# *Language and reading difficulties; what have we learned, and where do we go from here?*

|  |  |
| --- | --- |
| Presenter | Abstract |
| Kl. 10:00 |  |
| **Maggie Snowling** | **When does SLI become Dyslexia?**  This talk will present findings from a longitudinal study of children at high-risk of dyslexia either because of preschool speech and language difficulties or because of a first degree affected relative, followed from age 3 to 8 years. A focus on preschool language profiles suggests that there are shared risk factors between familial dyslexia and language impairment. The developmental picture is however more complex. It will be argued , in line with the critical age hypothesis, that children who enter school with a persistent speech or language impairment are most at risk of reading problems. |
| Kl. 11:15 |  |
| **Monica Melby Lervåg** | **The cohort study- Knowledge we have gained and lessons we have learned**  We started to plan the cohort study in 2006 and Sol played an important role in  this study. The study also marked the beginning of our research group. More  than 10 years later we are still publishing papers based on this study. The talk  will focus on the topic and results from some of the papers in this study,  methodological lessons we learned when planning the study, and the way  forward for these kind of observational studies. |
| **Hanne Næss Hjetland** | **Development of language and reading comprehension ability from 4 years to 4th grade**  In this talk I will present two studies on preschool prediction of later reading comprehension ability. The first study is a systematic review where the main objective is to summarize the available research on the correlation between reading-related preschool predictors and later reading comprehension skills. The second study is a longitudinal study that follows a cohort of Norwegian speaking children from the preschool-age and over into school. The 200 children were followed from the age of four and until the age of nine and assessed with a broad range of language and reading tests at yearly intervals. The main research question is ‘to what extent does early language skills and decoding ability predict growth in reading comprehension?’ Because reading comprehension is such a crucial skill for future success we want to have a better understanding of how to best prepare children for later reading instruction and to understand why problems with reading and reading disabilities occur. |
| **Jannicke Karlsen** | **Development of language and reading comprehension in Norwegian second language learners – a comparison with a cohort of Norwegian monolingual children.**  Previous studies have often found gaps in the language and reading comprehension skills between first and second language learners. However, the size of the gap appears to vary between studies. Longitudinal studies are crucial to understand the factors that cause this variation in results and to give an understanding of the precursors of development. In two studies, we have examined the longitudinal development of vocabulary (study 1) and listening- and reading comprehension (study 2) in a sample of Norwegian first and second language learners. We also investigated the impact of background factors such as the mothers’ educational level and number of books in the homes. The results indicated that the gap between the two samples did not decrease from kindergarten to Grade 2. Moreover, the results revealed several similarities, but also differences in the development of language and reading comprehension between the samples. |
| **Arne Lervåg** | **Morphology and the development of reading skills: Sol’s very long longitudinal study – are there anything more to report?**  In here PhD project Sol started to collect data from a large sample of pre-school children – a sample that she followed whole the way up to Grade 9. Partly, this study concerns the effects of a morphological and phonological intervention that Sol gave these children in kindergarten and partly it concerns the longitudinal development of reading skills from kindergarten to Grade 9. Earlier this year, Sol and I together with Charles Hulme published the effects from the intervention part of the study and today I am going to present analyses that describe the longitudinal development part of the study. |
| Kl. 12:15-12:45 Pause |  |
| Kl. 12:45 |  |
| **Turid Helland** | **“Speak up!” - The Bergen Longitudinal Dyslexia Study**  The «Speak up» project followed a group of children through their pre-literacy, emergent literacy and literacy stages (ages 5-15). The aims were to identify and follow up children at risk of dyslexia focusing on: 1) pre-literate detection, 2) pre-literate training, 3) neurocognitive development, 4) brain imaging, 5) heredity, 6) gender.  In 2003 parents and teachers of 109 five year olds answered a Risk Index questionnaire (RI-5) identifying 26 children as at-risk. Together with matched controls they were regularly assessed until they were fifteen. 13 children (11 at-risk, 2 controls) developed dyslexia.  We found that 1) the RI-5 had a predictive value, 2) early data based training had an effect, 3) neurocognitive deficits changed by literacy stage, 4) brain imaging showed divergent literacy processing at all three literacy stages, 5) familiar dyslexia was seen in eight children in the dyslexia group, 6) the gender distribution was five boys, eight girls. |
| **Ellen Iren Brinchmann** | **The role of word knowledge in reading and understanding text**  Sol Lyster is not a woman of few words. On the contrary, throughout her career Lyster has been passionately interested in words and the role of word knowledge in children’s mastery of language and reading. In this talk, I will discuss highlights of previous research on the relationship between word knowledge and reading, including Lyster’s own contributions to the field. What have we learned, and where do we go from here? |
| **Rolf Fasting** | **Learning to read - learning to write: paths for learning**  In Norwegian Education, basic skills are viewed as prerequisites for learning and literacy throughout schooling, locally, nationally and globally. The acquisition of reading, however, can hardly be isolated from the other basic skills, for example writing. The presentation will account for writing as a basic skill for children's overall learning and literacy development. |
| **Bente Hagtvet** | **From oral to written language in a semi-transparent orthography as evidenced in a sample of children at familial risk of dyslexia**  This presentation is based on results presented by Sol and myself at a number of conferences over the last decade. The results regard a sample of 130 Norwegian speaking children at familial risk of dyslexia. An overarching purpose of these presentations has been to identify the oral language markers of later reading and spelling problems, and how these precursors relate longitudinally. In the present talk I shall discuss trends and patterns of the previously presented findings. |
| Kl. 14:00 |  |
| **Kari-Anne B. Næss** | **DSL+ - an effective vocabulary intervention**  **for children with Down syndrome**  Based on Sol Lyster’s initiative, the research group CLL has had a comprehensive research focus on longitudinal language and reading development in children with Down syndrome. Descriptive longitudinal studies have been conducted and they have shown great stability in skills over time and that vocabulary is a bottle neck for development in other areas. Based on our results, we have developed a vocabulary intervention program which will be presented in the talk. The aim of the intervention is to increase the vocabulary depth and breadth in children with Down syndrome and achieve transfer effect to other language variables. |
| **Melanie Kirmess** | The purpose of this presentation is to honor and illustrate Sol Lyster`s influence on other areas within the field of speech-language pathology, in this example, adults with aphasia. Aphasia is defined as an acquired language and communication disorders, for example following stroke.  Sol was a supervisor for my PhD study that explored the clinical applicability and outcome of constraint induced language therapy (CILT) in early aphasia rehabilitation in Norway. Even today, there is still a lack of acknowledged recommendations concerning the effectiveness of aphasia rehabilitation programs, whereas CILT has been described as one of the positive trends in several Chochrane-reviews. Based on the results from the multiple case-study of my PhD, Sunnaas rehabilitation hospital has further developed and runs now a well-established 3-weeks CILT program for persons with aphasia. Post doc research data has been collected from the Sunnaas groups, including different parameters as language tests, qualitative text analysis, quality of life, and participant evaluation of the program. Preliminary analyses include datasets from about 100 participants. This presentation aims to exemplify some of the Norwegian CILT research. CILT itself is a method that also can be applied to other language and communication disorders. |
| **Janne von Koss Torkildsen,**  **Joanne Arciuli,**  **Ona Bø Wie** | **Statistical learning in children with specific language impairment**  Statistical learning (SL) is a central ability in the acquisition of language. Recently it has been suggested that SL may involve both domain-general computational mechanisms and modality-specific encoding mechanisms (Frost et al. 2015). While several studies have found that children with specific language impairment (SLI) have difficulties with auditory SL, there is little and inconclusive evidence regarding SL in the visual domain. Difficulties in visual SL would indicate that children with SLI have a broad deficit in implicit learning of statistical regularities in the environment. In this presentation we will review the existing literature on statistical learning in language impairment. Moreover, we will present new data from a visual SL experiment, showing that children with SLI have significantly poorer visual statistical learning abilities than children with typical language. |
| **Charles Hulme** | **Interventions to improve children's reading and language skills**  I will present the results from a number of Randomized Controlled Trials by our group showing positive effects on children's reading (decoding) and language and reading comprehension skills. Early interventions to improve reading and oral language skills for children at-risk of language difficulties can be highly effective and are likely to confer considerable educational benefits. |