ENCYCLOPEDIA
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[Archived] Services and Programs Supporting Young Children's Language Development

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Introduction

Developmental language disorders place children at risk for long-term social, emotional and academic difficulties.[1] Intervention programs vary considerably in terms of service delivery method and may include direct intervention by a speech-language pathologist (for individual children or groups of children) or indirect intervention in which the speech-language pathologist trains a caregiver to conduct intervention (parent training, consultation with early childhood educators).

Subject

This review describes parent-administered language intervention and its efficacy for children with receptive and expressive language disorders. In parent-administered intervention, parents become the primary intervention agents and learn how to facilitate language development in

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daily, naturalistic contexts. The parents themselves are the direct recipients of the speech-language pathologist's efforts and their children do not normally receive therapy from the speech-language pathologist concurrently. Parent-administered intervention differs significantly from *parent involvement*, in which children receive direct intervention from the speech-language pathologist and parents play a secondary but supportive role (e.g. observation of therapy sessions, informal suggestions for language facilitation, completion of home practice assignments).

Theoretically, most parent-administered language intervention programs adhere to social interactionist perspectives of language acquisition, which maintain that simplified, responsive language input provided by adults helps children make comparisons between non-linguistic and linguistic contexts and figure out the relationships among objects, actions, external events and words.[2] The hypothesis is that responsive input strategies influence children's developmental progress in pre-linguistic aspects of communication (e.g. joint attention/action, intentional communication acts), vocabulary and morphology (i.e. suffixes denoting plural forms, past tense verbs, possession, etc.), and early sentence forms.

Responsive input strategies used in many well-known parent-administered language intervention programs[3-7] include:

- child-centred strategies (e.g. follow the child's lead, get down to the child's physical level, wait for the child to initiate);
- interaction-promoting strategies (e.g. encourage children to take turns in a conversation, ask questions and wait for a response); and
- language-modelling strategies (e.g. label, expand utterances, extend topics).

These and other strategies are described further in Tannock and Girolametto.[8] Some parent-administered programs also teach parents to target specific interaction and communication goals (e.g. pre-linguistic skills, vocabulary, two-word phrases, morphemes such as simple words and prefixes) using a focused stimulation procedure.[9,10] In focused stimulation, the targeted goal is repeated several times within an interaction and the focus is on increasing the child's receptive exposure to the form. The child is not asked to imitate the target. Other programs may include instruction on how to elicit target goals directly by requesting imitation of the target behaviour or asking a question that elicits the goal.[5,6] In the latter type of program, the children's

productive practice of goals is viewed as a key language-learning strategy.

Parent-administered intervention programs have been used with late-talking toddlers between 18 and 30 months,[10,11] preschool-aged children with cognitive and developmental delays (e.g. Down syndrome)[12-15] and preschool-aged children with receptive and expressive language disorders.[16-18] Parent-administered interventions have also been used with children who have Autism Spectrum Disorder, but these studies are not included here (for a comprehensive review, see reference 19).

Problems

There are few well-designed studies that investigate the efficacy of parent-administered intervention and there are several concerns with the existing studies. First, the participants have generally been well-educated, middle-income parents who are English-speaking and highly motivated to participate in parent programs, raising the possibility of selection bias. Second, the sample sizes in these studies have been small and the focus has been on short-term communication and language outcomes for the children. Finally, there is no research to demonstrate the efficacy of this approach for families from lower socio-economic backgrounds or families from different cultural groups (for whom parent-child interactions may differ from the mainstream culture).

Research Context

Very few efficacy studies have been conducted in this area, due to a number of methodological issues that make stringent research methods difficult to employ. The research context provides the following challenges: (a) the number of participants is limited due to the costly and time-intensive nature of language intervention; (b) language intervention is an interaction between a practitioner and a family and maintaining treatment fidelity across multiple participants and sites is difficult to achieve; (c) traditional “blinding” methods cannot be employed because families are aware of treatment and control conditions; and (d) follow-up studies are difficult to conduct because long-term control groups are viewed as unethical.

Key Research Questions

Key research questions include the following:

1. Does parent-administered intervention result in better outcomes for children?

2. Is parent-administered intervention more efficient than traditional intervention?
3. For which parents and children does it work best?

Recent Research Results

Only experimental studies (i.e. randomized control trials or single subject designs) are summarized here.

Children with cognitive and developmental disorders

Included in this group are two- to five-year-old children, with a variety of etiologies (e.g. Down syndrome, chromosomal abnormalities, mild cerebral palsy, general delays in development), and language levels that range from pre-linguistic (non-verbal) communication to short sentences. Interventions that employed a general stimulation approach (i.e. no specific language goals) yielded significant improvements in social-communication skills (e.g. joint engagement, responsiveness, assertiveness) and frequency of communication.[12,20] In contrast, interventions that selected goals and employed focused stimulation or elicitation techniques induced changes in vocabulary size[13,15] and the use of multiword utterances.[14] None of these studies followed the families longitudinally, hence data describing longer-term outcomes for language, social and emotional development are not available.

Late-talking toddlers

These children are between 18 and 30 months of age, with non-verbal IQs in the normal range, no known sensory, motor or social-emotional problems, and are at the single-word stage of language development. Focused stimulation of vocabulary targets was utilized in these studies. Treatment effects were reported for a broad range of language measures, including vocabulary acquisition, development of multiword sentences, and speech sound development.[10,11,21] Girolametto et al.[21] examined outcomes for behavioural/emotional development and reported a reduction in externalizing behaviour as measured by the Child Behavior Checklist.[22] Only one study followed the toddlers longitudinally to five years of age.[23] The findings indicated that 86%[18] of the children originally identified as late talkers had caught up to their age-matched peers; 14% (three children) were identified as having language disorders.

Children with receptive and/or expressive language disorders

Several studies have examined the efficacy of parent-administered language intervention for preschool-aged children with receptive and expressive language disorders. All children had non-verbal IQs in the normal range and no known sensory or motor problems. These intervention studies included specific language targets for the children and demonstrated significant improvements in the acquisition of vocabulary,[24] morphology (i.e. word endings) and syntax (i.e. grammar).[9,18] None of the studies reported outcomes for social and emotional development.

Treatment comparisons

Only two comparisons of parent-administered intervention and traditional, clinician-administered therapy have been conducted.[9,18] In these studies, children in both interventions made equivalent gains in language development. Fey et al.[9] concluded that more consistent treatment effects were displayed by children in the clinician-administered intervention than in the parent-administered intervention. Baxendale et al.[18] reported that children with receptive *and* expressive language disorders made greater changes in the parent-administered intervention than children with expressive language disorders. The latter group of children had better language outcomes in the clinician-administered intervention.

Conclusions

Overall, the available research suggests positive outcomes of parent-administered intervention for a wide range of children with language disorders. Gains in language development appear most consistently in interventions that target specific goals. The children's short-term progress is an important finding, given that the untreated control groups did not make similar gains. No negative effects of this intervention have been reported in the literature. However, little is known about longer-term effects of parent-administered language intervention. Replication studies employing larger numbers of subjects would further contribute to our knowledge of outcomes. Future projects should also investigate the long-term impact of parent-administered intervention and family/child characteristics that may influence outcomes.

Implications

Parent-administered intervention is a viable model of language intervention for promoting short-term developmental progress in communication and language skills in preschool-aged children. This service delivery model is cost-effective, requiring less than 50% of the clinician's time.[9] Practitioners utilizing this model must carefully monitor children's progress to provide

adjustments or alternative interventions if gains are not observed. General access to the content of parent-administered interventions should be available in a variety of comprehensible formats for families whose commitment precludes them from participating in a formal program (e.g. parent education materials, Web sites). More evidence-based data is needed before wide-spread adoption of this intervention model is recommended for families from diverse linguistic and cultural backgrounds.

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