

MTA-ELTE Language-Learning Disorders Research Group

First annual report 2023

Module 1-2. The aim of Module 1 is to explore the prevalence of language weaknesses among children with social, learning and behavioral difficulties (SLBD). To this end, during the first year of the project, we finalized the test battery to be used to assess language performance, the relevant subtests of the Complex Oral Language Ability Test (KOBÁK) developed by Lukács and Kas (in preparation). The cognitive control tasks have been finalized during the first year too. These tasks are being used to differentiate between children with developmental language disorder (DLD) and children with language differences (e.g., minority language speakers, emerging bilingual children, etc.). We submitted a research-ethics proposal (IRB request) to the Research-Ethics Committee of B.G. Faculty of Special Needs Education, ELTE. Following the IRB approval, we recruited 13 speech-language therapists for data collection. We accepted applications from speech-language therapists from the following counties: Fejér, Szabolcs-Szatmár-Bereg, Pest, Zala and Bács-Kiskun and Budapest. Detailed protocols have been prepared for the participating professionals, to regulate the process of involving the participating children, the information and consent of parents and heads of institutions, the preliminary administration of the assessments, the recording of basic demographic data, the review and processing of the expert opinions, the procedure for conducting the assessments and the way the data are handled. Additionally, we provided in-person and online training to these professionals. The trainings focused on the goals of the project, confidentiality questions, data collection procedures with the language tests, and the administration of the cognitive tests. As required by the IRB approval, the speech and language therapists recruited the children with social, learning and behavioural difficulties themselves. By the end of the project year, 105 children with SLBD had been assessed with the language tests, exceeding the commitments made in the project plan. The digital recording, processing and evaluation of the data is currently underway. A number of the children with poor language scores started taking the cognitive tests too. The administration of the cognitive control tasks shows some overlap with language testing, but it occurs mainly following the data collection, therefore will continue in the second year of the project. Although testing is ongoing, about 120 children participated in different phases of data collection. Related to Modul 2, we produced one Q1 publication <https://doi.org/10.1016/j.jfludis.2023.105993> and one Q2 publication <https://doi.org/10.1177/17446295231189018>. Publication of the first results from the current data collection is expected by the end of the second year of the project. Module 3. The aim of the module is to develop an intervention method based on music therapy to improve the cognitive-linguistic skills of school-age children. During the first year of the project, the methodology was finalised and activities were carried out in preparation for the testing period of the second year. The recruitment of music therapy colleagues to participate in the research has also started. In May, a public doctoral dissertation defense by Ágnes Varga (doctoral advisors: Klara Marton & Zoltan Jakab) took place at the Doctoral Programme in Special Education of the Doctoral School of Education at ELTE-PPK on the topic of "The effects of musical activities on cognitive control processes", which is the methodological basis of the

module in music therapy. In June, the Facebook and print campaign design of the Zene Tere programme, which is the basis of the module, was awarded 1st place at the 5th ELTE Science Communication Competition. The winning entry can be found here: [Varga Ágnes: A Zene Tere \(elte.hu\)](#). Module 4. The aim of the module is to develop an evidence-based, effective and efficient psychomotor-based early intervention method for young preschool children with language development delays, which can be integrated into the national professional service system. In the first year of the project, the development of the intervention program was prepared from two directions. On the one hand, we outlined the theoretical framework of the relationship between language and sensorimotor processes in the embodied cognition theory approach. We also conducted a literature review on the effects of singing and chanting on early language development. Two speech and language therapy students were involved in the study of these topics and worked on them as a BA thesis topic. Subsequently, with the help of a group of early intervention speech and language therapists, a problem map of the state of play of early intervention and screening and treatment of language delay at the age of three was compiled. Secondly, we started recruiting speech and language therapists to participate in the research module 4. We gave professional presentations on this topic at the conference on early care of the Hungarian Association of Speech and Language Therapists and the Association of Demosthenes. We have held bi-monthly training workshops for speech and language therapists on the assessment of language delay and the therapeutic approach we wish to introduce. The workshops were attended by 20-25 speech therapists from all over the country. This work will continue next year.