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PREVIEW

THE IMPACT OF ONE SPECIAL EDUCATION PRESCHOOL  
PROGRAM ON ADAPTIVE BEHAVIOR AND PARENTAL STRESS

by

Laura Price Kennedy

PREVIEW

A Doctoral Project Submitted in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Psychology in the  
Department of Psychology at Pace University

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## CHAPTER I

### INTRODUCTION

Much attention and controversy has recently been focused on preparing young children with disabilities for formal school curricula. This interest coincides with federal and state recognition of the importance of early intervention and preschool services for children with disabilities, established risks, or developmental delays. The Individuals with Disabilities Education Act (IDEA), Public Law 101-457, and the Education of the Handicapped Act Amendments of 1986 mandate identification of children in need of early and preschool intervention. These laws also make provision for treatment services which will minimize the potential for developmental delay, as well as enhance development for disabled infants, toddlers and preschoolers (Kochanek, Kabacoff & Lipsitt, 1990).

Major assumptions underlying IDEA, in general, and PL 99-457, in particular, can be seen as powerful support for belief in the efficacy of early and preschool intervention. Assumptions embedded in the PL 99-457 legislation are that: 1) earlier intervention makes for better outcome; 2) a multi-disciplinary intervention approach leads to better outcome; 3) the involvement of family is necessary and important to early and preschool

intervention (as young children's needs are best understood in the context of family needs); 4) qualified personnel are needed to provide early and preschool intervention services; 5) even children "at risk " for disabilities should be included in intervention services; and 6) interagency coordination is necessary to providing services and Inter-agency Coordination Councils should be formed to ensure coordination of services to infants and toddlers (Gallagher, 1992).

In addition to these assumptions being support for belief in the efficacy of early and preschool intervention, they define and guide early intervention and preschool services. One quickly sees that because of the variety and range of problems posed by young, disabled and at risk children, "no single [intervention] formula can be universally applied to this diverse population" (Meisels, 1989, p.453). As a result, a major focus of early and preschool intervention is a multi-disciplinary, professional team approach that reflects the coordinated efforts of teachers, physical therapists, speech therapists, psychologists and social workers.

Because children are being identified at increasingly younger age levels, their problems cannot be viewed in isolation, out of the family environment. The problems of infants, toddlers and preschoolers are best understood

within the family context. Early and preschool intervention attempts to provide services that are sensitive to family concerns and family strengths. Thus, one of the goals for early intervention services is the "enhancement and creation within families, new capabilities that will support and facilitate the young child's development and prevent developmental problems" (Meisels, 1989, p. 453). Because guidelines for how schools are to accomplish this are not clear, early intervention and preschool programs often struggle with how to meet family needs, include families in service planning and delivery, and assess services to children and their families.

One of the major rationales for early and preschool intervention provides some clues to the family service and assessment dilemma. This rationale is a "transactional model" of mutually influencing child and environmental factors (Anastasiow, 1986). It suggests that dysfunctions within the child and family dyadic environment serve to alter normal development and help create disabilities. The extent to which the child elicits or is the target of negative environmental influences has an impact on the child's risk for later disabilities (Meisels, 1989). Thus, early and preschool intervention emphasizes a strong belief in the influence of the relationship of parents and children (Scott, 1990) and the plasticity of child development

(Meisels, 1989) especially as it is impacted by the family. Early and preschool intervention views young children's behavior as neither fixed nor impossible to change (Lerner, 1987).

While the underlying assumptions of early and preschool intervention and its rationale are clearly supported by theory, the mechanics of creating and developing early intervention and special education preschool programs that will successfully meet the needs of disabled children and their families are not so clear. How and to what extent parents and families are to be involved in receiving services is individually determined by each program's understanding of child and family need. Also, once programs are developed and implemented, systems for evaluating the family component of services and general programmatic efficacy need to be established.

Only by examining the efficacy of early and preschool intervention in producing developmental change can programs objectively see results, refine service delivery and demonstrate the need for funding. This is especially true as the expenditure of funds to support programming becomes increasingly politicized and scarce. In a climate of scarcity, questions of cost-benefit analysis, who should receive funding, and how much are often raised.

Research on the economic costs and benefits shows that early intervention and preschool programs for environmentally at-risk children and their families can be a sound investment (Seitz, Rosenbaum & Apfel, 1985; Schweinhart & Weikart, 1988). Less is known about the economic benefit of early and preschool intervention-with disabled children and more evidence to support the efficacy of services needs to be gathered. Actual measurements and evaluations of the changes that specific early intervention and preschool programming makes in the development of young children with disabilities are needed to validate and demonstrate program efficacy. Such evaluations can make it more likely that early intervention and preschool programming continues. With these mind, this project will explore and attempt to validate the efficacy of one special education preschool program as it provides services to children and their families.



## CHAPTER II

### REVIEW OF THE LITERATURE

A review of the literature on preschool special education reveals that although federal legislation requires early childhood intervention services, a great many elements of the public law are left for individual states to determine. Key among these elements, left to individual states, are specific procedures and criteria for identification and determination of eligibility, as well as specific guidelines for the programming of early and preschool intervention of services (Weber, 1991).

Currently, most states determine eligibility based on the presence of an existing delay in one or more areas of development, or the presence of one or more general risk factors likely to result in delay. These risk factors are: 1) established risk, where diagnosis (e.g., Down Syndrome) indicates eventual developmental delay; 2) biological risk, such as specific categories of infants born preterm; and 3) environmental risk, such as occurs in infants born to substance abusing mothers (Campbell, 1991). States serving children within these delay and risk categories establish their own individual criteria for inclusion in services and selection of evaluation instruments to determine eligibility.

Literature in the area of early childhood intervention and assessment includes much controversy over definitional issues and the appropriateness of methods used for identification, diagnosing and labeling of young children. Because young children normally experience valleys and peaks in function due to development, the determination of disability or delay is often difficult (Frede & Barnett, 1992).

Moreover, as a direct result of legislation and research on programming, the focus of early childhood and preschool special education has been shifting. Rather than emphasizing remediation of children's developmental deficits by individual staff (representing different disciplines) within specialized settings, new programs in early childhood intervention emphasize the facilitation of developmental competencies within a family directed and community based context (Bruder, 1993). Programs which adopt a joint focus on child and family are the most effective in enhancing developmental progress (Shonkoff & Hauser-Cram, 1987). Special education preschool programming now encourages the development of a broad band of competencies in children with disabilities. These are reflected in the domains of social/emotional function, communication skill, perceptual motor ability, attention, and cognition (Haring, Lovett, Haney, Alogzzine, Smith & Clarke, 1992).

Similarly, research in the area of early childhood and preschool assessment supports the notion that single measures, such as intelligence testing alone, are insufficient and inappropriate to determine the functioning of young children, let alone eligibility for special education service (Neisworth & Bagnato, 1992). Researchers suggest that screening, diagnosis, eligibility determination, intervention planning, monitoring and evaluation be accomplished through the use of assessment procedures which broadly measure developmental competencies (Frede & Barnett, 1992).

One assessment procedure used in special education preschool programs involves "adaptive behavior". Adaptive behavior is defined as "the performance of daily activities required for personal and social sufficiency" (American Guidance Service, 1985, p. 6). Three central components of adaptive behavior are that it is: 1) age-related or developmental, becoming increasingly complex with age; 2) defined by the expectations or standards of others who interact with the individual; and 3) that is defined by typical performance and not ability (American Guidance Service, 1985).

A large volume of research exists, attesting to the ability of adaptive behavior measures to discriminate between clinical groups. This research generally supports

the usefulness of adaptive behaviors in identification of even mild handicapping conditions (Harrison, 1987).

Adaptive behavior measurements can successfully integrate assessment and intervention with disabled children by identifying: 1) the activities and skills that are functionally important to adaptation, 2) current adaptive performance levels, and 3) future levels at which individuals must perform to ensure transition to less restrictive settings (Hoen & Fuchs, 1987). Researchers have also emphasized that adaptive behavior and social skills represent two subdomains of social competence, a powerful indicator of future school success (Gresham & Elliot, 1987).

Adaptive behavior is commonly measured using an instrument such as the Vineland Adaptive Behavior Scale (VABS). Much of VABS research involves assessment of the mentally retarded, and fewer studies have been published using the VABS with a developmental disabled preschool population. However, the Vineland has been successfully used to differentiate among preschoolers with disabilities and the efficacy of special education preschool programming (Shonkoff, Hauser-Cram, Krauss, & Upshur, 1988).

In a review of more than 30 early intervention studies, Shonkoff and Hauser-Cram (1987) found early intervention programming to be effective in advancing the developmental

progress of infant and toddlers with established disabilities. However, specific research studies examining the effectiveness of special education preschool programming are few in number.

In an example of one such study, Fewell and Oclwein (1991) examined the rate of development of 194 special education preschoolers with developmental delays (including 92 with Down Syndrome). In order to evaluate the efficacy of programming, children were administered the Classroom Assessment of Developmental Skills and the Battelle Developmental Inventory (BDI). Their rate of development (ROD) was compared pretest and during intervention, across 6 domains. ROD was found to be significantly greater for most children during intervention and greater for 5 of the 6 domains when limited to Down Syndrome children.

In another example, Bruder (1993) evaluated the developmental progress of 30 children, with varying disabilities creating moderate to severe impairment, as they participated in several community early childhood special education services. Change was measured through developmental quotient (DQ) and age equivalent scores (AE), and assessed by the Battelle Developmental Inventory and the Preschool Language Scale a minimum of every six months. All children made statistically significant gains during the project period.

In the third example of special education preschool research, O'Connor, Jenkins, Leicester & Slocum (1993) assessed the impact of teaching of phonological awareness to preschool children with learning disabilities. In their study, 47 children , 4-6 years-old were randomly assigned to receive training in one of three categories of phonological tasks (rhyming, blending or segmenting) or to a control group. Results revealed that children were able to make significant progress within each category of training, but that training did not generalize from category to category. Although the children's level of cognitive development significantly predicted learning outcomes, it did not appear to limit the learning of phonological outcomes.

Most available research on preschool programming utilizes the non-identified, mainstream preschool population to examine the impact of programming on children's readiness for kindergarten, or describe changes in cognitive growth through a specific preschool experience. While these studies predominantly focus on mainstream preschoolers, rather than special education preschoolers, they can still be useful in providing models for research in early childhood special education.

Pellegrini (1992) explored social cognitive status as a predictor of first grade success, among 24 preschool children over a 2 year period. He observed preschool play-

ground behavior (play and interaction with peers), and measured these children's achievement with the Metropolitan Readiness Test and the Georgia Criterion Reference Test. He found that children's object play and peer interaction predicted more traditional aspects of school achievement. Preschool children effective at manipulating sticks, logs, and stones attained higher scores on the Math component of the Georgia Criterion Reference Test. Furthermore, high rates of peer interaction was found to be positively related to high achievement, while high adult directed behaviors were negatively associated with achievement at the preschool age.

Marcon (1990) found that a "child-initiated" model of preschool, where child initiated learning and play was emphasized (by allowing the child to direct the focus of their activity) was more successful in developing mastery skills than academic preschool models. Mastery level was determined through the assessment of social, motor, language and adaptive development, in 295 4 year-olds randomly selected from preschool models. This research lends support for the assessment of preschoolers development through broad bands of competency such as adaptive behavior measures.

Probably some of the most famous preschool studies have been generated from the Head Start Preschool Program.

One longitudinal study by Lee, Brooks-Gunn, Schnur, & Liaw (1990) assessed the sustained effects of Head Start into kindergarten and first grade, for disadvantaged Black children. Participation in generic Head Start programs was compared to both no preschool and other preschool experiences for disadvantaged children, in two American cities. This study has advantages over other Head Start impact studies. Researchers incorporated both pretest/posttest and comparison group information in an analysis of covariance design that controlled preprogram background and cognitive differences. Dependent measures were gathered in the domains of cognition, verbal achievement and social adaptation. Head Start children maintained educationally substantive gains in cognitive/analytic ability, especially when compared to children without preschool experience. These effects were not as large as those found immediately following Head Start intervention. Moreover, findings suggested that preschool experience in general may be indicative of better kindergarten and first grade performance, rather than that of Head Start, per se (Lee, Brooks-Gunn, Schnur & Liaw, 1990).

#### Impact of Parents on Early Childhood Education

Few early intervention studies report little more than short term gains without the involvement of parents and families in program planning and implementation (Shonkoff