

# Language Outcomes of Contextualized and Decontextualized Language Intervention: Results of an Early Efficacy Study

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The present study examines whether a new contextualised language intervention (CLI) or an existing decontextualised language intervention (DLI) resulted in greater changes in children's language and narration than a no-treatment condition (CON). Both interventions were associated with statistically significant improvements on sentence- and discourse-level measures when compared to a no-treatment condition, with the CLI group performing the best.

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The present study examines whether a new contextualised language intervention (CLI) or an existing decontextualised language intervention (DLI) resulted in greater changes in

children's language and narration compared to a no-treatment condition (CON). In the study, 16 children aged 6-9 years were randomly assigned to the CLI and DLI groups, and 8 children were assigned to the CON group. Children in the CLI and DLI conditions received group intervention sessions of 50 min 3 times per week for 6 weeks. Both interventions were associated with statistically significant gains on sentence- and discourse-level measures when compared to a no-treatment condition, with the CLI group performing the best.

- School-age children with specific language impairments (SLI) often demonstrate difficulty in comprehending and producing narratives.
- Difficulties in one area (such as comprehension) often affect the performance in other areas (such as literate language use).
- Deficits negatively impact the ability of children with SLI to profit from instruction in the classroom without some form of intervention.

### **Contextualised language intervention (CLI)**

- Contextualised language intervention is a treatment approach in which specific teaching steps are used to train multiple linguistic targets or curriculum-related skills within activities that involve rich, meaningful, and coherent references to people, objects, and actions.
- Topic continuity across activities is a key component of CLI.
- It is assumed that language is best learned when children engage in activities with more skilled participants who provide them with models and support within authentic communicative interactions.

### **Decontextualised language intervention (DLI)**

- In a decontextualised language intervention, children

are taught language skills in discrete, teacher-directed activities with minimal topic continuity across the activities.

- In each activity, the topics and interactive contexts are different.



## **The study**

The present study employed a nonrandomised, parallel group design to provide a low-cost test of our revised intervention to facilitate a larger, more costly, and more internally valid investigation.

Research question:

1. Will children who receive CLI or DLI present greater improvements on sentence-level or narrative-level language measures compared to children in a no-treatment control group (CON)?

## **Participants**

The study included 24 children with learning impairments (LI). Of these, 8 received CLI, 8 received DLI, and 8 formed a CON group. Intervention was provided in a public school in three sessions of 50 min per week over 6 weeks in small groups of 3 or 4 students.

## **The CLI intervention procedure**

- The CLI was structured around children's literature and incorporated both oral and written language whenever

possible.

- Children were provided with multiple opportunities to talk about and share knowledge of the story content and use vocabulary and grammatical structures from the model stories.
- The clinician delivering the CLI encouraged the children to link relevant world knowledge and experiences to the vocabulary and sentence structures that were taught in each session.
- The specific intervention activities in the CLI included the following: listening to stories, answering comprehension questions, generating inferences, comparing/contrasting characters and actions across stories, discussing and defining the meanings of Tier 2 vocabulary, and brainstorming solutions to problems inherent in the stories.
- Tier 2 vocabulary includes words that are likely to be unfamiliar to children but represent 'concepts' with which children are familiar.

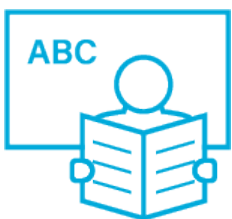
### **The DLI intervention**

- Children in the DLI group answered questions and played games from the No-Glamour series published by LinguSystems.
- The materials included a commercially packaged grammar game and situational drill cards designed to improve vocabulary, sentence complexity, and social language.
- Clinicians were instructed to engage the children in each game or card set for an average of 12.5 min.
- Clinicians were instructed to provide feedback in the form of focused stimulation, explanations, growth-relevant recasts, and vertical structures.
- Topic continuity or discontinuity was a critical difference between the DLI and CLI programs. Topics were discontinuous in the DLI program.



## Findings

- The CLI group's post-test scores on the Recalling Sentences and Formulated Sentences subtests were significantly larger than the control group's post-test scores.
- The DLI group's post-test scores were significantly higher than the CON group's scores for Formulated Sentences but not for Recalling Sentences.
- The effect sizes for the CLI intervention were 81% larger (on average) than the effect sizes for the DLI intervention.
- There were significant differences between the CLI and CON groups for the TNL Narrative Language Index, the TNL Narrative Comprehension score, and the MISL microstructure score.
- The only significant difference between the narrative performance of the DLI and CON groups occurred for the MISL microstructure score.
- For the four narrative measures combined, the effect sizes for the CLI were nearly three times larger (on average) than the effect sizes for the DLI.



## Summary

- The study assessed the language outcomes of children who

participated in a CLI and those who participated in a DLI.

- Both the CLI and DLI programs incorporated activities that involved listening to short stories, asking or answering questions, and brainstorming solutions to problems. In addition, children in both groups were asked to define words and to generate sentences containing vocabulary words.
- The primary difference between the interventions was that the CLI condition provided more topic continuity across activities that were presented in functional, narrative-based intervention contexts.
- Children in all three groups achieved similar scores on five of the six measures before intervention. The only exception was the Recalling Sentences subtest, in which the children in the CLI group had significantly higher scores than the children in the CON group.
- After intervention, children in the CLI group achieved significantly higher scores than children in the CON group on Recalling Sentences and Formulated Sentences.
- Children in the DLI group achieved higher scores than children in the CON group on Formulated Sentences but not on Recalling Sentences.
- Only the CLI group performed significantly differently from the CON group on the TNL Narrative Language Ability Index.
- The CLI group performed significantly better than the CON group on the comprehension measure and the microstructure measure, but not on the macrostructure measure.
- For the sentence-level measures, there were large or very large effect sizes for both the CLI and DLI groups over the CON group.
- It could be argued that both interventions were effective for improving children's sentence-level language skills.
- There were important group differences in the size of

the effects. On average, the effect sizes for the CLI group were 81% larger than the effect sizes for the DLI group.

- The CLI approach yielded moderate effects ( $d = 0.43$ ) on the general measure of narrative language ability and for the MISL macrostructure scale ( $d = 0.45$ ), and large effects for the TNL Comprehension scale ( $d = 0.93$ ) and MISL microstructure scale ( $d = 1.19$ ).
- A finding of positive outcomes for children who received group therapy is promising news for clinicians whose caseload considerations prohibit or restrict the provision of individual treatment to children with LI.