Critical Review:

In children with phonological/articulation disorders, do non-speech oral motor exercises improve speech production compared to direct speech therapy?

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This critical review examines the evidence evaluating the efficacy of non-speech oral motor exercises (NSOMEs) as a treatment approach for children with phonological/articulation disorders. Research studies include one randomized clinical trial design, one single group pre-test post-test design and one single subject design. Overall, the evidence does not support the use of NSOMEs to treat children with phonological/articulation disorders. Future and clinical recommendations are discussed.

Introduction

Children with speech sound disorders, such as phonological/articulation disorders, reportedly dominate the caseload receiving speech and language services (Lass & Pannbacker, 2008). Speech-Language Pathologists (SLPs) often use a variety of phonetic or phonemic-based approaches to treat children with phonological/articulation disorders.

Objectives

The primary objective of this review is to critically evaluate the current literature examining the efficacy of NSOMEs as a treatment approach for children with phonological/articulation disorders. A secondary objective is to provide future and clinical recommendations.

Method

Search Strategy

Databases searched were CINAHL and PubMed. They were searched using the following terms: ((oral motor exercises) AND (articulation disorders or phonological disorders)), ((nonspeech oral motor exercises) AND (articulation disorders or phonological disorders)). The search was limited to articles in English. There was no limitation on the date of articles.

suggested that oral motor training did not improve speech development in children who have PADs.

Based on research design and methodology, level I evidence was provided. This is considered to be the highest quality of experimental evidence available. Participants were specified and a description of treatment procedures was included. The authors used valid statistical measures and they adequately controlled for order effects by randomizing the order of specific treatments received. However, the study had a few weaknesses, which reduces the overall strength of the evidence. The authors used a small sample size and they did not provide any information about blinding assessors or reliability of outcome measures. Also, results may have been slightly skewed due to a participant dropping out of the study in the second last session. Though the authors provide recent and strong evidence against using NSOMEs in therapy, the evidence can be considered equivocal until additional well-designed studies are conducted to replicate similar findings.

Discussion

The purpose of this review was to determine if the use of NSOMEs is an effective and appropriate treatment approach for children with phonological/

3. A detailed description of treatment should be provided to determine if there are effective types of NSOMEs.

Clinical Implications

SLPs should carefully evaluate the available research on NSOMEs and incorporate scientific evidence into their daily practice. If clinicians choose to use NSOMEs in therapy, clients or parents of clients should be made aware that this approach is, at most,