The time for school psychologists to invest concentrated and
intensive intervention is when students are very young and still in general
education settings. This paper presents suggestions on ways to accomplish
this through data collection, design of an intervention, staff training,
modifying an intervention, and teamwork. To illustrate the process, the paper
describes a case study of a child in nursery school who was identified as
having developmental problems. Traditional interventions and even
consultations did not work with the child, so an intensive intervention,
using a team approach, was initiated. First a baseline of behavior was
established, and then the intervention plan was developed. The plan called
for time-out procedures combined with a high rate of reinforcement and a
change in antecedents. The school psychologist met with teachers and staff to
discuss the intervention and to train them in its implementation. After
beginning the plan, staff met continuously to monitor progress and to adjust
the interventions to address new behaviors. The intervention resulted in a
steep decline in aggressive behaviors and in noncompliance. Verbal threats
were extinguished and affectionate behavior increased dramatically. Plans for
long-term maintenance as the child moved to higher grades were also
implemented. (RJM)
Designing and Justifying a Treatment Intervention for Severely Behaviorally Disordered Young Children in a General Education Setting

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Designing and Justifying a Treatment Intervention for Severely Behaviorally Disordered Young Children in a General Education Setting

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Poster presented at the National Association of School Psychologists Annual National Convention, Anaheim, California. April 3, 1997

Abstract

The role of school psychologists as health care providers involves work with behaviorally disordered and emotionally disturbed children. The time to invest concentrated and intensive intervention is when students are very young; i.e., kindergarten, and still in general education settings. Data collection, design of the intervention, staff training, ongoing need for modifying the intervention, and team work will be covered. Dealing with administrators in order to gain both financial and administrative support, and preparing general education students and teachers as well as all of those in the school community who might be affected will be discussed. Affective support for the child and family will be addressed. Two years of data and outcomes will be presented. This model can be used by school psychologists in typical elementary schools. Cost effective suggestions for using the model and the mental health benefits to children who can control their behavior will be shared.

Rationale

Public schools are faced with increasing numbers of children exhibiting behavioral and emotional problems that are highly challenging and beyond the capacity for management by general educators. Even more disturbing is the number of very young children who come to school for the first time exhibiting out-of-control behaviors. Typically children presenting with severe behavioral problems in large Kindergarten classes are placed in classes for behaviorally disordered children, sometimes for a good part of their elementary school careers. Nationwide less than 16% of all students with severe behavioral/emotional disorders receive services in the regular class setting and this has not changed much over the past ten years. The regular education classroom has been the least frequent option for these children (Coutinho & Oswald, 1996). Intervention is often too late and behaviors are difficult to reverse (Webster-Stratton, 1993). The optimal time for intervention is at the preschool and kindergarten levels.

A special education team in an elementary school, led by the School Psychologist, developed an intervention model for assisting students with severe emotional and behavior problems in the general education setting. The model consists of problem identification, establishment of a baseline for all behaviors of concern, development of the intervention plan, staff training, implementation of the plan with built-in corrections and monitoring/planning for long-term maintenance. Team members consisted of the School Psychologist, the general education teacher, an Intervention Specialist and an aide with support from two consultants. A single case study is utilized to demonstrate the model.

Problem Identification

The student in question was an only child in an intact but highly stressed home. He had been identified at a developmental screening where he exhibited echolalia and minimal play behaviors as well as oppositional behaviors. The student was placed in a nursery school/day care program with an aide. The nursery school was a low demand situation and the student made dramatic gains in both language development and play skills. Planning for the transition from nursery school to Kindergarten included retention of the nursery school aide and selection of the classroom teacher who agreed to the placement. The school Principal talked with all incoming parents of Kindergarten children to prepare them for the integration of several severely involved students. A behavioral plan was in place the first day of school.
By October, the student had escalated and aggressive behaviors had become very serious. The behavioral strategies that had been designed were not working. The tokens used in the behavioral program became another avenue for opposition. Both in school and out of school play therapy was initiated. An agency was hired to provide behavioral intervention in class with no success. Two consultants were brought in, one to work with the family to determine if a behavioral plan could be implemented at home and the other to help the team design a new behavioral plan for school. The team determined that a full day in Kindergarten was too stressful for both the student and the class, so the school funded an afternoon program in the nursery school/day care environment which had been successful in the past.

Attempts were made to identify antecedents of behavior but no antecedents for aggressive behaviors could be identified. The student appeared to be responding to internal stimulation or experiencing a delayed reaction to stress rather than responding to the external environment. On a particularly challenging day when another child was injured, the Principal suspended the child. This proved to be a rallying cry for the team. At an administrative team meeting the school psychologist laid out cost benefits and staff development benefits to contrast an in-house plan as compared to contracting with other school systems. Administrators were convinced to allow the team to attempt an intensive intervention.

Establishment of a Baseline
Data was collected for five days by rotating staff in the building. A number of individuals participated in the data collection and for some of the time two individuals collected data as a check on accuracy of data. Behaviors which were critical were described and time sample data collection was utilized to establish the baseline. This data was then used to determine the frequency of reinforcement for two types of behavior, noncompliant and aggressive behaviors. The behaviors specified included: quiet noncompliance, verbal refusal, verbal threats, running away, mild aggression with intent and moderate aggression with intent.

Behaviors in categories 1-4 (see TABLE 1) averaged 53 incidents per day in November. Given that the morning Kindergarten lasted approximately 180 minutes per day, noncompliance was occurring every 3.4 minutes of the day on average. Aggressive behaviors were averaging 10 incidents per day on average or every 18 minutes or so. This indicated that reinforcements for compliance needed to be fairly continual and strong concrete reinforcement for non-aggression needed to occur approximately every 18 minutes. The team defined the needed frequent reinforcement as descriptive statements about the child's behavior and the reinforcement for non-aggression to consist of a token. A reward menu was designed. In addition, a rule structure was developed to help stabilize the environment and make expectations clear. Data collected one day at home (see TABLE 2) showed that there was less quiet refusal at home but significantly more verbal threats. Parents were exhausted.

Development of the Intervention Plan
It was known that aggressive behavior can be reduced by reinforcing a child's positive behavior and by using time-out or response-cost procedures as deterrents to negative behavior (Cole, Underwoods & Lochman, 1991). It was also known that a high rate of positive reinforcement is needed in class (Shriver & Allen, 1996). The school team gathered for a series of meetings in order to develop an intervention plan that would include the use of time out procedures combined with a high rate of reinforcement and a change in antecedents. The term "Rule Time" was used in place of time out because the term 'time out' had already been used at home without success. Three separate places for 'Rule Time' were established, one in class, one outside of class and one in the nurse's office, which was a safe area for tantrums at the end of the corridor away from the classroom. Time out administered in the general education classroom is not as effective as is the use of an area removed from the classroom (Skiba, & Raison, 1990). Antecedents were managed through the use of a rule card which was developed by the team. Daily notes were reported to the School Psychologist for the purposes of monitoring progress and correct implementation of the plan.

The next step involved the development of an "intervention script" by the School Psychologist (Lentz, Allen & Ehrhardt, 1996). The intervention script was studied by all members of the team who provided feedback in the form of 'what if' statements. This allowed the team to generate additional interventions and to clarify
procedures that had already been developed. Every possible contingency was scripted. Parents were brought in to review the alternatives as well as the new intervention plan. Parents were pleased with the plan and gave signed agreement through an educational plan.

**Staff Training**
The school psychologist met with all of the teachers in the adjoining classrooms and also talked with students. Teachers agreed to go without volunteers for the first few days of the intervention in order to protect the privacy of the child. Staff training was conducted with teachers, aides and in-house substitutes in case of illness in a member of the immediate team. The school psychologist explained the intervention procedure and specific situations were role played. The most difficult part of the procedure to teach was the reinforcement system and the importance of withdrawing interaction during 'Rule Time'.

**Implementation of the Plan**
As the intervention plan was implemented, the team met everyday after school for the first five days to strategize and make changes in procedures. Scripting had to be rewritten several times in the first few weeks of intervention because it was determined that even though statements appeared to be clear when written, they did not fit actual situations perfectly. The need for the nurse's office was quickly reduced.

Changes were made as new behaviors appeared. Day to day behavior was more clearly connected with the child's serious mood swings and with his physical condition which involved a long series of ear aches and rashes. In January, data was again collected utilizing aides, teachers, and the School Psychologist. Data collected 11/19 to 1/25 (see TABLE 3) showed a sharp reduction in aggressive behaviors from 10 per day in November to an average of 1.3 per day in January. Noncompliance also reduced although not as precipitously from an average of 53 incidents per day to an average of 28.6 per day. There had been one particularly difficult day in which 76 quiet refusals were counted. If this day were eliminated, the average would have been 15 incidents per day. Verbal threats were extinguished. Two new behaviors were measured, staring and off task behaviors. The staring incidents were worrisome for a period of time but eventually were extinguished by ignoring them. Aggressive behaviors continued to decrease, but in their place passive behaviors appeared such as making noises, sticking out his tongue, lack of focus, pricking himself with pencils, and stopping talking in the middle of a sentence.

In March behavioral data was collected again (see TABLE 4) but this time the team was interested in a different constellation of behaviors. These included: fluttering his eyes, refusing to begin a task, doing something other than requested, removing himself from the group, going under the table, making off topic statements or asking off topic questions, saying "no" and averting his eyes when given a command. The team decided to focus on the resistance of not beginning work (an average of 9.5 per day), doing something other than asked (an average of 12.2 times per day) and asking off-topic questions. Rule cards were designed specifically for each activity of the day. These made the expectations explicit and set up a situation where the rule cards were controlling the behavior rather than the adults being perceived as in control.

Affectionate behaviors increased dramatically. The student could now tolerate being bumped by peers. He was able to tolerate a full day of school by mid April. Aggressive behaviors were infrequent, but when they occurred, they were clearly tied to extreme stress and were mostly self directed.

**Planning for Long Term Maintenance**
The team prepared for the transition to Grade 1. The teacher moved with the student to Grade 1 but a new aide needed to be trained. A different system of data collection was devised and data was delivered to the School Psychologist weekly so that modifications in the plan could be made on an ongoing basis. As expected, aggressive behaviors were elevated after the summer even though the student spent much of it in the nursery school/day care setting. Rule Time's averaged 12 per week for the first four weeks and then dropped to 5 per week for the second month. The most problematic behaviors were observed in lower structure areas. Rules were read every 15 minutes at the beginning of the school year and reduced to every hour late fall.
During periods of acute stress, rules for each activity were utilized and then dropped out as behaviors decreased. By the end of Grade 1, the student was behaving appropriately most of the time.

**Benefits**

Currently the student is successfully enrolled in second grade with a new aide. Weekly data is reported to the School Psychologist who continues to consult and monitor progress (see Table 5). The student is making excellent progress and individual therapy is being phased out. The student has made friends and can be managed easily most of the time. Benefits to the student include internalization of rules, ability to manage strong emotion and to ask for help, and development of friendships. Behavior at home is greatly improved and the child can shop with parents and attend functions without disruption. Prognosis for this student is greatly improved. Benefits to the team are considerable in the expertise which has been developed. Complex plans have been developed for an additional half dozen children as the team continues to utilize the expertise that they have developed.

**References**

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Data Collection 11/16-11/21

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<th>2 Verbal Refusal</th>
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I. DOCUMENT IDENTIFICATION:

Title: Designing and Justifying a Treatment Intervention for Severely Behaviorally Disordered Young Children in a General Education Setting

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Corporate Source: 

Publication Date: 

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