

Effectiveness of Dialogic Book Reading Intervention on Lexical Development In the Lebanese Multilingual Context

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Introduction

Dialogic Book Reading (DBR) is a shared reading technique shown to enhance lexical and narrative skills in children. Through this technique, adults facilitate children's understanding and vocabulary use by engaging them in a variety of question-answers prompts and by making connections between book event and children's own lives (Lonigan & Whitehurst, 1998). This practice is also used by speech and language therapists (SLT) in order to improve children's language learning. However, little is known about the use and the feasibility of such techniques in Lebanese children with Developmental Language Disorders (DLD). This study follows two pilot studies conducted in two different countries: Lebanon (Hankash, Kouba El Hreich, Abou Melhem, 2018) and Austria (Dornstauder, 2018), as part of Cost Action IS01406. It aims at exploring the feasibility of this technique in the Lebanese multicultural context and to examine its efficiency on expressive vocabulary skills.

Participants

We recruited 2 Lebanese bilingual children with Developmental Language Disorder :

- Age: 5 ; 0
- L1 Lebanese Arabic
- English speaking preschool

BAY



- Age: 4 ; 0
- L1 Lebanese Arabic
- English speaking preschool

ALY



- ✓ No language treatment received before the study
- ✓ No concerns about nonverbal cognition
- ✓ Socio-economic level documented
- ✓ No major issues in articulation
- ✓ No hearing loss

Procedure

1- Formal language assessment

Done by a blind tester using standardized tests of several aspects of language

2- Baseline : Probes

Administered 3 times before treatment starts

3- Treatment sessions using the DBR technique

- A total of 12 sessions: 1 session per week
- Books used in a specific randomized order: 1 book per session
- Conducted by an SLP and a qualified SLP student trained in the method
- Parents do not participate directly in the treatment
- Duration: 30 to 45 minutes per session

4- Continuous lexical evaluation : probes

- Administered after each treatment session
- 3 different sets: 36 slides each with sentence completion and questions

5- Post-treatment assessment + probes

- 2 months after the end of the treatment
- Done by a blind tester using tests + Probes
- To verify the eligibility for the study

+

Short questionnaires for SLP and parents

Treatment material

- **9 books:** scripts adapted and translated into Lebanese Arabic
 - **3 sets of themes:** 3 books each
 - **5 prompting types:** Wh-questions, distancing, recalling, completion, open ended
 - **Target words:** 36 words, 12 for each theme
- Ex: ladder (noun), loud (adjective), honk (verb), outside (adverb)

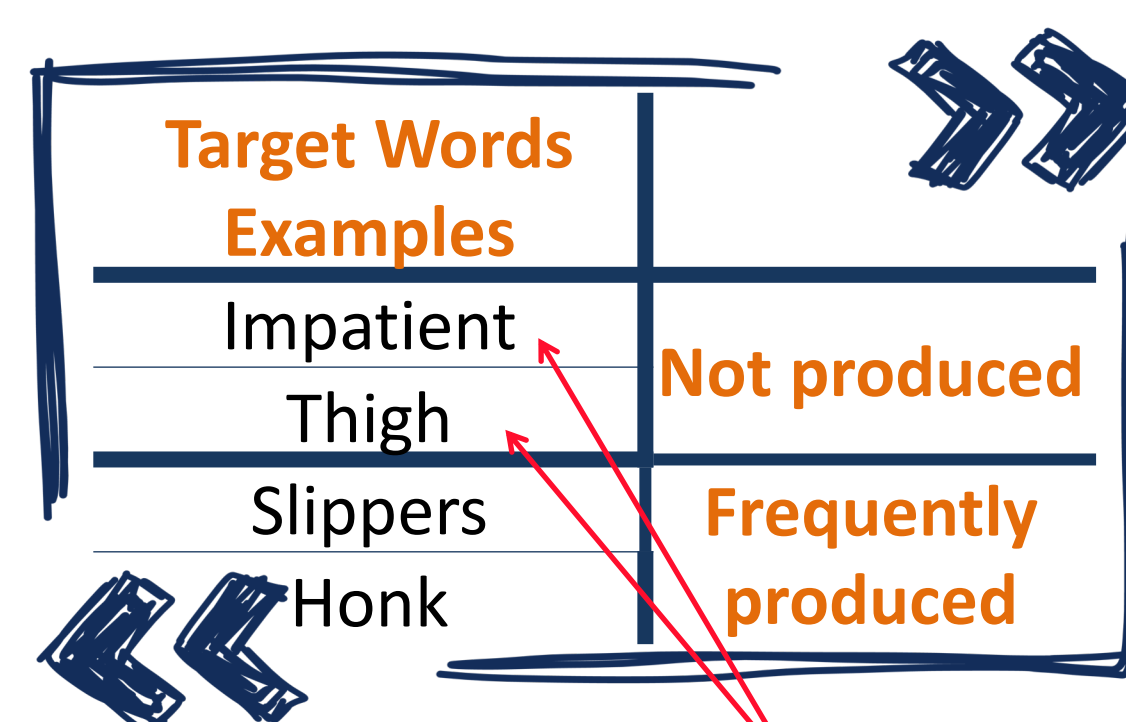
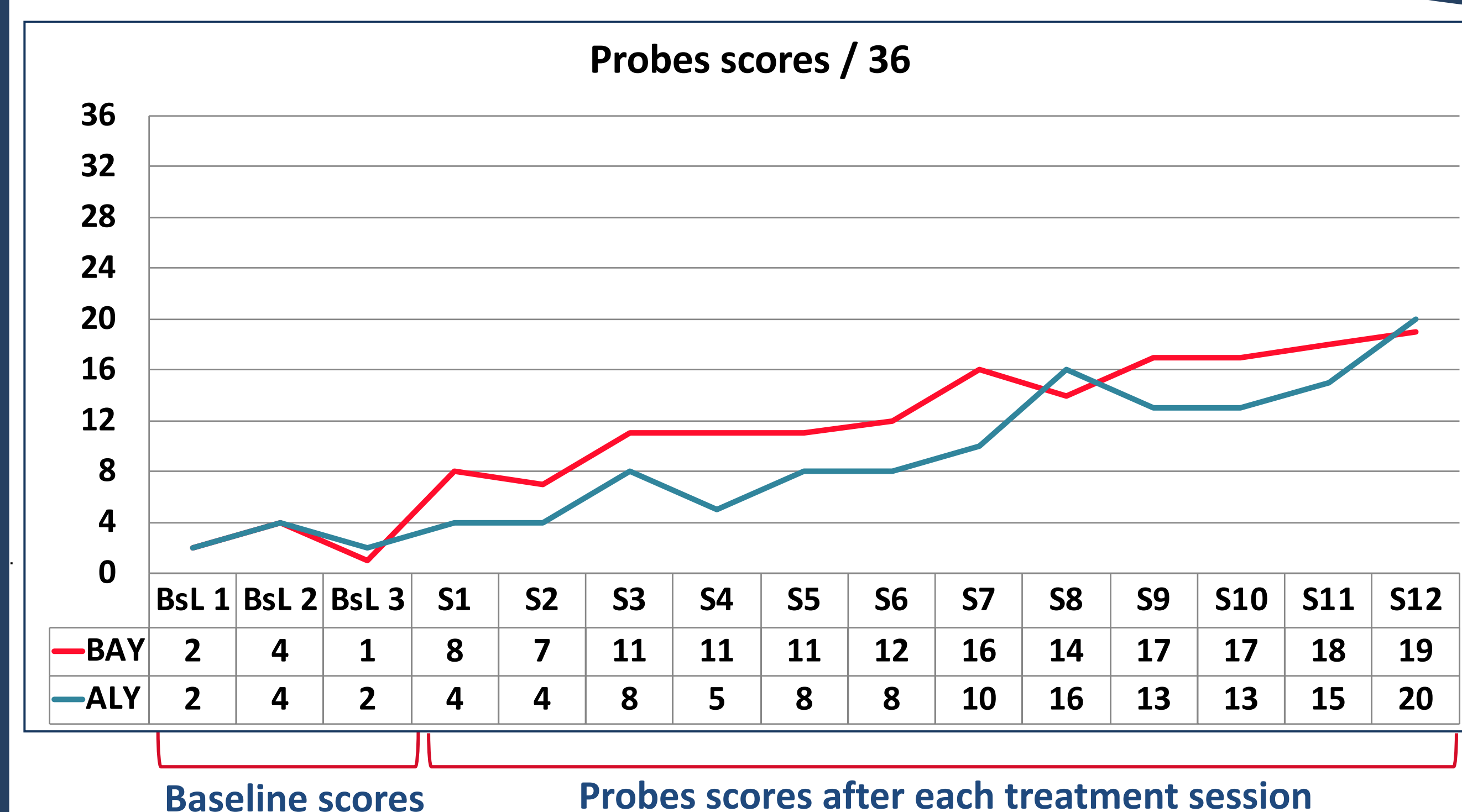
Assessment material

- PABIQ** (Tuller, 2015)
- ELO-L** (Zebib & al., 2017)
- CLT** (Haman & al., 2015)
- MAIN** (Gargarina & al., 2012)
- RAN (EDA)** (Billard & Touzin, 2012)
- LITMUS-SRT** (COST Action IS0804)
- LITMUS-NWRT** (COST Action IS0804)
- Raven's Matrices** (Raven, 1986)
- Conversational language sample**
- DIGIT SPAN (CELF)** (Messing Semel & al., 2004)

Results

Probes scores :

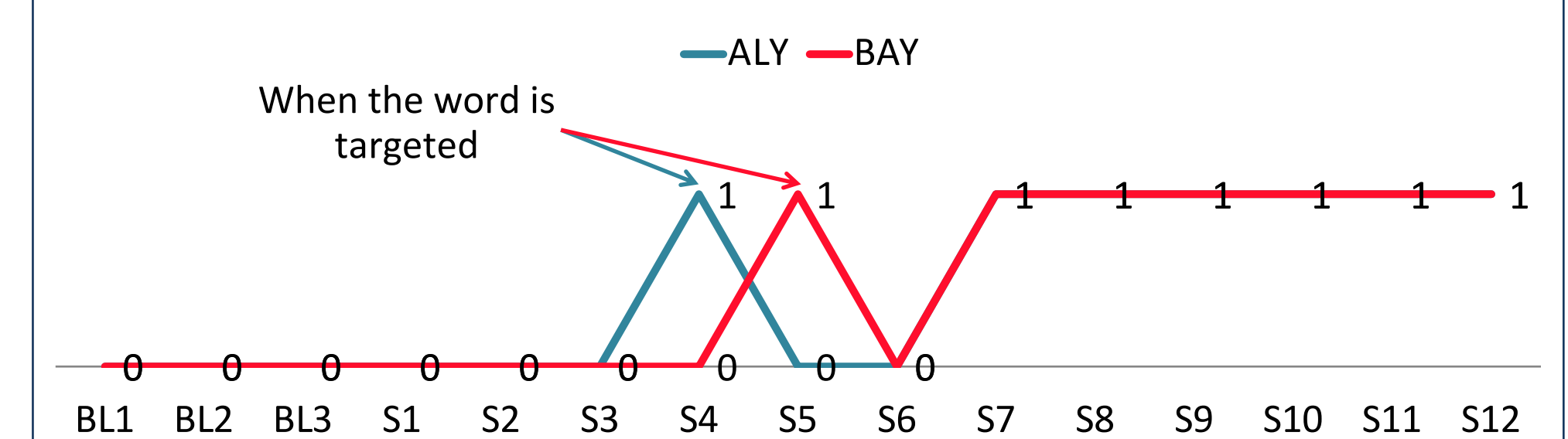
Baseline and continuous evaluation after every DBR session



Probes sets were also administered to 10 Lebanese TD children aged between 4;4 and 4;11. Results showed that some target words were not produced by TD children either: word frequency, AoA should be taken into account.

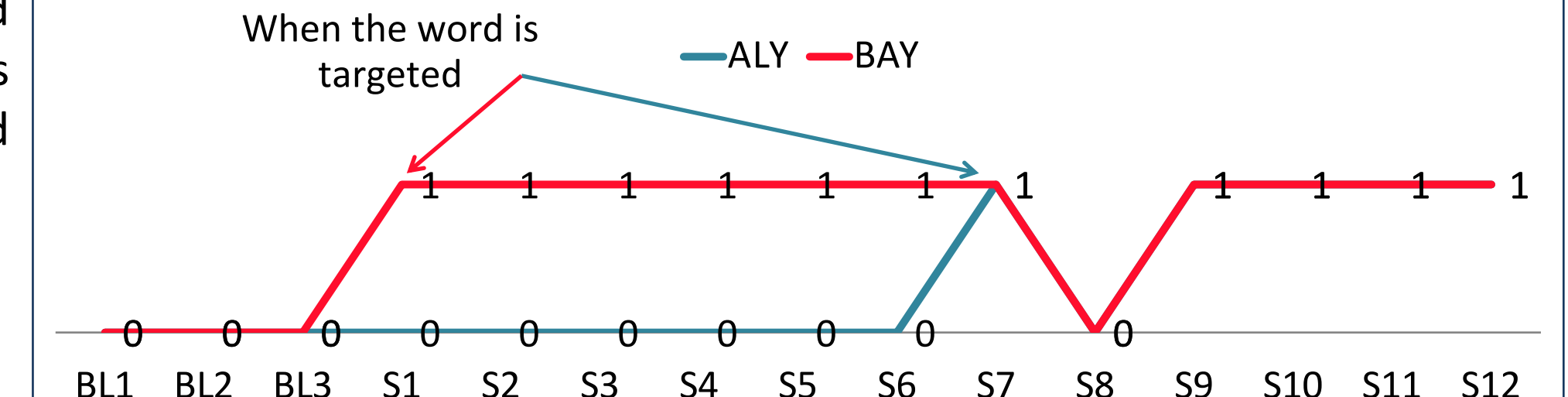
Clear upward trend: increasing scores during treatment

Sidewalk



Probes results show that many target words are only produced after being addressed during the DBR session.

Cheek



Conclusion

DBR is a very promising technique in language intervention for DLD children. This technique exhibited a positive impact on their expressive language skills. It is considered as an easy and ecological method of treatment that can also be used in schools and home settings. Nevertheless, caution should be considered regarding socio-economic and cultural factors that may influence such interventions.

Perspectives

Further investigations are needed in order to confirm the effectiveness of this technique:

- Scores maintenance two month after the end of the treatment
- Overall language scores evolution
- Positive parents and SLP views regarding this technique

References

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- Lonigan, C. J. et Whitehurst, G. J. (1998). Relative efficacy of parent and teacher involvement in a shared reading intervention for preschool children from low-income backgrounds. Early Childhood Research Quarterly, 13. 263-290.

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