

## **Abstract**

Narrative intervention aims to foster both macrostructure and microstructure verbal skills. Bilingual narrative intervention attempts to do this in two languages for advancing both home language and societal language skills. The present study reports effects of intervention on microstructure and macrostructure narrative abilities among French-Hebrew bilingual children with typical language development. We are particularly interested in cross-linguistic transfer of language skills between L1/French and L2/Hebrew and vice versa as a result of the intervention. Twenty-two second graders ages 7-8, born in France, participated. All acquired L2/Hebrew as sequential bilinguals in schools in Israel. They were considered typically developing bilinguals due to their ability to hold a conversation and function in both languages. In addition, as part of their language screening, children' performance was measured on sentence repetition (SR) and Cross Linguistic lexical Task (LITMUS-CLT) in Hebrew and French. Two blocks of six intervention sessions adapted from Story Champs (Spencer & Petersen, 2012) were administered by native speaking research assistants, first block in L1/French and then a block in L2/Hebrew. Intervention was conducted in groups of 3-4 children, in an online mode through Zoom. Six macrostructure story elements (character, problem, feeling, goal, attempt, outcome), word and sentence level measures, and 24 new words (12 in each language) were taught in the intervention. Narrative skills at macro level were assessed by comprehension questions and a production of the narrative story structure in a retelling task; microstructure skills were evaluated linguistically (number and types of words as well as number of expressions-C-units and their length) and vocabulary was tested via a task requiring definitions to words. Four progress monitoring sessions involving story retelling and defining target words in each languages took place at: 1) pre-intervention (PM1); 2) post French intervention (PM2); 3) post Hebrew intervention (PM3); and 4) six weeks after the 12 intervention sessions (PM4).

Results showed an effect of intervention on microstructure and macrostructure with an improvement in understanding and production of narratives in French and a focused narrative story structure for Hebrew. At the micro level, a greater contribution was observed for Hebrew at the level of the word and the number of C-units, while in French the contribution was observed in the number of new word types and the length of the expression. Effect on

vocabulary was observed in both languages. For **macrostructure**, at PM2, following intervention in L1/French, the *Character* element was produced more in the Hebrew narratives; and six weeks after the end of both interventions at PM4, the *Feeling* and *Attempt* elements were produced more in L2/Hebrew stories in comparison to PM3. For **microstructure**, improvement in L2/Hebrew occurred at two points for the number of different words: at PM2, and at PM4. The mean length of C-units showed improvement at PM4 compared to PM3. Comparison between PM1 and PM4 showed improvement in total number of word and number of C-units. For **vocabulary**, an intervention effect was observed for 12 French words (9 presented in French and 2 presented in Hebrew), but only 7 Hebrew words (4 presented in French and 3 in Hebrew).

The division of the children into groups according to the age of exposure to Hebrew for the first time (AOB- Age Of Bilingual onset ) showed an interaction between the scores of the assessment sessions and the AOB at the micro level for number of words, number of word types and number of expressions in the L1/French. Regarding number of words and number of word types, similar patterns are seen. Children exposed late (after 47 months) did not see a significant difference between the scores of assessment sessions. Children exposed up to 23 months showed an improvement after intervention in L1/French (PM2) and the children exposed between 24 and 47 months showed an improvement after the L2/Hebrew intervention that was not maintained over time. Regarding number of expressions, only children exposed up to 23 months showed an improvement two months after the end of the program (PM4) and the other children showed no difference throughout the entire program.

Bidirectional transfer effects emerged, from L1/French to L2/Hebrew in microstructure, macrostructure and vocabulary, but the opposite impact was observed for vocabulary only. Our findings suggest that children can benefit in their L2 from support provided in L1, when the focus is on aspects that are shared across the two languages. This promising direction could be used to assist children of immigrants in their new country in reducing linguistic and academic gaps for an equal opportunity for learning.