

## **Developmental language disorder (DLD, formerly SLI) and early reading development in Hebrew: A longitudinal study from kindergarten to 2<sup>nd</sup> grade**

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**Research topic:** This longitudinal study sets out to explore the topic of domain-specific (phonology, morphology, syntax, and semantics) versus domain-general profiles of **developmental language disorder (DLD)** in Hebrew-speaking children from different socio-economic strata. I also examine the connections between these different subtypes of language impairment and the early development of reading abilities regarding decoding accuracy, reading rate and fluency, spelling, and written expression.

**Why is my study unique?** To date, there is no general agreement on the subject of sub-types of DLD, despite many attempts at classification over the years, most conducted in English (Bishop et al., 2016). Moreover, only a handful of small-scale clinic-based studies have addressed this topic in Hebrew. The Safra longitudinal study provides a unique opportunity to pursue the question of domain-specific and domain-general sub-types of DLD in Hebrew, which differs significantly from English in both linguistic and orthographic features. Moreover, as part of the study, several new directions will be explored: Alternative classification methods for defining DLD, early literacy development (1<sup>st</sup> and 2<sup>nd</sup> grades) among subtypes of children with DLD, the influence of SES, and developmental stability and change in the prevalence of these varieties.

**Analyses currently underway:** Based on a comprehensive battery of language and literacy measures administered in preschool and 1<sup>st</sup> grade, composite Z scores will be calculated for each linguistic domain separately (lexicon, morphology, syntax, and phonology), as well as a general cross-domain composite measure which combines all four domains. Children falling below the 20th percentile in one or more domains will be included in the specific DLD group(s). Regression analyses will then be used to examine the relationships between linguistic and literacy measures for the different groups.

**Significance of this study and relevance for education:** This will be the first longitudinal investigation to pinpoint the relative prevalence of different subtypes of DLD in Hebrew in kindergarten and the later consequences of these impairments for early reading development. In addition, the alarming prevalence of both DLD and reading difficulties among low SES children emphasizes the need for early and intensive evidence-based intervention in this population and

underscores the need for thorough understanding of the language and literacy characteristics of this vulnerable population. The findings are likely to assist clinicians and policy makers in the fields of health and education in planning and implementing effective evidence-based intervention programs for children with DLD, many of whom develop reading difficulties, especially those from low SES.