Critical Review:
Is Parent Based Intervention an Effective Service Delivery Model?

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This systematic review examines the effectiveness of parent based intervention as a viable service delivery model for preschoolers with language delays. Study designs appraised include mixed (between and within groups) randomized clinical trials (4) and mixed nonrandomized clinical trials (2). There is a sufficient evidence base for Speech-Language Pathologists to use parent based intervention in clinical practice with a fair degree of confidence. Implications on clinical practice are discussed.

Introduction

Language delay during the preschool years is a chronic problem with both immediate and long term permeating effects on academic success, behaviour, literacy, socio-emotional development and vocational success (Law et al., 2004; Bexendale & Hesketh, 2003). Language development is largely variable in typically developing children during this time allowing some to argue for a However for many children, language delays do not resolve spontaneously necessitating intervention (Bushmann et al., 2009; Girolametto, 2004). There is a clinical need for intervention for the preschool population to be timely, cost effective and ecologically valid to maximize the potential gains and minimize chronic effects (Baxendale & Hesketh, 2003; Gibbard, 2004; Girolametto, 2004; Girolametto et al, 1996; Law et al., 2004).

For preschoolers, typical service delivery models for intervention include parent based intervention (PBI) and clinician based intervention (CBI). The main difference between these models is the agent of administration, the former being the parent or caregiver and the latter being the Speech-Language Pathologist (SLP) (Fey et al., 1993). There is a significant body of empirical support for effectiveness of CBI, but it has been described as healthcare resources, and the breadth of generalization has been questioned (Fey et al., 1993; Gibbard et al, 2004; Girolametto, 2004). Conversely,607 4.0.2( )-6enonresources lameoo6(ess)-6( )-122613(n)6(t)-12nid1ing

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demographics of the participants, specific intervention procedures, or outcome measures.

Data Collection

Results of the literature search yielded the following types of articles consistent with the aforementioned selection criteria: mixed (between and within groups) randomised control trial (RCT) (4) and mixed nonrandomized clinical trial (2).

Results

Studies establishing a treatment effect for PBI

Bushmann and colleagues (2009) examined the effectiveness of the Heidelberg Parent-Based Language Intervention (HPLI).

size was small, decreasing the power of these findings. Due to these shortcomings, these results should be interpreted with caution. These suggestive findings indicate PBI is an effective service delivery model with short term efficacy.

Studies comparing PBI and CBI

Baxendale & Hesketh (2003) compared the effectiveness of the Hanen Parent Program, a well established PBI, to CBI for inner city children with expressive or expressive/receptive language impairments using a nonrandomized clinical trial. From over 1000 referrals, 37 English speaking participants were allocated to the PBI group (n = 19) or CBI group based on geographical location. With the exception of age (the PBI group had younger participants) there were no significant differences reported between groups on standardized measures of speech and language abilities. Assessments were done pre-test, 6 months post-test, and 12 month pre-test follow up. Experimenters in this study were not blind.

Intervention for the CBI group was between 8 and 12 weeks and was 11 weeks for the PBI group. Although parents were required to be present for CBI sessions, the

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measures included criterion referenced measures from a spontaneous language sample and standardized scores from the Preschool Language Scale (PLS). Analysis with non-parametric measures revealed both groups improved relative to pre-test measures and standardized scores

to a CBI (n = 17), PBI (n = 11) and delayed treatment control (n = 10) group. Participants ranged in socioeconomic status and ethnic backgrounds. Several significant differences were noted between the groups

behaviour and ordinal position.

Several procedural differences between the two experimental groups were described by Law et al (1999). In the CBI group, emphasis was placed on structured daily routines with no redundant language, -verbal prompts, as well as fostering non-verbal listening and auditory speech sound discrimination. Intervention totalled 27.4 hours over 6 weeks. The PBI group received a condensed and modified version of HPP which totalled 25 hours over 10 weeks. Participants were assessed using the PLS during the study: pre

Discussion

There was a considerable amount of support in the reviewed literature for the effectiveness of PBI as a service delivery model for preschoolers with language delays. A treatment effect for PBI was demonstrated using multiple treatment approaches, including the Hanen Parent Program, cyclic goal attach strategy and focused stimulation (Baxendale & Hesketh 2003; Bushmann et al., 2009; Girolametto et al., 1996; Fey et al., 1993). Furthermore a comparable treatment effect was seen in PBI and CBI (Baxendale & Hesketh, 2003) although the effects may be less consistent in PBI (Fey et al., 1993). The descriptive or anecdotal evidence regarding the costs of CBI and PBI was conflicting