



NSW Speech Pathology Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE:

Discourse-based intervention is a possible way to treat Word Finding Difficulty (WFD) in children, though more evidence is required to make a conclusive decision.

Clinical Question [patient/problem, intervention, (comparison), outcome]:

What techniques are effective for improving word-finding difficulties in children aged 2 – 12 years old?

Citation:

Stiegler, L. N & Hoffman, P. R. (2001). Discourse-based intervention for word finding in children. *Journal of Communication disorders*, 34, 277-303

Design/Method:

Within-subject multiple baseline across tasks design
Single subject design replicated with 3 individual subjects.

Participants:

- Three 9 years-old Caucasian males with specific language impairment (SLI), no mental retardation, no pervasive developmental disorders, no hearing loss or fluency disorder, no history of head trauma, neurological dysfunction or documented anxiety disorder, normal Peabody score, 1-2 standard deviation below mean for test of word finding in discourse.
- 3 children chosen from same class and school and described by teachers with WFD.
- Subject 1: in special education class; subject 2 and 3 in special education and mainstream

Experimental Group:

- All participants received treatment though one subject's intervention specifically focused on word-finding. They received 3 weeks of intervention each delivered in a sequential cycle with a baseline measure taken week 1 and week 5. The 3 students received different combinations of intervention during weeks 2-4 which included picture-elicited narrative, story re-telling narrative, conversation on a familiar topic.
- On-line feedback was given immediately when the student exhibited observable word-finding difficulty. The feedback did not directly cue production of a word but made the subject aware that a communication breakdown had occurred, to systematically assist the subject through the word finding process, and to confirm the target word when it was produced. The feedback varieties included request for associative information, request for clarification, confirmation/reconstructing, and phonemic cueing or provision of target word.

Control Group:

No control group

Results:

- All 3 subjects produced fewer overt word finding behaviours (OWFBs) after treatment
- One subject exhibited immediate change while the other two made more gradual changes
- The 3 discourse tasks were not equal in complexity (the story retell task was much more difficult than the picture-elicited narrative in conversation)
- Longer, more complex communication units were associated with significantly higher levels of linguistic non-fluency, including overt word finding difficulties

Comments:

- They needed to specify what Word Finding behaviours they were counting compared to number of words (i.e. if number of words increased for a child, it would decrease overall percentage of WFD)
- 'Practice effect' - maybe the child was used to the activity and/or clinician by the third therapy session. Also same baseline and treatment activities used.
- The sample was too small
- There were 3 different discourse tasks used but their context was the same.
- Short treatment sessions and only one baseline session.
- No statistical measures were made on design.
- Not enough information on the type and amount of feedback provided
- There was no naïve listener for story re-tell task
- There were no generalised post-test measures.
- Possible effect of previous speech therapy intervention.
- Did not acknowledge the weaknesses in their article.

Level of Evidence (NH&MRC): Level IV**Appraised By:** Paediatric Language Group
Clinical Group:**Date:** October 2003