour les patients Moebius après une chirurgie du sourire. L'idée est que la réanimation faciale pourrait être facilitée par une «thérapie d'imitation» et une activité synergique main-bouche. Les résultats cinématiques préliminaires soutiennent nos attentes, montrant que le protocole FIT-SAT peut être appliqué avec succès à la réhabilitation des patients atteints de syndrome de Moebius. Ces résultats peuvent ouvrir la voie à l'application de FIT-SAT aux patients atteints d'autres formes de paralysie faciale.

Mots-clés : Dysfonction oro-motrice, troubles myofonctionnels, troubles neuromusculaires

CO 061

(1275) - RÉSULTATS FONCTIONNELS POUR LE LANGAGE ET LES TROUBLES DE LA DÉGLUTITION APRÈS RECONSTRUCTION CHIRURGICALE DU PALAIS MOU CHEZ DES PATIENTS ATTEINTS D'UN CANCER DE L'OROPHARYNX : REVUE SYSTÉMATIQUE

Maia, Joana - Association Portugaise des Orthophonistes, Portugal

Cecatto, Suzana - Ordre des Médecins, Brésil

Monteiro, Eurico - Ordre des Médecins, Brésil

Objectifs : Déterminer le type de lambeau chirurgical obtenant de meilleurs résultats pour l'élocution et la déglutition chez les patients atteints d'un cancer de l'oropharynx et ayant effectué une reconstruction partielle ou totale du sphincter vélopharyngien.

Méthodes : Une recherche systématique sur l'élocution et la déglutition après la reconstruction chirurgicale du palais mou chez les patients atteints d'un cancer de l'oropharynx a été menée sur la base de données Medline, Scopus, Cochrane Central, CDSR, Clinicaltrials.gov. Des études ont été sélectionnées selon les critères d'inclusion jusqu'en décembre 2013, et évaluées individuellement par un processus aveugle faisant référence à l'analyse et à la méthodologie appliquée, par deux chercheurs indépendants. Des formulaires ont été remplis pour identifier et analyser les lambeaux chirurgicaux et les méthodes de reconstruction par rapport aux résultats de l'élocution et de la déglutition, avec une analyse qualitative selon l'échelle de STROBE.

Résultats : Sur 2123 études identifiées, 21 ont été incluses dans la revue. Elles étaient constituées comme suit : deux études où la reconstruction a été réalisée en utilisant la fermeture primaire ; cinq études utilisant des lambeaux locaux ; cinq études utilisant des lambeaux myocutanés/

fasciocutanés ; neuf études utilisant des lambeaux libres, le plus fréquent étant le lambeau libre radial de l'avant-bras (4 études - contenant des variantes techniques). Les données collectées pour analyse dans cette revue étaient : la conception de l'étude ; la taille de l'échantillon ; le type de lambeau ; le type d'évaluation fonctionnelle dans le contexte de l'élocution et de la déglutition ; le résultat de la qualité de l'étude selon la liste de contrôle STROBE. Après analyse, on constate que des reconstructions dans des zones plus étendues représentaient plus de difficultés pour la restauration des structures d'élocution et de déglutition. Le manque d'uniformité dans la classification des lambeaux du palais mou après la résection, a limité la comparaison prospective des méthodes de reconstruction.

Conclusions : On dispose de peu d'études qui ont prouvé l'efficacité de la reconstruction du palais mou, avec absence de complications secondaires. La difficulté de créer un palais mou dynamique qui soit efficace pour le langage, la déglutition et la respiration reste discutable et l'absence de consensus sur la méthode la plus efficace est manifeste dans la littérature.

Mots-clés : **Cancers de la tête et du cou, dysphagie, troubles du langage, dysarthrie**

CO 062

(1045) - LA THÉORIE ET LA PRATIQUE DE LA GESTION DE L'ENFANT ATTEINT DE TROUBLES DU LANGAGE - UNE ENQUÊTE SUR LES PRATICIENS EUROPÉENS

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Murphy, Carol-Anne - *Université de Limerick, Irlande*

Gerrits, Ellen - *Université d'Utrecht, Pays-Bas*

McKean, Cristina - *Université de Newcastle, Royaume-Uni*

Topbaş, Seyhun - *Université d'Istanbul Medipol, Turquie*

Thordardottir, Elin - *Université McGill, Canada*

Beckermann, Elisabeth - *Université de Marburg, Allemagne*

Law, James - *Université de Newcastle, Royaume-Uni*

Objectifs : Cette enquête a été réalisée dans le cadre de l'action COST Action IS1406 «Améliorer les compétences langagières des enfants en Europe et au-delà: une collaboration axée sur les interventions pour les enfants qui apprennent leur langue maternelle». C'est un réseau de recherche qui couvre non seulement tous les pays de l'UE (à l'exception du Monténégro), mais aussi les pays voisins tels que l'Islande, l'Albanie, le Liban et la Russie. L'objectif était d'interroger les praticiens européens sur leur pratique et plus spécifiquement sur les aspects de la prestation de services (localisation, modèles de prestation, durée, etc.), les préoccupations culturelles (notamment le multilinguisme et la compétence culturelle) et les fondements théoriques des interventions.

Méthodes : L'enquête a été conçue en anglais par des membres d'Action. Elle a ensuite été traduite dans une trentaine de langues différentes et envoyée par le biais de divers réseaux (y compris CPLOL) à travers l'Europe en juillet 2017 via une liste de liens SurveyMonkey. Les liens sont restés ouverts jusqu'à la mi-octobre 2017. Les données ont ensuite été analysées en premier lieu par une équipe de l'université de Newcastle au Royaume-Uni.

Résultats : Les résultats n'ont pas encore été analysés (26.09.17) car la date de clôture de l'enquête est très proche de la date de soumission des résumés pour le CPLOL 2018. Nous savons à ce stade que nous avons plus de 4000 réponses à l'enquête en ligne, la plus grande en son genre jamais réalisée sur ce thème. Ce résumé sera mis à jour dès que nous aurons des résultats disponibles (mi-novembre 2017).

Conclusions : Il s'agit de la première enquête de la pratique «sur le terrain» à travers l'Europe et la première à dresser un tableau aussi complet dans un si grand nombre de pays (36). Les résultats intéresseront les praticiens et les décideurs dans tous les pays concernés et nous espérons qu'ils seront repris au niveau de l'UE.

Mots-clés : **troubles spécifiques du langage, troubles développementaux du langage, intervention**

CO 063

(1427) - CARACTÉRISTIQUES DE L'ENFANT LIÉES À L'AMÉLIORATION DE LA PERFORMANCE LINGUISTIQUE DES ENFANTS EN ÂGE PRÉSCOLAIRE AYANT DES TROUBLES DÉVELOPPEMENTAUX DU LANGAGE

Bruinsma, Gerda - *Université des Sciences Appliquées d'Utrecht, Pays-Bas*

Gerrits, Ellen - *Université des Sciences Appliquées d'Utrecht, Pays-Bas; - Université d'Utrecht, Pays-Bas*

Wijnen, Frank - *Université d'Utrecht, Pays-Bas*

Objectifs : Plusieurs études ont montré que l'orthophonie peut être efficace chez les enfants atteints de DLD (Law et al, 2004, Broomfield & Dodd, 2011). Cependant, tous les enfants ne montrent pas d'améliorations et on en sait peu sur les caractéristiques des enfants liées aux progrès. La compréhension de ces facteurs est importante pour adapter les services aux besoins de chaque enfant. Dans cette étude, nous avons étudié l'amélioration de la performance linguistique des enfants de 4 et 5 ans atteints de DLD, objet d'une intervention au niveau du langage dans différents contextes éducatifs aux Pays-Bas. En outre, nous avons étudié la relation entre l'amélioration et la gravité du trouble du langage, l'intelligence non verbale et le multilinguisme.

Méthodes : Aux Pays-Bas, la plupart des enfants de 4 et 5 ans atteints de DLD sévère reçoivent un traitement orthophonique et un soutien éducatif, que ce soit dans des classes ordinaires ou dans des écoles spécialisées. Pour être admissible à ce service, le QI non verbal doit être de 70 au minimum. À partir des dossiers de 220 enfants recevant un traitement orthophonique dans 26 lieux répartis aux Pays-Bas, nous avons enregistré les résultats de deux évaluations de tests standards sur le langage avec un intervalle d'environ un an. Nous avons également enregistré l'intelligence non verbale et demandé aux parents de remplir des questionnaires sur les langues parlées à la maison.

Résultats : Au niveau du groupe, les enfants ont montré des progrès significatifs sur les résultats du quotient des tests de langue, mais les différences individuelles étaient importantes, certains enfants ayant même des résultats en baisse. L'intelligence non verbale n'était pas liée à l'amélioration de la performance linguistique, alors que la gravité du trouble l'était. Les enfants avec des scores initiaux faibles ont montré avoir progressé davantage que les enfants avec des scores plus élevés. Les résultats préliminaires montrent que les enfants multilingues atteints de DLD peuvent rattraper leur retard plus rapidement que les enfants monolingues.

Conclusions : Les enfants dont l'intelligence non verbale est inférieure à la moyenne peuvent également bénéficier de l'intervention orthophonique comme les enfants ayant des QI non verbaux plus élevés. La sévérité des troubles du langage et le multilinguisme par rapport au monolinguisme pourraient être des prédicteurs du progrès.

Mots-clés: troubles développementaux du langage, intervention

CO 064

(1103) – MÉTHODOLOGIE D'APPRENTISSAGE BASÉE SUR DE JEUX NUMÉRIQUES POUR L'ORTHOPHONIE-LOGOPÉDIE

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Zwitserslood, Rob - *Chercheur principal, PhD, groupe de recherche Orthophonie-Logopédie, Université des Sciences Appliquées d'Utrecht, Pays-Bas*

Objectifs : Étudier l'exploitabilité de jeux sur des tablettes en orthophonie et ses effets sur l'apprentissage des langues chez les enfants d'âge préscolaire atteints d'un Trouble Spécifique du Langage (TSL) en répondant aux trois questions de recherche suivantes :

1. Quels sont les jeux sur tablettes qui conviennent à l'Orthophonie ?
2. Quelles sont les meilleures pratiques pour stimuler l'interaction et la communication entre l'orthophoniste et l'enfant lorsqu'on utilise des jeux sur tablettes dans l'orthophonie ?
3. Quel est l'effet de l'orthophonie utilisant des jeux sur des tablettes, par opposition à l'orthophonie qui utilise des jeux traditionnels ?

Méthodes : Pour répondre à la première question, une checklist de jeux fiable et une base de données ouverte pour l'analyse des jeux ont été développées. Pour répondre à la deuxième question, une analyse vidéo systématique de l'interaction et de la communication entre les orthophonistes et les enfants atteints de TSL a été réalisée. La troisième étude est un Essai Randomisé Contrôlé (ERC) qui examine l'efficacité de l'intervention du vocabulaire avec des jeux sur tablettes comparée aux matériels de jeux traditionnels dans un groupe d'enfants de 3 ans atteints de TSL.

Résultats : La liste pour la sélection des jeux et les évaluations des jeux seront disponibles dans une base de données néerlandaise ouverte pour les orthophonistes et autres professionnels. Un guide pratique sur les jeux, y compris des instructions brèves sur vidéo, ont été créés et des ateliers additionnels pour les orthophonistes sont en cours de développement. Les résultats préliminaires de l'étude d'effet sur l'orthophonie avec des jeux sur tablettes par opposition aux matériels de jeux traditionnels sera présentée.

Conclusions : De nouvelles observations seront présentées sur ce sujet très discuté, à savoir si le jeu « électronique » en séance d'orthophonie a un effet positif sur le développement du langage. Nous partagerons des informations sur les caractéristiques nécessaires d'un jeu sur tablette pour être utilisable en orthophonie. En outre, nous présenterons les meilleures pratiques en orthophonie lorsqu'on utilise des jeux sur tablettes.

CO 065

(1239) - EFFICACITE DE LA THERAPIE PAR IMITATION FONCTIONNELLE (FIT) POUR LES ENFANTS EN BAS AGE PRESENTANT UN TDL DANS DES GROUPES MERITANT DES SOINS SPECIAUX : UNE ETUDE PILOTE

Zwitzerlood, Rob - Royal Dutch Auris Group / Utrecht University of Applied Science, Pays-Bas

Objectifs : L'objectif de cette étude est d'examiner l'efficacité de la thérapie par imitation fonctionnelle (*Functional Imitation Therapy* (FIT, Schlichting & de Koning, 1988) ciblée pour améliorer la morphosyntaxe dans des groupes de garderie spécialisés pour enfants présentant un TDL aux Pays-Bas.

Méthodologie : Vingt-huit enfants (ayant une moyenne d'âge de 3;5 ans) issus de cinq groupes de garderie spécialisée pour les enfants présentant un TDL ont participé à cette étude. Tous les enfants ont été diagnostiqués avec un TDL, et faisaient état d'un QI non-verbal et de résultats dans le domaine de la langue expressive d'une valeur de 1.7 SD sous la moyenne lors des tests standardisés. Des échantillons de langage spontané ont été recueillis en trois temps ; T0, T1, et T2, à intervalles de sept semaines. Pendant la période T0-T1 les enfants ont reçus les soins habituels, constitués de thérapie d'orthophonie et d'activités de stimulation linguistique de la part de deux assistants pédagogiques travaillant avec chacun des groupes. Pendant la période d'intervention, les enfants ont bénéficié de sessions d'orthophonie et ont participé à des activités de groupe avec FIT (thérapie par imitation fonctionnelle) assuré par les assistants pédagogiques pendant 30 minutes par jour, et ces trois jours par semaine. Les assistants pédagogiques avaient été formés pour travailler avec la thérapie par imitation fonctionnelle avant le début de

l'intervention et ont été supervisés par les orthophonistes. Suite à la période d'intervention, les orthophonistes et les assistants pédagogiques ont participé à une interview semi-structurée ayant pour objectif de recueillir leurs impressions et opinions concernant le travail de thérapie par imitation fonctionnelle.

Résultats : Quatre enfants ont été exclus de l'analyse ; trois enfants n'étaient pas intelligibles à T0, T1, ou T2, et un enfant était absent pour le T2. Les tests t des échantillons jumelés n'ont montré aucun gain en termes de durée de l'énoncé moyen des mots pendant la période de soins habituel. Suite à l'intervention, une croissance significative de la durée moyenne de l'énoncé (taille de l'effet (*effect size*) $d = -0.65$) a été constaté. Les orthophonistes et les assistants pédagogiques ont eu une impression positive concernant la thérapie par imitation fonctionnelle, et ont apprécié leur coopération pendant l'intervention. La thérapie par imitation fonctionnelle n'est cependant pas adaptée à tous les enfants, et une formation adéquate pour travailler avec la thérapie par imitation fonctionnelle est nécessaire.

Conclusions : Lorsque mise en œuvre adéquatement, la thérapie par imitation fonctionnelle peut s'avérer un complément précieux à l'ensemble des outils de remédiation destiné aux groupes bénéficiant de soins spéciaux en garderie.

Mots-clés : Troubles du développement du langage, déficience spécifique du langage, intervention

CO 066

(1143) – COMMENT AMÉLIORER LA COMPRÉHENSION DU LANGAGE ORAL ?

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Objectif : Il existe un manque de compréhension du langage oral, des recherches d'intervention chez les enfants et les adolescents atteints de troubles du développement du langage (TDL), et l'image d'ensemble de la question reste obscure. L'objectif de cet atelier est de fournir une vue d'ensemble des interventions de la compréhension du langage oral et de discuter des techniques de thérapie individuelle qui peuvent être utilisées pour améliorer sa compréhension. Cet atelier est basé sur la revue de la littérature des interventions sur la compréhension du langage oral. (Tarvainen, Stolt & Launonen, présenté au Congrès.

Méthodologie : Après une courte introduction du sujet, les participants discuteront en petits groupes de quelles techniques de thérapie ils utiliseraient pour améliorer la compréhension du langage oral chez les enfants et les adolescents atteints de TDL. Les résultats de ces discussions seront partagés avec tout le groupe. Ceci se reflétera alors dans ce qui est connu sur le sujet par rapport à la recherche et au cadre des interventions sur la compréhension du langage oral qui sera présenté. Le cadre introduira trois niveaux de focus d'intervention : en modifiant l'environnement communicatif de l'enfant, en ciblant le langage de l'enfant et en visant le processus du langage chez l'enfant. Le cadre présentera aussi deux approches: accroissement des compétences de l'enfant et stratégies d'enseignement pour mieux faire face aux capacités courantes. Les techniques de thérapie que les participants ont introduites seront placées dans ce cadre. L'efficacité et la force de la preuve dans chaque technique de thérapie seront présentées.

Résultats : Après l'atelier, les participants auront une vue d'ensemble des techniques de thérapie possibles à utiliser dans l'amélioration de la compréhension du langage oral, leur efficacité et la solidité des preuves.

Les participants pourront allier leurs connaissances passées et futures avec cette vue d'ensemble et appliquer l'information au travail clinique afin d'améliorer la pratique basée sur la preuve.

Conclusion : Les effets des interventions du langage sur la compréhension orale chez les enfants et les adolescents dans le trouble du développement du langage : un examen systématique de la portée.

Mots clés : Troubles du développement du langage, intervention

CO 067

(1314) - SCHÉMAS DE CHANGEMENT DANS LA PRÉCISION DE LA PAROLE ET MESURE DE L'EFFICACITÉ DU TRAITEMENT CHEZ LES ENFANTS D'ÂGE PRÉSCOLAIRE PRÉSENTANT DES TROUBLES DE LA PAROLE.

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Objectif : Afin d'assurer une prestation de services efficace, la thérapie ne doit être proposée que si elle s'avère bénéfique aux enfants. Il peut être difficile de distinguer entre l'effet thérapeutique et la maturation chez les enfants d'âge préscolaire. L'objectif était d'identifier les trajectoires individuelles de changement dans la précision de la parole avant l'intervention, après une période de maintenance de 8 semaines d'intervention et un an plus tard. La lecture est également mesurée un an plus tard.

Méthodologie : 20 enfants âgés de 3,0 à 4,11 ans présentant des troubles de parole, répartis au hasard soit dans un groupe pour une intervention immédiate soit dans un groupe témoin gardé en attente. La précision de la production des consonnes a été mesurée en pourcentage de consonnes correctes sur le DEAP (Diagnostic Evaluation of Articulation and Phonology). La conscience phonologique (CP) a été mesurée en utilisant le test d'évaluation du niveau de conscience phonologique (PAT) et la capacité de lecture (chez ceux qui avaient commencé à lire) a été mesurée en utilisant le YARC (York Assessment of Reading Comprehension).

Résultats : Cinq modèles de changement ont été identifiés chez 12 enfants évalués à tous les moments :

- Amélioration négligeable immédiatement après l'intervention, amélioration significative 8 semaines plus tard, amélioration négligeable au cours des 8 mois suivants (P4, P8, P5).
- Comme au point ci-dessus, un discours adapté à l'âge a été atteint 8 mois plus tard (P11).
- Amélioration significative immédiatement après l'intervention, pas d'amélioration pendant la période de maintenance et un discours adapté 8 mois plus tard (P1).
- Pas d'amélioration après la période de non-intervention, amélioration significative pendant l'intervention et discours adapté à l'âge 8 mois plus tard (P2, P10, P13, P15, P16)
- Amélioration significative au cours de la période de 8 semaines sans intervention, suivie du même taux d'amélioration pendant la période d'intervention de 8 semaines (c.-à-d. aucun effet apparent de l'intervention) (P3, P17).

Après 1 an, 11/12 enfants avaient des capacités de CP adaptées à leur âge. Cinq enfants qui avaient commencé à lire, présentaient des compétences de reconnaissance des mots adaptées à leur âge.

Conclusion : Les changements dans la précision de la parole sont compatibles avec la fluence connue des profils préscolaires. La conception longitudinale, incorporant des lignes de base multiples avant l'intervention pour contrôler la maturation, avec des suivis répétés, a indiqué un effet différé et constitué des mesures informatives de l'efficacité du traitement. Ceci peut aider à orienter le développement d'interventions individualisées.

CO 069

(1278) - ÉVALUATION DE L'EFFICACITÉ DU TRAITEMENT DES ENFANTS AYANT DES TROUBLES PHONOLOGIQUES GRAVES

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Objectifs : La littérature internationale décrit que les jeunes enfants atteints d'un trouble phonologique sévère bénéficient d'un traitement visant à améliorer leur intelligibilité. Au Centre d'Orthophonie Royal Dutch Kentalis, les enfants atteints d'un trouble phonologique sévère suivent

un traitement dans différents contextes en fonction de leur âge. Les enfants entre 2 ½ et 4 ans, tant monolingues que multilingues, suivent un traitement au sein d'une garderie spécialisée (trois jours par semaine pendant neuf mois). Les enfants entre 4 et 7 ans qui ne font pas suffisamment de progrès avec un traitement orthophonique courant, suivent alors un traitement intensif dans un cadre pluridisciplinaire pendant une période de six semaines, suivi d'un traitement (avec des conseils adaptés) orthophonique courant.

Méthodes : Nous présentons les données de 50 enfants entre 2 ½ et 4 ans et de 100 enfants entre 4 et 7 ans, présentant tous des troubles phonologiques graves. Des données sur les compétences cognitives, auditives et linguistiques ont été rassemblées pour tous les enfants. Un modèle pré-post a été utilisé pour avoir un aperçu de l'étendue phonologique et de la relation entre le développement phonologique et d'autres compétences linguistiques.

Résultats : Cette recherche aboutit à des profils d'enfants de différents groupes d'âge présentant un trouble phonologique sévère. Nous avons posé les questions suivantes :

1. Quel profil phonologique spécifique ces enfants ont-ils ?
2. Quelle est la relation entre les profils phonologiques et les capacités auditives, cognitives et langagières ?
3. Quelle est l'efficacité de cette mesure dans le traitement phonologique chez les enfants atteints d'un trouble phonologique grave, mesurée par des mesures langagières et par les évaluations des parents ?

Conclusions : Il est important d'avoir une idée des capacités des enfants présentant un trouble phonologique. Cette connaissance permet de choisir la meilleure intervention pour les troubles phonologiques. Les profils phonologiques servent de base à la création d'un plan de traitement avec des objectifs de traitement formulés SMART, pour développer l'intelligibilité de l'enfant.

CO 070

(1126) – APRAXIE INFANTILE DE LA PAROLE : COMPÉTENCES MOTRICES DE LA PAROLE ET MARQUEURS DE DIAGNOSTIC POUR LE SUÉDOIS

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Objectifs : L'apraxie infantile de la parole (AIP) est un handicap du contrôle moteur de la parole avec une capacité réduite de convertir les codes phonologiques abstraits dans des ordres moteurs de la parole. Le diagnostic différentiel entre l'AIP et d'autres troubles des sons de la parole est crucial pour une intervention correcte. Il n'existe pas de marqueurs simples neurologiques ou comportementaux connus pour l'AIP, mais différents ensembles de symptômes ont été suggérés. La plupart des données sont basés sur l'anglais et sont donc spécifiques à la langue. Les deux questions principales de la recherche sont : quels sont les principaux symptômes en suédois ? Comment les compétences motrices de la parole sont-elles associées aux compétences orales motrices, phonologiques et grammaticales chez les enfants soupçonnés d'AIP ?

Méthodes : 51 enfants, âgés de 3;03 à 8;10 ans, annoncés pour des troubles phonologiques et soupçonnés d'AIP, ont participé à la recherche. Les compétences motrices de la parole ont été évaluées avec le test d'évaluation dynamique moteur de la parole (DYMTA). Le résultat phonologique, la performance orale motrice et la production grammaticale des enfants ont été évalués en utilisant des tests suédois normés ou des données de référence pour des enfants ayant un développement normal. Les évaluations ont été enregistrées en vidéo/en audio, transcrites et notées suivant les manuels de tests. Des statistiques non paramétriques ont été utilisées.

Résultats : Les analyses préliminaires de 27 enfants indiquent que les participants, en tant que groupe, ont réagi avec de grandes variabilités à tous les tests avec un plus grand nombre

de déviations normatives que le groupe contrôle de la même catégorie d'âge. Une corrélation significative a été trouvée entre les compétences motrices et la phonologie ($r = .926$), les compétences orales motrices ($r = .826$) et la grammaire ($r = .614$). Il n'existe aucune corrélation significative entre l'âge et les compétences évaluées.

Conclusions : Les enfants atteints troubles phonologiques et d'AIP sont un groupe hétérogène ayant des compétences parole-langage non liées à l'âge, mais avec de fortes corrélations entre les compétences motrices de la parole et les compétences orales motrices et du langage, en particulier en phonologie. L'association avec la grammaire devra faire l'objet d'une analyse plus approfondie. La connaissance des symptômes principaux de l'AIP spécifique à la langue, guidera les cliniciens vers un diagnostic fiable dans la langue adéquate et lorsqu'il évaluera les enfants plurilingues.

Mots-clés : Dyspraxie

CO 071

(1064) – EFFETS COMPORTEMENTAUX ET NEUROSTRUCTURELS DE L'INTERVENTION MOTRICE DANS L'APRAXIE DU LANGAGE CHEZ L'ENFANT

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Objectifs : L'objectif de cette étude est d'explorer les changements dans la relation du comportement du cerveau en tant que fonction de modèle d'intervention. À cet effet, nous notons les changements dans les mesures du comportement et de la connectivité neuronale suivant deux approches d'interventions différentes (contrôle moteur de la parole vs langage) chez 10 enfants présentant une apraxie de la parole dans l'enfance.

Méthodes : 10 enfants présentant une apraxie de la parole ont été sélectionnés : cinq ont été choisis au hasard pour suivre une intervention sur la motricité de la parole (ces enfants ont été traités avec PROMPTs, le programme de restructuration ciblant la phonétique musculaire) et cinq autres pour suivre un traitement du langage et de la motricité orale. Les mesures du comportement incluent l'évaluation des compétences verbales et motrices de la parole (Évaluation verbale motrice pour les enfants-VMPAC), la diadococinésie, la mesure de l'intelligibilité de la parole, l'inventaire phonétique, les imprécisions et inconsistances dans les erreurs. La connectivité neuronale des circuits cérébraux liés à la parole a été étudiée au moyen de l'imagerie du tenseur de diffusion (DTI, diffusion tensor images). Tous les enfants ont été évalués avant et après une période de traitement de six mois durant laquelle ils ont participé à au moins 30 sessions de traitement individuel.

Résultats : Avant le traitement, les deux groupes n'ont présenté des différences statistiques sur aucune des variantes. Après le traitement, les enfants présentant des troubles de la motricité de la parole ont amélioré significativement les mesures de comportement suivantes : sous-tests du contrôle focal de la motricité orale et du séquençage du VMPAC ; précision lexicale et la consistance des erreurs, intelligibilité, précision de la diadococinésie ; organisation spontanée du langage. Pour les enfants suivant une intervention du langage et de la motricité orale, les résultats n'ont pas apporté d'amélioration significative au niveau des compétences verbales/orales motrice, de la précision du mot, de la consistance des erreurs, de la précision de la diadococinésie ou de l'intelligibilité. Néanmoins, une amélioration statistiquement significative a été démontrée dans l'inventaire phonétique, le vocabulaire réceptif et au niveau de l'organisation spontanée du langage. Les changements de connectivité dans le groupe ayant suivi l'intervention sur la motricité de la parole étaient spécifiques à un ensemble de réseau lié au contrôle de la motricité

orale, alors que le groupe suivant un traitement du langage et de la motricité orale a montré des résultats plus diffus, mais aucune modification de la vitesse de la parole.

Conclusions : une amélioration des symptômes principaux de l'apraxie de la parole après l'intervention sur la motricité de la parole pourrait résulter de changements dans un ensemble de réseaux stratégique lié à la motricité de la parole et aux zones du sensori-motrices, fournissant ainsi des pistes pour le choix des approches thérapeutiques.

Mots-clés : troubles du développement du langage

CO 072

(1042) – UNE REVUE RESTROSPECTIVE SUR 6 ANS DE PATIENTS PEDIATRIQUES TRAITÉS DANS UNE CLINIQUE DE LA VOIX PLURIDISCIPLINAIRE

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Objectifs : Les cliniques pluridisciplinaires de la voix sont de plus en plus populaires et ont attiré récemment un nombre croissant de cas en pédiatrie. En pédiatrie, la plupart des troubles de la voix ont été considérés dans le cours de l'histoire, comme des troubles généraux du larynx et des voies respiratoires supérieures. Durant les deux dernières décennies, les troubles de la voix en pédiatrie, non liés aux difficultés respiratoires, ont été traités comme une entité séparée, spécialement pour la population croissante de professionnels de la voix parmi les enfants. Les lésions pathologiques minimales du larynx chez l'adulte, ont été largement examinées. Les chercheurs reconnaissent la complexité et la différence entre les pathologies du larynx chez l'adulte et en pédiatrie et par conséquent la gestion des plans de thérapie. Ce travail met en lumière la prévalence de troubles de la voix dans la population pédiatrique et leur gestion adéquate.

Méthodes : Une analyse rétrospective a été conduite sur des patients en pédiatrie s'étant présentés à la clinique de la voix pluridisciplinaire pendant une période de plus de six ans, de janvier 2011 à mars 2017. Nous avons évalué la démographie des patients, les examens, les diagnostics et leur gestion.

Résultats : 113 nouveaux patients en pédiatrie, allant de 3 à 15 ans, ont été examinés. 61.9% des enfants étaient de sexe masculin et 38.05% de sexe féminin. Les diagnostics les plus communs furent les kystes des cordes vocales (22.1%), la dysphonie liée à une tension musculaire, (23%) et les nodules (12.6%). Dans 19.5% des cas, une opération chirurgicale a dû être effectuée, 49.6% des cas ont été dirigés vers un orthophoniste, 13.3% ont été mis "en attente" d'un suivi et 17.6% ont quitté la clinique. Près de 10% de l'échantillonnage étaient des chanteurs professionnels âgés de 9 à 15 ans.

Conclusions : Les troubles de la voix en pédiatrie peuvent être gérés de manière appropriée soit par une équipe pluridisciplinaire en chirurgie et/ou des orthophonistes. Les kystes sur les cordes vocales sont vraisemblablement plus communs que les nodules, particulièrement chez les enfants chanteurs.

Il est intéressant de voir que les jeunes enfants peuvent développer une dysphonie liée à une tension musculaire, ce qui montre le besoin de développer plus les compétences cliniques axées sur la pédiatrie dans les thérapies de la voix.

Mots clés : troubles de la voix, diagnostic fonctionnel

CO 073

(1190) - LA QUALITE VOCALE DES ACTEURS COMPAREE AUX DANSEURS APRES UNE PERFORMANCE

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Objectifs : L'objectif de la présente étude est de décrire les habitudes vocales d'acteurs et de danseurs et de comparer l'impact d'une performance sur la qualité vocale objective et subjective des danseurs et des acteurs. Du point de vue hypothétique, l'impact d'une performance sur la qualité vocale est plus forte chez les acteurs que chez les danseurs.

Méthodologie : Des échantillons de discours ont été enregistrés avec la méthode PRAAT chez les sujets avant et après une performance d'une heure et demie. Les échantillons consistaient en une combinaison de phonation soutenue et de discours continu. Pour chaque échantillon de discours, l'index de qualité de la voix acoustique (*Acoustic Voice Quality Index* (AVQI) a été calculé. En deuxième lieu, le temps de phonation maximum, la fréquence et la gamme d'intensité et d'instabilité (%) d'une voyelle isolée (a) a été déterminé avec le méthode PRAAT pour le calcul de l'index de gravité dysphonique *Dysphonia Severity Index* (DSI). Des évaluations de la perception auditive ont été effectuées avec l'échelle de GRBASI. Des questionnaires ont été utilisés pour répertorier les symptômes vocaux et les facteurs les influençant. Des enregistrements de voix de 27 acteurs professionnels, 19 acteurs non-professionnels et 8 danseurs professionnels ont été effectués avant et après une performance d'une durée moyenne de 90 minutes. Pour comparer les données, nous avons utilisé ANOVA et les tests Post-hoc Scheffé ou chi-square. Afin de comparer l'impact de la performance théâtrale au sein de trois groupes, les tests d'échelonnage jumelés de Wilcoxon ont été utilisés.

Résultats : Même si le questionnaire a révélé de mauvaises habitudes d'hygiène vocale, la qualité acoustique vocale des acteurs était significativement meilleure que celle des danseurs. Aucune différence significative pré et post performance n'a été constaté en ce qui concerne les évaluations DSI, AVQI et GRBASI au sein des trois groupes. Chez les acteurs, une augmentation significative du f0 a été mesuré, probablement dû à un effet d'échauffement. Suite à la performance, les acteurs ont fait état de plus d'inconfort au niveau du tractus vocal et les danseurs, de plus de symptômes de douleur.

Conclusions : Les résultats de cette étude montrent une qualité vocale similaire après une performance avec une augmentation de l'inconfort du conduit vocal chez les acteurs, et de douleur chez les danseurs.

Mots-clés : Troubles de la voix, voix professionnelle

CO 074

(1161) - EFFET DE TROIS PROGRAMMES DE THÉRAPIE DU CONDUIT VOCAL EN SEMI-OCCLUSION SUR LA QUALITÉ VOCALE DES PATIENTS PRÉSENTANT UNE DYSPHONIE : APPROCHE LAX VOX, PHONATION À LA PAILLE ET TRILLE DES LÈVRES

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Objectif : Le but de cette étude était d'étudier l'effet de trois programmes de thérapie vocale en semi-occlusion (TVSO) l'approche « Lax Vox », « phonation à la paille » et « trille des lèvres » sur la qualité vocale et les capacités vocales des patients dysphoniques.

Méthodologie : Un multi-groupe de contrôle pré-test et post-test a été utilisé. Trente-six patients présentant une dysphonie ont été intégrés dans l'un des trois groupes expérimentaux (pratiquant l'approche Lax Vox, la phonation à la paille ou le trille aux lèvres) ou dans un groupe témoin (recevant une thérapie fictive), en utilisant un échantillonnage aléatoire. Chaque groupe a suivi 6 séances de 30 minutes pendant 3 semaines. Une évaluation vocale standardisée à la fois subjective (anamnèse, auto-évaluation du sujet, évaluation auditive-perceptuelle) et avec des mesures vocales objectives (tâche maximale de performance, mesures aérodynamiques, profil de gamme vocale, analyse acoustique, indice acoustique de la qualité vocale, index de sévérité de la dysphonie) a été utilisée pour estimer la voix des participants avant et après la thérapie.

Résultat : L'expérience est actuellement en cours et les résultats et les conclusions seront disponibles pour la conférence.

Mots-clés : Troubles de la voix, intervention

CO 075

(1133) – PROMOTION DU BIEN-ÊTRE DE LA VOIX : LA MÉTHODE PROEL RENCONTRE UNE CLASSE DE DEUXIÈME CYCLE PRIMAIRE

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Objectifs : La méthode *PROEL* a été mise au point pour la réhabilitation des troubles de la voix ; cela inclut principalement les activités physiques et proprioceptives. Le projet d'école a été développé pour accroître la prise de conscience vocale et promouvoir le bien-être vocal. L'étude a pour but d'analyser et de discuter les activités vécues basées sur la méthode *PROEL* pour savoir si elles pouvaient mener à une grande amélioration du bien-être vocal plutôt que de donner de l'information.

Méthodes : Deux classes ont été prises au hasard dans une activité (GA, n= 20) et un groupe contrôle (GC, n = 18); tous les participants ont participé à une première réunion frontale, où les caractéristiques de la voix et les normes d'hygiène vocale étaient illustrées. Le Groupe A a participé à trois autres réunions où les activités de la méthode *PROEL* étaient testées. Toutes les voix des enfants ont été analysées avec le logiciel multi-paramètres *MDVP*, l'échelle de perception *GIRBAS* et le questionnaire d'auto-évaluation *CVHI-10*, avant les réunions (T0), immédiatement après la fin des réunions (T1) et cinq mois après (T2).

Résultats : Nos résultats ont montré un impact positif du projet sur tout l'échantillon des enfants. Le groupe A pouvait se rappeler de plus d'activités au T1 et même cinq mois après comparé au groupe C; les exercices de dynamique et de perception du *PROEL* ont un fort impact positif sur les enfants qui l'ont essayé. Les analyses de paramètres vocaux ont montré des différences statistiques entre les deux groupes à trois stades divers : au T1 du GA, le temps maximum de phonation (TMP) était plus long, le ton général de perception de la voix (G) sur l'échelle *GIRBAS* s'était amélioré et la fréquence moyenne fondamentale (F0) était plus élevée. Néanmoins, tous les résultats significatifs observés n'étaient plus détectés au T2.

Conclusions : La méthode *PROEL* peut être considérée comme une bonne approche pour promouvoir le bien-être de la voix dans les écoles, pourtant des changements vocaux significatifs n'ont pas pu être maintenus dans le temps.

Mots clés : Troubles de la voix, prévention

CO 076

(1090) – UTILISATION DE L'ANALYSE VIDÉO POUR DÉVELOPPER LES COMPÉTENCES INTERPERSONNELLES DES ÉTUDIANTS EN ORTHOPHONIE

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Objectifs : l'analyse vidéo est une méthode d'enseignement bien établie pour développer les compétences des professionnels. L'analyse systématique du comportement utilisant la vidéo de la pratique clinique permet d'acquérir un niveau d'analyse et de réflexion difficilement atteignable par d'autres méthodes d'enseignement (Fukkink et al., 2011). Nous présentons la preuve d'une évaluation d'étudiants en orthophonie qui utilisent la vidéo dans différents domaines de la pratique clinique, explorant de quelle manière et à quel point le retour de la vidéo améliore l'apprentissage pour l'étudiant en orthophonie. Nous considérons : 1. La faisabilité de l'analyse vidéo et 2. L'influence de l'analyse vidéo sur la qualité de la réflexion et les changements dans les compétences interpersonnelles.

Méthodes : Nous avons utilisé des méthodes de recherche qualitative pour analyser l'expérience et opinions de l'analyse des vidéos de 43 étudiants de première année en orthophonie, en 2017/18. L'analyse de la vidéo a été introduite comme faisant partie du nouveau programme de développement des compétences dans les entretiens cliniques durant (i) des entrevues cliniques simulées avec les patients ; (ii) des séances de jeu de rôle avec les pairs se concentrant sur l'anamnèse du patient, des évaluations, des conseils et la participation à des réunions pluridisciplinaires ; (iii) premières expériences cliniques avec des patients. Les étudiants ont enregistré leur pratique en utilisant des IPAD et en téléchargeant des vidéos à partir d'une plateforme d'apprentissage sécurisée et professionnelle (IRIS Connect). Les vidéos étaient analysées par les étudiants suivant un plan d'observation, puis elles étaient partagées avec les pairs et les tuteurs, faisant ainsi partie du processus de coaching.

Résultats : Nous allons faire un rapport sur les bénéfices et les défis de l'utilisation de l'analyse vidéo à partir (i) de la mesure d'utilisation de l'analyse vidéo par les stagiaires ; (ii) des pré- et post auto – évaluations du niveau de confiance dans les compétences personnelles ; (iii) des rapports personnels de l'expérience des stagiaires de l'utilisation de l'analyse vidéo ; et (iv) des groupes focus avec les étudiants.

Conclusions : l'analyse vidéo et le coaching sont excessivement utilisés dans la pratique en orthophonie, mais moins fréquemment dans le développement des compétences des stagiaires en orthophonie. Cette étude devrait fournir une preuve de faisabilité et des avantages de l'analyse vidéo pour l'évolution d'une réflexion avisée contribuant au développement des compétences interpersonnelles des étudiants en orthophonie.

Mots clés : formation clinique

CO 077

(1104) – UTILISER UN OUTIL D'ANNOTATION DE VIDÉOS DANS L'APPRENTISSAGE AVEC RETOUR DE PAIRES DANS DES SITUATIONS INDÉPENDANTES EN LIEU ET TEMPS

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Objectifs : Aujourd'hui, étudier indépendamment des lieu et temps est devenu de plus en plus important. Afin de contribuer à ce concept « ateliers d'apprentissage » est une tâche relevant du défi pour les formateurs. Les étudiants en orthophonie à l'Université Hanze en sciences appliquées sont tenus de faire un stage d'apprentissage en interne lors de leurs 2^{ème} et 3^{ème} année dans des « ateliers d'apprentissage ». Ils forment une petite équipe de pratique d'à peu près douze étudiants, au sein de laquelle ils apprennent à examiner et à traiter des patients, exercer les compétences en matière de raisonnement pour la pratique clinique et adoptent une attitude professionnelle et réfléchie. Tout en rendant les « ateliers d'apprentissage » plus indépendants en lieu et temps, il est important de savoir quelle est l'opinion des étudiants sur les outils d'annotation vidéo comme est le Rating Fragment Vidéo (VFR), dans la formation. Un outil comme le Rating Fragment Vidéo pourrait apporter une contribution significative dans la formation.

Méthodes : Deux groupes d'étudiants de 2^{ème} année ont été désignés pour donner des retours de paires :

1. Dans la classe lorsqu'ils regardaient la session en direct sur un écran unique, et 2. Sur un ordinateur lorsqu'ils regardaient la vidéo de la session téléchargée en VFR. Ensuite, les étudiants ont rempli le questionnaire sur l'utilité, la maniabilité, l'efficacité et l'efficacité des deux méthodes de formation.

Résultats : en général, les étudiants sont positifs sur l'utilisation du retour de paires. En VFR, ils ont donné et ont reçu plus de retours et celui-ci était plus spécifiquement lié à la situation. La possibilité de réflexion personnelle en VFR est facile à utiliser et bonne pour leurs développements professionnels. Mais l'aspect d'indépendance des facteurs lieu et temps doit être mieux perçu dans l'outil d'annotation vidéo VFR.

Conclusions : l'utilisation d'un outil comme le VFR, améliore la prise de conscience de l'importance du retour des paires et de la réflexion personnelle des étudiants. Les facteurs de succès pour la sélection d'un outil qui aidera à soutenir une formation indépendante en lieu et temps semble être le « n'importe où », « n'importe quand », et « avec n'importe quel appareil ».

Leitmotiv : "Ne faites pas que regardez. Apprenez."

Mots clés : qualité de l'éducation, apprentissage électronique

CO 078

(1167) - RELEVER LES DÉFIS DE LA PRATIQUE ORTHOPHONIQUE- L'APPRENTISSAGE ENTRE PAIRS EN TANT QU'OUTIL DE RÉOLUTION DE PROBLÈMES DANS LE PROCESSUS DE RAISONNEMENT CLINIQUE

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Objectif : La complexité croissante du nombre de cas dans la prise en charge orthophonique, par exemple en raison d'une comorbidité plus élevée, révèle un manque d'informations ou d'expérience dans le traitement des cas compliqués, requérant le soutien de praticiens expérimentés et spécialisés dans ce domaine - en particulier au niveau des thérapeutes débutants. L'un des moyens de relever ces défis peut être l'apprentissage entre pairs et la façon dont il serait utilisé dans le contexte éducatif et professionnel de l'orthophonie.

Méthodologie : Un apprentissage entre pairs a été mis en œuvre le long de cinq semestres d'un programme consécutif d'études d'orthophonie, dans une université des sciences appliquées

en Allemagne. L'approche a été intégrée dans un séminaire de raisonnement clinique avec 25 étudiants d'orthophonie, chacun présentant une étude de cas difficile de leur pratique actuelle. Tous les participants ont rempli une courte enquête en ligne pour évaluer la faisabilité de l'approche d'équipe dans ce contexte, ainsi que les avantages et le développement personnel concernant les études de cas discutées.

Résultat : Les étudiants se sont sentis encouragés car ils pouvaient partager leur expérience et relever des défis réels. Ils ont particulièrement apprécié de fait de recevoir des réponses d'un large éventail d'autres orthophonistes, mais aussi de pouvoir contribuer aux demandes des autres étudiants et de leur fournir des solutions pratiques. Tous les participants ont estimé que l'apprentissage entre pairs était une approche appropriée pour le raisonnement clinique, soutenant leur développement professionnel et personnel. Ils se sont également aperçus d'une capacité accrue à employer la réflexion métacognitive pendant leur travail et d'un besoin éventuel de formation supplémentaire. Certains étudiants ont suggéré l'emploi de l'apprentissage entre pairs dans leur milieu de travail.

Conclusion : Dans le cadre éducatif et professionnel de l'orthophonie, l'apprentissage entre pairs peut être utilisé avec succès car il déclenche une réflexion métacognitive sur la pensée et l'action du praticien, entraînant une prise de conscience accrue des besoins et des compétences dans le processus de raisonnement clinique.

Mots-clés : Éducation clinique, apprentissage fondé sur les problèmes, qualité de l'éducation

CO 079

(1158) - L'IMPACT D'UN PROJET DE TUTEUR SUR LES COMPÉTENCES ACADÉMIQUES D'APPRENTISSAGE CHEZ LES ÉLÈVES PRÉSENTANT UN TROUBLE PHONOLOGIQUE

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Aper, Leen - Université de Gand, Belgique

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Objectif : Le tutorat entre pairs peut faire avancer les expériences d'apprentissage et les performances académiques des étudiants. De plus, ce tutorat semble être une stratégie efficace pour acquérir et développer de nouvelles compétences. Cette étude visait à explorer les effets du tutorat entre pairs sur les compétences des étudiants de première année (tutorés) et les étudiants de dernière année (tuteurs) d'un programme de master en orthophonie.

Méthodologie : Des questionnaires auto-administrés ont été utilisés pour étudier la motivation, les attentes, le succès d'apprentissage et les compétences de 69 tutorés et 32 tuteurs dans un projet de tutorat entre pairs visant à optimiser les compétences d'articulation des tutorés. Leurs réponses ont été statistiquement comparées à celles d'un groupe témoin d'étudiants n'ayant pas participé au projet de tutorat entre pairs.

Résultat : Les tutorés ont rapporté un succès d'apprentissage significativement plus élevé que le groupe témoin, bien que leur motivation et leurs attentes soient similaires au début. Les tuteurs, cependant, ont exprimé une faible motivation au début et aucune amélioration à la fin du projet.

Conclusion : À partir des effets positifs rapportés par les tutorés, ce programme de tutorat entre pairs sera intégré dans le programme de formation en orthophonie pour améliorer les compétences d'articulation des étudiants de première année. Néanmoins, des ajustements seront nécessaires pour pouvoir diminuer la résistance des tuteurs en dernière année. D'autres recherches pourraient évaluer l'effet des ajustements incorporés par rapport à cette résistance.

Mots-clés : Éducation clinique

CO 080

(1029) - PARLER DE LA FORMATION CONTINUE EN ÉGYPTÉ PAR LE BIAIS DU PROGRAMME INTERNATIONAL D'ORTHOPHONIE

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Objectif : La présentation de ce groupe d'experts adressera les besoins liés à la formation des professionnels en Égypte, pour une myriade de sujets cliniques. Le domaine en Égypte est en plein développement et il est excitant que l'organisation professionnelle, l'Association Égyptienne des Sciences de la Communication et la Linguistique ait développé et mis en application le premier programme international d'orthophonie. Les activités de formation continue (FC) ont permis aux participants d'obtenir des unités standards de FC Continuing Education Unit (CEU) délivrés par ASHA au travers de la collaboration avec l'association professionnelle d'orthophonistes du District de Columbia. Une évaluation des besoins a pu identifier quatre domaines de formation pour le programme : spectre des troubles de l'autisme, troubles de la lecture et du langage, troubles du langage chez l'enfant et la dysphagie. L'accent a été mis sur la mise à disposition d'informations sur les bonnes pratiques afin de lier la recherche à la pratique.

Méthodologie : Les participants vont

- a. Résumer la situation actuelle des professions en Égypte.
- b. Lister quelques-uns des besoins en formation continue en Égypte.
- c. Résumer les activités menées à bien afin de parler du fossé existant entre les compétences des professionnels et les besoins des patients.

Résultat : Un programme de formation continue d'une semaine s'est tenu avec plus de 60 participants. Au préalable, une évaluation des besoins a permis de mettre au point le programme. Des professionnels hautement compétents et qualifiés ont adressé les bonnes pratiques pour l'autisme, la dysphagie, la lecture et l'écriture et des enfants présentant des troubles du langage. L'accent a été mis sur la recherche en clinique, afin que les participants puissent appliquer les nouvelles compétences immédiatement dans leur contexte professionnel.

Les résultats généraux des évaluations du programme ont montré que les activités étaient extrêmement réussies et que les objectifs correspondaient hautement aux besoins des participants.

Conclusions : D'autres organisations et professionnels pourraient faire des émules pour les activités offertes par l'Association égyptienne des Sciences de la Communication et la Linguistique. Plus particulièrement, et pour des pays comme l'Égypte, l'information liée aux applications cliniques pouvant être utilisée immédiatement par les professionnels est souhaitée.

CO 081

(1237) - MOTS POUR L'ÉVALUATION DE L'ITALIEN : VALIDITÉ DE CONTENU

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Objectifs : L'évaluation phonologique doit faire l'inventaire des connaissances phonologiques de l'enfant relativement aux segments, en particulier concernant la structure interne des segments et les composantes syllabiques de leur langue maternelle. Afin d'obtenir un échantillon significatif du système phonologique de l'enfant, il est essentiel d'avoir une liste de mots représentant tous les phonèmes de la langue faisant l'objet de l'analyse, et tenir compte des débuts de mots ou

syllabes simples et complexes. Cette étude a pour objectif de proposer une liste de mots validés pour la composition d'un éventuel outil d'analyse phonologique de la langue italienne.

Méthodologie : Le chercheur a identifié 2489 mots basé sur des évaluations de langage d'enfants en italien. Les mots ont été classifiés selon les segments et leur position dans la syllabe et dans le mot. Cette liste a été évaluée par un groupe d'experts (orthophonistes) avec le logiciel PAROLE. Trois choix ont été proposés pour chaque mot, avec un seul choix possible pour chacun. Ensuite, à l'aide d'un autre logiciel statistique, on a calculé l'index du taux de validité du contenu pour chaque élément évalué.

Résultats : Sur les 2489 éléments, 131 mots ont été validés pour des fins d'évaluation des phonèmes dans des positions de départ simples et complexes chez des enfants italiens unilingues âgés entre 3 ans et 8 ans et 11 mois. Parmi les mots sélectionnés, on peut observer que certains sont répétés afin d'évaluer différents phonèmes. Cette évaluation est nécessaire afin de créer une liste de mots ayant au moins trois occurrences de chaque segment occupant différentes positions dans la syllabe ou le mot, et pouvant être représentés sous forme graphique pour faciliter l'élicitation des mots, et être utilisés par d'autres experts dans d'autres domaines (enfants).

Conclusions : La liste de mots validée a permis aux chercheurs d'avoir à disposition suffisamment de stimuli pouvant être utilisés dans un nouvel outil évaluation auprès d'enfants italiens monolingues.

CO 082

(1412) - MESURES DE LA COMPLEXITÉ MORPHOSYNTACTIQUE EN TURC : LONGUEUR MOYENNE DE L'ÉNONCÉ, NOTATION DE LA PHRASE DÉVELOPPEMENTALE ET INDEX DE LA SYNTAXE PRODUCTIVE

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Objectifs : Cette étude est menée dans le but de comparer les résultats des mesures morphosyntaxiques LME morphèmes, LME mots, DSS (*developmental sentence scoring*) et IPSyn (*Index of Productive Syntax*), chez les enfants turcs. Par conséquent, la mesure la plus appropriée peut être identifiée pour la langue turque en évaluant les capacités morphosyntaxiques des enfants turcs en plus des tests de langue standardisés

Méthodes : Les sujets étaient 80 enfants turcs monolingues, entre 2,0 et 5,11 ans présentant un développement typique. Les sujets ont été divisés en huit groupes d'âge avec des intervalles de six mois et chaque groupe avait une représentation égale du genre. Les données ont été recueillies pendant un jeu libre avec un jeu de ferme, et enregistrées avec une caméra manuelle. La conversation pendant le jeu a ensuite été transcrite via le logiciel de la version turque SALT v9 et les mesures MLUw et MLUm ont été calculées pour les 100 premiers énoncés. Les autres 100 premiers énoncés ont été définis en tenant compte des critères d'exclusion de l'IPSyn et analysés en fonction des structures grammaticales dans l'IPSyn-TR. Pour DSS, les cinquante dernières phrases ont déterminé les huit sous-groupes de DSS pour le turc.

Résultats : Lorsque les énoncés ont été analysés, tous les résultats ont montré une augmentation constante dans tous les groupes, à part une diminution minimale dans le groupe d'âge de 4 ans, 6-5,0 dans l'IPSyn. Les scores sont également fortement corrélés non seulement avec des tests standardisés assurant un développement typique, mais aussi avec des tests de langage standardisés. Bien que l'un soit fortement corrélé avec l'autre, la MLUm et l'IPSyn ont la valeur la plus forte. La MLUm a une valeur plus élevée avec d'autres en comparaison avec la MLUw.

Conclusions : Les MLU, DSS et IPSyn sont des méthodes fiables et valides pour évaluer les capacités morphosyntaxiques des enfants turcs entre 2,0-5,11 ans. Cependant, la MLUm est une meilleure indication que la MLUw pour le turc, qui est une langue morphologiquement riche. Avoir une corrélation plus élevée avec l'IPSyn donne à penser que l'IPSyn est un indicateur plus fiable pour les compétences linguistiques expressives en turc.

Mots-clés : Prévention, troubles développementaux du langage

CO 083

(1404) - VERSION PORTUGAISE DE L'INVENTAIRE DE L'USAGE DES LANGUES: UNE MESURE RAPPORT PARENT POUR DES COMPÉTENCES LINGUISTIQUES PRAGMATIQUES

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Objectifs : Compte tenu de la pertinence du pragmatisme dans la communication et du manque d'outils d'évaluation au Portugal pour évaluer ces aptitudes au plus jeune âge, l'un des principaux objectifs de cette étude repose sur la traduction, l'adaptation, la validation et la standardisation de l'inventaire « Language Use Inventory (LUI), au Portugais européen. LUI est une mesure normalisée de rapport parent, avec trois parties (I-gestes, II-mots, III-phrases) conçue pour évaluer le développement de compétences pragmatiques chez les enfants âgés de 18 à 47 mois.

Méthodes : Toutes les procédures recommandées par les directives internationales d'adaptation et de validation des tests ont été adoptées dans cette étude quantitative : d'abord une étude pilote a été réalisée avec un échantillon de 120 inventaires et une étude normative a été réalisée avec un échantillon de 1555 inventaires. Dans l'étude normative, tous les inventaires de l'échantillon ont été pris en charge par les parents/soignants des enfants âgés de 18 à 47 mois, du Portugal (continent et îles inclus).

Résultats : L'analyse de la fiabilité des trois parties de l'inventaire a montré des coefficients alpha de Cronbach supérieurs à 0,80, avec obtention de coefficients de corrélation test-réexamen entre 0,83 et 0,97, démontrant la stabilité des résultats. D'autre part, au niveau de la validité structurelle, selon la théorie, les sous-échelles d'inventaire étaient organisées autour de deux facteurs qui globalement, peuvent expliquer les 77,4% de la variance des résultats.

Conclusions : Ces niveaux élevés de fiabilité et de validité de la version portugaise de l'inventaire (LUI-PT) illustrent sa standardisation et l'établissement de normes standard pour l'analyse des compétences pragmatiques des enfants portugais âgés de 18 à 47 mois. L'augmentation des résultats selon l'âge et leur différenciation selon le développement du langage typique ou les difficultés dans ce domaine, suggèrent la pertinence de cet outil pour l'identification des déficiences pragmatiques dans les premières années de vie, ainsi que pour les besoins de tous les professionnels sur le terrain.

Mots-clés : Pragmatisme, dépistage

CO 084

(1340) - L'ADAPTATION HONGROISE DU MACARTHUR-BATES CDI-3 POUR LE DÉPISTAGE DES RETARDS DE LANGAGE

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Objectifs : Les principaux objectifs de notre étude étaient de rassembler des données normatives pour la forme hongroise du CDI-3 de MacArthur-Bates et de présenter l'instrument comme l'outil principal pour le dépistage du langage. En Hongrie, les modifications apportées à la loi ont rendu obligatoire pour les orthophonistes travaillant dans des établissements d'enseignement, le dépistage pour un retard de langage chez les enfants âgés de 3 ans.

Méthodes : 1453 enfants sans problèmes de développement apparents âgés entre 2, 0 et 4, 0 ans ont été impliqués dans l'étude normative. Les participants venaient de la capitale, ainsi que de petites villes et villages du pays. Les formulaires CDI-3 ont été complétés par des questionnaires démographiques. Des analyses statistiques quantitatives ont été effectuées sur le nombre de mots dans la liste de vocabulaire expressif, la longueur moyenne des trois phrases les plus longues et le nombre de réponses positives sur la complexité de la phrase et les routines de communication. La validité du formulaire CDI-3 a été étudiée dans un sous-groupe d'enfants par la comparaison entre le rapport parental et les performances des enfants dans les tests de compréhension de la phrase (TROG) et de morphologie expressive, ainsi que des échantillons de discours narratif.

Résultats : Les données ont montré une distribution normale dans tous les groupes d'âge. Les intervalles normaux du vocabulaire expressif, de la complexité de la phrase et des routines de communication ont été définis avec seuils marquant le retard du langage. Les différentes sections du formulaire montrent une forte corrélation en général. Des sections du formulaire de rapport parental ont montré une forte corrélation avec les performances des enfants dans les tests de compréhension de la phrase, de morphologie expressive et les mesures quantitatives des échantillons de discours narratif.

Conclusions : La forme hongroise du CDI-3 de MacArthur-Bates est un instrument valable pour dépister le retard de langage à l'âge de 3 ans et pourrait également être utile pour contrôler l'efficacité de l'intervention sur les troubles de langage chez l'enfant.

Mots clés : Troubles développementaux du langage, dépistage, mesures des résultats rapportés par les patients (développement ou adaptation interculturelle et validation)

CO 085

(1215) - UN NOUVEAU TEST POUR L'ÉVALUATION DE LA PROSODIE CHEZ LES ENFANTS EN PRESCHOOLAIRE

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Objectifs : De plus en plus de recherches montrent que la prosodie joue un rôle crucial non seulement dans la communication humaine mais aussi dans l'acquisition et le développement du langage. La prosodie (i.e. l'intonation, le rythme, la proéminence, la fragmentation) aide les enfants et les tout-petits à segmenter le signal du langage et à établir des catégories linguistiques (Gervain & Mehler, 2010 ; Morgan & Demuth, 1996). Le développement prosodique typique dans la production est également crucial, et est liée au développement lexical, morphosyntaxique et pragmatique (Frota et al, 2016). Dans cette étude, nous présentons l'évaluation de la prosodie chez les enfants, un nouvel outil d'évaluation du développement prosodique des enfants âgés entre 3 et 5 ans. Cette étude comble une lacune en ce qui concerne les protocoles existants pour l'évaluation du développement prosodique.

Méthodologie : L'évaluation de la prosodie chez les enfants mesure la compréhension prosodique et les capacités d'expression liées aux domaines suivants ; i) l'affect - aimer versus ne pas aimer, ii) la modalité - chant vocatif versus des affirmations, iii) l'emphase - l'accent placé sur un mot en particulier, et iv) l'accentuation (compréhension seulement) - schémas d'accentuation discriminatoires. La structure de l'évaluation de la prosodie chez les enfants a été alimentée par des instruments existants développés pour des sujets plus âgés (McCann & Peppé, 2003 ; Filipe et al. 2017), et le test a été administré avec support informatique. Des éléments de vocabulaire ont été sélectionnés à partir de PLEX-5 - un lexique de production

de discours d'enfant pour le portugais européen (Frota, Correia, Severino, Cruz, Vigário & Cortês, 2012). Un échantillon de convenance a été sélectionné (N = 21 filles, 10 garçons ; tranche d'âge : 3 à 4 ans; moyenne=XX) à l'école maternelle, selon toutes les procédures d'éthique standards. Un orthophoniste a évalué les enfants individuellement, et a enregistré toutes les productions.

Résultats : Les réponses des enfants ont révélé différents rythmes de développement selon les habilités prosodiques.

Conclusions : L'évaluation de la prosodie chez les enfants s'est avéré être un test informatif pouvant servir à évaluer le développement prosodique chez les enfants de niveau préscolaire, et ce dès l'âge de 3 ans.

Mots-clés : **Evaluation, formation clinique**

CO 086

(1211) - INFECTIONS RECURRENTES DE L'OREILLE MOYENNE DANS LA PETITE ENFANCE- TRAITEMENT DES INFORMATIONS AUDITIVES ET L'ACQUISITION DE LA PHONOLOGIE

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Objectifs : Les cas d'infections de l'oreille moyenne sont plus nombreuses dans la petite enfance, période qui est également importante pour le développement du traitement central des informations auditives. L'objectif de cette étude est d'examiner le traitement des informations auditives et l'acquisition de la phonologie chez des enfants de 2 ans souffrant d'otites moyennes aiguës récurrentes. Pour la première fois, des enfants souffrant d'otite moyenne aiguë récurrente ont été examinés à l'aide de potentiels évoqués cognitifs (PEC) auditifs afin d'étudier l'encodage du son et la discrimination préconsciente de stimuli linguistique, ainsi que les mécanismes neuraux de l'attention auditive involontaire. De plus, la production de consonnes de ces enfants a été examinée afin d'obtenir des informations concernant la justesse de la discrimination neurale des sons et la formation de la représentation phonologique.

Méthodologie : Vingt enfants de 2 ans (± 2 mois) atteints d'otite moyenne aiguë récurrente et un groupe témoin équivalent a été examiné. L'électroencéphalographie a été enregistré selon un paradigme passif à représentations multiples contenant des stimuli de syllabes en finnois et cinq de leurs déviations (fréquence, intensité, voyelle, durée de la voyelle et changements de consonnes). Les P1 et N2 obligatoires, la négativité de disparité (MMN), les réponses P3a (eP3a) précoces, et les réponses tardives P3a (IP3a) des ERP ont été analysés. Le répertoire des consonnes a été analysé à partir d'échantillons de discours spontané, produits dans un contexte de jeu semi-structuré d'une durée de 15 minutes.

Résultats : Les résultats suggèrent que les enfants souffrant d'otite moyenne aiguë récurrente avaient un codage du son intact mais une discrimination auditive préconsciente atypique pour de nombreux aspects du son d'un discours. De plus, ils ont montré des mécanismes neuraux atypiques lors de l'attention auditive involontaire pour des sons nouveaux mais dénués de sens. Les enfants atteints d'otite moyenne aiguë récurrente avaient un répertoire de consonnes plus restreints que leurs pairs.

Conclusions : Une perte de l'audition fluctuante, associée à une otite moyenne aiguë récurrente dans la petite enfance peut affecter le traitement central des informations auditives et peut empêcher un développement optimal du langage. Il serait important d'informer les parents concernant la perte de l'audition fluctuante et les conseiller, afin d'effectuer un suivi du développement du langage chez ces enfants.

Ce travail a été présenté le 30 mars 2017 lors d'une réunion nationale de l'association finlandaise pour la recherche sur le langage et le discours.

CO 087

(1294) - LES PRATIQUES DES ORTHOPHONISTES GRECS, DE L'ÉVALUATION À LA PRESTATION DE SERVICES POUR LES ENFANTS ATTEINTS DE TROUBLES PHONOLOGIQUES (TP).

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Objectifs : Les Orthophonistes utilisent une variété de pratiques pour les enfants atteints de troubles phonologiques (TP). Alors qu'un corps émergent de recherche empirique se développe dans le domaine des TP, notre compréhension de la façon dont celui-ci s'aligne étroitement avec la pratique clinique professionnelle est limitée. Objectifs : Examiner les pratiques des orthophonistes grecs, de l'évaluation à la prestation de services pour les enfants atteints de TP.

Méthodes : Un questionnaire (McLeod et Baker, 2014) modifié par l'équipe de recherche, a été complété par 68 orthophonistes grecs. L'enquête comprenait des questions qualitatives et quantitatives concernant les pratiques utilisées de l'évaluation à la prestation de services pour les enfants atteints de TP.

Résultats : La majorité des répondants (81,6%) travaillaient en pratique privée. 50% avaient plus de 9 ans d'expérience et 41,4% étaient spécialisés dans le retard/développement phonologique. 54,4% des orthophonistes ont utilisé l'outil d'évaluation « Test de Développement Phonétique et phonologique » standardisé en grec (PAL, 1995), alors que 60% ont utilisé une méthode d'analyse du processus phonologique. Les orthophonistes ont indiqué que, lors de la priorisation des cibles d'intervention, l'âge des enfants a toujours influencé leurs décisions, alors que le développement précoce de sons avait une priorité élevée pour 86,6% des participants. Les approches d'intervention les plus utilisées étaient la *Conscience Phonologique* (53,1%) et la *Discrimination Auditive* (65,7%). Le service était dispensé individuellement (en tête-à-tête) par 85,8% des participants, en milieu clinique (86,8%) et par le clinicien lui-même (60,3%). La pratique la plus appréciée par les orthophonistes lorsqu'ils traitent avec des familles d'enfants atteints de TP est un modèle d'aide *Parent- en tant que-aide thérapeutique*. En outre, 71,6% des participants estimaient que la participation de la famille avait toujours une influence positive sur le résultat de l'intervention.

Conclusions : Les pratiques des orthophonistes grecs de l'évaluation à la prestation de services ont été étudiées. Les professionnels ne sont pas toujours en accord avec les suggestions de la littérature, mais semblent également s'appuyer sur leur expertise clinique. Les différences entre les pratiques des professionnels dans les différents pays font l'objet de discussions.

CO 088

(1188) - CORRÉLATION ENTRE LES VALEURS SUBJECTIVES DE L'INTELLIGIBILITÉ DES ENFANTS PRÉSENTANT DES TROUBLES DE LA PAROLE ET LES RÉSULTATS DES TESTS NORMALISÉS

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Objectif : Les troubles de la parole sont des troubles du développement caractérisés par des erreurs dans la production des sons qui ont un impact sur l'intelligibilité. L'objectif de cette étude était d'évaluer l'intelligibilité des enfants présentant des troubles de la parole par des méthodes

non seulement subjectives mais aussi normalisées, la corrélation entre les mesures objectives et subjectives des troubles des sons ayant aussi été testée.

Méthodologie : 42 enfants présentant des troubles de la parole, âgés de 4, 5 à 6 et 6 ans ont fait partie de l'étude. La version turque du test *Goldman-Fristoe Test of Articulation (SST)* a été utilisée pour évaluer le développement de la parole chez ces enfants et la version turque de l'Échelle d'intelligibilité en contexte (ICS) a été utilisée pour évaluer l'intelligibilité des enfants. L'ICS est un questionnaire composé de 7 items à faire remplir par les parents pour évaluer le degré de compréhension de la parole de l'enfant par différents partenaires de communication sur une échelle de 5 points. Les mères ont participé en tant que juges de l'intelligibilité de leurs enfants. Les résultats du SST et les scores bruts d'intelligibilité ont été analysés pour tester s'il existait une corrélation entre les mesures objectives et les mesures subjectives des enfants.

Résultat : Les résultats de l'étude montrent qu'il existe une faible corrélation entre les scores standards du SST et les scores d'intelligibilité des enfants. Le coefficient de corrélation de Spearman a été calculé entre les scores du sous-test de discrimination auditive et les scores d'intelligibilité, entre les scores du sous-test d'articulation et les scores d'intelligibilité et enfin entre les scores du sous-test des processus phonologiques et les scores d'intelligibilité. Les scores de discrimination auditive et les scores d'intelligibilité étaient négativement corrélés ($r = -0,44$; $p = 0,046$). Les scores du sous-test d'articulation et les scores d'intelligibilité étaient négativement et modérément corrélés ($r = -0,64$; $p = 0,002$) et finalement les scores du sous-test des processus phonologiques et les scores du test d'intelligibilité étaient également modérément corrélés entre eux ($r = -0,51$, $p = 0,018$).

Conclusion : Bien que la performance des enfants soit faible dans le SST et que les enfants présentent des troubles de la parole légers à modérés ou modérés à sévères, leur intelligibilité n'a pas été jugée faible par leurs mères.

Mots-clés : Troubles phonologiques

CO 089

(1315) - EFFICACITÉ DE LA THÉRAPIE DE STIMULATION CHEZ LES ENFANTS TURCS PRÉSENTANT DES TROUBLES DE LA PAROLE

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Objectif : La capacité de stimulation a été utilisée avec succès par les orthophonistes dans le traitement des troubles de la parole. Bien que difficile à définir, la stimulation est une compétence facilement mesurable qui peut fournir des informations précieuses aux cliniciens dans le traitement des enfants présentant des troubles de la parole. Son rôle unique dans la planification du traitement des troubles de la parole chez les enfants de langue turque n'a pas encore été étudié. L'objectif de cette étude était d'étudier l'effet de la thérapie de stimulation dans les troubles de la parole.

Méthodologie : Les participants impliqués dans l'étude ont été sélectionnés parmi des enfants âgés de 4, 5 à 6,6 ans. L'étude a été réalisée auprès de 22 enfants présentant des troubles de la parole, réunis par l'Université Hacettepe, Unité d'orthophonie. La version turque du *Test of Articulation Goldman-Fristoe* - (SST) a été utilisée pour évaluer le développement de la parole chez ces enfants. Les enfants ont suivi une « thérapie de stimulation » pendant 11 séances pour améliorer leur intelligibilité de la parole.

Résultat : Les résultats pré-test / post-test du SST ont été comparés. L'analyse des données a montré des changements positifs et significatifs dans les scores SST ; le nombre de processus phonologiques inappropriés au développement des enfants a disparu et leur intelligibilité

s'est améliorée. Les résultats pré-test / post-test des sous-tests du SST ont été comparés. Les différences entre les variables ont été analysées en utilisant le test de Wilcoxon. Cette analyse a révélé que tous les scores post-test étaient relativement plus élevés que les scores pré-test et que toutes ces différences étaient statistiquement significatives ($p < .05$).

Conclusion : Les résultats de l'étude contribuent aux approches de Miccio et Elbert (1996). Ces chercheurs ont conçu le programme d'intervention de stimulation pour les enfants qui ont un inventaire des productions de phonèmes réduit, qui a contribué de manière positive à leur système phonologique. Les résultats de l'étude indiquent que la thérapie de stimulation peut être utilisée comme type de traitement chez les enfants de langue turque présentant des troubles de la parole.

Mots-clés : Troubles de la parole, stimulation, intelligibilité, intervention

CO 091

(1286) - EXPLORER L'EFFET DE L'ÂGE SUR LA SÉMANTIQUE ET LA SYNTAXE COMPLEXE DANS LES NARRATIONS BILINGUES ET UNILINGUES

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Objectifs : Les tâches narratives sont une mesure écologique pour obtenir des performances de langage qui requièrent une organisation au niveau du discours et au niveau syntaxique. Il y a encore peu de preuves sur les capacités des enfants bilingues en matière de tâches narratives. Le but de cette étude était d'examiner l'impact de l'exposition bilingue et de l'âge de la première exposition bilingue (AoA) au niveau macro (sémantique) et au niveau micro (longueur et complexité de l'énoncé) dans les récits.

Méthodes : 103 enfants en développement typique au Québec, Canada, ont participé dans deux groupes d'âge : 1^e année (âge moyen 6, 9 ans (SD 6m) et 3^e année (âge moyen 8, 8 ans (SD 8m). Chaque groupe d'âge comprenait 3 sous-groupes : les locuteurs monolingues francophones, les locuteurs séquentiels ou simultanés francophones. Dans chaque groupe, les sous-groupes étaient équivalents en âge, en cognition non verbale et en éducation maternelle. Les narrations étaient recueillies à l'aide d'images sans mots en utilisant l'Instrument des Normes des Narratives d'Edmonton (ENNI) (Schneider, Dubé et Hayward, 2005) Les mesures des résultats comprenaient la sémantique (niveau macro) et, au niveau micro, la longueur moyenne des énoncés, le nombre total d'énoncés, le nombre de mots différents et l'Indice de Complexité (IC une mesure de l'utilisation des clauses subordonnées).

Résultats : Les résultats ont été analysés en utilisant ANOVA et l'analyse de régression. Pour les enfants de 1^e année et 3^e année, aucune différence significative n'a été observée entre les enfants monolingues et bilingues, que ce soit en utilisant des analyses de groupe ou en traitant la durée et le temps de l'exposition sur un continuum. Des différences significatives ont été trouvées entre les deux groupes d'âge.

Conclusions : Les résultats suggèrent que les récits sont relativement peu affectés par le bilinguisme chez les enfants d'âge scolaire aux niveaux macro et micro. Compte tenu de cette étude, les résultats suggèrent que les structures syntaxiques peuvent nécessiter moins d'exposition pour leur acquisition chez les enfants d'âge scolaire et que la syntaxe pourrait être plus sémantiquement biaisée chez les enfants plus jeunes.

Mots-clés : Plurilinguisme

CO 092

(1034) – ACCÈS AUX SERVICES D'ORTHOPHONIE POUR LES ENFANTS PLURILINGUES ET MIGRANTS

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Objectifs : les besoins en matière de parole, langage et communication sont particulièrement fréquents chez les enfants y compris les enfants plurilingues et migrants. Plus d'un enfant sur trois en Allemagne a un antécédent de milieux migrants. Dans certaines parties de la ville de Brême, ce chiffre est plus élevé et prend en compte les enfants de réfugiés. La disponibilité des données sur l'accès aux services d'orthophonie (SO) est encore inadéquate, tout spécialement si on prend en compte les enfants plurilingues. Néanmoins, les programmes de contrôle de santé montrent que les migrants tout comme les enfants de familles défavorisées, présentent des différences sur de nombreux aspects liés à la santé comparé à la majorité de la population ; par exemple, une plus grande probabilité de rencontrer des obstacles pour l'accès aux soins.

Méthodes : L'information a été obtenue par les orthophonistes représentant 30 cabinets dans différents districts dans une des plus grandes villes, qui est particulièrement touchée par la polarisation socio-spatiale. Les données ont été recueillies entre juillet et septembre 2016 au moyen d'un questionnaire, les données analysées en utilisant les statistiques descriptives et le logiciel SPSS. Les pratiques étaient regroupées selon la proportion de migrants mineurs et de mineurs bénéficiant du soutien des services sociaux du district. L'enquête faisait par exemple ressortir le nombre de consultations et la proportion d'enfants plurilingues, l'âge des enfants au moment de l'annonce, le diagnostic orthophonique versus médical, l'application et le type de matériel d'évaluation, les objectifs d'intervention, les données sociodémographiques des orthophonistes praticiens.

Résultats : Les résultats suggèrent les enfants plurilingues sont annoncés plus tard que les enfants monolingues parlant allemand et qu'un enfant plurilingue sur deux présentait un trouble du développement du langage (TDL), alors que certains enfants de statut socio-économique modeste passaient inaperçus. De plus, les orthophonistes reconnaissent de défi persistant de poser un diagnostic différentiel adéquat entre les troubles de la communication et les variations typiques de la langue sans participer à des formations continues mettant l'accent sur la prise en charge d'une clientèle plurilingue et multiculturelle.

Conclusions : L'étude met en exergue les obstacles et le besoin accru d'une prise de conscience pluriprofessionnelle ainsi qu'une connaissance professionnelle approfondie afin de fournir un diagnostic précoce efficace et rapide, permettant aux enfants plurilingues présentant un TDL d'avoir accès aux mêmes services lors de mêmes besoins.

Mots-clés : troubles du développement du langage

CO 093

(1343) – AUCUN AVANTAGE DU BILINGUISME POUR DEUX GROUPES D'ENFANTS D'ÂGE SCOLAIRE SUR DEUX TÂCHES DE FONCTION EXÉCUTIVE

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Objectifs : Un certain nombre d'études ont conclu que les enfants bilingues surpassent les enfants monolingues dans les tâches de fonctions exécutives (Barac et Bialystok, 2011), alors que d'autres études n'ont pas réussi à trouver un avantage au bilinguisme (Namazi et Thordardottir, 2010). Bon nombre de ces études ont utilisé le « Dimensional or Wisconsin Card sorting tasks » - tâches de tri de cartes (Bialystok, 1999 ; Bialystok et Martin, 2004), qui oblige les participants

à déterminer et à classer les critères de tri des cartes et à les modifier face à des preuves contradictoires. Cette étude a comparé les enfants monolingues aux enfants bilingues sur deux tâches de fonction exécutive.

Méthodes : 76 enfants d'âge scolaire, en première et troisième année d'école française à Montréal ont participé. Chaque niveau comprenait des enfants monolingues et deux sous-groupes bilingues, équivalents en âge, éducation maternelle et QI non verbal, mais qui différaient par l'âge d'exposition au bilinguisme (AE) et le niveau général d'exposition au bilinguisme. Les variables d'origine ont été soigneusement documentées grâce à un rapport détaillé des parents. Les groupes monolingues et bilingues avaient précédemment montré des différences significatives sur les mesures de vocabulaire. Tous les participants ont reçu deux mesures de la fonction exécutive, la tâche de tri de cartes Wisconsin (WCST, Heaton et al 1993) et l'Odd one Out (OoO, Henry, 2001), une tâche de portée de la MT visuelle. Le WCST a été noté pour le total des réponses, le nombre de tris corrects et le nombre d'éléments à trier. L'OoO a été noté pour le total de réponses correctes et la portée (la plus longue suite de mots mémorisée).

Résultats : Aux deux niveaux scolaires, les enfants monolingues ont obtenu les meilleurs résultats ; cependant, les différences entre les groupes d'enfants monolingues et bilingues n'étaient pas significatives. Les analyses de régression traitant la quantité d'exposition bilingue et la zone d'influence comme variables continues ont donné des résultats marginalement significatifs pour les résultats de la fonction exécutive du groupe plus jeune ($p = 0,077$), ce qui suggère une meilleure performance des enfants bilingues. La régression n'était pas significative pour le groupe plus âgé ($p = .432$).

Conclusions : L'étude n'a pas pu prouver l'avantage du bilinguisme dans la fonction exécutive.

Mots-clés : Plurilinguisme

CO 094

(1428) - DÉVELOPPEMENT DU LANGAGE CHEZ LES BILINGUES TURC-NÉERLANDAIS COMPARÉ AUX MONOLINGUES

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Objectifs : Le but de cette étude était d'étudier les compétences linguistiques de 25 bilingues turc-néerlandais par rapport à 25 enfants néerlandais monolingues appariés selon l'âge et le sexe. Deuxièmement, chez enfants 9 bilingues turc-néerlandais et 13 enfants néerlandais monolingues, des données longitudinales sur trois ans (à l'âge de 6 ans et à l'âge de 9 ans) ont été collectées et comparées.

Méthodes : Cinquante enfants nés en 2007 ont été inclus dans l'étude. Le groupe sujet comprenait 25 enfants bilingues turc-néerlandais âgés en moyenne de 9 ans, 6 ans (8 ans, 11 ans et 9 ans, 10 ans, écart-type : 0,26) et le Turc comme langue maternelle dominante. L'exposition linguistique au néerlandais était d'au moins 2 ans. Un groupe témoin apparié d'âge et de sexe d'enfants néerlandais unilingues a été compilé. Les compétences linguistiques ont été étudiées en utilisant le CELF. Chez 22 enfants, les compétences linguistiques ont été réévaluées trois ans plus tard dans une étude de suivi. Les données ont été comparées en utilisant le test U de Mann-Whitney et le test de Wilcoxon des paires appariés.

Résultats : Les compétences linguistiques générales, la compréhension de la langue et la production du langage étaient significativement plus faibles chez les enfants multilingues turc-néerlandais que chez les monolingues. L'étude de suivi n'a montré aucune différence significative dans les compétences linguistiques chez les enfants multilingues turc-néerlandais et monolingue. La

production du langage chez les enfants bilingues était principalement influencée par la profession de la mère et la langue parlée à la maison.

Conclusions : Après trois ans, le retard de langage des enfants néerlandais bilingues demeurait.

Mots-clés : Multilinguisme

CO 095

(1147) - LANGAGE ET VOCABULAIRE CHEZ DES ENFANTS DE TROIS ANS EXPOSÉS AU BILINGUISME

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Objectif : Des recherches précédentes ont montré que les enfants bilingues ont tendance à avoir un vocabulaire moins développé dans chaque langue par rapport aux enfants monolingues. Des recherches précédentes indiquent également que le vocabulaire d'un enfant bilingue atteint ou n'atteint pas le niveau monolingue typique selon le profil d'exposition bilingue. Il semble y avoir un lien entre le niveau d'exposition à une langue et la performance dans cette même langue. L'étude en cours examine la relation entre le vocabulaire expressif en suédois et en finnois et l'exposition linguistique chez les enfants bilingues de trois ans, en Finlande. L'étude fait également des comparaisons entre la quantité de vocabulaire chez les enfants bilingues et les enfants monolingues.

Méthodologie : Les participants étaient 46 enfants bilingues suédois- finlandais et 24 enfants monolingues suédophones. Ils ont été évalués individuellement au niveau du vocabulaire expressif en suédois et / ou en finnois avec le test de vocabulaire *Renfrew Language Scales: Word Finding Vocabulary*. Les parents ont également rempli un questionnaire contenant des informations générales sur l'exposition de leur enfant à la langue, de la naissance à l'âge de trois ans.

Résultat : Les résultats de la présente étude seront présentés à l'aide de mesures de vocabulaire unique, total et conceptuel total des enfants bilingues et monolingues et de mesures de l'exposition linguistique chez les enfants bilingues. Nous basant sur des recherches précédentes, nous soulevons l'hypothèse que les analyses révèlent une corrélation positive entre la quantité de vocabulaire expressif et le degré d'exposition au langage dans chaque langue. Les implications des résultats seront discutées et leur pertinence pour la différenciation entre le développement du langage typique et le langage déficient, chez les enfants bilingues, sera aussi évaluée.

Conclusion : Afin de mieux comprendre le développement du langage typique chez les enfants bilingues, des données provenant d'enfants bilingues sont absolument nécessaires pour d'éviter les erreurs par excès et par défaut d'un diagnostic des troubles du langage chez cette population. La présente étude apportera des perspectives sur la façon de mesurer et d'interpréter avec exactitude les données sur le vocabulaire bilingue chez les jeunes enfants.

Mots-clés : Plurilinguisme

CO 096

(1175) - INCIDENCE DU VOCABULAIRE ET DES INTERVENTIONS EN SYNTAXE SUR LA LECTURE DE CEUX QUI POSSÈDENT DE FAIBLES APTITUDES DE COMPRÉHENSION : UNE ÉTUDE RENDOMISÉE CONTRÔLÉE

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Objectif : La simple vue de la lecture suggère que celle-ci est un produit de décodage et de compréhension orale. Dans ce modèle, les difficultés de ceux qui possèdent de faibles aptitudes de compréhension, pouvant décoder couramment et avec précision, découlent des faiblesses du langage oral. Il a été démontré que certaines interventions sur le langage oral ont une incidence sur leur lecture. Cependant, les meilleures cibles pour l'intervention orale ne sont pas claires. Dans cette étude randomisée, nous avons cherché à comparer l'incidence de deux interventions, axées sur la syntaxe et le vocabulaire, respectivement, sur la compréhension du texte par ceux qui possèdent de faibles aptitudes de compréhension.

Méthodologie : 175 enfants (M = 9: 5 ans, SD = 0: 5, 87 filles) ont participé à trois interventions - syntaxe, vocabulaire et fonctions exécutives, et un groupe de motivation à la lecture de contrôle. 85 ont été classés comme détenant de faibles aptitudes de compréhension (FC) et 90 comme des lecteurs typiques en développement (DT). Les actions ont ciblé 26 groupes d'intervention (6 à 10 participants chacun) avec une séance de groupe hebdomadaire d'une heure, pendant 10 semaines. L'intervention au niveau du vocabulaire a été modélisée à l'aide de la méthode efficace d'enseignement du vocabulaire (Beck, McKeown et Kucan, 2002) et de l'intervention en syntaxe de Phillips (2014).

Résultat : Une analyse de la covariance (ANCOVA) contrôlant l'âge, les scores de vocabulaire standardisés antérieurs et les scores pré-test a montré une amélioration du vocabulaire des participants ($p < 0,001$) et de la syntaxe ($p = 0,024$) lors de l'intervention en vocabulaire, et de leur syntaxe ($p = .001$) et scores de vocabulaire ($p = .008$) lors de l'intervention en syntaxe, par rapport au groupe témoin. Il n'y a pas eu d'interaction du type intervention X groupe, ce qui indique que les interventions ont eu un impact égal sur les participants FC et DT. Cependant, les participants au niveau du vocabulaire et du groupe de syntaxe n'ont pas amélioré leurs scores de compréhension en lecture, tels que mesurés via une tâche ponctuelle et un test standardisé.

Conclusion : Bien que les faiblesses du langage oral puissent être liées à une mauvaise compréhension du texte, l'incidence des interventions en langage oral et en transfert vers la lecture est probablement limitée, à moins que le transfert ne soit spécifiquement ciblé.

Mots-clés : Intervention

CO 097

(1023) - NORMES DE FLUIDITÉ DE LA LECTURE POUR LA LANGUE ROUMAINE À LA FIN DU PREMIER CYCLE PRIMAIRE

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Objectifs : La fluidité de la lecture à haute voix représente une priorité dans notre système d'éducation, même s'il n'existe pas de norme pour les élèves dans l'enseignement primaire. Le but de cette étude est d'établir des normes pour la fluidité de la lecture de la langue roumaine à la fin du premier cycle en utilisant le PEAFIC (Instrument d'évaluation et de formation de la fluidité de lecture, Bodea Hațegan & Talaș, 2014).

Méthodes : Le PEAFIC est un outil mis au point en tenant compte des particularités de la langue roumaine pour la détection précoce des troubles de la fluidité de la lecture et une intervention rapide dans les premières classes. 1997 élèves de première année, 954 filles et garçons âgés de 7 à 9 ans, ont participé à cette étude. Les élèves ont été sélectionnés dans les écoles rurales et urbaines (385 élèves provenant d'écoles rurales et 1592 élèves provenant d'écoles urbaines). Les données ont été recueillies par les évaluateurs, utilisant quatre listes différentes de mots sélectionnées à partir du PEAFIC. L'évaluateur a enregistré le nombre de mots lus par l'élève en une minute et le nombre d'erreurs faites dans chaque liste.

Résultats : Les résultats offrent de nouvelles normes pour la fluidité de lecture à haute voix à la fin du premier cycle dans les domaines suivants : mots monosyllabiques, mots bisyllabiques, les mots de trois syllabes et dix textes (41.21 mots monosyllabiques, 37.66 mots bisyllabiques, 25.73 mots de trois syllabes et 38.74 mots du texte).

Conclusions : Les normes de fluidité de la lecture à la fin du premier cycle offrent une nouvelle perspective dans la fluidité de lecture à voix haute pour les professeurs et les orthophonistes, puisqu'il est possible de mettre au point des programmes d'intervention précoces en comparant les résultats des élèves à ces normes. Les tâches de cette étude peuvent être utilisées pour identifier les élèves à risque pour la dyslexie à un très jeune âge. Les normes de lecture pour le deuxième, le troisième et le quatrième cycle doivent encore être établies. Les implications de ces normes dans le système d'éducation roumain pour l'évaluation et les interventions seront discutées dans le contexte de la dyslexie.

Mots clés: Qualité de l'éducation

CO 098

(1009) – L'AMORÇAGE SÉMANTIQUE INFLUENCE LE TRAITEMENT DE LA MISE EN CORRESPONDANCE DES PROPRIÉTÉS SÉMANTIQUES – RÉSULTATS D'UNE PRÉÉTUDE SUR LE PROGRAMME D'INTERVENTION POUR DYSLEXIQUES

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Objectifs : Dans l'amorçage, un stimulus contextuel à court terme modifie le traitement du stimulus cible suivant. (Gulan, 2010). Transféré au niveau du processus du langage écrit, à l'école primaire, l'amorce facilite le processus de lecture pour les enfants lorsqu'ils relient le mot qu'ils lisent à leurs expériences précédentes. Les amorces (des images par exemple) qui précèdent la cible modifie le temps de reconnaissance de la mise en correspondances des caractéristiques sémantiques (Gulan & Valerjey, 2010).

Méthodes : Dans la première partie de cette étude, nous évaluons la vitesse de lecture et les effets de l'amorce sur celle-ci avec un échantillon de n = 47 enfants et adolescents. De plus, les différences entre les groupes d'âge sont recensées pour les caractéristiques fonctionnelles et visuelles de chaque catégorie (fruits, légumes, jouets, animaux) et les temps de détection sont vérifiés suivant les cibles présentées. Nous supposons que le processus de lecture est plus rapide lorsque la relation entre cibles et amorces sont proches et positives.

Résultats : Une étude préliminaire de participants adultes, indique une moyenne de vitesse de lecture de 2.24 secondes. La tâche de détection des caractéristiques fonctionnels ($\emptyset = 2.0$ s) pour une catégorie de mots est réalisée 30 millièmes de seconde plus rapidement que la détection des caractéristiques visuelles ($\emptyset = 2.3$ s) (Prange, non publié). Les résultats préliminaires pour l'identification des amorces et cibles adéquates chez les enfants et les adolescents seront discutés et interprétés en rapport avec la théorie du modèle de Logogen. (Patterson, 1998).

Conclusions : Sur base de ces résultats, nous conceptualisons l'intervention pour améliorer la rapidité de lecture des enfants et des adolescents dyslexiques. Son efficacité est évaluée dans le contexte de séries de cas unique ($n = 6$) dans la deuxième partie de cette étude.

Mots clés : Dyslexie, intervention, handicap cognitif

CO 099

(1191) - UNE COMPARAISON DES COMPÉTENCES DE LA CONNAISSANCE DES CARACTÈRES IMPRIMÉS CHEZ LES ENFANTS TURCS PRÉSENTANT DES TROUBLES DU DÉVELOPPEMENT DU LANGAGE ET LES ENFANTS TURCS EN DÉVELOPPEMENT TYPIQUE DE NIVEAU PRÉSCOLAIRE

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Objectifs : Les compétences émergentes d'alphabétisation sont des compétences pouvant prédire les capacités de lecture futures. Les compétences de lecture émergentes qu'ont les enfants, facilitent leur processus de lecture et les préparent à la vie académique. L'une des composantes importantes des compétences d'alphabétisation est la connaissance des caractères imprimés, qui est admis comme terme plus vaste concernant le développement des connaissances dans le domaine de l'orthographe et du langage écrite. L'objectif de cette étude préliminaire, est de présenter un bref résumé des compétences en termes de langage écrite des enfants turcs entre 3 et 5 ans.

Méthodologie : La procédure « Preschool Word and Print Awareness (PWPA) » de sensibilisation au mot et au caractère imprimé a été administré par des examinateurs formés. Pendant la lecture partagée d'un livre, la connaissance du concept de caractère imprimé chez les enfants a été évalué de différentes façons (localisation du début du livre, organisation des caractères imprimés narratifs, de gauche à droite sur la page, etc). Les réponses des enfants ont été évaluées sur une échelle de 0 à 2 points. Ces deux évaluations ont été menées par des orthophonistes dans un environnement clinique. On a ensuite comparé les scores des participants présentant des troubles du développement du langage ($n = 20$) à ceux de leurs pairs en développement typique ($n = 20$) pour ces différentes tâches.

Résultats : Les résultats de cette étude ont indiqué que les enfants en développement typique avaient des résultats plus élevés sur les différentes tâches relevant de la reconnaissance du mot et du caractère imprimé que les enfants présentant des troubles du développement du langage. Les différences de scores étaient statistiquement significatives ($p=0.03$) entre les deux groupes d'enfants. Les différences en termes de connaissances du concept du caractère imprimé peuvent prédire les connaissances et les capacités phonologiques des enfants ainsi que leurs futures capacités de lecture.

Conclusions : Les enfants ayant des performances moins élevées dans la procédure de reconnaissance du mot et du caractère imprimé pourrait être au risque de présenter de troubles phonologiques, et des déficiences dans le domaine de la lecture et de l'écriture par la suite. Cependant, la petite taille de l'échantillon ayant servi de base à cette étude ne permet pas d'examiner les effets du SES sur les tâches de performance des enfants. Dans les études

à venir, le nombre de participants sera augmenté afin de d'examiner les effets du SES sur les performances des deux groupes.

Mots-clés : Troubles de développement du langage, connaissance du concept du caractère imprimé, compétences de lecture émergentes

CO 100

(1240) - LE ROLE DES CONNAISSANCES MOTRICES DANS LA RECONNAISSANCE DE SYMBOLES GRAPHIQUES

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Objectifs : Les données récentes suggèrent que les connaissances motrices jouent un rôle crucial dans la reconnaissance de symboles graphiques. L'apprentissage de symboles par la copie à la main donne lieu à une meilleure reconnaissance que l'apprentissage par la saisie du symbole sur un clavier, ce qui indique que le type d'activité moteur impliqué lors de l'apprentissage de nouveaux caractères affecte la performance de reconnaissance subséquente. Cependant, l'écriture à la main et le fait de taper sur un clavier ne diffèrent pas seulement en termes d'activité motrice. La copie nécessite la reproduction de tous les éléments du caractère cible, et requiert donc la construction détaillée de sa représentation visuelle. Inversement, le fait de saisir le caractère sur un clavier ne nécessite pas un traitement aussi détaillé puisqu'une association globale entre la cible et la touche correspondante suffit. La présente étude a tenté de définir les contributions respectives du traitement analytique et de la connaissance motrice.

Méthodologie : Nous avons comparé la copie au fait de saisir les caractères par clavier dans le cas d'un trouble de l'apprentissage impliquant l'analyse de symboles sans l'aspect graphomoteur. Les participants ont composé le symbole cible en sélectionnant des aspects élémentaires d'un ensemble montré sur écran et en les entraînant dans la position appropriée. Les participants adultes ont appris un ensemble de symboles graphiques non familiers soit en les copiant, en les tapant ou composant. Un test de reconnaissance a été administré immédiatement après la phase d'apprentissage et une nouvelle fois deux semaines plus tard. L'exposition à l'apprentissage a été limité soit dans le nombre d'essais ou dans la durée.

Résultats : Dans les deux cas, la composition et la copie a mené à une meilleure performance de reconnaissance que le fait de taper sur clavier.

Conclusions : En somme, au travers des expériences, la copie a donné lieu à la meilleure performance en termes de reconnaissance des symboles, et la saisie sur clavier a donné lieu à la plus faible performance. Lorsque un laps de temps d'apprentissage suffisant était alloué, l'apprentissage par composition a donné lieu à une performance équivalente que l'apprentissage par la copie.

CO 101

(1325) - LA VITESSE MAXIMALE DE DÉGLUTITION DIMINUE RAPIDEMENT LORS DE PLAINTES LORS DE LA DÉGLUTITION

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Objectifs : Dans le cadre de l'évaluation clinique des patients atteints de (éventuelle) dysphagie, mais pas nécessairement d'aspiration, la vitesse maximale de déglutition (Maximum Swallowing Speed - MSS en m/s : le temps nécessaire pour boire une quantité déterminée d'eau le plus rapidement possible) est une tâche de performance maximale pour identifier la réduction de la capacité de déglutition. Pour mieux comprendre l'utilisation de la MSS à travers les étiologies, nous avons cherché à comparer les bases de données.

Méthodes : Nous avons comparé trois bases de données précédemment collectées comme suit : une avec 28 patients SLA pour étudier la sensibilité de la MSS afin de détecter une atteinte bulbaire, une avec 50 patients atteints de dystrophie musculaire oculo pharyngée (DMOP) pour étudier les caractéristiques cliniques et l'historique naturel et une avec 33 patients atteints de la maladie de Parkinson, pour étudier la force de la langue comparée à la MSS. Nous avons dichotomisé chaque groupe en « ayant des plaintes lors de la déglutition (SC) vs n'ayant pas de plaintes lors de la déglutition (non-SC) en utilisant pour les SLA une atteinte non bulbaire (non-BI) vs l'atteinte bulbaire (BI), pour le DMOP l'EAT-10 (non-SC) = 0-3 vs. SC = 4-40) et pour la maladie de Parkinson, le ROMP (non-SC = résultat 7-8 vs. SC = 9-35).

Résultats : Pour la SLA, la MSS moyenne était de 19,7 ml / s (ET 8,1), avec 27,3 (ET 8,1) pour les non BI et 16,3 (ET 8,5) pour BI, montrant une réduction à 59,7% ($p = 0,01$). Pour le DMOP, la MSS moyenne était de 10,3 ml / s (SD 7,0), avec 16,8 (4,7) pour le non-SC et 8,0 (6,5) pour le SC, montrant une réduction à 47,6% ($p = 0,00$). Pour la maladie de Parkinson, la MSS moyenne était de 13,5 ml / s (ET 7,1) avec 18,2 (6,8) pour les non SC et de 9,5 (4,4) pour les SC, montrant une réduction à 52,2% ($p = 0,00$).

Conclusions : Indépendamment de la capacité de déglutition et de la physiopathologie (les patients atteints de SLA étaient tous médullaires et avaient une MSS relativement élevée, alors que tout le groupe DMOP avait une moyenne de MSS faible), la vitesse maximale de déglutition semble diminuer rapidement de moitié lorsque les patients commencent à se plaindre à la déglutition. La MSS est un test clinique facile pour quantifier la capacité de déglutition dans diverses étiologies.

Mots-clés : Dysphagie, troubles neurodégénératifs

CO 102

(1382) - TRAITEMENT DE LA DYSPHAGIE CHEZ DES PATIENTS ATTEINTS D'UNE DÉTERIORATION COGNITIVE À TRAVERS DE TECHNIQUES D'APPRENTISSAGE IMPLICITES

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Objectifs : Le but de l'étude est de démontrer que les patients atteints de troubles cognitifs et de dysphagie sont capables d'apprendre des comportements de déglutition compensatoires en utilisant des techniques de récupération espacée, d'apprentissage sans erreur et de repères de disparition. En outre, après la formation, les patients peuvent généraliser la technique dans un environnement typique pour les repas à court et moyen terme.

Méthodes : Pour évaluer les effets de l'enseignement de la déglutition compensatoire, un plan longitudinal a été appliqué à six patients atteints d'encéphalopathie atrophique et d'encéphalopathie atrophique vasculaire avec déficience cognitive et dysphagie coexistant, provenant de deux maisons de repos médicalisées différentes. Les patients ont reçu des séances individuelles d'évaluation, de formation, de rappel et de suivi.

Résultats : Chaque participant a appris les stratégies de déglutition compensatoire et a gardé cette information dans chaque suivi, à court et à moyen terme. De plus, les patients ont montré une généralisation des stratégies dans des conditions spécifiques.

Conclusions : Cette recherche était une étude pilote visant à démontrer que les patients souffrant de troubles cognitifs peuvent retenir de nouvelles informations grâce à des techniques d'apprentissage implicites. Celle-ci peut être utilisée comme point de départ d'autres études visant à valider les résultats avec un plus grand nombre de participants et avec un groupe témoin. Ce travail a également suggéré de nouvelles stratégies pour maintenir la divulgation de l'information dans toutes les situations.

Mots-clés : Dysphagie, déficience cognitive, démence, troubles neurodégénératifs, intervention

CO 103

(1132) – FIABILITÉ DE LA VERSION PORTUGAISE SUR LE SYSTÈME DE CLASSIFICATION DE LA CAPACITÉ DE MANGER ET DE BOIRE (EDACS-PT) CHEZ LES ADULTES IMC

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Objectifs : Les classifications fonctionnelles mises au point pour être utilisées chez les enfants IMC, comme le système de classification de la fonction motrice majeure, se sont révélées utiles pour décrire le fonctionnement chez les adultes IMC. Manger et boire sont des activités pour lesquelles les personnes IMC présentent souvent des limites, à cause des difficultés oro-motrices ; cela a des conséquences sur leur qualité de vie. Le système de classification des capacités de manger et de boire (Eating and Drinking Abilities Classification System EDACS) identifie les caractéristiques de la sécurité et de l'efficacité pour les capacités d'alimentation orale chez les enfants IMC et s'est montrée fiable dans sa version portugaise (EDACS-PT). Le but de cette étude était d'évaluer la fiabilité de la version portugaise du système de classification des capacités de manger et de boire chez les adultes atteints de PC.

Méthodes : 41 adultes, âgés de 18 à 49 ans ont été évalués par deux orthophonistes dont un inconnu du participant, ainsi que par un parent. Tous les thérapeutes avaient plus de cinq ans d'expérience de travail avec les patients IMC. Les concordances entre les orthophonistes et entre l'orthophoniste et les parents ont été calculées, ainsi que les corrélations avec d'autres classifications (GMFCS, MACS, BFMF, VSS).

Résultats : Le coefficient intra-classe entre les orthophonistes était de 0.96 (CI95% : 0.92-0.98) et entre l'orthophoniste et les parents de 0.92 (CI95% : 0.85-0.95). Le tau de Kendall du GMFCS (0.58, $p < 0.001$), du BFMF (0.71, $p < 0.001$), du MACS (0.76, $p < 0.001$) et du VSS (0.66, $p < 0.001$) montre une forte association avec l'EDACS-PT.

Conclusions : Les résultats sont similaires à ceux trouvés dans l'application de l'EDACS-PT pour les enfants IMC. Ce travail montre que la version portugaise de l'EDACS est fiable pour l'utilisation chez les adultes IMC et peut être utilisé dans la pratique clinique. L'information pourrait être recueillie par les professionnels et les membres proches.

Mots clés : Dysphagie

CO 104

(1424) - AFFAIBLISSEMENT DE LA MASTICATION EN CAS D'ANKYLOGLOSSIE

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Objectifs : L'ankyloglossie est une anomalie linguale bien décrite qui entrave la succion chez les nourrissons. On connaît moins les conséquences ultérieures d'un « frein-lingual » pour le développement de la fonction orale. Le but de l'étude était de déterminer si et comment différents stades et types d'ankyloglossie inhibent la mastication chez les enfants. Il faut un modèle mastication appropriée pour obtenir des modèles articulatoires corrects, en équilibrant la coordination des muscles de la langue et en développant une occlusion normale.

Méthodes : La capacité de mastication et les modes de mastication spécifiques ont été évalués chez 38 enfants atteints d'ankyloglossie et comparés à 32 enfants sans anomalies du frein lingual. Tous les sujets ont été enregistrés sur vidéo pendant qu'ils mâchaient des solides et évalués en trois dimensions les mouvements de la langue et de la mandibule. Les auteurs ont également utilisé l'échelle normalisée du test TOMASS (test de la Mastication et Déglutition de Solides).

Résultats : Les résultats obtenus ont montré que différents types de frein lingual peuvent avoir différents impacts sur la mastication. Néanmoins, tous les types de freins non normatifs examinés affectent la capacité de la langue à mâcher les aliments dans la cavité buccale et à restreindre les mouvements latéraux de la langue.

Conclusions : Un frein lingual raccourci ou anormal altère significativement la mastication et le contrôle du bol alimentaire chez les enfants. Des schémas anormaux de mastication peuvent conduire non seulement à des problèmes d'articulation ou de phonation anormaux, mais aussi, à l'avenir à des problèmes d'occlusion et d'ATM.

Mots-clés : Troubles de l'alimentation/de la déglutition, prévention, dysfonctionnement oromoteur, troubles myofonctionnels, diagnostic fonctionnel

CO 105

(1332) - COMPARAISON ENTRE L'ÉVALUATION D'UN ORTHOPHONISTE ET L'OPINION DES SOIGNANTS CONCERNANT LA PERFORMANCE ALIMENTAIRE DES ENFANTS

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Objectifs : 1) Déterminer l'opinion du soignant concernant la performance alimentaire de ses enfants ; 2) vérifier le niveau d'accord/désaccord entre l'opinion du soignant et l'évaluation de l'orthophoniste ; 3) évaluer les caractéristiques communes et les facteurs liés aux difficultés d'alimentation chez les enfants ayant un développement typique.

Méthodes : L'échantillon était constitué de 171 enfants portugais âgés de six mois à trois ans ayant développement typique, et leurs soignants. L'échelle d'alimentation du Children's Hospital de Montréal est une échelle d'auto-recensement dont l'objectif principal est d'identifier l'opinion du soignant sur le comportement alimentaire des enfants et le test d'évaluation du comportement alimentaire qui évalue les capacités alimentaires et la détection précoce des changements alimentaires chez les enfants entre quatre et 36 mois.

Résultats : La plupart des soignants considèrent que le temps d'alimentation est modérément aisé, car les enfants se conduisent relativement bien et ont un bon appétit. Une corrélation entre les résultats totaux de l'échelle MCH-FS et le test ACA a été trouvée, et dans la plupart des cas, les

résultats de l'évaluation du soignant et de l'orthophoniste étaient similaires. L'indice de masse corporelle (IMC) est significativement corrélé avec le résultat total dans les deux évaluations, ainsi que le temps moyen d'alimentation, la prise de médicaments, l'existence de troubles cliniques dans la famille et la préférence et le rejet de certains aliments.

Conclusions : Cette étude conclut qu'il existe une corrélation entre la perception des soignants et l'évaluation des orthophonistes et que l'échelle d'alimentation du Children's Hospital de Montréal est un bon outil de dépistage pour les orthophonistes et autres professionnels de la santé. En outre, les soignants qui se font le plus de soucis sur les compétences alimentaires de leurs enfants ne correspondent pas nécessairement aux enfants qui ont plus de difficultés lorsqu'ils mangent selon l'orthophoniste. Par conséquent, la présente étude contribue à une meilleure compréhension de la perception des soignants concernant les difficultés alimentaires des enfants.

Mots-clés : Troubles alimentaires/de la déglutition, diagnostic fonctionnel

CO 106

(1388) - CO-CONCEPTION D'UN DISCOURS OPTIMAL ET D'UN SERVICE D'ORTHOPHONIE POUR LES ENFANTS EN ÂGE SCOLAIRE ATTEINTS DE DLD AVEC DES PRATICIENS ET DES UTILISATEURS DE SERVICES

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Murphy, Carol-Anne - Université de Limerick, Irlande

Conway, Paul - Université de Limerick, Irlande

Perry, Alison - Université de Limerick, Irlande

Objectifs : Les enfants atteints de DLD en âge scolaire risquent d'avoir de moins bons résultats à l'âge adulte. Si nous voulons améliorer ces résultats, il est essentiel d'offrir des services de thérapie orthophonique intégrés à l'école. Travailler dans les écoles présente des défis considérables pour les orthophonistes, dont bon nombre d'entre eux demeurent sans solution. De plus, les points de vue des parents et des enfants ne sont souvent pas pris en compte lorsque sont planifiées des améliorations au niveau des services d'Orthophonie. Nous avons mobilisé les principales parties prenantes (orthophonistes, enseignants, parents et enfants atteints de DLD) pour co-concevoir un service d'Orthophonie optimal pour cette population.

Méthodes : Six groupes de discussion ont été organisés avec un échantillonnage raisonné de parties prenantes en Irlande (Dublin et le sud-ouest). Une nouvelle approche de la recherche sur les services de santé (Enquête Appréciative) a étayé l'étude. Les groupes ont été enregistrés en audio, les données ont été intégralement transcrites et une analyse qualitative du contenu a été appliquée au texte. Un échantillon des données a été codé indépendamment et une vérification a posteriori des analyses a été effectuée par les participants.

Résultats : Cinq thèmes clés ont été identifiés. Ceux-ci concernaient : les *caractéristiques du service* (dirigé par l'enfant, collaboratif et réactif); les *qualités du praticien idéal* (la conviction dans sa capacité à changer et à s'adapter); la *culture de salle de classe* (sûre, écoutante et inclusive); *supports d'apprentissage* (habilitants, et adaptables); et *résultats prioritaires* (amélioration du langage, cognition sociale et compétences de « survie »).

Conclusions : Toutes les parties prenantes ont décrit une culture inclusive comme optimale pour assurer que les enfants atteints de DLD peuvent réussir et participer à l'école. Soutenir les enfants atteints de DLD à « exprimer leur avis » a également été un constat majeur.

Comprendre l'expérience vécue de l'enfant atteint de DLD à l'école a été identifié comme étant important pour l'information sur les objectifs du traitement. Ces résultats s'ajoutent à de plus en plus d'ouvrages sur l'importance pour les orthophonistes de travailler dans les écoles d'une

façon « basée sur les droits ». Ces résultats peuvent renseigner sur la planification future des services pour les enfants atteints de DLD en âge scolaire.

Mots-clés : Troubles spécifiques du langage, troubles développementaux du langage

CO 107

(1200) «JE N'AI JAMAIS PU SAVOIR CE QUE CET ELEVE SAVAIT FAIRE NI COMMENT IL OU ELLE COMMUNIQUE» (PROFESSEUR)

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Objectifs : La participation et la communication font partie de la démocratie et sont essentielles à l'apprentissage des élèves à l'école. Cependant, tel que l'illustre le commentaire ci-haut, la participation et la communication peuvent s'avérer difficiles si les élèves qui pourraient bénéficier de méthodes de communication améliorée et alternative (CAA) n'ont pas accès à ces outils, ou si les professeurs et les pairs n'ont pas la formation ou les compétences nécessaires dans le domaine de la communication avec les méthodes CAA.

Cette étude qualitative par observation a examiné les défis posés par la participation des élèves utilisant la CAA dans des environnements scolaires réguliers en Norvège au niveau du premier cycle du secondaire.

Méthodologie : Six classes ayant chacune un élève utilisant la CAA ont pris part à l'étude. Les données ici présentées rassemblent 42 cours, durant lesquelles des observations vidéo ont été effectuées, ainsi que 27 entretiens avec des élèves utilisant la CAA, leurs pairs, les assistants, les professeurs d'éducation spécialisée et les professeurs de classe.

Résultats : Les résultats ont révélé que les outils CAA n'étaient disponibles que la moitié du temps (54.7%) et n'étaient utilisés que 16.9% du temps. Les systèmes CAA étaient surtout utilisés pour effectuer les exercices écrits et pour communiquer avec les professeurs d'éducation spécialisé ou les assistants plutôt qu'avec les pairs ou les professeurs réguliers. De plus, les données ont indiqué que les élèves utilisant les outils de CAA ainsi que leurs pairs les ont décrit comme étant des leviers de communication alors que les professeurs et assistants les considéraient plutôt comme des obstacles. Le personnel enseignant tout comme les élèves n'avaient pas ou peu de formation pour communiquer avec les outils CAA, et aucune des écoles ne disposait de services d'orthophonie.

Conclusions : Malgré la prédominance d'obstacles à la participation et à la communication, les élèves tout comme le personnel enseignant souhaitent un environnement d'apprentissage inclusif. Un sujet demandant davantage de recherche est de savoir comment les orthophonistes pourraient le mieux participer à améliorer la situation des élèves en écoles régulières qui nécessitent les outils CAA.

Mots-clés : Qualité de l'enseignement

CO 108

(1454) - QUELLE EST LA COMPÉTENCE LINGUISTIQUE CHEZ LES ADOLESCENTS ? ÉTUDE PRÉLIMINAIRE SUR UN ÉCHANTILLON D'ÉLÈVES DE L'ENSEIGNEMENT SECONDAIRE

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Citro, Raffaella - *Hôpital Universitaire de Ruggi d'Aragona, Italie*

Ferdinandi, Miriam - *OSA Cooperativa, Italie*

Objectifs : On pense généralement que les difficultés d'élocution et de langage sont associées aux premières années de vie, comme si ces difficultés allaient perdre leur importance à des âges ultérieurs. En effet, de nombreuses études ont été menées sur les troubles du langage chez l'enfant, alors que les études relatives à l'âge adolescent sont très peu nombreuses. Toutefois, plus récemment, quelques études (Conti 2008, 2013, Bryan 2009) ont été menées sur la persistance des troubles et leur impact sur la communication sociale et le comportement à l'adolescence. Notre recherche vise à contribuer à l'étude des difficultés linguistiques chez les adolescents.

Méthodes : 100 élèves ont été sélectionnés dans une école secondaire du centre de Rome, 20 de chaque année scolaire (entre 14 et 18 ans), 10 filles et 10 garçons choisis de façon aléatoire. Ceux-ci ont fait l'objet d'un protocole d'évaluation comprenant : une tâche narrative, une tâche déductive, un questionnaire d'auto-évaluation et une échelle d'observation. Au préalable, le test de matrices de Raven a éliminé les déficits cognitifs possibles. Les étudiants qui ont échoué à la tâche narrative ou la tâche déductive ont également subi un test de vocabulaire (Boston Naming Test).

Résultats : 30% des sujets ont échoué à la tâche narrative, 34% à la tâche déductive (14% des deux tâches). Ce groupe a effectué le Boston Naming qui n'a été réussi que par 2%. Le pourcentage d'échec au niveau des matières était plus élevé chez les garçons pour les deux tâches. En ce qui concerne les aspects métacognitifs, l'auto-évaluation a indiqué que 46% de l'échantillon avait des difficultés de communication. L'échelle d'observation Broadmoor n'a enregistré aucune difficulté dans la communication non verbale.

Conclusions : Notre étude confirme que les difficultés de langage persistent jusqu'à l'âge de l'adolescence. Environ 2 sujets dans chaque classe démontrent ces difficultés, confirmant les études relatives à l'enfance menées dans d'autres langues. Des recherches supplémentaires sont nécessaires dans ce domaine, ainsi que de nouvelles perspectives sur l'intervention des Orthophonistes à l'adolescence.

Mots-clés : troubles développementaux du langage, dépistage

CO 109

(1213) - LA PREVALENCE ET LA NATURE DU DISCOURS, DU LANGAGE ET LES BESOINS EN TERMES DE COMMUNICATION DES ADULTES AU CHOMAGE DE LONGUE DUREE

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Objectifs : L'étude a pour objectif d'étudier la prévalence de la nature du discours, du langage et les compétences communicatives d'un groupe d'adultes au chômage de longue durée. Les difficultés de communication et de langage peuvent être présents à long terme, et influencer la performance académique, le fonctionnement psychosocial et l'emploi (Johnson et al., 2010). La plupart des recherches dans ce domaine se concentrent sur les jeunes enfants, et la recherche concernant les enfants moins jeunes et les adultes ayant des besoins dans le domaine du langage de la parole et de la communication (*speech, Language and Communication Needs -SLCN*) est limitée. Une étude de faible envergure a montré que 88% des hommes au chômage âgés entre 18 et 24 ans présentaient des troubles du langage (Elliot, 2011). Il est important d'en savoir davantage sur le langage et la communication des adultes au chômage de longue durée car la capacité à communiquer de manière compétente est essentielle au bien-être et est cruciale pour pouvoir trouver un emploi et le garder.

Méthodologie : L'étude est transversale et utilise un échantillonnage intentionnel. Les participants ont été recrutés à partir de l'un des principaux fournisseurs de services en matière d'employabilité au Royaume-Uni. Les 148 participants ont complété une courte auto-évaluation standardisée

sur le langage et la communication, le *Communication Checklist – Self Report* (Bishop et al., 2009), qui explore la structure du langage, les compétences pragmatiques et l'investissement social.

Résultats : Une proportion substantielle de participants ont rapporté des difficultés en termes de structure du langage, des compétences pragmatiques et de l'investissement social. Les adultes plus âgés, (de 26 ans et plus) ont rapporté davantage de difficultés que ceux de la tranche d'âge inférieure (18-25 ans). Plusieurs de ces difficultés n'avaient jamais été identifiés au préalable.

Conclusions : Le langage et l'investissement social jouent un rôle crucial sur le lieu de travail, et sont nécessaires pour obtenir et garder un emploi. L'identification et la compréhension des besoins dans le domaine du langage, de la parole et de la communication chez les adultes au chômage de longue durée va permettre le développement d'interventions efficaces dans le domaine du discours et du langage, et leur fournira un niveau de soutien suffisant afin qu'ils puissent contribuer pleinement à la société.

Mots-clés : Troubles du développement du langage, pragmatique, évaluation, diagnostic fonctionnel

CO 110

(1270) - « EXPLORER LES EXPÉRIENCES VÉCUES EN ORTHOPHONIE POUR DES ENFANTS PRÉSENTANT DES TROUBLES DÉVELOPPEMENTAUX DU LANGAGE »

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McMenamin, Ruth - Université nationale d'Irlande, Galway, Irlande

Objectifs : Les enfants présentant un trouble développemental du langage (TDL) peuvent éprouver des difficultés pendant toute leur vie. Celles-ci ont un impact sur l'interaction entre pairs et le bien-être émotionnel. Les orthophonistes peuvent promouvoir la capacité communicative pour plus d'indépendance et d'autonomie (Association Irlandaise des Orthophonistes, IASLT, 2017). Il est nécessaire d'évaluer les services du point de vue de l'enfant et de prendre des décisions en matière de prestations de services basées sur les besoins et les préférences du client (Lyons et Roulstone, 2016, IASLT, 2017). La perspective du client est une considération vitale dans l'application de la pratique fondée sur les preuves (EBP - American Speech-Hearing Association, ASHA, 2017). À ce jour, une grande partie de la recherche en orthophonie sur les enfants présentant des troubles de la communication, a utilisé des méthodes quantitatives (Lyons, 2014). Cette étude vise à explorer l'expérience vécue des TDL chez les enfants plus âgés et de l'intervention orthophonique utilisant une approche participative.

Méthodes : Les entretiens ont été complétés avec trois enfants âgés de 10 à 12 ans présentant un TDL et ayant eu un suivi orthophonique dans l'ouest de l'Irlande. Les enfants ont été invités à co-crée et à co-analyser des données conformément à une méthodologie de recherche participative. Cette approche met l'accent sur l'engagement significatif des enfants en tant que co-chercheurs dans la production de données. Quatre thèmes ont émergé des données : identité, soutien, engagement et école. Les enfants ont décrit l'identité en termes de sport et de relations, d'accès à des personnes et à du matériel de soutien, d'énergie et d'écoute pour l'engagement, les expériences d'alphabétisation et la liaison avec l'école.

Résultats : Les résultats de cette étude ont fourni un aperçu des perceptions qu'ont les enfants de leur propre identité et de leurs expériences du suivi orthophonique. Les résultats soutiennent une approche focalisée dans la pratique clinique et ont des implications pratiques directes sur la façon dont l'intervention est réalisée.

Conclusions : Les résultats démontrent également l'utilité des techniques participatives pour la recherche auprès des utilisateurs de services avec les personnes ayant des difficultés de communication et mettent en évidence les possibilités d'une recherche plus approfondie.

Mots-clés : Troubles développementaux du langage

CO 111

(1194) – IMPACT : AMELIORER L'INTERACTION PARENT-ENFANT AFIN D'ENCOURAGER LE DEVELOPPEMENT DU LANGAGE

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Law, James - Newcastle University, Royaume-Uni

Objectifs : L'objectif d'IMPACT (une bourse Marie Skłodowska-Curie pour le premier auteur) est de déterminer si une échelle d'observation de l'interaction parent-enfant pourrait être développée pour être utilisée par les aides-soignants de l'enfance afin d'identifier les familles pouvant bénéficier d'interventions dans le domaine du langage en se focalisant sur les parents. Un travail est actuellement en cours avec des infirmiers/ères et des familles pour recueillir les données et en évaluer la faisabilité. Cette présentation fait état du travail préliminaire démontrant la pertinence d'une telle échelle évaluant l'interaction parent-enfant en tant qu'instrument de mesure des comportements parentaux associés au progrès linguistiques.

Méthodologie : Des données basées sur l'observation d'une cohorte communautaire de dyades mère-enfant ont été utilisées pour développer l'échelle d'interaction mère-enfant, une mesure de réactivité parentale (réponse contingente, appropriée et prompte aux invitations de l'enfant). Auprès d'enfants âgés de 2 ans, 251 dyades mère-enfant ont été filmés pendant 15 minutes de jeu libre. Les vidéos ont été aveuglément évaluées quant aux aspects suivants ; 1) une évaluation détaillée de la réactivité pouvant prévoir les résultats dans le domaine du langage et 2) l'échelle d'interaction parent-enfant (une réactivité évaluée sur l'échelle de Likert entre 1 et 5). Les aspects réceptifs et expressifs du langage de l'enfant ont été évalués à l'âge de 3 et 4 ans.

Résultats : Dans des modèles de régression linéaire ajustés ; l'échelle d'interaction parent-enfant a prédit dans une grande mesure les résultats standard réceptifs et expressifs aux âges de 3 ans (coefficient=5.9, $p<0.001$; coefficient=5.4, $p<0.001$ respectivement) et 4 ans (coefficient=4.6, $p<0.001$; coefficient=3.1, $p=0.004$ respectivement). L'échelle de l'interaction parent-enfant a été positivement reliée au codage détaillé de la réactivité parentale ($r(242)=.44$, $p<.001$).

Conclusions : Les résultats ont montré que l'échelle d'interaction parent-enfant basé sur l'observation peut être utilisée de manière efficace et fiable sur un échantillon de dyades communautaires mère-enfant.

IMPACT testera si les infirmières et infirmiers peuvent être formés à l'utilisation de l'échelle de mesure afin d'évaluer l'interaction parent-enfant pendant les visites de santé de routine. Si l'échelle d'évaluation s'avère faisable et efficace, elle pourra potentiellement être incorporée aux services de santé universels, permettant aux soignants de la santé des enfants d'avoir un outil additionnel pour identifier les enfants pouvant bénéficier d'interventions ciblant les interactions parent-enfant.

Mots-clés : Troubles de développement du langage, prévention, intervention

CO 112

(1298) - EFFICACITÉ DES COMMENTAIRES PARENTAUX DANS LA THÉRAPIE D'INTERACTION PARENT-ENFANT

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Objectifs : L'objectif de cette étude était d'évaluer l'efficacité de la formation parentale avec retour d'expérience pour les enfants ayant des troubles développementaux du langage (TDL).

La question est de savoir si cette formation est efficace pour les problèmes phonologiques ainsi que les problèmes de langage.

Méthodes : Dans un ECR, quarante enfants monolingues présentant un TDL et âgés de 3, 3 ans ont été assignées à un groupe d'intervention ou un groupe témoin. Tous les enfants fréquentaient des centres de jour spéciaux pour les enfants atteints de TDL. Ils ont été évalués deux fois, au départ (T0) et six mois plus tard (T1). Les mesures comprenaient des tests linguistiques standardisés, l'analyse du langage des parents et des enfants et des questionnaires parentaux (auto-évaluation, qualité de vie, QDV). Tous les parents ont assisté aux réunions de groupe d'information sur les techniques de facilitation du langage (TFL), telles que la restructuration et la réduction de la vitesse d'élocution. Les enfants du groupe témoin ont suivi des séances d'orthophonie individuelles de 30 minutes hebdomadaires sans leurs parents pendant 24 semaines. Dans le groupe d'intervention, les parents et leurs enfants ont suivi des séances bihebdomadaires de 50 minutes pendant 24 semaines, consistant en une formation parentale avec retour d'expérience par les orthophonistes. Leurs parents ont appliqué le TFL à la maison pendant les routines quotidiennes.

Résultats : Au départ, la plupart des enfants avaient des retards de langage expressifs ainsi qu'une baisse de leur qualité de vie. Plus de 50% avaient un retard de développement phonologique. Le nombre d'énoncés des parents était trois fois plus élevé que celui de leurs enfants. Leur durée moyenne d'expression était deux fois plus élevée. Les résultats préliminaires au T1 indiquent une amélioration significative chez les enfants des deux groupes dans toutes les mesures, y compris la phonologie. Tous les parents ont considérablement réduit leur nombre d'énoncés et de questions. Les parents du groupe d'intervention ont signalé une augmentation significative de leur autonomie, alors que les parents du groupe témoin ont signalé une diminution.

Conclusions : La formation parentale avec retour d'expérience est un traitement prometteur pour les jeunes enfants atteints de TDL. Le programme ajoute des options au traitement pour les parents. Il crée ainsi des choix pour la prise de décision partagée.

Mots-clés : Intervention

CO 113

(1118) - ENGAGEMENT: PARENTS ENGAGÉS DANS L'OBJECTIFS D'ARTICULATION DE L'OBJECTI PARENTS IN GOAL ARTICULATION ET DANS L'OBJECTIF D'ÉVALUATION DES JEUNES ENFANTS ATTEINTS DE TROUBLES DE DÉVELOPPEMENT DU LANGAGE

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Objectifs : Dans les soins axés pour le patient de jeunes enfants présentant des troubles du développement de langage (TDL) le traitement doit s'adresser directement aux priorités de l'enfant et du parent. Néanmoins, les orthophonistes notent que les parents sont souvent incapables d'exprimer leurs priorités et inquiétudes, ce qui rend difficile l'établissement des buts spécifiques et fonctionnels qui mènent à des résultats appropriés pour les enfants présentant des troubles TDL. Ce projet visait à mettre au point un outil pour les orthophonistes pour structurer une entrevue avec les parents au sujet des priorités et des inquiétudes et pour impliquer les parents dans la mise en place et l'évaluation des objectifs spécifiques pour la participation communicative.

Méthodes : L'outil "ENGAGE" a été mis au point en utilisant deux méthodes consécutivement : une étude Delphi avec les parents et les professionnels (n=42) et une étude de conception avec les orthophonistes (n=8). En fonction des résultats, les concepteurs ont mis au point un prototype qui fut testé dans une étude d'utilité avec les orthophonistes (n=68) et les parents (n=11).

Au début et à la fin de l'étude, les orthophonistes ont évalué l'outil par rapport à son attrait, son utilisation facile, sa fonctionnalité et sa sécurité sur une échelle de 10 points.

Résultats : L'étude Delphi eut comme résultat la description de 36 articles sur les aspects de la participation communicative que les parents et les professionnels trouvent importants. La conception de l'étude a eu pour résultat un ensemble de critères que l'outil doit rencontrer et une exploration des directions envisageables pour la conception. Avec cette contribution, un prototype a été mis au point. Par la suite, des améliorations ont été effectuées sur le prototype avec diverses versions durant le test d'utilisation par les orthophonistes et les parents. L'outil final fut évalué par rapport à son attrait, son utilisation facile, sa fonctionnalité et sa sécurité avec des scores allant de 7.6 à 8.4 sur 10.

Conclusions : L'outil "ENGAGE" satisfait les critères définis par les acteurs. "ENGAGE" aide les parents à clarifier les priorités et les conduit vers l'établissement de choix de buts spécifiques fonctionnels pour leurs enfants : des aspects importants des soins axés sur le patient. En incluant, les utilisateurs finaux dans le processus de développement, la probabilité, de la mise au point d'un outil utilisable semble s'accroître. Cette présentation se concentre sur le développement du prototype et des tests d'utilisation.

CO 114

(1146) - VERS UNE APPROCHE PLUS ORIENTÉE VERS LA FAMILLE DANS LES CLINIQUES "WELL CHILD" CONCERNANT LE DÉPISTAGE DES TROUBLES DU DÉVELOPPEMENT DU LANGAGE CHEZ LES JEUNES ENFANTS.

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Visser-Bochane, Margot - Université des Sciences appliquées de Hanze, groupe de recherche sur le bien vieillir, soins de soins et santé regroupé, Groningen, Pays-Bas

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Objectifs : Nous avons fait une étude qualitative pour explorer les perceptions des parents/du personnel soignant des enfants avec – et sans – troubles du développement du langage (TDL) sur le dépistage du langage chez l'enfant dans les cliniques "Well Child Clinics" (WCC).

Méthodes : Nous avons interviewé 10 parents d'enfants monolingues atteints de TDL, 21 parents d'enfants monolingues sans TDL et 7 parents d'enfants plurilingues sans TDL. Les âges des enfants allaient de 1;0 à 4;9 ans. Nous avons étudié les données à travers l'analyse du contenu. Toutes les entrevues ont été transcrites textuellement et ont été analysées en utilisant une théorie fondée sur les faits.

Résultats : Six thèmes inductifs ont émergé des entrevues: (1) SYSTÈME DE SOINS DE SANTÉ : les parents ont besoin de plus de clarté au sujet des chemins à suivre pour les soins, l'orthophoniste est considéré comme un expert dans le diagnostic de la TDL; (2) CONSULTATION : la continuité dans les soins ainsi que l'environnement du contexte familial est importante dans le dépistage; (3) PERCEPTION : les parents étaient heureux du soutien reçu pour les choses de base et de l'approche d'un professionnel. Certains parents étaient moins satisfaits, à cause du jugement rapide sur le développement du langage de leurs enfants ou parce que l'orientation vers des diagnostics supplémentaires se faisait trop tardivement ; (4) DÉSIRS : les parents ont besoin de plus d'information sur le pour et le contre des différentes solutions de soins, et les WCC devraient

se concentrer sur les aspects plus psychosociaux du développement de l'enfant; (5) FACTEURS PARENTS : les parents ont différentes stratégies pour faire face aux TDL, et certains d'entre eux ne sont pas sûrs d'eux sur la manière d'élever leur enfant; (6) FACTEURS DE L'ENFANT : les parents ont pu expliquer les différences de leur comportement dans les différents contextes, les conséquences du problème de langage et le caractère de leurs enfants.

Conclusions : Les domaines cibles pour améliorer le dépistage structurel du langage dans les WCC sont : plus de clarté par rapport aux pour et aux contres des différents plans de soins, plus de continuité dans le soin, octroi de plus de responsabilisation des parents, adaptation aux besoins et faire face aux stratégies des parents et inclusion de l'environnement familial dans le dépistage du langage.

Mots clés : troubles du développement du langage, dépistage, prévention

CO 115

(1318) - EFFICACITÉ D'UN PROGRAMME DE PARENTS SUR LA COMMUNICATION PARENT - ENFANT CHEZ LES ENFANTS D'ÂGE SCOLAIRE PRÉSENTANT DES TROUBLES DÉVELOPPEMENTAUX DU LANGAGE

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Objectif : Les enfants présentant des troubles développementaux du langage (TDL) suivent une thérapie intensive et courte de huit semaines au Centre de la parole et du langage de l'institut Royal Dutch Kentalis. Leurs parents sont impliqués dans ce traitement. Ils sont entraînés avec le programme vidéo de coaching en communication interactive de Kentalis (Interaction Communication Video Coaching Program - ICVC). La présente étude vise à clarifier l'efficacité de ce programme sur les compétences communicationnelles parent - enfant dans l'interaction avec leur enfant d'âge scolaire présentant un TDL.

Méthodologie : Une conception pré-test / post-test des participants a été appliquée. Les données ont été recueillies selon trois points de mesure. Deux mesures ont été réalisées pendant le programme de traitement régulier de huit semaines, un point de mesure à quatre semaines de la thérapie. Les données proviennent d'interactions parent - enfant enregistrées sur vidéo et de questionnaires. 11 parents ont rempli les questionnaires. Les mesures des résultats étaient liées aux interactions suivant des initiatives de l'enfant, aux questions posées et à l'application de techniques de modélisation linguistique.

Résultat : Après la thérapie, des changements significatifs ont été observés au niveau des tâches « suivre l'initiative de l'enfant » (1) et de « poser des questions » (2). La première variable (1) exprimée dans un quotient suivant' (QS), a diminué. La deuxième variable (2) exprimée dans un quotient question' (QQ) a significativement diminué. Aucun changement significatif n'a été signalé dans « l'application de techniques de modélisation linguistique ». Les scores totaux sur les questionnaires ont révélé une augmentation significative dans le comportement communicatif des parents.

Conclusion : Après la période d'intervention de huit semaines, le programme ICVC semble être efficace, aidant à modifier le comportement de questionnement des parents et à améliorer les compétences d'évaluation de leur comportement de communication lors d'interactions avec leur enfant d'âge scolaire atteint de TDL. Il n'y a pas d'explication claire à ce jour sur le « quotient suivant » décroissant, qui devrait augmenter pendant la thérapie.

Mots-clés : Troubles développementaux du langage

CO 116

(1018) - LA LECTURE INTERACTIVE POUR STIMULER LES COMPETENCES NARRATIVES DES ENFANTS ISSUS DE MILIEUX VULNERABLES

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Objectif : Les compétences en production de récits des enfants sont hautement prédictives de leur développement langagier (Bishop, & Edmundson, 1987) ainsi que de leurs performances scolaires futures (Schelstraete, Bragard, Collette, Nossent, & Van Schendel, 2011). Or les enfants qui évoluent dans un milieu vulnérable présentent des difficultés spécifiques en production de récits (Lefebvre, & Giroux, 2010). Selon certains auteurs (Lever, & Sénéchal, 2011), les séances de lecture interactive auraient un effet bénéfique sur le développement des capacités narratives. Nous analysons les effets d'un programme d'intervention en lecture interactive sur la production de récits d'enfants issus de milieux fragiles, au niveau de la macrostructure mais également au niveau de la microstructure, ce que peu d'études ont exploré jusqu'ici.

Méthodes : Un programme d'intervention en lecture interactive de 30 séances a été proposé à 172 enfants issus d'écoles à discriminations positives du centre-ville de Bruxelles (groupe expérimental). Un second groupe, contrôle, n'a bénéficié d'aucune intervention spécifique (N=87). Le programme est proposé en classe, à l'ensemble des élèves, par leur professeur habituel. Les compétences narratives ont été évaluées au moyen de l'ENNI (Schneider, Dubé, & Hayward, 2005). Les productions ont été transcrites via le logiciel CHILDES (MacWhinney, 1991) et analysées au niveau de la macro et de la microstructure.

Résultats : Les résultats ne révèlent aucune différence significative entre les deux groupes concernant la macrostructure. Cependant, au niveau de la microstructure, les résultats montrent des progrès significativement plus importants pour le groupe expérimental. Ces progrès varient en fonction du niveau langagier des enfants (pas de difficultés, difficultés modérées, difficultés sévères).

Conclusion : Implémenter la pratique de la lecture interactive dans nos écoles maternelles à discriminations positives permet de soutenir le développement des capacités narratives des enfants. Nous mettons en évidence un bénéfice significatif pour les éléments de microstructure. Des moyens complémentaires pour améliorer davantage le développement des compétences en macrostructure sont à réfléchir.

Mots clés : **Domaine spécifique - Troubles développementaux du langage, Conditions - Plurilinguisme, Champ - Intervention, Champ - Prévention**

CO 117

(1196) - SOLEM (SOUTENIR ET OBSERVER LE LANGAGE ET LA COMMUNICATION DES ENFANTS EN CLASSE MATERNELLE) : UN OUTIL D'OBSERVATION POUR LES ENSEIGNANTS

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Objectifs : L'école maternelle constitue un contexte privilégié pour soutenir le développement langagier et communicationnel des enfants. En effet, les enfants ont l'occasion d'y expérimenter de façon quotidienne des interactions riches et diversifiées avec les enseignants, susceptibles d'étayer leur développement langagier (Pence et al., 2008). En Belgique francophone, les enseignants

de maternelle font état d'un manque d'outils pour observer et soutenir le développement langagier des enfants. L'outil SOLEM a été développé pour répondre à ce besoin et pour faciliter la concertation entre les enseignants et les agents psycho-médico-sociaux.

Méthodes : Quatre groupes nominaux ont été réalisés auprès de 39 enseignants, agents psycho-médico-sociaux et directions d'écoles afin d'identifier leurs besoins. L'outil a ensuite été élaboré par une équipe de logopèdes et mis à l'essai dans 22 classes pilotes, afin d'en valider la forme et le contenu. 219 enfants de ces classes ont été évalués de façon parallèle avec l'Évaluation du Langage Oral (ELO ; Khomsi, 2001), afin de déterminer la sensibilité et la spécificité de l'outil.

Résultats : Lors des groupes nominaux, plusieurs besoins ont été identifiés : accorder de l'importance aux aspects moins formels du langage, avoir une démarche en arborescence adaptée à chaque enfant, qui mène à des pistes d'actions concrètes. Le processus de validation montre que l'outil SOLEM dispose d'une sensibilité – détecter la nécessité d'un soutien langagier chez les enfants qui en ont besoin – de 0.79 et d'une spécificité – objectiver la non-nécessité d'un soutien langagier chez les enfants sans difficulté – de 0.93, ce qui correspond à une sensibilité acceptable et une spécificité de bon niveau (Plante & Vance, 1994).

Conclusion : L'outil SOLEM permet aux enseignants d'identifier les enfants vulnérables sur le plan du langage et de la communication, et les guide dans le choix et l'utilisation de stratégies de soutien langagier qui peuvent être utilisées durant leur routine et leurs activités existantes.

Mots-clés : évaluation, apprentissage interprofessionnel

CO 118

(1134) - L'ÉVALUATION DES COMPÉTENCES EN LECTURE DES ENFANTS AVEC DÉFICIENCE INTELLECTUELLE

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Objectifs : De nombreuses études montrent que les personnes avec déficience intellectuelle présentent très souvent des difficultés en langage écrit - compétence cruciale pour la participation sociale - qui dépassent leurs limitations intellectuelles (Chanell, Loveall, & Conners, 2013). Ce constat questionne les interventions pédagogiques et thérapeutiques dont ils bénéficient. Ce champ de connaissances est de manière générale peu développé et l'est essentiellement dans la littérature scientifique anglophone. Afin de mesurer tant les compétences réelles de ces enfants en langage écrit que l'efficacité des interventions, il est fondamental de disposer d'instruments d'évaluation adaptés. L'objectif principal de la recherche ELODI (Enseigner la Lecture de manière Optimale aux élèves ayant une Déficience Intellectuelle, subside du Fonds National Suisse de la Recherche scientifique no 100019_173096), menée en Suisse, est d'évaluer les effets d'un nouveau programme d'enseignement de la lecture sur les performances des élèves. Il nécessite de développer un instrument de mesure permettant d'évaluer les performances en lecture (lecture de graphèmes, de pseudo-mots, de mots réguliers...) et ses prérequis (connaissance des correspondances grapho-phonémiques, conscience phonologique) qui soit adapté aux enfants francophones présentant une déficience intellectuelle, verbaux et non-verbaux.

Méthodes : Sur la base notamment d'un instrument germanophone validé pour la déficience intellectuelle (Moser & Bayer, 2007 ; Sermier Dessemontet & de Chambrier, 2015), une version adaptée aux spécificités de la langue française a été créée. Les items ont été appariés en termes de longueur, complexité phonologique et fréquence dans la langue. En outre, plusieurs épreuves ont été créées pour mesurer les compétences d'élèves non-verbaux. Les tâches de pointage, de jugement ou d'appariement ont ainsi été privilégiées.

Conclusion : La présente communication vise à présenter cet instrument de mesure et les adaptations qui suivront le pré-test qui est en cours dans le cadre de plusieurs études de cas.

Mots-clés : Handicap spécifique du langage, Déficience cognitive, Diagnostic fonctionnel

CO 119

(1358) - ENTRAÎNER LA MÉMOIRE DE TRAVAIL CHEZ L'ENFANT AVEC TDL : QUELLE EFFICACITÉ SUR LE LANGAGE ?

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Stanford, Emily - Université de Genève, Suisse

Objectifs : Parmi les théories explicatives récentes du Trouble Développementale du Langage (TDL), certaines attribuent les déficits linguistiques observés à des limitations en Mémoire de Travail (MdT). Plusieurs études ont effectivement mis en évidence un lien fort entre la MdT et le traitement des phrases complexes chez les enfants avec TDL (Montgomery & Evans, 2009 ; Marinis & Saddy, 2013 ; Frizelle & Fletcher, 2015 ; Durrleman & Delage, 2016 ; Delage & Frauenfelder, soumis). Notre projet actuel s'interroge sur les effets que peut produire un entraînement cognitif sur le développement langagier des enfants avec TDL.

Méthodes : L'entraînement de la MdT que nous avons créé est proposé sur Ipad et cible les empan simples (=nécessitant un stockage et un rappel des informations) et complexes (=nécessitant un traitement supplémentaire des informations stockées). Le programme comprend 12 heures d'entraînement réparties sur 8 semaines. A l'heure actuelle, 33 enfants (14 contrôles/19 TDL), âgés de 6 à 12 ans, ont été entraînés en MdT. Leurs résultats seront comparés à ceux de 22 enfants présentant les mêmes caractéristiques mais ayant suivi un entraînement alternatif, basé sur les compétences scolaires, qui vise à s'assurer des effets spécifiques que l'on s'attend à retrouver pour l'entraînement cible.

Résultats : Les premiers résultats analysés sont encourageants. Ils révèlent un effet de transfert direct, c'est-à-dire que les enfants avec TDL améliorent significativement leurs performances sur des tâches de MdT non entraînées, et notamment pour la mémoire sérielle qui s'était avérée prédictive des résultats en syntaxe (Delage & Frauenfelder, soumis). Une amélioration des performances en syntaxe semble également se dessiner pour les enfants ayant suivi l'entraînement en MdT, particulièrement sur le versant productif.

Si les résultats globaux confirment à terme l'efficacité de l'entraînement cible, avec un bénéfice attendu sur la MdT mais surtout sur les capacités langagières des enfants, la suite logique sera une transposition à la pratique des orthophonistes/logopédistes.

CO 120

(1210) - EXAMEN DE LA CONFUSIONS P/B EN LECTURE : AU DELA DE L'OPPOSITION VISUELLE VS PHONOLOGIQUE

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Medina, Franck - N/A

Belmer, Coline - N/A

Objectifs : Notre recherche s'inscrit dans la modélisation de la lecture comme système à trois dimensions (grapho-phonémique, phonologique, visuo-graphémique) décrit par Serniclaes et Sprenger-Charolles (2015). Les «confusions», substitutions préférentielles d'une lettre par une autre, font partie des signes d'appel d'une dyslexie ; classiquement elles sont typées en visuelles ou phonologiques. Nous nous sommes penchés sur le cas des confusions p/b chez des enfants de CE1, CE2 et CM1 suivis en orthophonie, en ciblant les perturbations des processus sous-jacents (phonologiques, visuo-attentionnels et mnésiques).

Méthodes : Nous avons construit un protocole permettant de distinguer la dimension centrale (ou mnésique) de la confusion, la qualité de la lecture au niveau lexical (vrais mots constituants des paires minimales), et sub-lexical (logatomes). Puis nous avons adjoint des épreuves ciblant la dimension phonologique (répétition de logatomes portant le phonème /p/ ou /b/, discrimination de paires de logatomes) et des épreuves s'intéressant à la dimension visuo-attentionnelle (lecture avec changement de police ou de casse, barrage des graphies p ou b dans des quintets de lettres, influence de la présentation - normale ou en caractères espacés. Ce protocole a été transmis au printemps 2017 à des orthophonistes libérales réparties sur le territoire français après une formation. Les données ont été recueillies anonymement via un formulaire en ligne.

Résultats : Le protocole est encore en cours : ce jour nous avons 20 réponses (6 CE1, 9 CE2 et 5 CM1) pour des enfants porteurs de la confusion (donc avec plus de 10% d'erreurs à l'épreuve de lecture de mots).

6 enfants ne présentent que des erreurs en lecture de mots et logatomes, 9 enfants échouent en sus sur la dimension visuo-attentionnelle, 2 sur la dimension phonologique et 3 pour les 3 dimensions.

Conclusion : Nos premières conclusions questionnent l'usage clinique d'une typologie binaire (phonologique/visuelle) des confusions et amènent à réfléchir tant sur le plan théorique que sur les approches rééducatives.

Mots-clés : **Dyslexie, Diagnostic fonctionnel, Troubles spécifiques de l'apprentissage**

CO 121

(1445) - LES EFFETS DE LA THÉRAPIE NAP CHEZ LES PATIENTS ATTEINTS DE TROUBLES DE LA VOIX

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Adamiak, Justyna - Université d'Éducation Physique, Cracovie, Pologne

Gattner, Halina - Université d'Éducation Physique, Cracovie, Pologne

Kostrzon, Magdalena - Station Thermale de la Mine de Sel de Wieliczka, Pologne

Szczygieł, Elżbieta - Université d'Éducation Physique, Cracovie, Pologne

Golec, Joanna - Université d'Éducation Physique, Cracovie, Pologne

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Objectifs : Le but de l'étude était d'évaluer l'efficacité de la thérapie NAP sur l'amélioration de la voix chez les patients souffrant d'asthme et de troubles de la voix liés, traités dans un environnement souterrain du Centre de Santé de la Mine de Sel de Wieliczka.

Méthodes : 17 patients (âge moyen 54 ± 15 ans) ont été traités dans l'étude pilote, suivant un traitement dans la partie souterraine du Centre de Santé de la Mine de Sel de Wieliczka. Les sujets ont assisté à des séances de thérapie NAP qui consistaient en 12 séances de groupe et 2 séances individuelles. Les dimensions thoraciques pendant l'inspiration et l'expiration, l'indicateur VO₂max et un temps maximal de phonation ont été mesurés avant et après une réadaptation de trois semaines.

Résultats : Les auteurs ont observé une amélioration significative dans les trois aspects. Le temps maximum de phonation s'est considérablement amélioré et sa valeur moyenne est passée de 11,4 à 14,6 secondes. La différence thoracique moyenne entre l'inspiration maximale et l'expiration a augmenté significativement de 2,47 cm à 4,44 cm.

Conclusions : Une réadaptation complète incluant un environnement souterrain, la respiration et un traitement postural augmentant l'élasticité des supra- et infra hyoïdes basée sur les techniques thérapeutiques NAP peuvent améliorer de façon significative la performance vocale chez les patients asthmatiques.

Mots-clés : Troubles vocaux, troubles neuromusculaires, voix professionnelle

ATELIERS



Ateliers

WS 001

(1022) - LA PLATE-FORME INTERACTIVE TIWOUH AU SERVICE DES ENFANTS AVEC TROUBLES DE LA COMMUNICATION ET DU LANGAGE

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Théate, Caroline - TIWOUH SA

Les interventions CAA augmentent les compétences communicatives des personnes ne pouvant s'exprimer de manière intelligible (Ganz et al., 2012). Par ailleurs, les rééducations langagières s'appuient de plus en plus sur des solutions technologiques (Logan et al., 2017). La plate-forme Tiwouh a été conçue par une équipe multidisciplinaire alliant professionnels de la technologie et orthophonistes. Basé sur une analyse des besoins (Maillart et al., 2015), cet outil combine une dimension technologique (tablette, synthèse vocale, ...) et participative (partage d'exercices, support aux utilisateurs, ...). La plate-forme permet au thérapeute de créer et d'adapter différentes applications complémentaires : CAA, vocabulaire, syntaxe, adaptation de jeux/livres, rituels, conversation, langage écrit. Elle propose de nombreux modèles pré-construits de difficulté croissante. La réussite d'une intervention CAA étant conditionnée à l'implication parentale (Morel, 2015), elle permet d'impliquer les parents dans la construction des exercices. Les exercices créés peuvent être partagés entre utilisateurs.

Dans cet atelier, nous proposerons une introduction théorique sur la place des technologies dans les interventions langagières ; nous présenterons la plate-forme et ses différentes possibilités, notamment en termes de personnalisation afin d'optimiser le bénéfice de l'intervention (McNaughton & Light, 2013). A partir d'une vignette clinique, nous nous connecterons à la plate-forme et nous créerons des exercices adaptés à la situation présentée. Nous proposerons des vidéos illustrant l'utilisation en séance de rééducation orthophonique et en famille.

A l'issue de l'atelier, les participants seront familiarisés à l'utilisation de la plate-forme et à la construction d'exercices. Ils manipuleront les exercices créés et transférés sur des tablettes. Ils seront ainsi initiés à implémenter cet outil dans leurs prises en charge.

La plate-forme collaborative TIWOUH permet aux orthophonistes de s'appuyer sur une solution technologique innovante pour aborder de manière personnalisée les troubles de la communication et du langage et soutenir les familles dans la généralisation des acquis et l'implémentation dans la vie quotidienne.

Mots-clés : Intervention, Troubles développementaux du langage

WS 002

WS - (1329) – L'ÉCHELLE D'ALIMENTATION DE L'HÔPITAL DES ENFANTS DE MONTRÉAL : UNE MANIÈRE RAPIDE ET EFFICACE D'IDENTIFIER LES DIFFICULTÉS D'ALIMENTATION DANS LA POPULATION EN PÉDIATRIE

Lopes, Ana Claudia - *École Supérieur de Santé d'Alcoitão, Portugal*

Santos, Marta - *École Supérieur de Santé d'Alcoitão, Portugal*

Gama, Irene - *École Supérieur de Santé d'Alcoitão, Portugal*

L'objectif est de démontrer que la version luso-européenne de l'échelle d'alimentation de l'hôpital des enfants de Montréal, qui interroge le personnel soignant sur les enfants âgés de six mois à six ans souffrant de troubles de l'alimentation, est une manière rapide et efficace d'identifier les difficultés d'alimentation dans la population pédiatrique. Cette échelle a subi une adaptation culturelle et linguistique par la traduction et la rétroversion de l'instrument

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luso-européen par une analyse faite par le procédé Delphi. Cette version a été soumise une phase de prétests et une révision finale qui fut exécutée et validée sur la population portugaise. L'échelle a été fournie au personnel soignant s'occupant de 301 enfants en pleine phase de croissance et à 29 membres du personnel soignant s'occupant d'enfants ayant des troubles de l'alimentation.

L'analyse de l'échelle par les experts déboucha sur un grand accord par rapport au contenu des sujets (71%) et un excellent accord quant à la pertinence (100%). Des différences significatives statistiques ($p < 0.05$) furent trouvées et étudiées parmi les groupes étudiés pour le score final. L'instrument a une excellente consistance entre les deux groupes ($\alpha = 0.910$) et a prouvé être un excellent outil pour identifier les difficultés d'alimentation dans la population en pédiatrie. La version portugaise de cette échelle est acceptable linguistiquement et culturellement et a démontré une fiabilité en distinguant les opinions du personnel soignant et peut-être utilisé par les professionnels de la santé tels que les pédiatres, les infirmiers et les nutritionnistes afin d'identifier les enfants souffrant de troubles de l'alimentation en les référant aux orthophonistes.

Mots-clés : Troubles de l'alimentation/la déglutition, dépistages

WS 003

(1425) – INTÉGRER LA NEUROPLASTICITÉ DANS VOTRE PRATIQUE CLINIQUE : EXEMPLES DANS LA MALADIE DE PARKINSON ET EN PÉDIATRIE UTILISANT LE PROTOCOLE BASÉ SUR LES PREUVES LSVT LOUD®

Fox, Cynthia - LSVT Global, Inc., États-Unis

Ramig, Lorraine - Centre National pour la Voix et la Parole, Université du Colorado, Boulder, États-Unis

Boliek, Carol - Université de l'Alberta, Edmonton, Canada

Guse, Laura - LSVT Global, Inc., États-Unis

Cet atelier définira les principes clés guidant la neuroplasticité dépendante de l'activité ; il démontrera comment ces principes peuvent être intégrés dans un traitement défini, basé sur les preuves, utilisant le « Lee Silverman Voice Treatment » (LSVT LOUD) comme exemple. On y discutera des données des résultats comportementaux et neutres provenant de la LSVT LOUD chez des personnes atteintes de Parkinson et chez des enfants atteints de paralysie cérébrale. Il est clair que de nombreux cliniciens reconnaissent l'importance des principes de la neuroplasticité, mais le défi subsiste sur la manière de l'intégrer dans la pratique clinique. Les principes tels que la spécificité de la formation, les répétitions suffisantes, le timing et l'intensité de la formation seront définis ; des données provenant d'études sur les animaux et les humains seront présentées, afin d'étayer ces principes de neuroplasticité. La méthode LSVT LOUD sera décrite comme un exemple, sur la manière d'intégrer les principes de la neuroplasticité dans un protocole de traitement normalisé et basé sur la recherche.

Des données de trois essais effectués au hasard seront résumées en incluant la preuve de deux études d'imagerie neutre pré/post LSVT LOUD chez des personnes atteintes de la maladie de Parkinson. Ces données attestent d'améliorations significatives en ce qui concerne le volume vocal et l'intelligibilité du discours qui sont liés à la réorganisation du cerveau telle que décrites dans les études d'imagerie cérébrale. Les résultats de la recherche comme l'application de celle-ci à d'autres troubles neurologiques (comme l'ataxie, la sclérose en plaques) seront également fournis. Des données d'une série de trois études utilisant la méthode LSVT LOUD chez des enfants atteints de paralysie cérébrale et de dysarthrie seront présentées, y compris un ensemble de mesures allant de l'acoustique à l'imagerie cérébrale.

Les obstacles potentiels et les solutions pour l'application des protocoles qui incorporent les principes de la neuroplasticité dans le monde réel seront débattus suivant la perspective de plus de 20 ans d'application dans le monde réel de la méthode LSVT LOUD en dehors des laboratoires de recherche.

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La compréhension des principes clés de la neuroplasticité et de leur intégration dans la pratique clinique peut aider à guider les cliniciens à choisir les cibles les plus appropriées pour le traitement et le mode d'application du traitement pour leurs patients.

Mots-clés : Trouble du langage, dysarthrie, trouble de la voix, troubles neurodégénératifs, intervention, maladie de Parkinson

WS 004

(1290) – MISE SUR PIED DE SERVICES COMPÉTENTS POUR LES RÉFUGIÉS : UN NOUVEAU DÉFI POUR LA COMMUNAUTÉ DES ORTHOPHONISTES

Mancini, Giuseppe - ASL RM5 Tivoli (RM), Italie

Vlassopoulos, Maria - 1er Dépt. de Psychiatrie, Université d'Athènes École de médecine, Grèce.

La crise des réfugiés en Europe a mis en exergue les nombreuses difficultés pour créer des services adaptés aux populations vulnérables. Les réfugiés adultes et enfants souffrants des effets néfastes d'une migration forcée peuvent engendrer des troubles chroniques s'ils ne sont pas traités. De nombreuses études ont montré que malgré que les gouvernements européens et les décideurs politiques soient conscients des difficultés rencontrées par les populations de réfugiés, que les services médicaux et de réhabilitation ne possèdent souvent pas des plans consistants et cohérents pour mettre sur pied des programmes les plus efficaces, lorsque ceux-ci existent, ils sont fragmentés et mal coordonnés. Ils existent d'autres barrières pour le traitement qui sont les difficultés culturelles et de communication, le manque d'accès des services d'intervention, le manque de continuité des soins, tels que le manque de responsabilisation de la part des réfugiés eux-mêmes. De plus, la plupart des réfugiés ne sont pas familiarisés avec les services de santé et de réadaptations occidentaux et leurs attentes par rapport aux traitements peuvent être différentes par rapport aux services offerts, ce qui amène à un manque de compréhension mutuelle des approches utilisées.

L'orthophoniste faisant partie des équipes interdisciplinaires a un rôle de pivot à jouer dans la mise au point des services compétents d'aide aux réfugiés

Dans cet atelier, nous analyserons les questions suivantes :

- Qu'est-ce qu'un service d'aide aux réfugiés compétent doit posséder ?
- Comment l'orthophoniste peut contribuer dans un modèle biopsychosocial à la prestation de services pour les réfugiés ?
- Comment l'expertise de l'orthophoniste peut être utilisée pour obtenir de meilleurs résultats pour la population de réfugiés ?
- Quels sont les techniques qui peuvent être appliquées ?

L'atelier tentera de sensibiliser les orthophonistes sur leur rôle dans la mise au point de la fourniture de services appropriés, d'analyse des procédures et de souligner les obstacles pour les traitements adéquats, tout en offrant certaines pistes sur la manière dont les services peuvent être améliorés selon la perspective de l'orthophoniste. L'atelier utilisera des méthodes interactives et des discussions en groupe. Des cas individuels seront analysés.

Mots-clés : Apprentissage interprofessionnel, apprentissage basé sur l'esprit d'équipe

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WS 005

(1267) - LUBBI TROUVE DES SPEECH BONES : MATÉRIEL ORTHOPHONIQUE POUR LES ENFANTS

Másdóttir, Thóra - *Université d'Islande, Islande*

Gísladóttir, Eyrún Ísfold - *Centre de la parole Reykjavík / Málsmiðja Eyrúnar, Islande*

L'objectif de cet atelier est de décrire le potentiel clinique du nouveau matériel destiné aux enfants présentant des troubles du langage. Alors que le premier objectif du matériel Lubbi est l'amélioration du son, d'autres domaines de l'évolution de la parole, du langage et de l'alphabétisation sont également inclus, tels que la prise de conscience phonologique et le vocabulaire.

Le matériel a été mis au point sur base de recherches dans le domaine de l'évolution phonologique des enfants islandais (Másdóttir, 2008, 2014, 2016), la prise de conscience phonologique (Símonardóttir & Einarsdóttir, 2002 ; Weitzman & Greenberg, 2010), et l'utilisation des gestes dans l'apprentissage et l'évolution du langage (Callcott, Hammond, & Hill, 2015). Une évaluation formelle fondée sur les preuves du Lubbi pour la parole et le langage est en cours. Le Lubbi pour la voix et le langage est composé de différents éléments que les orthophonistes peuvent utiliser dans leurs activités afin de développer les habiletés de la parole, du langage et de l'alphabétisation. Celles-ci comprennent des cartes pour chaque type de son, les dessins des positions d'articulation, des gestes pour chaque son, de petites histoires avec des activités de prise conscience phonologique et les « speech bones » extraits du livre, qui peuvent être utilisés pour des activités telles que des exercices pour la production de la parole ou pour favoriser les compétences en lecture. Chaque son est accompagné d'une chanson, qui met en exergue le son et ajoute une profondeur aux instructions cliniques et pédagogiques.

Les participants à cet atelier apprendront comment mettre au point les méthodes d'apprentissage en 3-dimensions (la simulation visuelle, auditive et tactile avec la production orale) en accord avec les preuves des recherches en cours, comment ce matériel est utilisé en Islande et comment ce matériel et ces méthodes peuvent être utilisés par les locuteurs d'autres langues. L'accent est mis sur l'application clinique du matériel, fournissant aux participants de nombreuses idées pratiques, non seulement pour les troubles du langage des enfants, mais aussi pour encourager les compétences langagières des enfants tout venant en âge préscolaire.

Mots-clés : Troubles phonologiques

WS 006

(1098) - LEXIQUE PIRATE - ENSEIGNEMENTS PRATIQUES DÉBOUCHANT SUR UNE APPROCHE DE THÉRAPIE STRATÉGIQUE BASÉE SUR LA PRATIQUE POUR LES ENFANTS SOUFFRANT DE TROUBLES DU VOCABULAIRE

Marks, Dana-Kristin - *Université Ludwig-Maximilian-Munich, Allemagne*

Ulrich, Tanja - *Université de Cologne, Allemagne*

L'atelier est destiné à acquérir des vues sur une méthode d'intervention particulière pour les enfants souffrant de troubles du vocabulaire (âgés de 4-10 ans) appelé "Le lexique Pirate". Le but de cette thérapie stratégique est de modifier les réactions des enfants dans les situations pour lesquels ils leur manquent une connaissance du vocabulaire ou lorsque l'omission d'un mot est impossible. En utilisant le modèle basé sur l'apprentissage (la marionnette "Tom", le thérapeute fournit et enseigne un ensemble de stratégies d'apprentissage sémantique et lexicale si nécessaire. Les enfants sont encouragés à appliquer ces stratégies dans leur vie quotidienne, afin que les effets de généralisation puissent être obtenus pour des mots non connus.

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L'atelier illustre comment faire une session de thérapie concrète en fournissant des vidéo-clips et d'autres explications. L'ensemble du matériel thérapeutique sera disponible et prêt à être inspecté. Nous répondrons aux questions posées.

Les participants obtiendront une vue d'ensemble de l'approche thérapeutique du "Lexique Pirate", la structure d'une simple leçon de thérapie et diverses techniques thérapeutiques en enseignant des stratégies particulières de l'apprentissage du vocabulaire.

Le "Lexique Pirate" est une approche thérapeutique basée sur la pratique qui fut mise au point en Allemagne en 2008 et a été constamment améliorée depuis lors. Le manuel thérapeutique avec tous les mots a été récemment traduit en anglais. Nous pouvons mener cette approche thérapeutique dans chaque langue, cette méthode peut être utilisée par les orthophonistes partout dans le monde.

Mots-clés : Handicaps spécifiques du langage, intervention

WS 007

(1063) – MULTILINGUISME : MYTHES & RÉALITÉS

Pénard, Joy - ASHA – Association américaine de la parole- du langage et de l'audition, États-Unis

L'atelier brisera un certain nombre de mythes et de notions préconçues au sujet du multilinguisme. Cette présentation réfutera ces mythes en utilisant les résultats récents d'études publiées par des pairs, et décrira le développement du bilinguisme de la naissance à l'école primaire en couvrant les points clés du développement de la parole et du langage. Par la suite, nous discuterons des lignes directrices de base pour l'évaluation appropriée et nous déterminerons si un enfant multilingue présente des différences ou des troubles du langage. Une attention particulière sera donnée au vocabulaire et au développement de l'alphabétisme chez les enfants en âge scolaire, et comment s'appuyer sur l'identité et les multiples langues de l'enfant pour soutenir son développement. Des stratégies seront proposées pour inclure les langues de la communauté, inclure les parents et créer un environnement facilitant l'accès aux objectifs éducatifs.

Une séance de question/réponse interactive au sujet du thème, du partage d'expériences, des démonstrations des bonnes pratiques sera proposé pour : offrir des outils et des ressources disponibles pour l'évaluation de la parole et du langage et leur intervention, démontrer comment utiliser le multilinguisme pour aider au développement du vocabulaire et du langage. En se basant sur les dernières recherches des experts internationalement reconnus sur le sujet du multilinguisme (en incluant Sharynne McLeod, Johanne Paradis, Brian Goldstein, Michelle Garcia Winner, Madalena Cruz-Ferreira, et Jim Cummins parmi d'autres), les participants pourront étendre l'éventail de leurs compétences cliniques.

La dissémination d'informations critiques et utiles ayant un impact direct sur les pratiques orthophoniques cliniques pour une population croissante d'enfants multilingues. Accroître la prise de conscience de la prévalence de sujet sur les questions d'évaluation et d'intervention des enfants multilingues.

Les enfants multilingues ont besoin d'évaluations et d'interventions de la parole et du langage appropriées afin d'élaborer des pratiques efficaces et basées sur les preuves.

Mots-clés : Multilinguisme

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WS 008

(1074) - UTILISER LES MÉDIAS SOCIAUX AFIN D'ENCOURAGER L'ENGAGEMENT ACCRU DE LA RECHERCHE ; EXPÉRIENCE DES ÉTUDIANTS EN ORTHOPHONIE ET DES PRATICIENS EN ALLEMAGNE ET AU ROYAUME-UNI

Roddam, Hazel - *Université Centrale du Lancashire, Royaume-Uni*

Scharff Rethfeldt, Wiebke - *Haute École pour la Santé, Brême, Allemagne*

Muehlhaus, Juliane - *Haute École pour la Santé, Trêves, Allemagne*

L'engagement accru dans la recherche de la part des professionnels des soins de santé a eu impact positif sur l'expérience des soins pour le patient (Boaz et al 2017), ce qui renforce le besoin de promouvoir la pratique basée sur l'expérience et le renforcement des capacités en matière de recherche parmi les étudiants et les praticiens qualifiés. La prise de conscience et la confiance dans l'application de la recherche en pratique est fort limitée par l'accès restreint aux sources appropriées de preuve dans de nombreux secteurs de notre communauté professionnelle – spécialement pour les collègues dans certaines parties du continent européen (Roddam et Skeat 2010). Durant les dernières années, nous avons eu la preuve de l'efficacité croissante des médias sociaux dans la dissémination des résultats de la recherche en matière de santé (Schnitzler et al 2016). Le réseau d'appui à la recherche (ResNet) a été lancé en 2015 en tant qu'initiative basée sur l'internet, tout d'abord pour les praticiens SLT sur le continent européen. Il vise à améliorer les compétences et la confiance dans les pratiques basées sur l'expérience et à encourager la pratique basée sur la recherche (Finch et al 2013). En janvier 2016, un nouveau journal mensuel du club en ligne a été créé (via Twitter) s'appelant (#ReSNetSLT), afin de maîtriser le pouvoir des médias sociaux et de faciliter une plus grande participation interactive (Lizarondo et al 2010, 2012). Cet atelier présentera un panorama clair, une définition et une démonstration des plateformes adéquates des médias sociaux en partageant l'information sur la recherche en SLT, tout en incluant Twitter. Il présentera également des exemples de cas sur la manière dont les étudiants et les praticiens en SLT utilisent les médias sociaux comme faisant partie de leur routine tout en continuant leur évolution professionnelle (Gilbert 2017, Moorley et Chinn 2014).

L'atelier invitera les délégués à s'engager dans une discussion structurée sur les avantages de l'utilisation des médias sociaux pour l'accès aux informations sur la recherche et les ressources tout comme sur les défis perçus dans l'utilisation de ces médias sociaux. L'atelier fournira de précieux conseils et des stratégies pour l'utilisation des médias sociaux afin d'accéder et de partager la recherche d'information appropriée à leur pratique clinique.

Les orthophonistes peuvent bénéficier à tous les stades de leur carrière de l'utilisation des médias sociaux pour accéder à l'information sur la recherche comme faisant partie de leur routine tout en continuant leur évolution professionnelle.

Mots-clés : Pratiques basées sur l'expérience, apprentissage en ligne

WS 009

(1207) – INTERVENTION SUR LE VOCABULAIRE CHEZ LES ADOLESCENTS PRÉSENTANT DES TROUBLES DU LANGAGE AU NIVEAU UNIVERSEL, CIBLÉ ET SPÉCIALISÉ DE LA PRESTATION DE SERVICE

Lowe, Hilary - *City, Université de Londres, Royaume-Uni*

Joffe, Victoria - *City, Université de Londres, Royaume-Uni*

L'atelier explorera l'efficacité des interventions sur le vocabulaire, délivrées dans les écoles et aidera les délégués à améliorer leur connaissance et leur compréhension de l'intervention au

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niveau lexical chez les adolescents présentant des troubles du langage (TSL) au niveau universel, ciblé et spécialisé de la prestation de service. L'importance du vocabulaire pour l'accomplissement de la scolarité à l'adolescence, sera mise en exergue. (Feinstein & Duckworth, 2006). Une étude recherchant l'efficacité d'une nouvelle approche de l'intervention sur le vocabulaire universel sera présentée : "La découverte du mot". Les délégués seront formés à l'intervention pratique avec les méthodes utilisées. Nous discuterons de l'application de l'intervention à des niveaux ciblés et spécialisés de prestation de service.

Les professeurs ont enseigné des mots dans un programme de science à soixante-dix-huit adolescents souffrant de TSL, âgé de 11 à 13 ans selon deux conditions : 1) 10 mots enseignés suivant les pratiques courantes d'enseignement ; et 2) 10 mots appariés enseignés selon les techniques d'apprentissage comprenant des activités phonologiques-sémantiques, incorporés dans le programme d'enseignement. Dix mots contrôle appariés n'ont pas eu d'intervention. La connaissance des mots a été évaluée avant l'intervention et après l'intervention ainsi que à certains moments plus tard dans le temps. Les professeurs des écoles secondaires généralistes ont été formés par des orthophonistes selon des techniques.

Spécifiques d'apprentissage de mots dans un environnement expérimental. L'intervention sur le vocabulaire dans la classe expérimentale fut plus efficace que les pratiques d'enseignement habituel et a permis d'augmenter les connaissances lexicales des élèves. Parmi les étudiants, les préférences étaient mitigées entre une intervention en classe entière, de petits groupes ou le suivi individuels.

L'atelier mettra en exergue l'importance de la collaboration entre l'orthophoniste, le professeur, l'enseignant assistant pour améliorer le vocabulaire des adolescents présentant des troubles du langage. Il n'est pas trop tard pour intervenir durant l'adolescence et des améliorations du vocabulaire peuvent être obtenus chez les élèves plus âgés présentant des troubles du langage lorsque l'on travaille à différents niveaux, de prestation de service (universel, ciblé ou spécialisé). Il faut également prendre en compte le modèle d'exécution de l'intervention (classe entière, petit groupe, individuel) selon les besoins et préférences des élèves.

Mots-clés : Trouble de l'évolution du langage, intervention

WS 010

(1356) – BARRIÈRES ET FACILITATEURS DANS L'ÉDUCATION INTERPROFESSIONNELLE : BARRIÈRES ET FACILITATEURS EN SE BASANT SUR LES PREUVES EUROPÉENNES ET NORD-AMÉRICAINES

Constantinidou, Fofi - *Université Chypre*

Mcneilly, Lemmieta - *ASHA - Association américaine de la parole - du langage et de l'audition, États-Unis*

Zerafa, Claudine - *Pratique privée*

Bonello, Marjorie - *Pratique privée*

Emmeneger, Catherine - *Pratique privée*

Ojaste, Anelli - *N/A*

Jimenez Garrido, Yaiza - *Pratique privée*

Cet atelier est organisé par le groupe de travail (IPE/EIP) interprofessionnel de la commission éducation du CPLOL et les membres de l'équipe ASHA pour l'EIP. Le but est de discuter des facilitateurs et des obstacles des programmes EIP en Europe et en Amérique du Nord. L'EIP est défini comme « une ou deux professions apprenant au sujet, ou par rapport, ou les uns et les autres pour améliorer la collaboration effective et améliorer les résultats (en matière de santé).” (OMS, 2010, p.7). Actuellement, peu de normes professionnelles existent dans le monde et on trouve une grande variété de modèles différents dans les services de la santé et de l'éducation. Cette diversité peut affecter les pratiques EIP. Néanmoins, il existe un besoin de coordonner les

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approches dans la mise en place de l'EIP dans les programmes d'orthophonie. Cet atelier vise à présenter et à encourager le débat en adoptant cette approche.

Cet atelier reprendra les résultats de l'enquête du groupe de travail IPE du CPLOL concernant les pratiques courantes en formation IPE dans les programmes universitaires de 20 pays européens. Des données additionnelles d'une étude de cas qualitative menée par Bonello (2016) utilisant la méthodologie des groupes focus universitaires, des témoins du secteur de l'éducation et de la santé, et de nouveaux professionnels qualifiés venant de Malte fournira une perspective multiculturelle de l'EIP. Pour finir, l'information provenant des ressources européennes et de l'ASHA sera intégrée avec ce qui précède afin de fournir des recommandations pratiques pour faciliter l'EIP dans les formations universitaires.

Une étude du CPLOL a montré que les universités reconnaissent leur responsabilité à fournir une formation EIP ; pourtant, il existe une incongruité et un manque d'uniformité dans l'application de l'EIP. On trouve aussi bien des freins que des activateurs surtout en lien avec les frontières professionnelles et les questions d'identité culturelle, les questions culturelles, les changements au sein des programmes et du financement. Il apparaît que les facteurs culturels nationaux ont également un impact sur l'application de l'EIP.

L'EIP requiert un changement de paradigme. Il s'agit de créer les bases pour la pratique collaborative au niveau des programmes universitaires et d'aller vers une approche intégrative. Les orthophonistes travaillent déjà dans un contexte interprofessionnel. L'atelier se terminera par des suggestions pratiques.

Mots-clés : Education interprofessionnel, éducation clinique, qualité de l'éducation, apprentissage en équipe

WS 011

(1035) – SPEAKABOO : DÉPISTAGE DU DÉVELOPPEMENT DU LANGAGE CHEZ LES ENFANTS PLURILINGUES

Blumenthal, Mirjam - *Royal Dutch Kentalis, Pays-Bas*

Van Der Zijden, Liesbeth - *Royal Dutch Kentalis, Pays-Bas*

L'évaluation des enfants plurilingues de moins de six ans est une tâche difficile. Premièrement, toutes les langues de l'enfant doivent être évaluées pour un résultat valide. Deuxièmement, les orthophonistes ne connaissent souvent pas la langue maternelle de l'enfant. Troisièmement, les instruments de dépistage nécessaires pour l'articulation dans des langues étrangères sont parfois difficiles à trouver ou n'existent pas. Enfin, les jeunes enfants sont souvent timides et refusent de parler lors d'une évaluation, surtout lorsqu'ils sont entourés de plusieurs étrangers. Le premier objectif de cette étude était de développer un outil de dépistage pour le développement phonologique en huit langues. Le deuxième objectif du projet était de créer un outil d'évaluation numérique qui permettrait de combler le fossé linguistique entre le patient et le thérapeute.

Nous avons développé un outil d'analyse d'articulation numérique, qui aide le thérapeute à obtenir des mots d'un enfant d'une manière non menaçante en lui permettant de jouer à un jeu sur un iPad. Un interprète officiel ou non officiel assiste le thérapeute. Tous les mots sont enregistrés par l'application et stockés dans un enregistrement pour chaque patient individuel permettant à l'orthophoniste de réécouter l'enregistrement, de le comparer à un locuteur natif et de noter les résultats.

Le processus de recherche des mots exacts et des images correspondantes, la recherche de preuves dans la littérature, les opinions des experts linguistes et les locuteurs natifs seront décrits. Speakaboo est actuellement disponible en huit langues. Pour chaque langue, un ensemble différent de mots et d'images est choisi, y compris un formulaire pour les résultats correspondants avec transcription API. Une description de chaque langue et de son système phonologique est

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également disponible. L'application peut être téléchargée gratuitement sur l'AppStore de Apple (septembre 2017).

Le dépistage du développement de la parole chez les jeunes L1 plurilingues peut être effectué, même si l'orthophoniste ne parle pas la langue de l'enfant. Nous sommes à la recherche de collaborateurs et de financement pour développer de nouveaux outils linguistiques de dépistage.

Mots-clés : Troubles développementaux du langage, troubles phonologiques, dépistage multilinguisme.

WS 012

(1193) – AMÉLIORER LA COMMUNICATION AVEC LE PECS DANS DIFFÉRENTES POPULATIONS

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PECS, le système de communication par échange d'images, est un système de communication augmentative et alternative (CAA) ayant fait ses preuves depuis 1985. Des centaines d'études confirment ses avantages chez les utilisateurs partout dans le monde et à tous les âges et les diagnostics. Le PECS fut mis au point en 1985, dans un contexte clinique regroupant des enfants autistes pour qui d'autres approches traditionnelles verbales avaient échouées et aujourd'hui, la plupart des études menées sont liées aux troubles du spectre autistiques. Ce protocole thérapeutique a également été appliqué avec succès, avec d'autres diagnostic ; il s'est révélé être un outil puissant pour l'amélioration de l'apprentissage et l'augmentation des compétences en matière de communication des personnes présentant des handicaps sévères tel que la trisomie 12, le syndrome d'Angelman, le syndrome de Down, le syndrome TEA, le syndrome de Stickler, le syndrome Idi q 15, le syndrome de West, le syndrome de Wolf, le syndrome 22q et la perte d'audition bilatérale. Cet atelier a pour but d'aider les participants à identifier les éventuels utilisateurs du PECS en se basant sur leurs vrais besoins de communication, indépendamment du diagnostic.

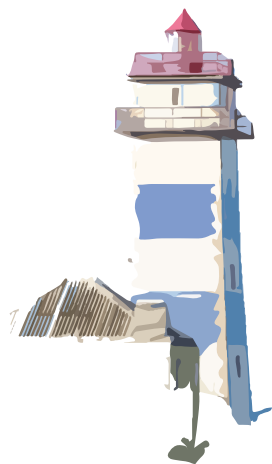
L'atelier présentera des vidéos d'élèves présentant différents syndromes et apprenant à utiliser la communication fonctionnelle dans les différentes étapes du protocole du PECS. Les intervenants encourageront la discussion sur les défis que chaque application pose et comment celle-ci contribue à améliorer les compétences en matière de communication et de sociabilité dans divers groupes.

Les résultats de l'application du PECS pour ces différents syndromes seront démontrés à travers l'observation et la discussion de cas. Après cet atelier, les participants seront plus conscients du large spectre d'utilisateurs à qui profiterait le PECS et amélioreront également les compétences cliniques pour intervenir auprès des cas de handicaps sévère de la communication.

Cet atelier fournira des informations au sujet du protocole du PECS et comment il peut être utilisé avec succès auprès des personnes présentant différents diagnostics.

Mots-clés : Évolution des troubles du langage, interventions, systèmes de communication augmentative et alternative, PECS, compétences en matière de communication.

E-POSTERS



PO 059

(1150) - QUELQUES DISPOSITIFS D'AIDES FRÉQUEMMENT PROPOSÉS AUX ENFANTS PRÉSENTANT DES DIFFICULTÉS DE LECTURE-ÉCRITURE : FONDEMENTS ET VALIDITÉ SCIENTIFIQUES

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Objectifs : Lire nécessite l'acquisition et la mise en œuvre de différents processus cognitifs et cet apprentissage ne s'effectue pas de manière fluide chez une proportion non négligeable d'enfants. Les difficultés ont souvent lieu dans la mise en place et l'automatisation de la procédure dite d'assemblage. De nombreux dispositifs ont été conçus afin d'aider les faibles décodeur·deuses présentant des difficultés qui peuvent être consécutives à une dyslexie, à un déficit sensoriel, à une déficience intellectuelle... Ces aides se retrouvent parfois utilisées tant par des logopédistes que par des enseignantes ordinaires et/ou spécialisées et sont parfois utilisées de façon indifférenciée voire cumulative. Dans une perspective d'efficacité du traitement logopédique, il est primordial de s'interroger sur le caractère aidant de ces différents dispositifs en fonction des difficultés observées.

Méthodes : Dans un premier temps, il s'agit de répertorier les aides les plus classiquement utilisées ainsi que d'analyser leurs justifications théoriques et leur efficacité au regard des travaux scientifiques les plus récents. Ensuite, des éléments de réponse sont apportés aux questions suivantes : le fait d'ajouter un 3^e code (couleur, personnage, historiette, geste) au sein de l'association graphème-phonème permet-il de favoriser la mémorisation et l'automatisation de ces associations ? Si oui, quelle unité ce 3^e code devrait-il mettre en exergue: syllabe, phonème, graphème, lettre ? Sur chaque élément de ces unités ou seulement sur certains d'entre eux (graphèmes complexes, lettres miroir, phonèmes proches...)?

Résultats : L'analyse montrera que certaines aides ont été validées scientifiquement mais que ce n'est pas le cas pour d'autres. Parmi ces dernières, certaines semblent pertinentes d'un point de vue théorique dans certains cas de figure alors que d'autres pourraient être contre-productives.

Conclusions : C'est une analyse précise des difficultés spécifiques des enfants ainsi que des caractéristiques exactes des aides proposées qui permettra aux professionnelles d'utiliser les outils adaptés.

Mots-clés: **Domaine spécifique - Dyslexie, Champ - Intervention**

PO 105

(1114)- COOPÉRATION PLURIPROFESSIONNELLE DANS LES SITUATIONS DE MULTILINGUISME ET SPÉCIFICITÉS DE L'INTERVENTION ORTHOPHONIQUE/LOGOPÉDIQUE

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Objectifs : Ce poster a pour objectifs de :

- mettre en évidence des pratiques de coopération pluriprofessionnelle dans les situations de bilinguisme/multilinguisme
- clarifier le rôle spécifique des orthophonistes/logopèdes dans ce contexte de diversité linguistique et culturelle

Méthodes : Suite à la conception d'un questionnaire en ligne bilingue et à sa diffusion dans différents pays européens, via les membres du CPLOL, une analyse qualitative a été menée sur les réponses obtenues. En parallèle ont été exploitées les données d'un questionnaire créé par un groupe de travail du CPLOL sur les pratiques collaboratives au sein de la profession. Une analyse de la littérature existante sur la thématique (articles et guidelines) a par ailleurs été menée.

Résultats : Les situations de multilinguisme et les contextes professionnels sont très variables. Néanmoins les résultats mettent en évidence ce qui semble faire l'objet d'un consensus concernant les pratiques orthophoniques/logopédiques (collaboration avec des interprètes et avec d'autres professionnels, formation continue...).

Différents rôles spécifiques émergent concernant les thérapeutes de la communication ; ils concernent bien entendu l'évaluation et la rééducation orthophonique mais également la prévention, le dépistage et la formation des autres soignants et professionnels du monde éducatif.

Conclusions : D'autres recherches quantitatives et qualitatives devraient compléter ce travail, afin de valider des recommandations de bonnes pratiques à l'attention des orthophonistes/logopèdes européens. Actuellement, il n'existe pas en Europe de consensus à ce niveau-là.

Mots-clés: **Conditions - Multilinguism, Specific field - Developmental language disorders, Area - Intervention, Area - Prevention, Area - Patient-reported outcome measures (development or cross-cultural adaptation and validation), Area - Clinical-reported outcome measures(development or cross-cultural adaptation and validation)**

PO 116

(1368) - BILAN ORTHOPHONIQUE ET ÉVALUATION DES CONNECTEURS : TEST DE LA GRENOUILLE 4-11 ANS

Hilaire-Debove, Géraldine - UNADREO, France

Objectifs : Cette recherche porte sur le développement et l'évaluation des connecteurs chez l'enfant francophone entre 4 et 11 ans («test de la grenouille 4-11 ans », HILAIRE-DEBOVE,G., 2017). Sera également présenté une étude de cas.

Le développement des connecteurs a fait l'objet de nombreux travaux chez l'enfant francophone. Trois types de connecteurs sont mentionnés dans la littérature : les déictiques, ceux encodant la temporalité (successivité, simultanéité, antériorité/postériorité, rupteurs, ponctualité) et ceux dits logiques (cause, conséquence, but, etc...). Selon les auteurs, leurs apparitions et utilisations varient en fonction de l'âge de l'enfant.

L'étude porte sur l'analyse de récits oraux produits par 350 enfants afin d'appréhender les aspects développementaux.

Méthodes : Les récits ont été élicités à partir du livret Frog, Where are You ? (Mayer, 1969) auprès de 350 enfants francophones âgés de 4 à 11 ans. La partie du test sur les connecteurs a été élaborée à partir de ces analyses et étalonnée ensuite.

Résultats : Nos résultats confirment ceux de la littérature à l'exception des connecteurs de successivité. Entre 4 et 5 ans, les enfants utilisent surtout des déictiques, ces derniers disparaissent de façon significative entre 6 et 7 ans. Concernant la successivité, elle est encodée à tous les âges, ne pouvant être utilisée comme repère développemental. La simultanéité apparaît de façon significative à partir de 8 ans, les rupteurs dès 9 ans. Enfin, les relations logiques sont davantage marquées avec trois paliers : entre 4 et 6 ans, puis 7 et enfin 8-9-10-11 ans.

Une étude de cas permettra d'illustrer les apports de cette grille dans le cadre du diagnostic et de la prise en charge orthophonique.

Conclusions : Les connecteurs sont le reflet de la complexification des relations syntaxiques, leur évaluation lors du bilan orthophonique à partir du récit oral permet d'appréhender les structures du langage et sa fonctionnalité.

Mots-clés: Domaine spécifique - Troubles développementaux du langage, Champ - Diagnostic fonctionnel, Champ - Intervention

PO 126

(1071) - EVALUER LE DISCOURS PAR LE CHOIX DES MARQUEURS DE RÉFÉRENCE : PRÉSENTATION DE DONNÉES NORMATIVES SUR LA BASE D'UNE TÂCHE DE NARRATION D'HISTOIRES

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Fossard, Marion - Institut des sciences du langage et de la communication - Université de Neuchâtel, Suisse

Objectifs : Les troubles discursifs sont difficiles à évaluer étant donné la pluralité des processus impliqués. Cependant, une mesure quantifiable et pertinente des compétences discursives pourrait s'effectuer par le choix des marqueurs de référence produits par un locuteur. En effet, la sélection d'un marqueur de référence (MR) ajusté au statut discursif et cognitif du référent est une aptitude importante pour permettre à son interlocuteur de récupérer le bon référent. Bien qu'atteinte dans différentes pathologies, cette compétence d'ajustement référentiel ne fait pas encore l'objet d'un outil d'évaluation spécifique. Une nouvelle tâche de narration d'histoires est présentée avec des données normatives auprès d'une population d'adultes francophones.

Méthodes : L'étude comporte 230 participants (115 femmes) de 19 à 91 ans. La tâche comprend six histoires sous forme de vignettes imagées. Chaque histoire comporte trois étapes d'élaboration narrative permettant l'évaluation des compétences d'ajustement référentiel: introduction, maintien et changement du personnage en focus. Les MR ont été extraits à chaque étape et codés en trois catégories: indéfinis, définis et pronoms. De plus, la manipulation du nombre (1 vs 2) et du sexe des personnages (différent vs identique) permet de distinguer trois niveaux de difficulté référentielle des histoires. En fonction du pourcentage de chaque catégorie de MR produit à chaque étape, des normes en centiles sont proposées, en considérant la complexité référentielle des histoires et les facteurs sociodémographiques des participants.

Résultats : La tâche présente une bonne fidélité inter-juges. La sensibilité des normes et la validité discriminante ont aussi été examinées en comparant les MR produits par trois locuteurs avec des pathologies différentes.

Conclusions : Des ajustements référentiels problématiques sont mis en évidence, attestant de la capacité de la tâche à détecter des difficultés à ajuster son discours à l'interlocuteur. De plus, ces ajustements problématiques sont distincts, ce qui souligne la diversité des difficultés pouvant s'observer au niveau du discours.

Mots-clés: Area - Screening

PO 164

(1171) - ÉLABORATION ET VALIDATION D'UN OUTIL D'ÉVALUATION INFORMATISÉ DES TROUBLES ACQUIS DE LA COMMUNICATION : UNE VALORISATION DE L'ANALYSE CLINIQUE.

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Ferré, Perrine - Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), Canada

Charest, Laurence - Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), Canada

Ansaldo, Ana Inés - Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), Canada

Joanette, Yves - Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), Canada

Objectifs : Les atteintes neurologiques acquises entraînent chez la majorité des individus des invalidités plus ou moins sévères sur le plan de la communication. L'évaluation orthophonique constitue une étape indispensable à l'élaboration d'objectifs d'intervention individualisés, mais l'absence d'outils d'évaluation complets, sensibles et valides en français québécois limite actuellement la précision et la portée du plan d'intervention qui en découle. En appui sur les recommandations les plus récentes concernant l'élaboration d'outils psychométriques ainsi que sur les besoins rapportés par les cliniciens, une quarantaine de tâches d'évaluation sont proposées. Dès l'étape initiale d'élaboration des tâches, de hauts standards de validité de construit et de contenu ont été poursuivis (respect des variables psycholinguistiques pertinentes, contrôle des facteurs confondants, spécificité des modes de passation). La standardisation ainsi que la fidélité inter-juges et intra-juge sont quant à elles en grande partie assurées par l'informatisation de l'outil.

Méthodes : La pertinence psychométrique et clinique de chacune des tâches a été évaluée au moyen de mesures de la consistance interne (N=12 participants contrôles et 5 participants avec atteintes neurologiques) et de la validité de surface (N=5 orthophonistes).

Résultats : Le contenu des tâches a ainsi été validé, les standards de passation ont été précisés et les opinions d'experts cliniciens ont été compilés. Les tâches testées en condition naturelle d'évaluation ont démontré une validité clinique satisfaisante.

Conclusions : Le choix éclairé d'un support d'évaluation fiable et de modes de passation adaptés ainsi que le respect de critères de construit psychométrique assurent la bonne validité d'un outil d'évaluation. Une telle démarche d'élaboration garantit que la normalisation de l'outil s'appuiera sur des fondations psychométriques solides, donnant tout leur sens aux étalonnages qui seront utilisés par les cliniciens.

Mots clés: Domaine spécifique - Troubles de langage acquis

PO 169

(1452) - ÉLABORATION D'UNE NOUVELLE GRILLE(ECLA) POUR L'ANALYSE ET L'ÉVALUATION DE DISCOURS PATHOLOGIQUE DE L'APHASIQUE.

Mohamed, Haciane - Université de Tizi Ouzou, Algérie

Objectifs : Nous exposons, en premier lieu, les objectifs du projet en détaillant l'approche utilisée avec des patients aphasiques. Quatre objectifs sous – tendent ce projet :

1. l'obtention d'un profil de l'expression orale comprenant les symptômes en général.

2. l'identification des niveaux d'analyse affectés à ces sujets,
3. compléter les profils d'expression orale obtenus initialement à l'aide des épreuves de test.
4. la contribution au développement de test en utilisant des approches nouvelles.

Objectifs : Notre première intervention en tant qu'orthophoniste consiste à faire le bilan des troubles présentés par le patient en s'appuyant sur une nouvelle technique d'évaluation du langage (ECLA 2015). Application du test ECLA 2015 pour objet de diagnostiquer les difficultés linguistiques, praxiques, et gnosiques : un test de 06 items ; Cet outil clinique renferme:

1. L' interview Dirigée
 2. Séries automatiques
 3. Répétition des mots
 4. La dénomination
 5. Désignation d'image
 6. Compréhension d'ordres oraux et praxies bucco-faciales
- Résultats : L'analyse des résultats obtenus se fait selon des items suivants :

- la discrimination phonétique
- la reconnaissance de la forme des mots
- la reconnaissance du sens du mot
- le traitement morphosyntaxique
- Traitement sémantico pragmatique

Conclusions : La présente recherche essaye de rendre compte de l'intérêt de l'élaboration une nouvelle technique d'évaluation par méthode du test (ECLA 2015- Évaluation des Compétences Langagières chez les sujets Aphasiques), et pour l'élaboration de ce test nous nous sommes basés sur des théories qui expliquent le langage prenant en considération l'expression et la compréhension comme base de celui-ci. L'application de cette technique va nous aider à élaborer un protocole thérapeutique qui va aider le sujet aphasique à améliorer ces performances par rapport à la compréhension et à l'expression orale.

Mots clés: Domaine spécifique - Aphasie

PO 178

(1446) - MIEUX PRÉVENIR ET ACCOMPAGNER LES TROUBLES DE DÉGLUTITION DES PERSONNES ÂGÉES EN EHPAD GRÂCE À LA FORMATION DES PERSONNELS PAR L'ORTHOPHONISTE

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Objectifs : Afin de mieux répondre aux demandes urgentes des établissements accueillant des personnes âgées et devant la difficulté de recruter des orthophonistes, l'association de prévention en orthophonie en Vaucluse (Parol'84) a proposé un dépistage des troubles de déglutition des résidents (Forster, 2013) et une formation des personnels.

Méthodes : Un groupe d'orthophonistes membre de l'association de prévention a mis au point le parcours suivant (renouvelable) :

- Prise de contact avec l'institution, identification des besoins et établissement d'une convention
- Dépistage des résidents et identification de leurs difficultés et plaintes
- Recueil des demandes du personnel en matière de formation sur la déglutition et ses troubles
- Formation pendant le temps de travail et sur le lieu de travail axée sur la pratique et l'entraînement lors de la collation qui suit la formation
- Echange de pratiques et recueil des changements comportementaux un mois plus tard.

Une série de questionnaires a permis de recueillir des éléments d'impact de la formation.

Du matériel d'information et de prévention à l'intention de tous (résidents, familles, visiteurs, personnel, ...) a été créé et évalué.

Résultats : Les résultats seront discutés après présentation de la population et des indicateurs. Ainsi on observera quel type de personnel répond à l'offre de formation (aide-soignant, infirmière, psychomotricien, psychologue, médecin, bénévole, famille, ...), l'effet à long terme d'une formation plus pratique possible, les changements comportementaux voire la dynamique identitaire induite par la formation (Kaddouri, 2006) auprès des personnels qui se voient conférer un nouveau rôle de prévention de la dysphagie.

Conclusions : Devant le manque d'orthophoniste disponible pour intervenir en EHPAD auprès des patients souffrant de dysphagie, l'association Parol'84 se positionne en tant qu'expert et propose une action évaluée de dépistage systématique ainsi qu'une formation du personnel avec analyse des changements comportementaux.

Mots clés: Champ - Prévention, Domaine spécifique - Dysphagie

PO 202

(1370) - GENDER DAY. EST-CE QU'UN ÉVÉNEMENT DE FORMATION PEUT CHANGER LA PRISE DE CONSCIENCE DES DIFFÉRENCES ENTRE LES GENRES CHEZ LES ÉTUDIANTS DES PROFESSIONS SANITAIRES

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Cavada, Luisa - Scuola Provinciale Superiore di Sanità "Claudiana", Italie

Grandi- Messerschmidt, Caterina - Scuola Provinciale Superiore di Sanità "Claudiana", Italie

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Padovan, Marco - Scuola Provinciale Superiore di Sanità "Claudiana", Italie

Objectifs : Déterminer si l'événement de formation change la prise de conscience des différences entre les genres chez les étudiants des professions sanitaires.

Méthodes : Étude descriptive pré-post, qui a concerné les étudiants de 12 cours de diplôme universitaire de «Claudiana». L'instrument utilisé est la Nijmegen Gender Awareness in Medicine Scale (N-GAMS), consistant en trois dimensions:

- sensibilité aux différences entre les genres dans le secteur de la santé publique (Gender sensitivity, GS)
- stéréotypes de genres envers les patients (Gender role ideology towards patients, GRIP)
- stéréotypes de genres envers des médecins/professionnels de la santé publique (Gender role ideology towards doctors, , GRID).

Le questionnaire comprenait également 12 points de dichotomie sur l'importance de la médecine de genre dans la formation et la profession.

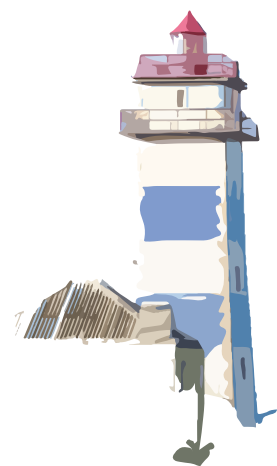
Résultats : 415 étudiants ont participé au Gender Day, dont 236 ont rempli les questionnaires pré et post événement. Les résultats donnent une augmentation de la sensibilité à ce sujet (GS) pour tous les participants, avec une augmentation statistiquement significative pour les étudiantes par rapport aux étudiants. L'attitude à l'égard des stéréotypes de genres envers les patients (GRIP) et envers les santaires (GRID) s'améliore aussi bien chez les étudiants que chez les étudiantes. Les résultats de l'importance de la médecine de genre dans la formation et la profession indiquent une augmentation de l'intérêt et de la sensibilité à ce sujet de la part des participants.

Conclusions : L'événement formatif a sensibilisé de façon concrète tous les étudiants de «Claudiana» pour ce qui est des différences entre les genres dans le secteur de la santé publique. À l'avenir, il est souhaitable que les programmes de formation des professions de la santé publique prévoient des séminaires interprofessionnels sur la médecine des genres afin de favoriser une approche personnalisée et intégrée du point de vue du genre.

Mots clés : Domaine spécifique - Apprentissage interprofessionnel

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Zarokanellou, Vasiliki .. PO-028 - (1247); PO-029 - (1248)
Zelenika Zeba, MirtaPO-058 - (1386)
Zerafa, Claudine WS-010 - (1356)
Zhang, JianguoPO-117 - (1326)
Zolgar, IngridPO-180 - (1359)
Zwitserlood, Rob CO-064 - (1103); CO-065 - (1239)
Zwitserlood-Nijenhuis, Margo CO-112 - (1298)