Training Professionals in Use of Positive Methods for Community Integration of Persons With Developmental Disabilities

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Introduction by the column editors: **Mainstream psychiatry has all but ignored the clinical needs of persons with developmental disabilities. With some notable exceptions, individuals in this group have been served in the community by behaviorally oriented psychologists or relegated to long-term institutional care (1,2). However, effective interventions are available, beginning with a functional analysis of the antecedents and consequences of targeted problem behaviors. Procedures for building adaptive coping and functional skills or compensating for their deficiency have been developed that are based on skills training, wraparound supports for employment and community living, stimulus control, and contingencies of reinforcement (3,4). Applied behavior analysis using task analysis, stimulus control, and contingencies of reinforcement also spawned some of the first techniques—including the token economy—shown to improve functioning and reduce psychopathology among persons with schizophrenia.**

One of the premier organizations to have documented the efficacy of person-centered, behavior-analytic, and community-based wraparound support services for persons with developmental disabilities is the Institute for Applied Behavior Analysis in Los Angeles. The institute was founded 20 years ago and has served more than 1,000 children, adolescents, and adults with developmental disabilities. Its staff have designed and empirically validated nonaversive techniques for modifying the behaviors that place their clients or others at risk of harm or injury and that often lead to the clients' ejection or isolation from community life. In this Rehab Rounds column the authors describe and evaluate the institute's training and consultation activities.

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For two decades the Institute for Applied Behavior Analysis (IABA) has had notable success in using evidence-based, person-centered behavioral support, instructional strategies, and total quality assurance systems to integrate persons with developmental disabilities into normal work and community living (5,6). Each year the institute offers training programs for professionals from around the United States and the world. In 1989 IABA launched its annual Summer Institute, which consists of two weeks of intensive training in assessment and intervention for the severe and challenging problem behaviors of individuals with developmental disabilities.

The Summer Institute provides competency-based training for professionals who can return to their home agencies to better serve individuals with problem behaviors that interfere with day-to-day living and community integration. The training of these professionals allows clients to be placed in less restrictive settings and provides cost savings to agencies that historically relied on outside professionals for behavioral consultation services.

Program design and curriculum

The Summer Institute is an intensive hands-on program in which participants acquire knowledge and skills in use of the IABA multi-element treatment model for effective behavior management. The model employs an expanded view of the criteria for evaluating treatment programs for behavior problems. Beyond the traditional criteria of immediacy and degree of effects on problem behaviors, the model requires that interventions be evaluated in terms of the durability and generalization of their effects, the side effects they produce, and their social and clinical validity. This complex array of clinical outcomes makes it unlikely that

any one procedure will be fully effective. Rather, optimal results generally require multi-element treatment plans whose various components, in combination, address the full range of outcome requirements. These separate components must be integrated into an organized treatment plan.

Intervention plans taught in the Summer Institute include both proactive and reactive strategies. Proactive strategies are those designed to produce rapid, durable, and generalized suppression of targeted problem behaviors with minimal negative side effects and also have good social and clinical validity. This category includes two types of services: ecological interventions, such as changes in the client's physical environments to reduce overstimulation or criticism and to fit the individual's profile of assets and deficits more congruently with his or her work and residential settings; and positive programming, which is designed to teach individuals more effective and socially acceptable ways of getting their needs met and coping skills for tolerating everyday frustrations.

Reactive strategies to manage aberrant behaviors that are dangerous to self and others and that are not tolerated by people in the community include nonaversive behavioral strategies, exemplified by reinforcement of behaviors that are incompatible with the dangerous behaviors. Reactive or direct interventions are provided to minimize property damage and injury of staff and clients.

The multi-element model also requires integration of assessment with intervention. Hence participants in the Summer Institute are taught principles of functional analysis. The client's assets, deficits, neurological and medical conditions, aberrant behaviors, and reinforcers along with the environmental antecedents and consequences of both adaptive and problematic behaviors are viewed as key variables in the analysis. Other competencies taught in the program are consultation and liaison skills for using mediators in the client's natural support system—teachers, parents, residential caregivers, employers, and others—for promoting desirable treatment outcomes.

Training activities include supervised field-based practicum assignments, feedback sessions, lectures, reading and writing assignments, practice exercises, follow-up telephone consultation, and evaluation. The program includes distributed practice and feedback as well as homework to ensure that participants are able to apply the techniques in their home agencies. For example, trainees attend lectures on functional analysis and then are given the field-based assignment of conducting a functional analysis for a client with a problem behavior. After completing the assignment, trainees are given individual feedback on the quality of their analyses and may be given further assignments to improve their skills.

Since the Summer Institute's inception, 274 professionals from 43 states and seven foreign countries have participated in the program. Eighty-five percent of the trainees had some college education; 32 percent had a bachelor's degree, 47 percent a master's degree, and 6 percent a doctorate or a medical degree. Sixty-seven percent of the trainees were employed by community-based residential and vocational services, about 20 percent worked in educational settings, and 13 percent provided medical, psychological, psychiatric, or consultation services.

Although these figures have remained fairly stable since 1989, the proportion of trainees from educational settings increased to 32 percent in 1998 and 1999, and the proportion of trainees who provide consultation services decreased to 4 percent in both years. These changes may have resulted from changes in federal and state regulations governing the education of students with developmental disabilities who exhibit problem behaviors that interfere with their learning. For example, amendments to the 1997 Individuals With Disabilities Education Act require that a functional assessment be conducted and a positive behavior support plan written and implemented before a student can be moved to a more restrictive educational setting because of aberrant behavior.

Conducting the training

The objectives of the Summer Institute are to train participants to provide competency-based assessment services, including the development of comprehensive, state-of-the-art, multi-element support plans designed to produce valued outcomes in cost-effective ways; to provide participants with a written set of materials, forms, and procedures for the administration and provision of behavioral services; to provide participants with supervised practicum experiences by assigning each trainee an individual with a developmental disability for whom the participant must conduct a comprehensive functional assessment and write a behavioral assessment report and recommended support plan according to the format used in the program; and to teach participants to use the interventions that are incorporated in the support plan with acceptable levels of consistency, accuracy, and with a built-in method for ongoing quality improvement. An outline of the program's curriculum is available from the first author.

Evaluation

A survey of trainees who attended the institute between 1989 and 1999 evaluated their learning and their application of the skills and know-how taught in the program. A total of 225 surveys were mailed to participants; ten were returned because of a change of address, and 126 were completed and used as a representative sample for this analysis. Survey questions covered all facets of the program and evaluated the topics covered and the skills and techniques taught in terms of their relevance to the participants' career development, of the participants' acquisition of knowledge, and of their usefulness for implementation. The survey also assessed factors that facilitated or impeded efforts and success in the sustained use of the knowledge and skills learned at the institute after participants returned to their home agencies.

Two topic areas were identified as having little relevance: "assuring staff consistency in program implementation" and "observational and procedural reliability." This finding may be attributed to the fact that these topic areas are not reinforced in the practicum component of the program as strongly as the other areas.

The skills and techniques covered

in the institute were organized into five categories: defining target behaviors, carrying out a behavioral assessment and functional analysis, designing an effective multi-element behavioral plan of support, solving problems by using strictly positive strategies, and developing a process for ensuring staff consistency. Participants reported that their acquisition of knowledge was high in all skill areas, and this measure was highly correlated with reports of feeling confident in using most skills. The correlation between participants' ratings of having the knowledge of the skill and of confidence in using it across the five types of skills was .81.

A similar relationship was observed in the assessment of whether trainees used these skill areas at their home agencies and, if so, whether they used them with confidence. Utilization was very high in four of the five skill areas and highly correlated with measures of confidence in using the skills. An exception was the skill area "developing a process for assuring staff consistency"; 66 percent of trainees reported that they had used this skill area, and 62 percent said that they did so with confidence. This lower level of utilization and confidence may be explained by the minimal practicum experience trainees had in developing quality assurance procedures during the program. Also, line-level clinicians rarely participate in designing quality improvement for their agencies.

Factors identified by 75 percent or more of the trainees as having significantly facilitated implementation of one or more of the principles and techniques learned at the institute after they returned to their home agencies included administrative support, congruence with agency ideology, and congruence with personal treatment philosophy. Factors identified by 20 to 30 percent of the trainees as impeding success were lack of support from administration, lack of collegial support and staff buy-in, and lack of knowledge and skills. In one instance, lack of support from administration was overcome by directly involving the director of a rehabilitation team in a subsequent Summer Institute.

Twenty-four percent of the trainees cited positive outcomes for their clients as the reason they continued to use the techniques learned in the program. Another reason was the high degree of continued administrative support and staff interest at participants' home agencies for the techniques featured during the institute. Ninety-three trainees reported that they taught the skills they learned in the institute to other staff members.

Moreover, the value of the skills and techniques taught in the program was evidenced by the reported interest of past participants in attending additional seminars, workshops, and institutes sponsored by IABA. Since the first Summer Institute in 1989, 71 percent of participants have attended at least one additional IABA seminar, workshop, or institute. The majority of past participants at Summer Institutes rated their use of positive strategies and the multi-element approach as "very effective" with their clients.

Results from this survey will be used to refine and develop the institute curriculum to increase the likelihood that skills taught will be directly applicable at trainees' home agencies. Because maintaining staff competence is the responsibility of agency administrations, the mandatory attendance of administrators at the institute along with line-level clinical staff may be a key to resolving some of the obstacles to utilization identified in this survey.

In 2001 the Summer Institute had 32 new trainees. The success of the program has led to numerous other two-week institutes sponsored by IABA at a variety of sites in the United States, Australia, and the United Kingdom. Longitudinal training has been provided to many agencies in the United States and abroad over the past decade. In the longitudinal approach, the training is provided over several months and the practicum assignments are completed at the trainees' home agencies. The longitudinal training offers more practical experience in developing a process for ensuring staff consistency. IABA has also developed a "trainer of trainers" model to further disseminate its multi-element approach.

Afterword by the column editors: It is heartening to learn that many trainees have provided their home agencies with the resources to better meet the needs of developmentally disabled persons with problem behaviors that hinder their integration into the community. A limitation of the survey results is that they are based on trainees' self-reports. IABA has not directly observed the trainees' use of skills to verify the fidelity or quality of their implementation over time. To address this limitation IABA is developing a certification process for trainees. To obtain and maintain certification, trainees will be required to regularly submit behavioral assessment reports and recommended support plans, along with other documentation, to demonstrate maintenance of their skills.

Dr. LaVigna and his colleagues have learned an important lesson from their experience with the Summer Institute—namely, that the rate-limiting factor in the successful use of the procedures with clients comes from the organizational and bureaucratic levels of human service agencies. Thus it would be wise not just to train individual practitioners but also to train and gain the active involvement of agency administrators in procedures for improving the functioning and quality of life of people with developmental disabilities. ♦

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