

Critical Review: Efficacy of Narrative-Based Intervention on Improving Oral Narrative Skills in Children with Language Impairments

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This critical review examines the efficacy of narrative-based intervention on improving oral narrative skills in pre-school and school aged children with language impairments. A literature search was conducted and the following types of articles were selected: studies of several children utilizing single subject methodology, a single case study design, and informational articles. Overall, the research provides guarded support for practicing clinicians to utilize narrative-based intervention for improving oral narrative skills in children with language impairments. Narrative-based therapy is worthy of further, more rigorous experimental investigation.

Introduction

Researchers have defined oral narratives as story telling, as a method of verbally relating past experiences and organizing life events (Crais & Lorch, 1994). Children are constantly exposed to stories (i.e., in the form of storybooks, movies, television shows, cartoons, and personal stories) and are expected to comprehend and often re-formulate narratives. Oral narratives are an integral part of children's daily life both in the classroom and social environments (Davis, Shanks, & Davis, 2004). Research has established that oral narrative skills directly influence children's ability to succeed in school. Narrative abilities in pre-school children predict long-term language skills and later academic performance (Cameron, Hunt, & Linton, 1988). Deficits in narrative skills also influence children's everyday social interactions with peers and family members.

Research has shown that children with language impairments exhibit difficulty when producing oral narratives (Crais & Lorch, 1994). In comparison to their typically developing peers, oral narratives produced by children with language impairments have been shown to include the following: fewer total words, fewer different words, less story grammar components, fewer complete episodes, less conventional story openings and closings, improper amounts of information given to the listener, fewer successful communication repairs, less accommodations to uninformed listeners, poorer use of cohesive ties, and fewer protagonists attempts, plans, and internal responses.

Clinical Rationale

Narrative-based intervention is becoming a common feature of speech-language pathologists'

clinical treatment plan for pre-school and school aged children with language impairments (Hayward & Schneider, 2000). Narrative skills take into account a wide range of language abilities that are used frequently in the classroom (i.e. to understand teacher's expectations and participate in classroom activities) and in everyday social settings. Children's oral narrative skills are also considered a key resource in bridging oral and written communication and improving reading comprehension (Hayward & Schneider, 2000). Therefore, research to support clinicians in their endeavour to provide effective and efficient narrative intervention for children with language impairments is critical.

Objective

The primary objective of this paper is to critically evaluate existing literature regarding the effectiveness of narrative-based intervention on improving oral narrative skills in pre-school and school aged children with language impairments.

Methods

Search Strategy

Computerized databases, including ProQuest Research Library, PubMed, MEDLINE- OVID, and CINAHL, were searched using the following search strategy:

((story retelling) OR (oral narratives), AND (narrative intervention), AND (language impairments), OR (language disorders)).

The search was limited to articles written in English between 1985 and 2006.

Selection Criteria

Literature assembled from various journals evaluated the efficacy of narrative-based intervention

on improving children's ability to understand and produce narratives. The intervention approaches described in the research articles taught children with language impairments to utilize story grammar components to structure the production of their oral narratives. The available literature outlines specific intervention techniques and evaluates collaborative approaches to narrative-based intervention.

Data Collection

Results of the literature search yielded the following types of articles: studies of several children utilizing single subject methodology (3), a single case study design (1), and informational articles (2).

Results

Hayward and Schneider (2000) conducted an exploratory study to evaluate the effectiveness of narrative intervention. Pre-school children with language impairments participated in the narrative-based intervention program. The researchers utilized a single-subject design evaluating all of the children individually pre and post intervention. In addition, group data was collected to examine the overall effectiveness of the intervention. Group pre and post-test results for story information units and complexity of the narratives were compared using a two-way analysis of variance (ANOVA) with two variables: time (pre- and post-) and listener conditions (familiar and unfamiliar). This analysis is appropriate for a mixed group design and the results indicated statistically significant improvement in the children's narrative productions ($p < 0.001$); however, single-subject data showed considerable variation.

A major limitation of the Hayward and Schneider (2000) study was the small sample size selected. In addition, the children were receiving a classroom language intervention program with a focus on narratives along with the specific narrative-based therapy; consequently, it is difficult to separate the effect of the narrative intervention and experimental confounds. A further limitation of the study was the listener's questions, which appeared to have served as a scaffold for the children's narratives. In turn, the scaffold may have influenced the children's narrative productions. Although, the Hayward and Schneider's (2000) study displays mixed results and several weaknesses, the research provides support for practicing clinicians to utilize narrative-based intervention.

Swanson, Fey, Mills, and Hood (2005) conducted a preliminary study to examine the feasibility of narrative-based language intervention. School aged children with specific language impairment participated in an intervention program

focusing on grammar and narrative goals. The results indicated that eight of ten children studied achieved clinically significant improvements on their narrative quality rating. Throughout the intervention, the children were informally observed to exhibit increased confidence in their narrative productions. A strong point of the research was that the scorers were blind to all details of the children's profiles during the transcription of the narrative. In addition, the transcribers randomly selected samples to transcribe a second time for reliability purposes.

Similar to the Hayward and Schneider (2000) study the number of children selected for the intervention was small and somewhat heterogeneous. A further limitation of the Swanson et al. (2005) study was the brief length of the intervention. In addition, some children participating in the study were receiving services from their school board speech-language pathologist, which may have confounded the results.

The study employed a measure of clinical significance based on the Fey, Catts, Proctor-Williams, Tomblin, and Zhang (2004) article. A clinically significant change indicated in the results of the study was based on the upper limit of the 95% confidence interval, which provides fair evidence for positive treatment results. However, many psychometric properties of Fey et al. (2004) narrative tasks are unknown, specifically information on test-retest reliability necessary to make accurate interpretations of the results (Swanson et al., 2005). A further weakness in the research was that long-term follow up data on the children's progress was not collected. This study had various limitations; however, it provides some guarded empirical support for the use of narrative-based language intervention in clinical practice.

Davis, Shanks, and Davis (2004) conducted a study on improving narrative skills in young children with delayed language development. Thirty-one children participated in the intervention program targeting oral narrative skills through a collaborative approach with the speech-language pathologist, teachers, and learning support assistants. Children were reassessed three months after the program. A major limitation of the study was the status of the population selected, which was not clearly representative, as a high proportion of children were from families of low socio-economic status.

The results of the study indicated a significant improvement in the quality of the children's narratives. Teachers' and learning support assistants' reports also illustrated improvements in the children's overall confidence, listening skills, independence, task completion, and ability to participate in classroom activities. The quantitative

data of the study was obtained on standardized measures by comparing age-related scores before and after intervention. The researchers found a significant improvement in the quality of the children's story telling. The researchers attempted to take maturation into account; however, not all of the variables were adapted to account for maturation. When evaluating age equivalent scores it is important to interpret the data with caution. It is challenging to determine the validity of the statistical improvements and judge if the intervention would have had a similar impact on children without a language delay (Davis et al., 2004). In addition, qualitative outcomes (obtained through diary entries and interviews) were poorly organized and outlined. This study has various limitations and it is difficult to evaluate the progress that these children would have made without intervention. However, the research provides tentative positive support for clinicians to utilize narrative therapy.

Klecan-Aker (1993) conducted a case study examining the effectiveness of a narrative-based treatment program on improving the story-telling ability of a school aged boy with a language/learning disability. Results revealed an improvement in both the length and complexity of the child's narratives. The study determined specific treatment targets through the use of detailed pre and post intervention criterion-referenced assessment.

The results of the Klecan-Aker (1993) study indicated improvements in the child's narratives post intervention; however, the article did not report statistically significant data. In addition, the child was assessed on standardized measures and he showed little overall gains, with the exception of improvements on reading comprehension. Two stories were elicited in an attempt to have a reliable measure of the child's story-telling ability; however, reliability measures were not reported. Although the results of the case study do not provide empirical support for narrative-based intervention, the research provides some guarded encouragement for the practicing speech-language pathologists to teach narrative skills.

Two articles were selected on oral narrative skills in school aged children (Crais & Lorch, 1994; Page & Stewart, 1985). Both articles described the important role oral narratives play in children's academic and social success. Implications for narrative intervention were outlined based on suggestions from the literature, rather than on empirical results. The articles are informational and based on credible expert opinions, they are not systematic reviews and they do not provide a critique of the efficacy of narrative-based intervention. The articles present specialist information and support for

facilitating story structure in children with language impairments.

Conclusions

Overall, the literature collected demonstrates several limitations. All of the participants in the research articles reviewed received intervention and there were no control groups, preventing definite empirical conclusions made regarding the efficacy of narrative-based therapy. The studies reviewed contained several methodological weaknesses (i.e. small heterogeneous sample sizes limiting the ability to generalize results to a larger population and lack of control of extraneous variables etc...). The two additional informational articles supporting narrative intervention showed implications for narrative therapy based on suggestions from the literature, rather than on based empirical results. Therefore, narrative intervention is worthy of further, more rigorous experimental investigation.

Despite the limitations of each article, a shared strength when examining the research is that all of the literature reports positive results supporting narrative therapy. Therefore, as a group the articles provide evidence for the efficacy of narrative-based intervention. An additional strong point in the research reviewed was that the intervention programs outlined were well-described and easily reproducible for speech-language pathologists to integrate into treatment. Qualitative observations also demonstrated improvements in the children's overall confidence and ability to participate in narrative-based activities.

In conclusion, the literature retrieved provides guarded support for practicing clinicians to utilize narrative-based intervention for improving oral narrative skills in pre-school and school aged children with language impairments.

Clinical Implications

Evidence based practice is a critical component to effective and efficient service provision. The evidence base for narrative intervention provides support for its use; however, gaps in the research remain and speech-language pathologists should utilize this therapy with caution. Clinicians are encouraged to continue examination of the efficacy of narrative-based intervention through the use of randomized experimental clinical trials. More specifically, information is needed with regards to the implications of narrative-based therapy on children's literacy development and long-term progress in school. Narrative skills are frequently used in classroom and social settings; therefore, an additional objective for future research is to further examine collaborative narrative-based intervention utilized with teachers, educational assistants, and parents.

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