This study evaluated the outcomes of an ongoing child day-treatment program in operation at a health treatment center in the Midwest. The program emphasized development of social skills through modeling by adults and practice with peers in 3-hour sessions that met 4 times a week. Evaluation focused on the extent to which clients improved in social functioning and whether there was an overall increase in age-appropriate behaviors. Admission and discharge data were obtained for 49 clients from 1993 to 1996. In addition, the Preschool Behavior Rating Scale was administered on admission and discharge. Analysis indicated significant improvement for all of the assessed behavioral categories with children functioning at an age-appropriate level or better on discharge. Results support the value of early, appropriate, and intensive intervention with young children with emotional/behavior disorders. (DB)
An Evaluative Study of Children's Day Treatment Using the Preschool Behavior Rating Scale

Introduction

Children's day treatment (CDT) programs typically provide intensive psychosocial intervention with children aged four to seven years. Many diagnoses are represented among CDT clientele, including communication disorders, pervasive developmental disorders, attention-deficit-hyperactivity disorder, disruptive behavior disorders, attachment disorders, elimination disorders, post-traumatic stress disorder, and mood disorders. CDT programs are designed to enhance self esteem, improve social functioning with peers and adults, increase developmental competence in areas of language, cognition, perceptual skills and motor skills, and to facilitate improved family functioning.

Research has established a link between problematic childhood peer relations and adjustment difficulties in adolescence and adulthood (Kupersmidt & Coie, 1990, Parker and Asher, 1987). Poor relationships with peers in early childhood are related to later emotional and mental health problems (Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Peer relationships have special qualities that are not likely to exist in adult-child relationships and that may contribute in important ways to the child's social development (Kemple, Speranza, & Hazen, 1991). Researchers have recognized that preschool children's understanding of emotional expression, cooperation, prosocial behaviors and use of conversational skills affect the level of acceptance they receive from peers. Acceptance by peers can in turn affect a child's interest in learning, interacting with others and participating in prosocial activities.
One principle underlying CDT is that social skills can be modeled and taught by an adult, but must be practiced with peers. The purpose of this evaluative study was to examine the outcomes of an ongoing CDT program in operation at a behavioral health treatment center in the Midwest. The goals of this analysis included determining: (1) the extent to which clients improved in social functioning, and (2) if there was an overall increase in age-appropriate behaviors.

**Method**

Admission and discharge data were obtained for 49 clients from 1993 to 1996. Data were obtained from 27 clients in 1993-94 and 22 clients in 1995-96, which essentially represents the entire population served for those periods.

Children in the program meet four days a week for three hours a day. A maximum of ten children participated in CDT at any given time, with the bulk of the intervention being delivered by two therapists and one assistant. A child psychiatrist observed the children in group at least monthly and participated in weekly staff meetings. Individual treatment plans are developed for each child with specific treatment objectives in the areas of behavior, communication, socialization and pre-academics. Treatment objectives are updated as needed in weekly staff meetings. Treatment needs are addressed in a highly structured environment through therapeutic play/milieu therapy, body movement activities, art therapy, music, social/emotional theme groups, pre-academics, and behavior modification. The average length of stay in the program for the evaluation period was 261 days.

The primary outcomes instrument utilized was the Preschool Behavior Rating Scale (PBRS), which is a standardized, empirically derived, well-normed instrument used to measure children's preschool behavioral skills in psychomotor, cognitive, and social arenas (Barker & Doeff, 1980). This instrument provides information about children’s preschool behavioral skills and indicates whether their skills are typical, questionable, or atypical compared to other children of the same age. Skills are assessed in each of the following areas: coordination, expressive language, receptive language, environmental adaptation, social relations, and global functioning (a summation of previous subscales). It should be noted that the PBRS controls for the threat that the natural maturation of children may pose to internal validity through the use of a classification table, which allows for judgments (i.e., typical, questionable, and atypical) to be made by taking into account the age and sex of each child. Norms are based on 6-month age intervals for boys and girls. In this study, children were placed into one of the above categories on each subscale at admission and again at discharge.

### Table 1

**Signed Rank Results on PBRS Utilizing Data from CDT Admission and Discharge**

<table>
<thead>
<tr>
<th>PBRS Scale</th>
<th>Wilcoxon Mean</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>z Score</td>
<td>Rank</td>
</tr>
<tr>
<td>Expressive Language</td>
<td>z = -5.3564,</td>
<td>20.73</td>
</tr>
<tr>
<td>Receptive Language</td>
<td>z = -6.0927,</td>
<td>25.00</td>
</tr>
<tr>
<td>Environmental Adaptation</td>
<td>z = -5.7767</td>
<td>22.50</td>
</tr>
<tr>
<td>Social Relations</td>
<td>z = -5.7767</td>
<td>22.50</td>
</tr>
<tr>
<td>Language Skills</td>
<td>z = -5.9062</td>
<td>23.50</td>
</tr>
<tr>
<td>Socialization Skills</td>
<td>z = -5.9683</td>
<td>24.00</td>
</tr>
<tr>
<td>Psychomotor Skills</td>
<td>z = -5.4424</td>
<td>20.00</td>
</tr>
<tr>
<td>Coordination</td>
<td>z = -4.5045</td>
<td>15.57</td>
</tr>
<tr>
<td>Total Score</td>
<td>z = -5.7767</td>
<td>22.50</td>
</tr>
</tbody>
</table>
Children's Day Treatment and PBRS

Results

The difference between the two sets of rankings was analyzed for the 49 clients using a Wilcoxon matched-pairs signed-ranks test. Analyses of the data indicated significant improvement for all of the assessed behavioral categories (see categories and statistical significance information in the figure and table). These data indicate that CDT is effective in accomplishing the program goals of facilitating increases in age appropriate behaviors and improving clients' social behavior and physical coordination. Children were identified for treatment because they were behind that which is expected of them for their age. When discharged from CDT approximately nine months later, the children were functioning at an age-appropriate level or better, according to the psychometrically sound measurements upon which the analyses were based.

Discussion

The nature of the results suggest that overall, CDT met the needs of the children served. The favorable results across all scales of the PBRS indicate the program did a consistent job of meeting the needs of the children to advance in their psychosocial development, which is consonant with program goals. Of course, in the absence of an experimental design, some extraneous variables have not been controlled, and indeed cannot be controlled. The PBRS allows more control than most instruments for maturation effects, however.

In order to help place the benefits of CDT into perspective, it is instructive to consider a recent article from the APA Monitor (1997, 28[6]), which reported on a study conducted at Kaiser Permanente, a large California-based HMO. In that study, it was determined that more than 13% of the children who were seen by primary care physicians were seen due to mental health and behavioral...
problems. That translated into a 10% contingent of the young people who utilized medical care most often costing the system $1,000,000 during the year the study was conducted. Additionally, nearly five percent of the parents of these children were clinically depressed. As the article points out, “People are taking their kids to the pediatrician when in fact they need help with parenting and with identifying their children’s emotional and psychological problems” (p. 6).

These findings draw attention to the beneficial aspects of early appropriate, and intensive intervention with a severe population of children with several problems, such as those served in CDT. Clearly, the benefits include not only the improvements in psychosocial, cognitive, and social functioning demonstrated in this evaluative study, but a potentially substantial medical cost offset effect for years to come. It may be worthwhile to examine the records of young high-frequency users of medical treatment to assess if they and their families would be better served with a primary psychosocial intervention such as CDT.

References


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