

Title

Intervention efficacy: pre-post difference scores versus impact on diagnostic status

Authors

Elin Thordardottir¹ & Eve-Julie Rioux²

Affiliations: McGill University¹, Center for Interdisciplinary Research on Rehabilitation of Greater Montreal (CRIR-IURDPM (IRD)), Quebec, Canada^{1,2}, and ReykjavikurAkademian, Iceland¹

Background

The efficacy of clinical intervention for language impairment (LI) in childhood generally involves the demonstration of significant progress shown to be the direct result of intervention. However, the extent to which the progress influences the children's ability to communicate in daily sitiations is often not reported. In Quebec, where this study took place, preschool children with LI are typically offered a block of 8 or 10 intervention sessions. Intervention is carried out in a different clinical setting than identification, and often considerably later. The efficacy of this model has not been investigated systematically.

Procedure

15 children with specific language impairment (SLI), mean age 57.5 months (SD 6.9), mean nonverbal cognitive scores 106.9 (SD 12.6) were provided 12 intervention sessions focusing on vocabulary and syntactic goals.

Results

For the children as a group, pre-post treatment difference scores were significant with a large Cohen's d effect size (receptive vocabulary p<.009, d= .78; expressive vocabulary: p<.000, d=2.27; syntax: p=.039, d=.64). Inspection of diagnostic status revealed that 3 children scored in the normal range before treatment. Of the 12 children who met SLI criteria before treatment, 11 still met those criteria immediately after treatment and at follow up two months post treatment.

Conclusions

The results highlight the need to reconsider the effect of a long time difference separating identification and intervention. Further, the results show that an intervention qualifying as efficacious in terms of pre-post difference scores had little impact diagnostic status, therefore, its impact on communicative ability can be questioned.