

Critical Review:
What is the validity of using nonverbal intelligence scores as an exclusionary criterion when identifying children with specific language impairment?

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identifying children with specific language impairment were also included. Only articles written in English were selected and no date restriction was used.

Data Collection

Upon completion of the previously described literature search the following articles met criteria to be included in this analysis: three nonrandomized clinical trials (two between groups and one mixed) as well as two within groups (repeated measures). In addition, two expert opinion articles were included. These articles provide an overview of the current state of research in the area of selection methods for children with specific language impairment.

Results

The following studies are presented in groups according to the type of study design utilized.

Nonrandomized Clinical Trial: Between Groups

The purpose of the study by Stark and Tallal (1981) was to establish a standard method for the selection of children with SLI. One of the criteria used in this study was a nonverbal IQ cutoff score of 85. To determine each participant's nonverbal IQ score, either the WISC-R or WPPSI, both widely accepted intelligence tests was used. As a secondary procedure, a

cutoff). Each child was administered two nonverbal intelligence tests. A cutoff score of 85 on the nonverbal intelligence test was used.

Results of the mixed model ANOVA indicated a significant main effect of group, a significant main effect of test, and a group by test interaction. No significant difference between the mean test scores was found for the typically developing group. Scores on the two tests were significantly correlated for the typically developing group. In contrast, a significant mean difference was found between the two tests for the SLI group. A post hoc analysis (unequal N HSD) showed no

limitation of a retrospective study is a lack of researcher control of testing procedures. For example, having a standard length of time between the two testing times and having all children complete the same IQ measure. Additionally, the study did not have a control group of typically developing children with which to compare the findings of the experimental group. Lastly, the study

opinions would be of more use if they provided a critical analysis of the articles rather than just presenting the current research findings. Lastly, like many clinical studies in the field of speech-language pathology, future studies should aim to increase sample sizes. This will improve the likelihood that the findings will generalize to the greater population.

Since each study focused on a different aspect of the use of nonverbal IQ as a criterion for identifying children with SLI, it is difficult to make a broad conclusion about its use. However, the results point to the following areas for consideration. First, there may be considerable variability in the nonverbal IQ scores of children with SLI. Second, children with SLI may have lower than average nonverbal IQ. Further, nonverbal IQ scores may not be stable over time in children with SLI. Lastly, results of SLI studies may lack the ability to be compared to other studies and to generalize to the clinical population when different nonverbal intelligence tests are used.

Clinical Implications

The following recommendations for clinical practice are made based on the research evidence presented:

- 1) Nonverbal IQ scores can be used as a method for ruling out a general cognitive disorder;