Critical Review: Is a developmental social-pragmatic intervention approach beneficial in developing language and communication skills in children with autism spectrum disorder?

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This critical review examines the effect of developmental social-pragmatic intervention approaches on language and communication skill development in children with autism spectrum disorders (ASD). Study designs include two randomized clinical trials (RCT), three single-subject multiple baseline designs, and one case-series post test only design. Results of the studies examined revealed encouraging outcomes in the use of developmental social-pragmatic treatment approaches for children with ASD in the areas of language and communication.

Introduction

Autism is a "severe developmental disability in which core impairments in language and reciprocal social communication have a profound influence on children's social development into adulthood" (Aldred, Green & Adams, 2004, p. 1420). In the early 1990s autism diagnoses began to soar and as of 2009, 1 in 110 children in the United Stated have an autism spectrum disorder (ASD) (Centers for Disease Control and Prevention, 2009). With this growth the problem of finding effective intervention approaches takes on heightened urgency.

Early intervention approaches typically use a traditional behavioural approach, also referred to as discrete trial training or Applied Behavioral Analysis (ABA), and are also the interventions that receive the majority of government funding. Despite documented success in teaching highly specific skills using such approaches, several limitations have been noted: training occurs in highly structured environments which limits variability in teaching style to promote the generalization of learned behaviours and spontaneous use of skills, deterioration of learned skills without delivery of contingent reinforcement, limited maintenance of learned skills, and targeting isolated skills rather than in the context of other co-occurring social-communicative behaviours is not representative of natural adult-child interactions (Ingersoll & Schreibman 2006). Studies

baselines were completed, all participants recieved ten weeks of language therapy using DSP methods. Once per week during both baseline and treatment, generalization was assessed by observation during a ten-minute free play session with parents.

Visual analysis of participant scores were used to measure changes in the rates of spontaneous and appropriate language usage, as well as generalization and maintenance of skills using the Functional Emotional Assessment Scale (FEAS) at pretreatment,

of treatment sessions each child received and a lack of follow-up data to evaluate long-term effects to determine maintenance of the children's social and communicative abilities. This study provides compelling evidence in using a DSP approach to develop joint attention and play skills in children with ASD, both of which are associated with later language and social abilities.

Koegel (1987) used a single-subject multiple baseline design, level 1 evidence, to directly compare behavioural and naturalistic approaches to language therapy in two young children with ASD. Data was collected within a traditional behavioural format (which served as the baseline condition) before the experimental natural language treatment condition. In-clinic data was taken to measure changes on imitative, deferred imitative, and spontaneous utterances.

Visual analysis by individual participant was used to display changes made in baseline and experimental treatment conditions. Data revealed that during baseline, the children made limited immediate imitative utterances, no deferred imitative utterances and no spontaneous utterances during all but one of the sessions. While receiving the experimental treatment condition, both children displayed increases in both immediate and deferred utterances, and large numbers of spontaneous utterances with an increase in verbal responding in terms of number and frequency of new words produced. Furthermore, the gains continued to be seen during a follow-up measure obtained thirty months post-treatment for Child 2.

Strengths of the study include a direct comparison of two treatment approaches in an area considered to be one of the core deficits in autism, selection of stimulus items that the child has access to in daily life, and task variation. Limitations of the study include small sample size and a lack procedural fidelity measures. Although

on addressing the following:

a) Further studies should use adequate sample sizes

b) Studies should attempt to control the intensity and location of speech-language therapy the children