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Developing Behavior Analysis at the State Level

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Over the past fifteen years, behavior analysts in Florida have worked together to develop the discipline with a multifaceted system of contingencies. Basing their effort in the area of retardation and with the cooperation of the state's Developmental Services Program Office, they have gradually developed a regulatory manual of programming policy and procedures, a hierarchical system of responsibilities for programming approval and monitoring, a state-sponsored certification program, a professional association, and an active university community. These components are described and discussed in terms of suggested principles for developing the field of behavior analysis within a state.

Key words: peer review, certification, state association, retardation, developmental disabilities, paraprofessional staff, regulatory manual

SEMINAL EVENTS

The Sunland Incident

In March of 1972, the superintendent of one of Florida's institutions for retarded citizens reassigned three employees. When the employees filed grievances about the reassignments, it was discovered that there had been systematic use of procedures in the name of behavior modification that violated both the superintendent's and the state's general policies. These alleged abuses then came to the attention of the Division of Retardation in Tallahassee, and the superintendent and six employees were suspended pending an investigation of the matter. The rest of the story was closely followed in the state's newspapers over a period of weeks and months.

The media reported that at one of the cottages a special program administered by a doctoral-level professional involved systematic abuse of clients in the name of behavior modification. Without going into the unpleasant details, these abuses included some paddling and long periods of isolation, but far greater use of humiliation in an attempt to punish misbehavior. For instance, in the case of a male teenage client who stole food, staff were to address him as "thief _____" and make him wear a sign indicating that he was a thief, the client was to eat only on the floor, and he was to dress in girls' panties and be treated as a girl.

Much of the publicity centered around the superintendent himself, who subsequently entered the hospital with "nervous exhaustion." But, it also was made clear that the abuses were in the context of a treatment approach called "behavior modification," which understandably concerned those throughout the state involved with other young, behavioral programs. Even though some newspaper articles quoted professionals or state administrators who pointed out that the reported practices were a misuse of behavior modification procedures and although one article had as its focus a strongly positive picture of behavior modification, behavioral programs around the state essentially came to a halt (May 1975).

In response to the original reports, the Secretary of Health and Rehabilitative Services through his director of the Division of Retardation and in conjunction with the Department of Psychology at Florida State University immediately

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appointed a team of nine outside investigators whose task it was to determine the facts in the case. After appropriate study, the committee found matters to be less evil than the newspapers suggested, although the circumstances clearly involved completely unacceptable abuses both of clients and the methods of behavior modification. The "chief psychologist" turned out to hold his doctorate in another field and was hired against the advice of three psychology consultants and made director of the behavior modification program. He was described as "energetic, hardworking, and enflamed with pseudoscientific zeal but . . . not qualified and [experienced] to administer such a program" (May 1975). The committee found that the abuses were systematically applied as part of a total program, whose intent appeared to be constructive (May 1975).

Following the committee's report, the superintendent was transferred to a position not involving client services, the director of the program and another professional were released or resigned, and three cottage parents were reprimanded and retrained in another institution (except for one who resigned). The program was discontinued.

The Joint Task Force

Soon after these actions, the director of the Division of Retardation formed a Joint Task Force that was charged with providing the state with a document outlining the "philosophy, procedures, and safeguards recommended for use in the State's administration of behavioral programs." The members of the joint Task Force included nine nationally-known figures in the fields of applied behavior analysis, retardation, and law.[1] The final report of the Joint Task Force was issued as guidelines proposed for implementation by the Florida Division of Retardation. (It was also published as a monograph in 1976 by the Research Advisory Committee of the National Association for Retarded Citizens.)

The document began with a general statement of philosophy regarding behavior and behavior change, as well as a historical review of approaches to caring for retarded individuals and the attendant legal issues. A lengthy section on behavioral procedures began by outlining the organizational considerations for the conduct of behavioral programming. In particular, it listed the various levels of personnel required, from direct care to programming directors and outside consultants, as well as their formal qualifications (education and experience) and their behavioral qualifications. It then described and discussed each of a number of "procedures" for strengthening and weakening behavior. The report also recommended procedures for monitoring behavioral programming activities, including the formation of a Peer Review Committee (PRC) consisting of two to four members of recognized doctoral-level expertise in behavioral programming.

The report concluded with a list of 14 formal recommendations. Among others, these included employing a State Coordinator of Behavioral Programming, offering stipends for graduate training in applied behavior analysis, developing an in-service training program in behavioral programming for staff, seeking legislation in support of the guideline's requirements for vendors, obtaining the coop-

[1] The members of the Joint Task Force were Sidney Bijou (Department of Psychology, University of Illinois), William Bricker (Mailman Center for Child Development, University of Miami), Paul Friedman (Mental Health Law Project), B. L. Hopkins (Department of Human Development, University of Kansas), Leonard Krasner (Department of Psychology, State University of New York at Stony Brook), Ivar Lovaas (Department of Psychology, University of California at Los Angeles), Jack May (Department of Psychology, Florida State University), Jack McAllister (Director, Florida Division of Retardation), Michael Nash (Department of Psychology, Florida State University), Todd Risley (chair) (Department of Human Development, University of Kansas), Philip Roos (National Association for Retarded Children), Sandra Twardosz (report editor) (Department of Psychology, University of Tennessee), Ken Walsh (National Center for Law and the Handicapped), Sue Warren (Department of Special Education, Boston University), and David Wexler (College of Law, University of Arizona).

eration of university-affiliated experts in applied behavior analysis, and adopting the report's guidelines and recommendations in their entirety.

This Joint Task Force report was an important seminal document in the history of Florida's retardation system and the state's behavior analysis community. Because the events at the Sunland institution that led to the formation of the Task Force concerned programming and were explicitly behavioral in their orientation (aside from whether such efforts properly represented good behavioral technology), nationally-known behavioral experts were well-represented on the Task Force. Furthermore, its charge was to make recommendations to guide the state in its administration of behavioral programming. In other words, the composition of the group (containing mostly behavioral experts and yet somewhat balanced with retardation and legal experts), the highly public context of its origins, and the explicit nature of its responsibility all gave its final report considerable influence, and this influence was on behalf of increasing and improving the role of behavioral programming in the state's retardation system. The formal involvement of the Division of Retardation helped lead to the report actually serving as a statement by the division of proposed guidelines for the practice of behavioral programming.

It took a few years for the full effects of the 1974 report to be revealed, but its eventual impact on the discipline of behavior analysis was significant. By establishing the general philosophy and methods of behavior analysis as the sole model for changing the behavior of retarded citizens under state care, it gave the field the imprimature of the state in this one area of service. At the same time, it specified a number of particular and influential roles for behavior analysts in this venture and indirectly arranged for many more. Put another way, the report and its accumulating consequences formalized the state's need for the field of behavior analysis, and it did so in very specific ways that left relatively little room for bureaucratic maneuvering or attempts to substitute other models.

PL 393 and the Bill of Rights of Retarded Persons

In 1975 and 1977, the Florida legislature passed and the govenor signed statutes concerning the treatment of retarded individuals. They were the result of many influences of the time, including events in neighboring Alabama that had led to the Wyatt v. Stickney decision and the efforts of the Florida Association for Retarded Citizens and the Director of the Division of Retardation.

A part of one of these statutes is termed the Bill of Rights of Retarded Persons. It is a statement by the legislature of the state's intention to clarify the rights of retarded persons, to set up mechanisms for protecting those rights, to mandate the development of a plan for treatment programs, to implement and support this plan, and to support the normalization principle by establishing an adequate range of habilitation environments.

The importance of the statute was not so much in describing a new set of rules for those working with retarded individuals as it was in providing some legal support for the general changes that were recommended in the report of the Joint Task Force and that gradually evolved through other documents and practices. It was part of a series of major and minor events that collectively constituted a transition from a custodial to a treatment model and was thus important in contributing to a general attitude of change.

The statute also helped to give some semblance of a legal footing to behavior analysts working to develop the state's capability to deliver sound behavioral services. For instance, the "treatment plan" referred to in the intent clause was behaviorally-based, which gave this approach at least some legal context. Another example of the statute's benefits was in the development of an abuse registry. This was a reporting system complete with a hotline for the purpose of encouraging employees or others to report abuse of any kind so that it could be investigated. The wording of the definition of abuse covered the usual possibilities but included among them, "failure to provide adequate habilitation."

This meant that a facility that did not offer effective behavioral programming services to its clients (assuming such services were required), either out of neglect, malfeasance, or by intention, was engaging in abuse. This facet of the definition of abuse has occasionally been useful in motivating reluctant facilities to develop effective programming services.

IMPORTANT FEATURES OF CONTINGENCIES

Developmental Services Program Office

This early history laid the foundation for a number of wide-ranging developments in subsequent years. These developments collectively comprise a complex system of contingencies involving the activities of Florida's behavior analysts and those with whom they interact professionally. It is useful to examine the important groupings of these contingencies so as to understand their features, effects, and interactions. This brief review of Florida's experiences will provide the basis for subsequent suggestions about some general principles for developing the discipline at the state level.

The Florida Department of Health and Rehabilitation Services is a 38,500 employee, 3.6 billion dollar agency, the largest non-federal human services agency in the country. Developmental Services is a subsystem of this massive agency that has budgetary and administrative responsibilities for services to developmentally disabled persons in the eleven districts of the department across the state. The total allocation for 1986 was 265 million dollars in order to meet the needs of 22,500 developmentally disabled persons through the usual range of services. These programs are largely community-based and vendor-operated, although four state-operated institutions, serving a total of approximately 2,000 persons, remain in operation.

Developmental Services is also the primary source of employment for behavior analysts in the state. For instance, approximately 80% of the membership of the Florida Association for Behavior Analysis is supported through this office, either directly or contractually. Although behavioral activities occur within other components of the department (e.g., mental health) and in other agencies, Developmental Services represents the most robust and developed behaviorally-oriented system in state government and forms the backbone for the funding and application of behavioral technology in the state.

The Developmental Services Program Office is a state-level office within the headquarters of the Department of Health and Rehabilitative Services. The office is responsible for Developmental Services budget, policy, regulation, legislation, development, data analysis, and in certain instances, oversight of operations. Although the program office does not have line authority to the districts, the responsibilities and control over these critical areas allow the office to exercise considerable influence in behavioral programming statewide.

Of the 30 staff in the program office, eight have behaviorally-oriented undergraduate or graduate degrees or are Certified Behavior Analysts, with several more staff having specific coursework and experience with behavioral technology. Two positions are formally behavioral positions: a doctoral-level position in the planning/development unit and a master's-level position in the operations/oversight unit. These two positions coordinate the various behavioral components that provide a multi-faceted approach to improving programming.

The doctoral position, Senior Behavior Analyst, is responsible for the planning and development of behavioral initiatives at the state level. The position's responsibilities within the program office include directing the Florida Behavior Analysis Certification Program, coordinating and managing the contract for the Florida Behavior Analysis Peer Review Committee, coordinating the behavior analysis budget, policy and legislative development, and coordinating revisions of the Behavioral Programming Guidelines. The Senior Behavior Analyst acts

as liaison and consultant on behavioral issues for the office.[2]

The master's position, Behavior Analysis Consultant, is responsible for operations and oversight of behavioral issues as the program office's interface with the districts and programs. The Behavior Analysis Consultant is the program office's liaison to the District Peer Review Committees, the hub of behavioral activity at the district level. This person answers questions from the field regarding the Behavioral Programming Manual and behavioral issues in general. The Behavior Analysis Consultant provides technical assistance in the field and consultation to districts, programs, and individuals. In addition, this person may accompany the program office's quality assurance team as well as the Peer Review Committee on field visits to evaluate behavioral programming components.[3]

The primary functions served by the program office in the development of the field of behavior analysis in Florida have been in leadership, coordination, and financial support, all in the context of the powerful and pervasive influence that only a division of a state agency can bring to bear. As the above position descriptions suggest, the program office has been the source of countless initiatives that have improved the state's ability to deliver programming services, the major activities being summarized in the following sections. At the same time, it has served a critical coordinating role in implementing these initiatives. In the early years chronicled here, it was the program office (formerly the Division of Retardation) that took the first important steps toward improving behavioral programming capabilities.

Of course, one of the most important functions of the program office has been its consistent financial support for behavioral programming over the past decade. The office has hired behaviorally trained staff to fill its own ranks, co-sponsored and provided funds for the initial conference of the Florida Association for Behavior Analysis, and participated in all of its subsequent annual meetings. The office also continues to coordinate and provide all funding for the Florida Behavior Analysis Certification Program, the Florida Behavior Analysis Peer Review Committee, and the Behavioral Programming Manual. Furthermore, it annually submits legislative budget requests for behavioral programming issues such as specialized programs and behavioral positions.

The source of this political and financial support for behavioral programming has extended through all levels of the program office, and often higher. A series of directors and administrators have considered behavioral programming to be a critical component of the system, have systematically fostered behavioral development, and have stood behind behavioral programs and initiatives, especially in the early years, when it would have been easier and more politically expedient to do otherwise.[4] This administrative commitment to behavioral programming often stems from the early experience that these individuals have had in service delivery positions, where they experienced first hand the effectiveness of behavioral methods.

It is difficult to overstate the importance of the behavioral climate and expertise of this office of state government to the development of the discipline in Florida. It has given the imprimature of the state to a myriad of major and minor actions that have directly and indirectly supported the efforts of behavior analysts on behalf of retarded citizens, and in the process it has supported the growth of behavior analysis as a profession in Flor-

[2] The Senior Behavior Analyst of the program office is Jerry Shook. The individual previously holding a similar position was Ray McKenzie.

[3] The Behavior Analysis Consultant of the program office is Michael Hemingway. The individual previously holding a similar position was Stelios Chimonides.

[4] These individuals include Stelios Chimonides, Ivor Groves, Jay Heckler, Richard Herring, James Joyce, Francis Kelly, Charles Kimber, Jack McAllister, Ray McKenzie, Bob Roberts, and David Rodriguez.

ida. The following accomplishments would have been much more difficult to achieve without the support of the program office.

Behavioral Programming Regulations

One of the direct consequences of the report of the Joint Task Force was the promulgation in 1978 of a formal regulatory document setting forth the minimum requirements for behavioral programming services in the state. The Developmental Services Behavioral Programming Manual (HRSM 160-4) is the result of the joint efforts of the program office, the Peer Review Committee, the Behavioral Programs Review Committees, and all other elements of the state's developmental disabilities system. It sets the tone for the delivery of behavioral services to the developmentally disabled persons of Florida by seeking to ensure that behavioral programming is implemented in an appropriate and ethical fashion, thereby safeguarding client rights. The current manual (now undergoing its third revision) describes both the formalities of the bureaucratic system in which programming must be conducted as well as the technical aspects of behavioral programming, including measurement, acquisition, reduction, and maintenance and generalization procedures.

Although the impending revision is likely to be more balanced and complete, the present document tends to focus more on reduction than acquisition procedures because, appropriately or not, they are often the source of greatest concern by non-professionals and even some professionals. A primary feature of the manual is the brief description of the minimum features of each procedure that is approved under certain conditions for use with clients in the state's care. This specification helps to avoid terminological misunderstandings and to constrain the range of procedural variation to appropriate limits.

The present manual arranges these procedures in four categories that are very loosely defined in terms of (1) the degree of risk that the procedure might be abused or result in a situation that is dangerous, or unethical and (2) the degree of restrictiveness represented by the procedure. Thus, the procedure referred to as differential reinforcement of other behavior is included in the category of Basic Non-Restrictive Procedures, and the use of contingent harmless substances is in the Mildly Restrictive Procedure group. Seclusion time out is considered the most restrictive procedure routinely available under limited conditions. Generally, the more bureaucratically risky and legally restrictive the procedure, the more extensive the approval and oversight requirements. The Behavioral Programming Manual also specifies those procedures that are prohibited on the basis of departmental policy or legislative mandate (e.g., procedures involving the administration of painful or noxious stimuli). However, it further provides a mechanism for obtaining approval for procedures not listed in the manual.

In addition to specifying approved and prohibited procedures, the HRSM 160-4 document also delineates the conditions under which each procedure may be implemented. The existence of a regulatory manual that formally approves certain procedures for statewide use under certain conditions is valuable for a number of reasons. First, it encourages use of a procedure only within certain procedural limits, thus avoiding some of the more unwise decisions that less well-trained individuals might make. Second, it allows practitioners to use procedures in a manner consistent with established practice with confidence that they are operating with the approval of the state. This framework not only gives practitioners the legal security that their professional actions deserve (making them more likely to use the full range of appropriate procedures available), it is particularly important in limiting the actions of supervisors and administators who may wish to prohibit procedures on the basis of personal preferences or otherwise intervene in technical decisions that are beyond their expertise. This latter consequence of the manual is especially useful when the treatment of choice may be a fairly restrictive procedure that might

come under close administrative and public scrutiny. Third, in describing the system of authority and responsibilities for programming, the Behavioral Programming Manual helps to define the role of the program office in this regard, establishes the Florida Behavior Analysis Certification Program, and formally sets up the district level Behavioral Programs Review Committees (BPRC) and Florida Behavior Analysis Peer Review Committee (PRC) and describes their roles and responsibilities (see below).

The Behavioral Programming Manual is a critical component in the state's behavioral system. It establishes other components of the system and provides the authority for the implementation and operation of those components. It allows practitioners to implement limited procedural operations while reducing the probability of their abuse or misuse. It gives all concerned a clear description of what is required, allowed, and prohibited and thus provides administrative and legal security to behavioral practitioners. In other words, it encourages the broad use of behavioral programming by protecting both the client, the practitioners, and the state.

Behavioral Programs Review Committees

A Behavioral Programs Review Committee (BPRC) is required by Florida's Behavioral Programming Manual for each of its eleven districts and four Developmental Services Institutions. Committee members must be Certified Behavior Analysts and are appointed by the head of Developmental Services for each district or institution, although the positions are voluntary. The members' formal university training in behavior analysis ranges from none to those with Ph.D.s from respected behavioral programs, with examples from all levels in between these extremes. The committee size usually varies from five to fifteen members, plus a committee chair. In an increasing number of instances, the committee is chaired by the District Behavior Analyst. This person holds the doctorate in behavior analysis and is assigned full-time coordinating responsibilities in the district. Committee members generally have other full-time duties in state- and vendor-operated facilities and perform their committee responsibilities in addition to their regular job functions. This body is often at the heart of the behavioral programming effort within a district or institution and in many instances represents its source of behavioral expertise.

The BPRC's primary function is to provide direct oversight for certain behavioral programs and procedures used within the district or institution. Committees have a regularly scheduled monthly meeting during which the membership engages in several duties designated by the Behavioral Programming Manual. In the present version, the committees are responsibile for reviewing specified restrictive procedures for implementation in district facilities (procedures categorized as non-restrictive do not require approval by the committee). Persons seeking procedure approval on behalf of a specific client submit written descriptions and appropriate documentation to the committee chair before the regularly scheduled meeting. The committee reviews the proposed procedure, usually in the presence of its author, and approves it for implementation, if warranted, often with stipulations. Data from the approved procedure are then provided to the committee at each scheduled meeting for the duration of the procedure's implementation.

Aside from its formal bureaucratic function, the meetings of the BPRC often also serve an educational function, with various practical behavioral topics being discussed in this supportive verbal community. Often meeting sites are rotated through the district's various facilities so that members may observe the level of behavioral competence of each facility and the environmental conditions under which a procedure may be implemented. This information can be particularly helpful when a restrictive procedure is being requested by a facility and the context in which it will be implemented is a salient factor in the approval process. The committee's educational role is enhanced

by the common practice of encouraging a limited number of visitors to attend meetings in an observer capacity. These guests might be staff of the facility housing the meeting or another facility within the district or a member of the local Developmental Services Human Rights Advocacy Committee (which is composed of volunteer citizens not employed in the retardation system).

More indirectly, the BPRC provides a local presence for behavioral programming in the districts. Committee responsibilities set the occasion for interaction with facilities within the district concerning each facility's behavioral programming effort. The committee's visit to a facility as part of its meetings offers it an opportunity to observe compliance with behavioral programming guidelines and policy. This sort of interaction usually leads to pressure from the committee for the facility to increase the quantity and quality of its behavioral programming effort. The members' position on the committee thus challenge them to function more as behavioral peers than as employees of different state and vendor facilities. The committees generally have a professional style in which they act on behalf of the discipline of behavior analysis and the clients being served.

Not only do the BPRCs often provide a focal point for individual district behavioral activites, they also function as a central contact point in the district for behavioral networking across the state. Program office information may be transmitted statewide by contacting the chairpersons of the district and institution BPRCs who can, in turn, pass the information on to behavior analysts within their district or institution. Other entities, such as The Florida Association for Behavior Analysis or other BPRC chairpersons, may also make use of the network to contact large numbers of behavior analysts with relatively little effort. Regularly scheduled meetings of the state's BPRC chairpersons is a recent development, so the potential power of the network is only beginning to be developed.

Finally, the BPRCs also provide feedback to the state program office and the Peer Review Committee on critical issues within the districts and institutions. This communication helps to keep behavior analysts in the program office and on the PRC in touch with key issues in the field and provides a more direct link to the contingencies under which field-based staff operate. Often BPRCs are a critical component in a feedback loop to the program office on state policies and initiatives generated by that office. The information from BPRCs, unlike that from other sources, is generally provided within a behavioral framework. BPRCs often initiate action by presenting issues to the program office. In some cases, these issues might not otherwise have surfaced until they became of sufficient magnitude to result in a crisis.

In summary, although not all of the state's Behavioral Programs Review Committees have attained the complete level of functioning described here, they generally provide organized groups of behavior analysts at the heart of the state's behavioral programming field operations. They have obvious quality control duties, but their less official functions are at least as important. They monitor, educate, troubleshoot, consult, problem solve, communicate, and lobby on behalf of behavior analysis. In other words, the members of the BPRCs are the state's leaders in the behavioral programming effort at the local and often the state-wide level. Their duties on the committee provide a powerful, professional, and everyday presence at the local level representing the agenda of the discipline in this sector of state government.

Peer Review Committee

Description and selection. The Peer Review Committee (PRC) plays a critical and pervasive role in the web of contingencies that involve behavior analytic activities in Florida. As already described, this body was recommended by the Joint Task Force and formally established by the Behavioral Programming Manual to serve the Development Services Program Office in an advisory capacity regarding

the application of behavioral technology in the state's retardation system. The word "peer" refers to the evaluation of the state's behavioral programming effort by experts from the parent discipline, rather than by committees composed of representatives from other disciplines or by professional bureaucrats or citizens.

The PRC is composed of eight persons who serve staggered seven-year terms.[5] The length of this term was chosen by the committee because of the lengthy on-the-job training required (one to two years) and the need for continuity in the face of relatively slow change in a complex system. The now-established selection process is for the existing committee to nominate candidates for consideration by the program office, which then selects from among the individuals qualified by the committee's nomination process. In this manner the professional expertise of the committee is used to define the minimum credentials of its members, and the program office staff retains the final decision-making power that is appropriate with a state-funded professional committee. The committee elects a chairperson who serves in this capacity for a period of two years and a vice-chairperson who succeeds the chair.

The formal criteria for selection to the committee are that candidates (1) have earned the doctorate in psychology, education, or related fields, (2) have had extensive formal training in behavior analysis, (3) have had experience in the application of that training to retardation populations and settings, (4) presently hold a faculty appointment in the area of their training at an institution of higher education, and (5) are not regular employees of HRS. Of course, these formal standards are only the foundation for the committee's deliberations.

Activities. The activities of the committee as a whole, in the form of subcommittees, and as individual members cover a wide range of professional services to the state and to the discipline. All activities are conducted through an annual state contract between the program office and a provider or vendor. The vendor is a member of the committee who has a private corporation and the time and interest to conduct various administrative duties.[6] The Senior Behavior Analyst of the program office is the manager for the contract and the official liaison between the committee and the program office.

Perhaps the most time-consuming PRC activity is monitoring or conducting on site reviews of (1) the existence and quality of the application of behavioral technology to the behavior of retarded clients, (2) the use of behavioral technology to manage the behavior of employees involved in the delivery of behavioral programming services, and (3) all aspects of retardation settings and the state's retardation system that affect the quality of behavioral services. Monitoring priorities and a general time frame are developed each year by the program office staff, although the opinions of the PRC are also considered in this decision. The entities for these visits include the state's 11 districts by which the Department of Health and Rehabilitative Services (HRS) administers its programs, the state's four institutions for retarded citizens, a number of special purpose facilities administered by the state, and private vendors who contract with HRS to serve its clients (which are usually monitored as a part of district visits, but which may occasionally be the sole focus of an on site review). The number of on site visits made in recent years has ranged from about six to ten.

[5] The present PRC membership includes Nathan Azrin (Nova University), Hewitt B. Clark (Florida Mental Health Institute, University of South Florida), Brian Iwata (University of Florida), James M. Johnston, chair (Auburn University), Janet Kistner (Florida State University), Jack Sandler, past chair (University of South Florida), Stephen Strichart (Florida International University), and William Wolking, vice-chair (University of Florida). Past members include Diane Bricker (Mailman Institute, University of Miami), John Bailey (Florida State University), Robert Davidson (University of Miami), Jack May, past chair (Florida State University), H. S. Pennypacker, past chair (University of Florida).

[6] Originally H. S. Pennypacker and now James M. Johnston.

The parameters of these visits vary considerably from one occasion to another. They are organized and coordinated by the PRC provider (in concert with the program office), who works with a representative of the entity to be monitored in selecting dates, ensuring that all necessary personnel will be present, and accumulating preliminary materials for the monitoring team. In addition, the provider works with the Senior Behavior Analyst in the program office in selecting the PRC members who will compose the review team, making hotel arrangements, and communicating with team members. The size of review teams depends on the nature of the district or facility to be visited, but usually ranges from three PRC members for two days (for monitoring a small or special purpose facility) to five or more members for three days (for monitoring a large district). The Senior Behavior Analyst from the program office also participates in site visits.

The visit begins with the early arrival (usually half a day before the entire team) of the Senior Behavior Analyst and the PRC coordinator for the visit. This advance team meets with key personnel from the target district or facility to arrange the final details of scheduling. Upon arrival, the team members organize their schedule and then break into two-person sub-teams to conduct the actual monitoring. One team also meets with critical personnel or committees, such as the Behavioral Programs Review Committee for the district or institution.

On district visits, a sub-team may spend anywhere from an hour or two to an entire day at a single program. The two members usually stay together when observing programming or talking with personnel and clients so that there can later be no question about what was said or observed. PRC members get quite skilled at quickly assessing the critical factors that determine a facility's programming effort. In their evaluation, they consider every facet of the programming effort and all of the factors that influence it. This includes the paperwork associated with behavioral programming, the training and skills of all relevant employees (including supervisory and administrative personnel who might not be expected to actually conduct programming but who are ultimately responsible for it), structural administrative matters, all facets of client needs, the availability of needed resources, and even bureaucratic political issues. Of course, an important part of the review is direct observation of the implementation of client programming.

The exit interview is a two-hour meeting held on the afternoon of the last day of the visit. In addition to the team members, anywhere from six to twelve people from the district office or facility being monitored are present, including those with the most responsibility for behavioral programming and those individuals with the highest level of authority in the entity (i.e., the district administrator or the institutional superintendent). On district visits, representatives of private vendors are not invited, both because they have already been given feedback by the sub-teams who visited them and so as to allow candid discussion with district personnel of all vendors that were monitored as well as issues that related to the district as a whole.

This two-hour meeting consists mostly of a presentation summarizing the team's findings led by the PRC member who is coordinating the visit, although time is also given to the other PRC members and to questions from the district or facility personnel and discussion of the team's observations. The program office's Senior Behavior Analyst is present; however, he plays a distinctly secondary role, making clear that the monitoring visit is the business of a group of independent experts representing the profession of behavior analysis, rather than the work of the program office.

The overall tone of the meeting is carefully designed to be constructive, although there is considerable variation in the style of particular observations depending on many factors, including progress since the last visit. The standards that guide the committee's assessments are intentionally unwritten because they come from the collective judgement of

the team members, tempered by numerous subtleties unique to the district or facility being monitored. For instance, a vendor-operated facility that has only a very limited behavioral programming effort may be praised and encouraged because their effort may represent considerable progress under adverse conditions (such as no one on staff who is especially knowledgeable in behavioral procedures), whereas another facility with better programming may be firmly criticized because it has a number of better-trained staff and has made no progress. Although the committee approaches these visits with a consistent general orientation, each visit calls for unique judgements about the substance and tone of the team's reactions that are based on a great many factors.

Soon after the visit, the PRC member who coordinated affairs on site begins preparing a report to the program office. Team members contribute rough drafts of sections concerning sites that they visited and all team members receive a complete draft for their comments. The report is a document of about 15 to 20 double-spaced pages that details the team's findings and issues recommendations about changes that would improve the behavioral programming effort. Because the team is representing the profession, in both the exit interview and the report there are no constraints placed by the program office on either the team's evaluation of programming or its recommendations. Thus, the recommendations sometimes go beyond the resources of the monitored entity (e.g., a recommendation to hire more behaviorally qualified personnel, even though it may be clear that financial resources are limited). However, because the report is addressed to the program office, such recommendations serve as guides to the state about the resources necessary to facilitate sound behavioral programming.

After evaluating the report, the program office disseminates it to the entity that was monitored. Then the program office negotiates a plan of corrective action with the district or facility. This written document later serves as a basis for guiding improvement efforts, continuing evaluation by program office staff, and assessing progress by the PRC on its next visit. Because of the plan of corrective action process, the team's comments and recommendations cannot simply be casually ignored. In other words, although the team is seen as representing the profession, its evaluations are also viewed as having the full support of the state through the program office.

As the reputation of the PRC as an independent professional body has developed, a second but related role that has evolved in recent years is as a participant in investigations conducted by the Inspector General's Office of HRS. The situations in which the PRC becomes involved are usually legally-defined, but in some way partly concern behavioral programming. In such cases, the program office is asked by the Inspector General's Office to provide a PRC monitoring team, which is selected in the usual manner, but which operates as part of a much larger monitoring effort. The details of this type of PRC monitoring vary greatly with the circumstances, but its report is usually included as a part of the final report by the Inspector General's Office.

A third type of activity by PRC members is approving requests for behavior change programs that are not described in the HRSM 160-4 Behavioral Programming Manual. Recall that this document not only specifies those behavioral procedures that are generically approved for use with clients, they also allow staff to seek approval of procedures not specifically described. The final step in this approval process is for the program office to forward each formal request to one or more PRC members for evaluation. This role for PRC members accomplishes a number of important benefits. It helps to protect clients, staff members, their employers, and the state from well-intended but naive and inappropriate attempts at changing behavior in the name of behavior analysis, although it hardly precludes such possibilities entirely. In doing so, it provides the program office with a professionally-defined set of boundaries

for acceptable behavior change procedures. It also tempers the formality of the Behavioral Programming Manual by allowing a necessary measure of procedural flexibility, but in a manner that protects against poorly-trained staff. Finally, it helps makes clear that the PRC sets the professional standards for the practice of behavioral programming with the state's retarded citizens.

A fourth kind of PRC activity is individual consulting as a member of the PRC for problems designated by the program office. These problems often concern a particular client who is presenting behavioral challenges that local resources have not been able to address satisfactorily. In such cases the program office asks a PRC member to spend one or more days consulting with local personnel in order to ameliorate the difficulty. When the presenting problem sometimes concerns a local situation involving behavioral programming that has to do with particular procedures that have been used or complaints that have been lodged against a facility, the PRC member will be accompanied by a member of the program office.

A fifth category of PRC activity involves offering formal training that is designed to improve the state's capability to offer sound behavioral programming to its clients. Over the years, this training has included routine academic courses, special courses offered through those institutions to non-degree students who are employed in facilities for the retarded, workshops and short courses offered through colleges and universities or at facility sites for employees, and ongoing private consulting relationships between individual PRC members and state and vendor operations. This training contribution was especially critical in earlier years when the depth of behavioral expertise in the state was much more limited than at present.

A sixth role that the PRC plays is as a consultant in the development, maintenance, and administration of the state's Behavior Analysis Certification Examination. It was at the instigation of early PRC members that the entire certification program was developed. Subsequently, various members have served with program office personnel and testing consultants on the advisory committee for the contract to develop the present examination, as content experts during its development, in developing the curriculum guide, in developing the information and registration booklet, in the administration and scoring of the examination, in annually revising the examination, and in defending the examination in administrative hearings.

Finally, the PRC serves the state and the profession in a variety of miscellaneous ways no less important than those described above. One of these is in making presentations of a professional nature to groups involved in one way or another in behavioral programming. Another visible role is in giving talks, serving on symposia and panels, and being generally available at annual meetings and conferences of the Florida Association of Behavior Analysis. A third role is as a source of support on behalf of the discipline of behavior analysis for various policies and practices that the program office is trying to establish or maintain. This support may take the form of meetings with officials of HRS or non-governmental organizations, or it may be in the form of written statements representing formal positions taken by the PRC.

These miscellaneous activities have in common a fairly explicit political agenda for the PRC. The political motivation may come from the program office, or it may come from the PRC itself. In either case, the goal of each such occasion is always one that has the professional support of the members of the committee. What is significant is that an office of state government is asking a group of individuals representing the discipline of behavior analysis to assist it in accomplishing changes in policies or practices that, whatever other benefits, will in some way further develop the profession within the state. The existence of the PRC thus gives these individuals a state-supported forum from which to lobby for circumstances that are in the interest of their discipline.

Critical issues. From the perspective of the program office, the PRC may be seen as a mechanism for obtaining the guidance and technical assistance of available experts in the professional discipline whose technology it uses to provide services to its clients. From the perspective of the discipline of behavior analysis, however, the PRC may be viewed somewhat differently. It is an opportunity for the discipline to exert considerable influence in numerous ways on not just the quality with which its technology is practiced but on the general and specific circumstances under which it is applied. These circumstances include the depth and breadth of training of professional and paraprofessional practitioners, the quality of the applications themselves, the bureaucratic environment in which the technology is used, the general professional environment in the state, and the support available from the academic community.

The PRC provides these opportunities because the program office finds it in its interest to support the committee, because its members find it in their interest to participate, and because of the professional credentials of its members that garner the attention of those with whom they interact. The benefits that the committee provides to the program office seem clear enough, but what maintains the participation of its members? There are a number of critical factors here. Certainly the daily consulting fee is an effective reinforcer for otherwise deprived academics, but it is less than the members may make for other types of consulting. Another important consequence might be described in terms of the change that participation is able to produce. Membership on the PRC enables one to have direct and significant impact not only on the care given to individual clients and the design and operation of the state's service delivery system, but on many facets of the discipline as it is represented in the state. Finally, not all doctoral-level academic behavior analysts in the state can be members at one time, and the personal and professional consequences of simply being a member of the committee also probably contributes to one's willingness to serve.

Experience with this committee suggests that there are particular features of its operation that may be critical to its continuing vitality and effectiveness. One of these is obviously the political support of the program office. Although such support has certainly been earned, an effective PRC still requires a courageous branch of a state human services agency. In this case, the Developmental Services Program Office has had the fortune to be directed by a series of individuals who were not threatened by sponsoring a professional group that was intended to operate with considerable independence from the bureaucracy. Of no less import is the core of employees within this office over the years who have been able to place benefits to the client ahead of natural bureaucratic tendencies in their unswerving support of the committee (see footnote 5).

Of course, support by the program office also refers to financial support. Although it is expected that the PRC will eventually obtain its own line in the state budget, it has thus far been funded out of miscellaneous monies that its supporters have been able to beg, borrow, and steal from other categories. This has meant some degree of budgetary uncertainty each year, but enough money has been available to permit it to carry on without undue hardship.

The committee's independence status warrants further elaboration as another prerequisite to a useful and enthusiastic body. As an advisory committee, its members are independent of both their academic institutions and the program office. There is a strong awareness on the part of the members and the program office that the committee is at all times acting on behalf of the discipline of behavior analysis. The program office remains unceasingly respectful of this independence, and the committee does not abuse it. However, because the interests of the program office on behalf of HRS employees and clients and the interests of the PRC members on behalf of the discipline are largely synonymous, there

are rarely conflicts of any significance between the committee and its sponsor.

This harmonious relationship is due in part to another important feature of the PRC's functioning. The criteria for selecting members and the style of the committee's work (under which new members are "trained") include a strong appreciation for the characteristic of "real-world" relevance and practicality. The selection of PRC members from the academic community has many benefits, but an associated risk is that some individuals may have insufficient sensitivity to the practical realities of life in the service-delivery and bureaucratic trenches. The requirement that members have applied experience in retardation settings is therefore quite important, as is a continuing emphasis on balancing professional ideals with a well-developed awareness of the practical context of one's advice.

Behavior Analysis Certification Program

History and description. When the PRC was first organized about ten years ago, it quickly learned from early monitoring trips that the were relatively few individuals in the state who had the different levels of training and expertise that were necessary for building an effective delivery system for behavioral technology in the state's retardation settings. This deficiency existed at all levels, from doctoral specialists to supervisory staff to direct care workers. For monitored facilities to even understand the PRC's suggestions, there had to be at least a few personnel available with at least some elementary training in basic principles of behavior and their application to the behavior of retarded individuals.

The response of the program office and the PRC was to organize a series of workshop-style training efforts throughout the state. An examination was informally developed in-house to assess the effectiveness of this training, and those who did well were given certificates. As a variety of contingencies at work in the state on behalf of behavior analysis began to accumulate, the demand for the program office to sponsor more workshops grew. At the same time, it became increasingly clear that the original examination had to be replaced with a more appropriate instrument. Accordingly, the program office promulgated a Request For Proposals for developing a certification examination and a set of curriculum materials. A contract was eventually awarded to a firm specializing in designing criterion-referenced tests.

The experiences of developing the examination over the next two years and the two subsequent years to date of administering, scoring, evaluating, revising, and defending the exam showed the good fortune of this decision to award the contract to test design specialists. The process of developing and using a professional certification exam turned out to be a complex and highly technical enterprise bounded by a substantial body of case law, all of which was news to the behavior analysts who were heavily involved.

The process began with the development of a rough draft of competency clusters, tasks, and standards based on the Behavioral Programming Manual (HRSM 160-4), the old exam, other professional materials, and consultation with a number of content experts. Then, a second edition was created based partly on review by content specialists. A third version in the form of a pilot test survey resulted from still more extensive work with a variety of content experts, and then the survey was distributed to a number of individuals both statewide and nationally, ranging from certified individuals to doctoral-level experts at colleges and universities. The respondents rated each task in every competency cluster on its criticality and its required proficiency. An analysis of these data led to the fifth edition, which then underwent field testing at three sites in the state. The results of this field testing were then analyzed and further revisions were made after an outside test consultant evaluated the exam and the final proposed revisions. During this entire process the highest standards of test security were maintained.

The content of the finished examination is intentionally fairly elementary. It covers about the same amount of material that might be taught in a one-quarter college course. Its coverage is broken into ten sections: Deciding to intervene, selecting assessment and measurement methods, observing and recording behavior, displaying data, interpreting data, effectively changing behavior, writing a behavioral program, training staff, evaluating behavioral treatments, and managing staff and behavioral programs.

These topics should suggest that the exam focuses rather narrowly on evaluating the examinee's understanding of a behavioral approach to the problems of managing client and staff behavior in retardation settings and the basic principles underlying behavioral programming and its most familiar procedures. However, the test items are unlike those with which most academics are familiar. In particular, the multiple choice items are almost entirely phrased in terms of hypothetical, though believable, applied situations so as to discriminate between examinees who have only learned some terminology and those can correctly respond to the question's focus in practical terms. Even individuals with decent graduate-level training in behavior analysis but without applied experience in retardation cannot be assurred of passing without special preparation, and those who have only experience in retardation, but little training in the basics of behavior analysis, have very little chance of success.

After administering the new exam three times over a period of a few months, the exams were scored, using a detailed answer key for the free response items. Two scorers independently score each exam, and each discrepancy is then scored by a third individual (all PRC members). An item analysis was conducted on the scored exams, which led to the elimination of certain items according to standard criteria before final scores were calculated. Then, a group of 16 individuals representing all facets of the retardation system (parents, vendors, advocacy committee members, district program managers, BPRC and PRC members, and program office personnel) convened for a full day to reach consensus on the passing score. In this session, concern was broadly expressed that passing the exam truly certify a sound understanding of behavioral technology and the ability to apply it effectively, even though that might mean that as many as two-thirds of the examinees would fail to pass. Finally, the examinees were given their scores. Throughout this costly and time-consuming venture, a number of program office staff and PRC members worked closely with the test designer and an outside testing consultant, and this relationship continues because the responsibility of administering a certification program requires a continuing revision of the examination and the administration and scoring procedures.[7]

The cost and effort is necessary, however, not only to construct a certification program that will effectively discriminate between those who have a useful command of the material covered and those who do not, but to be able to defend the program from legal assault. It is axiomatic that certification programs are routinely challenged through administrative hearings and in court. In fact, the failure of a few among those who do not pass to challenge the process probably means that it is not yet very important to be certified. If the entire development and administrative process does not meet the standards established by case law, then there is considerable risk that the entire effort (and the efforts of all who have earned certification) can be thrown out.

Critical issues. The Florida Behavior

[7] In addition to administrators whose support was critical (Ivor Groves, Charles Kimber, David Rodriguez, Richard Herring, and Bob Roberts), those program office staff involved have at one time or another included Ray McKenzie, Stelios Chimonides, and Jerry Shook. PRC members have included Nathan Azrin, Hewitt B. Clark, James M. Johnston, Jack Sandler, and Bill Wolking. The test designer was Ludwika Goodson, president of Instructional Design Systems in Tallahassee. The outside test consultant was Jacob Beard, Florida State University. The group most closely associated with the development of the examination to date is Jacob Beard, Ludwicka Goodson, James M. Johnston, and Jerry Shook.

Analysis Certification Program is more than just an examination, however. It is a complex set of contingencies formally designed to influence the behavior of a number of different kinds of people in different ways. Of course, the program is obviously intended to encourage those who work with clients or who supervise those who do to seek training in the material covered by the examination. As of this writing, approximately 300 individuals have been certified by this process, and the number of applicants for the exam is growing with each administration (150 individuals recently took the examination, an increase of 50% over last year). Furthermore, for every certified individual, there are at least one or two who have also studied for and taken the exam but who failed to attain the cutoff score (although most of these will prepare further and try again).

What are the circumstances that motivate individuals to prepare for and take the examination? Because so many individuals are either certified or attempting to become certified, everyone working in retardation settings knows or even works with at least one of them and hence sees colleagues learning useful skills from their preparations and being more effective on the job. At the same time, they may see or anticipate seeing their certified co-workers earn promotions, raises, praise from superiors, appointment to the BPRC, and other reinforcers as a result of these skills. (Although the program office has not yet been able to arrange an automatic higher pay grade for certified employees, private vendors are not so constrained by the bureaucracy and often pay certified workers more than others with otherwise comparable credentials.) Non-certified individuals may often want to apply for higher-level positions or switch employers for better jobs and may see certification as their ticket. Another major source of motivation for some examinees is pressure from their employer, usually because of general or even explicit pressure from the district's programming people or even the PRC's monitoring efforts. However, when the examinee is otherwise unmotivated or possibly unprepared academically to profit from training, this set of contingencies can fail to produce the desired result. Finally, part of the motivational picture for any examinee probably has something to do with the social reinforcers that accrue to certified individuals, many of which have been explicitly arranged by the program office and the PRC.

As a result of this increase in the number of individuals seeking training in areas covered by the examination and with the explicit and systematic encouragement of the program office and the PRC, there has been considerable growth in training opportunities of all kinds throughout the state. With the support of the PRC, the program office stopped sponsoring workshops a few years ago and instead focused on helping districts and vendors work together to develop local training resources. Thus, there are now a variety of locally-managed arrangements in routine operation, including workshops offered by private consultants, workshops sponsored by districts, college courses taught explicitly for retardation system employees at convenient times and places, and local consultantships for training purposes.

Of course, not all training experiences are of equal effectiveness, but it is anticipated that the natural contingencies of the free market will eventually weed out ineffective training efforts. To encourage sound training, however, a Curriculum Guide, which was developed as part of the certification exam contract, has been produced and made commercially available. It is intended to be used by both teachers and students and includes a description of the coverage of the exam, the sources for its content in the professional literature, the content standards for the exam, and pre- and post-tests to allow users to assess the need for and the effects of their preparation. It should be clear, then, that the certification program is also intended to influence the behavior of those who are capable of offering training by encouraging them to offer the right kind of training when asked to help by local personnel.

A related goal is to encourage depart-

ment heads and deans in the higher education system to hire more faculty with behavior analysis credentials so as to meet this increasing demand, which has already happened in at least one case. While this effect will be gradual, each new college or university faculty member that comes into the state gradually develops a range of influences on and off campus that bode well for the discipline.

The certification program is further intended to facilitate the actions of state retardation personnel in attempting to provide sound behavioral programming to clients. It has the direct effect of providing better-trained individuals for employment by the state and by private vendors. For example, this allows state facilities in the district to hire behaviorally-skilled individuals and for the district office to insist on vendor contracts that specify behaviorally-trained personnel and appropriate use of behavioral programming. It similarly gives vendors pressured the district or by PRC monitoring a credential to help guide their hiring decision and the means to comply with demands for good behavioral services. Each additional behaviorally-trained employee produces significant changes in the setting in which he or she works, which in turn changes the behavior of clients and other staff.

An increase in the number of behaviorally-trained workers in the retardation system also has subtler effects. It increases the likelihood that people with behavioral training will earn positions of influence in state and private settings, which then may further accelerate the influence of the discipline. As the proportion of behaviorally-trained persons working at different levels in the system increases, those who do not have such training may be expected to be more effectively influenced in ways consistent with the role of behavior analysis in retardation, an observation that is now routine. An institutional superintendent, for example, who works from a general bureaucratic perspective is more likely to make decisions that are in the interest of good behavioral programming if the assistant superintendent or other senior personnel approach their work from a behavioral perspective.

Another benefit of increasing the number of people in the state with even the modest level of behavioral training that the certification program formally demands is that it increases the number of people who identify with behavior analysis as a discipline. Most of the people who go through what for them are special and time-consuming preparations to pass the examination do not have graduate training in any field, and some do not have the baccalaureate degree. Passing the certification exam is an important achievement, and those certified (as well as those who receive training but do not eventually earn certification) tend to identify with the discipline of behavior analysis. These individuals are more likely to join and attend meetings of the Florida Association for Behavior Analysis and to take positions in their day-to-day activities on the job that are consistent with a behavioral perspective. Some even join the Association for Behavior Analysis and attend its meetings.

In fact, it seems that the benefits of the certification program are disproportionally large to the minimum amount of training involved. Of course, the paraprofessional level of the present effort can gradually be raised as the state's training capabilities and other factors permit. Some steps in this direction are already developing. Although many of these training efforts are fairly specifically aimed at preparing students for the examination, others cover additional material. It is anticipated that the present tendency to organize more workshop-style than college course-style training opportunities will gradually shift as more behaviorally-qualified faculty are available. There are also joint efforts underway between the program office and the university system to develop one-year, non-thesis, terminal master's programs in retardation behavior analysis.

Developing a certification program such as this would seem to require at least three elements: a strongly supportive state agency, a willing cadre of doctoral-level experts in the application of behavioral

technology to retardation, and an adequate supply of funds (perhaps $150,000 over two to three years). Additional prerequisites include a source of professional expertise in the field of criterion-referenced certification test development and at least the beginnings of a system of training opportunities available to the pool of potential examinees than can prepare them to take the examination. With all of this, then all it takes is work.

Florida Association for Behavior Analysis

History. In September of 1980, the program office, with the assistance of the PRC and other behavior analysts active in the retardation area, sponsored a "work session" on behavior analysis in retardation. It was at this conference, which over 500 people attended, that a meeting was held for the purpose of organizing the Florida Association for Behavior Analysis (FABA).

The purpose of this organization is "to promote the use of effective and humane behavior analysis procedures with normal and developmentally disabled children and adults throughout the state of Florida." It is administered in traditional fashion with an executive council composed of a president, secretary-treasurer, president-elect, and three members-at-large, all elected by the membership at the annual convention.[8] The major activities of the organization include holding an annual convention and pre-convention institute, conducting a two-day theme conference, and publishing a quarterly newsletter and a membership director.

The annual pre-convention institute and convention is usually held for three days in September in either Orlando or Tampa, both easily reached by members traveling from different parts of the state. FABA is organized like the ABA convention in every respect, with invited and submitted addresses, symposia, workshops, papers, panel discussions, and posters. (The certification examination is also administered in conjunction with the convention.) The topics cover all aspects of behavior analysis as practiced in the field of retardation. However, over the years there has been a carefully-planned broadening of the organization's focus with increasing excursions into mental health, special education, and business, among other areas.

The program has regularly featured a keynote speaker and a number of other invited behavior analysts whose involvement would be interesting to the membership and whose national visibility would enhance registration, which was 525 people in 1986.[9] FABA's emphasis on education is evident not only in the nature of its program (which has many workshops) but in its one-day pre-convention workshops begun in 1984.[10] Although the roster of invited leaders from out of state might suggest a traditional academic tone characteristic of national meetings, the topics of these speakers are usually practical in nature. Furthermore, the bulk of the program entries are submitted by all levels of behavior analysts within the state.

As befits a state professional organization, the convention has also been a

[8] The presidents of FABA have included (in order) Nathan Azrin, H. S. Pennypacker, Jerry Martin, James M. Johnston, Gary Jackson, Jon Bailey, Hewitt B. Clark, and Maxin Reiss.

[9] Keynote speakers have included (in chronological order) B. F. Skinner, Sidney Bijou, Gordon Paul, Robert Liberman, Ivar Lovaas, Karen Pryor, and Aubry Daniels.

[10] Preconvention workshop themes have included "Making programs work: Insight gained from 20 years of experience" (Richard Foxx), "Teaching techniques for developmentally disabled persons" (Ivar Lovaas), "The analysis and treatment of self-injurious behavior" (Brian Iwata), "Managing severe aggressive behavior" (Richard Foxx), "Treatment of behavior problems in persons with developmental disabilities" (Judy Favell), "Strategies for producing generalized gains with autistic and developmentally disabled children" (Glen Dunlop), "Behavioral treatment of medically involved developmentally disabled and mentally ill clients" (Dennis Russo), "Teaching language to developmentally disabled persons" (Mark Sundberg), "Educational strategies for promoting functional learning in the developmentally disabled" (T. J. Glahn), "Analysis and treatment of self-injurious behavior" (Brian Iwata).

forum for discussing issues specific to the state. At every meeting there are numerous addresses, symposia, and panel discussions in which PRC members, program office personnel, and other individuals who are influential in the operation of the retardation and mental health service delivery system participate. In fact, the convention is regularly attended by important individuals from not just the program office but other branches of Health and Rehabilitative Services. In addition, the convention is used as an occasion to convene various groups otherwise unrelated to FABA, such as the PRC, the chairs of the BPRCs, and others.

The annual theme conference held roughly six months after the fall convention has been an opportunity for the organization to try things that a professional convention would not easily accommodate or that might involve some degree of risk. Compared to a convention, a meeting with a single theme permits topics of special importance to be examined more thoroughly, educational goals to be addressed more explicitly, political agendas to be pursued more directly, and different sites to be sampled. The themes addressed in these conferences have included legal and ethical issues, computer applications in behavior analysis and human service systems, the use of psychotropic drugs with retarded and mentally ill populations, treatment and assessment of dually-diagnosed clients, staff management, and applications in business and industry.

As with most associations, the quarterly newsletter serves as a medium of communication with the membership by those who run the organization. Its attractive 8½ by 11 inch format is usually eight pages long and includes such material as reports of the executive committee, announcements pertaining to the annual convention and theme conference, reports of major presentations at these meetings, book reviews, short articles by members about innovative programs at their facility, news about the certification program, news from the program office, presidential statements, job announcements, and a wide variety of miscellaneous items.

FABA's very active annual agenda has been made possible by its consistent financial health: It has been "in the black" since its inception. After the program office's sponsorship of the original organizational meeting in 1980, the annual conventions have brought in sufficient income to provide adequate funds not only for the theme conferences (which usually at least break even) but also for a variety of miscellaneous expenses. (For instance, FABA now maintains an office at Florida State University, pays for some continuing staff costs, and owns two computers.)

Some of the reasons for this financial success include the size and the stable growth of the membership and registration for the annual convention, the reputations of keynote and invited speakers, the large number of interesting and practical workshops, heavy advertising, the generous programmatic contributions of some university faculty, the timing of the annual convention in the early fall when travel monies are still available, and a style that focuses on the practitioner-based membership registrants.

Critical issues. This brief description hardly does justice to FABA, which has been one of the most important forces in the development of the discipline of behavior analysis in Florida. An explanation of its unqualified success as a professional association has many facets, of course. Foremost among these is a pair of intertwined characteristics: the fact that the association has its base in the area of retardation and the fact that its primary membership focus is on individuals who have less than graduate-level training in behavior analysis.

The advantages of developing an organization such as FABA in the context of the state's mission to deliver behavioral services to developmentally disabled and especially retarded clients are many. This tactic means that the professional association shares with the state the goal of providing good behavioral care. It thus helps garner support for the organization from a state agency, thereby

bringing some immediate visibility and legitimacy to the professional group. In the case of FABA, the program office paid for the organizing meeting, and its personnel have always been represented on the executive council (because the elected individuals have been accepted by the membership as important behavior analysts in the state, not because the program office "owns" a seat on the council). It also provides a channel for the association (and thus the profession it represents) to demonstrate its value by providing assistance to the state through improving the skills of workers in the retardation system.

Furthermore, the field of retardation is one of the oldest areas of application of behavioral technology and, for various reasons, one in which it has enjoyed notable success. Because of the relative effectiveness of behavioral technology with not only this population, but also with the bureaucracy that delivers it, behavior analysis as a field is probably more well-established and dominant in retardation settings than is any other specialty. This means that a new state organization based in retardation is less likely to generate opposition by other state professional associations, particularly the state psychological association. In fact, this has been the case in Florida. FABA's clear focus on retardation, particularly at a sub-doctoral level, has seemed to reassure the Florida Psychological Association that it was not a threat to its traditional mental health territory.

This retardation base has the further advantage of encouraging the association to attract its initial and core membership from among those individuals working in the retardation system, most of whom have no more than minimal formal training in behavior analysis and only a minority of whom have graduate degrees in any field. Although by doctoral standards this level of competancy of the average member may hardly seem a strength for a professional association, it has the advantage of numbers. Any state has only a relatively small group of doctoral-level behavior analysts, and a professional association composed primarily of such individuals will always struggle financially and will probably do well to simply hold a small annual meeting. However, a focus on a membership defined more by interest in behavior analysis and common behavioral challenges on the job than by doctoral specialization gives an organization far greater potential for financial survival and professional success. The financial consequences of 50 versus 500 members should be obvious. In this case, moreover, professional success can be described more broadly as attracting individuals to a behavioral viewpoint, raising the level of their behavioral sophistication, and influencing the breadth and quality of the application of behavioral technology.

FBA attracts this kind of membership by carefully tailoring its pre-convention institutes, convention programs, and theme conferences to appeal to individuals with less than doctoral-level training who work in applied settings. Although its meetings are in every way conducted like national meetings, the substantive focus is rather narrowly applied (largely to retardation and other human services concerns), and within even this area the emphasis is especially practical. This parochialism can gradually be relaxed as the membership becomes more heterogeneous and behaviorally sophisticated, but because of the nature of the vast majority of its potential membership, a thriving and influential state association must retain a less traditionally academic focus than its national relatives.

For obvious reasons, FABA's meetings are also more explicitly educationally oriented than those of the Association for Behavior Analysis (ABA). When much of the membership of a professional organization has less than graduate level specialization in the discipline, augmenting their behavioral skills is one of the most important services that it can offer. Unfortunately, the training that is conducted in the context of conventions and conferences tends to be limited to relatively practical issues and skills (rather than, for instance, to basic principles), but given the members' on-the-job responsibilities, this is probably in the best

interests of the discipline anyway. Such training does not have to be hidden or "sugar-coated," however; most members are openly eager to improve their behavioral sophistication.

Florida's doctoral-level behavior analysts are not excluded by this membership focus. In fact, they are fully involved in the association. The state's doctoral behavior analysts have generally played a leadership role in founding and guiding the direction of the association's activities.[11] For instance, the proportion of individuals on the executive council holding doctorates is considerably higher than among the general membership, and all of the presidents have held doctorates. In addition, such individuals may be proportionally more heavily represented on the program than those with less training in the field. They are not an elite and separate group, however; the attention to the subtleties of professional status characteristic of a national meeting are notably lacking in FABA.

Although not all of these individuals are employed in the higher education system, many of them are, and this is another important characteristic of FABA. Like ABA, FABA is closely tied to those individuals in the field who contribute to the discipline as teachers and researchers. As a state organization, however, FABA has a somewhat closer relation with these members than does a national association. Besides the fact that they represent a significant proportion of the governing council, many of those students trained by these faculty at baccalaureate and graduate levels stay in the state to begin their careers, often in retardation settings. Furthermore, the many consulting and other helping relationships that these faculty have often involve them in FABA's state agenda for the discipline. Because of their visibility within the association, college and university faculty represent FABA wherever they act professionally and are thus important recruiters for FABA members.

Another critical aspect of FABA is its systematic involvement of personnel from state agencies in Tallahassee as well as the districts. Important individuals in the state retardation or mental health bureaucracy are regularly invited to participate on convention and conference programs in both functional and more honorary roles. This tactic has a number of benefits. It ensures that these individuals attend FABA's meetings and thus see a large number of people (many, their own employees) working to improve their ability to deliver services to the state's clients. This is a good context for behavior analysis. It ensures that policy makers hear discussion of important issues, thus subtly educating them on the behavioral position on such matters. With repeated attendance, it even encourages these officials to identify professionally with behavior analysis, and thus to generally or even explicitly support the association and its activities.

FABA's involvement of state personnel has indeed worked as desired. Program office personnel in Tallahassee as well as many district programming personnel now routinely attend FABA meetings. In fact, attending the annual FABA convention has become almost mandatory for significant individuals in the retardation system. More importantly, this attendance has paid off in terms of FABA's direct and indirect influence. For instance, the involvement of retardation and mental health officials in a conference on the use of psychotropic drugs seems to have had an impact on statewide regulations concerning their use. In another case, partly as a result of a number of convention addresses concerning the use of physically painful stimuli with severe self-injurious clients, the program office took the politically courageous step of attempting to get the legislature to allow their use under special circumstances. Of course, the effects of this general tactic are usually more subtle, but there is no question that it has enhanced respect for the association among state officials.

[11] In particular, Jon Bailey must be recognized as the individual who has had more to do with the success of FABA than any other. He was not only one of its founders, he has in one capacity or another been that person who in every organization serves as the central organizer and doer.

A related tactic has been to involve representatives of human rights groups and other organizations in the state that also work with the retardation system. The agenda has been to educate and to prevent hostility, and it seems to have worked thus far. For instance, the Florida chapter of the American Association for Mental Deficiency (AAMD) last year expressed interest in a joint conference, and FABA's sixth annual meeting was thus co-sponsored by AAMD.

It is important to note that this description of FABA has emphasized its origins more than its continuing development. In fact, those on its executive council have always focused on managing its development with great deliberation. For instance, although FABA's origins lie in the retardation system, it has slowly but systematically been extending its reach to the fields of mental health, child and youth services, special education, and government. This has occurred largely by slightly shifting the balance of its guest speaker invitations and other aspects of its programs. FABA is also taking formal positions on important issues in the state that affect the discipline by issuing policy statements or by presidential correspondence. For example, a letter from the president was sent to the National Association for Autistic Children criticizing certain positions that it took. In another case, FABA issued a statement supporting the state's Behavior Analysis Certification Program at a time when such support seemed useful. More recently, FABA has begun to develop its skills at legislative lobbying. A symposium that brought to FABA people who are experts in this process was a start, and the association is now consulting with a professional lobbyist to learn more about the basics of influencing legislative actions.

University-based Behavioral Community

The state's university-based behavioral community was involved in all of these efforts from their beginnings. Behaviorally-oriented faculty were members of the joint Task Force, have constituted the membership of the PRC, took the lead in founding FABA, and have worked very closely with the program office on many matters involving the effort to develop a sound behavioral programming system in the area of retardation, most notably the certification program.

Of course, this emphasis on the role of university faculty should certainly not imply that behavior analysts employed elsewhere throughout the state have not also made significant contributions. Non-university representatives of the field with baccalaureate, master's, and doctoral credentials have been critical players in Florida's evolving behavioral agenda, especially through FABA, their employment in senior positions in the retardation system, service on the BPRCs, and development of the certification program. However, the present point is that the role of university-based behavior analysts has been seminal.

One of the consequences of this resource has been a relatively organized leadership of the general effort to develop the profession in the state. Because this nucleus of individuals, numbering less than two dozen over the past ten years, has shared generally similar professional training and experiences, its contributions have tended to have a certain homogeneity of direction or focus in both strategies and tactics. Furthermore, their uniformly behavioral orientation has meant that each area of involvement has been informally approached as an opportunity to manage behavior. Thus, for example, although the certification program has evolved over a long period of time and has involved a number of different behavioral faculty, as well as many others, it was at all times viewed as a complex set of contingencies intended to influence the behavior of different classes of individuals in specific ways.

The example of the certification program suggests another benefit of the central involvement of the university community: constituting a valuable, convenient, and often inexpensive source of behavioral expertise. For Florida's retardation-based behavioral movement, this has been most important. The ability of

the Developmental Services Program Office to call on relevant university expertise to address the state's problems in the field of retardation, and increasingly in other human services areas, has not gone unnoticed in the Department of Health and Rehabilitation Services. As a result of this history, the university behavioral community is now well-respected in HRS as being capable of genuinely helping to solve the some of state's problems in serving its disabled and mentally-ill citizens.

To a certain degree, the mere fact that these doctoral-level experts hold appointments in the state's higher education institutions gives them a measure of status that might not accrue to those who are otherwise qualified, but who work in non-university settings. Although this respect may be less than fairly apportioned and well short of infallability, it is nevertheless a valuable adjunct to the central involvement of university faculty in the behavioral agenda for state-level development of the profession. Thus, whether as a member of a PRC monitoring team, a consultant on a serious self-injurious behavior case, a content expert in developing the certification examination, an officer of FABA, or in many other roles, when behavior analysts speak as members of a university faculty, their words are often given a certain respect merely because of that fact, and this may translate into an augmented ability to influence events.

Another natural consequence of the involvement of Florida's university-based behavioral community comes from its instructional role in the state's college and university system. It is this group that collectively produces many of the new members of the discipline from baccalaureate to doctoral levels, and many of these young behavior analysts stay in the state to develop their careers. Because of their professors' involvement in the retardation system, an important proportion of them specialize in that area and go on to take leadership roles with state and private retardation employers. This in turn facilitates progress toward the goal of developing a sound behavioral programming capability in the retardation system. Of course, the professional interests of this collection of faculty are hardly this narrow, but many of their students who settle in the state will have careers in human services and most are likely to be members of FABA.

GENERAL PRINCIPLES FOR STATE-LEVEL DEVELOPMENT

Evolution by Fortune and Design

It should not be surmised that the described activities in Florida on behalf of the field of behavior analysis came about solely by careful planning and effective organization on the part of any person or group, although planning and organization were often attempted in the service of particular ventures. The fact is that a certain amount of good fortune played a role at different points. Certainly the incident at the Miami institution in 1972 that led to the joint Task Force that led to its report that led to so many other events was, to some degree, an unplanned blessing in disguise. Similarly, the consequences that issued from the program office, the PRC, FABA, and the certification program clearly depended in large part on the contributions of particular individuals who happened to be employed in the state.

The greater the cumulative progress in various directions over the years, however, the greater the level of planning and organization that has been practiced. The formation of the PRC was certainly a significant event in this regard because it brought together a group of similarly inclined individuals who then began working in a more coordinated manner. But there were a number of equally important events that made their own contribution to this gradually more coordinated effort, such as the founding of FABA and the employment of a doctoral-level senior behavior analyst in the program office. At present, there is a fairly clear overall sense of direction among a loosely-knit collection of individuals that cuts across the various facets of the "movement" and a more formal degree of planning and organization within each component.

For example, for the past three years the program office has had a five-year plan of action for behavior analysis. Initially, a questionnaire was sent out to the behavioral community over the signature of the director to identify and prioritize goals. The office has established interim objectives that lead toward these goals, and the Senior Behavior Analyst and the Administrator of Client Services report on progress at the annual FABA convention. In fact, the Senior Behavior Analyst's job standards are built around these goals and objectives.

The remainder of this paper will summarize what appear to us to be some general principles that emerge from this history in Florida over the past 15 years. Although all concerned would probably insist that much more must be done to bring the discipline to full maturity as a scientific and professional force in the state, recent years have shown sufficient progress that it is now possible to see clearly the complete dimensions of this maturity. It is now similarly possible to examine this history with a reasonable measure of interpretive judgement in order to share these experiences with behavior analysts in other states.

Establish a Paraprofessional Focus

One of the most important observations concerns the importance of establishing a paraprofessional or practitioner focus as the foundation of any effort to develop systematically the profession at the state level. ("Paraprofessional" is used here as a convenient though somewhat inaccurate reference to individuals having little or no graduate training in behavior analysis, even though they may hold degrees in other disciplines or their employment may explicitly require them to manage someone's behavior.) In comparison to the alternative of working only with behavior analysts holding graduate degrees, this strategy assures a relatively large number of individuals who can become involved on behalf of the discipline. Furthermore, in contrast to an emphasis on academically-based professionals (of which there are inevitably too few in any state to carry all of the burdens of what is certainly a long-term struggle), a movement encompassing practitioners at all levels involves a wide range of employment settings and thus extends the reach of an increasingly visible profession.

Similarly, although academic professionals certainly have considerable influence within limited spheres, when the discipline can call on this larger base of individuals working in varied positions in heterogeneous settings who identify with the profession (even if they may have limited training in it), its ability to manage events in ways helpful to the discipline is greatly augmented. The fact that large numbers of individuals who think of themselves as behavior analysts to some degree may need considerable training in what it means to be a behavior analyst is only another benefit of a practitioner/paraprofessional focus. This training need can then be translated into a demand for developing the state's higher education capabilities in the discipline.

In Florida, the fact that the origin of the effort to develop the profession happened to be in the field of retardation ensured a paraprofessional focus because most employees in the system had little if any graduate training in behavior analysis. In addition, there was not a sufficiently large group of behavioral professionals available to mount a meaningfully organized and effective program of development. Now, the annual FABA meeting regularly has attendance figures of over 500, and there are many more people throughout the state who identify with behavior analysis in some way. Their formal education may have ended with high school or a couple of years of college, or they may have a baccalaureate or even master's degree with majors in history, education, psychology, or sociology, but they have also acquired some training in behavior analysis. This training may have ranged from in-service workshops to college courses, and many of them want more. At least one university in the state has now hired a behavior analyst because of this pressure, and the state budget has recently included funding for at least six doctoral-level behavior analysts (even-

tually there will be one for each district) who will be employed because they are needed to support a large body of paraprofessionals.

Base Effort in Human Services System

A second conclusion that can be drawn from experiences in Florida is closely related to the first. A paraprofessional focus suggests basing state-level development efforts in a human services system. The usual choices include developmental disabilities, mental health, child and youth services, aging, public health, and education. As a discipline, behavior analysis has the greatest investment in the areas of retardation, mental health, and education. Among these, retardation stands out because of various tactical advantages mentioned earlier. There is no reason to choose one area to the neglect of others, however, especially if in the state a well-established presence already exists in multiple areas. What is important is that the profession take advantage of the state's broad responsibilities to serve its citizens in these areas and thoroughly insinuate itself into a service delivery system.

This general strategy leads to many tactical goals. Particularly critical is involving the state in the support of the discipline. This can be accomplished by making state government increasingly dependent on the profession of behavior analysis by effectively helping it discharge its responsibilities. If a branch of state government comes to see behavioral technology as meaningfully useful to its mission, it can bring considerable support to the profession's own agenda. Because of the pervasive reach of the state, both bureaucratic and geographic, in human services fields, behavior analysis can thus earn considerable influence.

The state has effective control over numerous contingencies concerning exactly how its citizens are served, and these contingencies can be used to develop the profession. A state agency promulgates and enforces rules and policy governing its employees and how they do their job, and these rules and policies describe or at least reference contingencies designed to manage employee and, thus, client behavior. For instance, the state specifies employee training requirements, conditions of employment, methods of delivering service, and policy and standards by which that service is evaluated. When behavior analysis becomes an integral part of an agency's approach to its mission, these contingencies can encourage training in behavioral methods, make bureaucratic contingencies on the job more behaviorally appropriate and effective, require behavioral methods to accomplish client behavior change, and assess the results in terms of more behavioral standards than might otherwise be the case. In other words, in the absence of its own statewide bureaucracy, the discipline can borrow a bit of the agency's bureaucracy in the interest of assisting professional development, while fulfilling the highest quality services to clients.

In Florida's developmental disabilities system, for example, behavioral technology is the approach of choice in changing client behavior for the program office because it is the only technology that provides client training services that meet the requirements set forth in the state's statutes governing those services. As a result, this agency has worked closely with the profession in developing a certification program to improve the skills of developmental services employees, has assisted in offering training in behavior programming skills and facilitating the efforts of others who offer training, arranges and encourages various contingencies in the workplace that help to deliver better behavior programming services (such as the BPRCs, monitoring by supervisory-level staff, and behavioral measurement systems), and uses university-based experts both to help define and implement the standards for behavioral programming and to monitor adherence to them.

One of the auxiliary benefits of piggybacking the development of the discipline on the state's human services obligations is that it allows the profession to take advantage of state government's enormous financial resources. At the state

level, behavior analysis as a profession has little money to accomplish its development goals. However, when a state governmental agency sees the field as a means of discharging its responsibilities, its resources then became available to behavior analysis in ways that serve both parties well. For instance, in Florida the Developmental Services Program Office co-sponsored the initial statewide meeting that became FABA, pays the considerable costs of developing and administering the certification examination, pays for the PRC to conduct on site reviews of the quality of behavioral programming services throughout the state, and much more.

If this relationship between a state agency and a profession sounds somewhat one-sided in favor of the profession, it is only the focus of this paper that creates such an impression. In fact, the state benefits greatly from a relationship that is genuinely symbiotic. It is in the state's interest to encourage mature and healthy disciplines that provide the means for fulfilling its obligations to its citizens, and they routinely do so with many other professions. For example, Florida's Department of Professional Regulation currently administers some 70 licensure and certification programs for various professions across the state and has recently added the Florida Behavior Analysis Certification Program to its responsibilities.

In fact, the goals of state service and professional development often lead to the same courses of action. For instance, FABA often supports the efforts of the program office, thereby adding professional credibility to a bureaucratic agenda. FABA can also make political contacts that the program office is prohibited from pursuing. The only question for behavior analysts is how best to develop state-professional relations in each state and how to use them to best advantage for the profession and for the state's citizens.

Establish Broad and Coordinated Efforts of Academics

A paraprofessional or practitioner focus should not imply a limited role for a state's doctoral-level behavior analysts employed by colleges and universities. Academics as a group tend to have the major voice in the definition of behavior analysis as a discipline, and it is these individuals at the state level who are most likely to be among the leaders in this effort, although it would be politically and functionally wise to make sure that nonacademics also hold leadership positions. As such, it is obviously important that this involvement by academics be both broad and coordinated. Breadth here refers to the need for representation from the complete spectrum of the discipline's interests and points of view. This will help prevent one faction from gaining control of the effort, which might tend to discourage involvement by those with other interests and thus build at the state level a misshapen image of the field's national character, such as has happened with the American Psychological Association.

Coordination obviously encourages more effective action, and it can be achieved in different ways. One is through a state behavior analysis organization with its executive board and committees. This option has the benefit that the agenda and its pace are entirely under control of the profession. If the elected officers of such an organization feel that a particular course of action is appropriate, their resources and constituent countercontrol may provide the only limitations. An alternative is to coordinate the contributions of academic professionals through their advisory role to a state agency. This tactic harnesses the influence and resources of the state, though at the price of whatever constraints such dependence requires. Of course, an advisory body that is not useful to the agency or that departs too far from the agency's positions may find itself at the mercy of its benefactor.

In Florida, both options have been available for some time, and the inevitable cross-membership has even meant substantial coordination between the two mechanisms. FABA's executive board and the program office's PRC have out of necessity always shared the energies of

various university faculty. This has resulted in a useful degree of implicit coordination within the academic community. In one capacity or the other, some portion of this group has frequently found itself meeting to consider various issues bearing at least indirectly on the development of the profession in the state, even though the particular context of the meeting or issue might more directly concern possible invited speakers for the annual convention (FABA), recommendations about the operation of BPRCs (PRC), changes in membership requirements (FABA), possible continuing education requirements for maintaining certification status (PRC), political positions and actions with regard to legislation (FABA), or developing training alternatives throughout the state (PRC). The fact that the same overall group of academic representatives of the profession has been able to consider these and many other matters of obvious importance to the discipline's development has allowed them to work out differences and collate the best of their ideas. This has facilitated not only a relatively balanced and considered contribution from this group but the presentation of a unified approach to issues.

Organize a State Professional Association

Another guiding principle that can be drawn from experiences in Florida is to organize a state professional association. Such an organization can serve a number of critical functions if properly constituted and administered. The previous sections have offered some prerequisites and suggestions in this regard.

Developing an organization with a large base of paraprofessional members is probably close to being a prerequisite to meaningful progress in state-level development. As already argued, if a state association is organized in the traditional academic style of national organizations such as ABA and has to depend primarily on university faculty for its support and influence, it is unlikely to be able to achieve the influential status that is possible with a predominately paraprofessional membership. This constraint is partly due to sheer size and partly due to the breadth of employment settings in which the more variegated paraprofessional membership works.

If this paraprofessional/practitioner membership base is also largely affiliated with one of the state's human services delivery systems, an effective organization is even more likely. This characteristic greatly encourages the involvement and support of the appropriate state agency and greatly increases the organization's influence, both because of that support and because its members will constitute a broad cross-section of workers (usually supervisory and administrative) in that area.

Serving a membership in which only a relative few are university professors requires a very different style than characterizes a national organization such as ABA. It becomes particularly important to select keynote and invited speakers for the annual convention whose names are likely to be recognized by non-academic members of the field. Of course, their talks and the other activities should focus on issues that are especially relevant to the practical, applied interests of the majority of the membership. The convention should also have a more well-developed educational focus than is obvious at a national meeting, including preconvention institutes, workshops, and so forth.

One of the functions served by an organization with such a membership is as a source of professional identity. Those who join this kind of association and attend its meetings tend to think of themselves and their work in the context of behavior analysis as a field. One of the consequences of this identity is that they may more strongly support the behavioral viewpoint as they contact it in their daily work. The breadth of their employment settings and contacts throughout the state also helps to gain wide visibility and support for the discipline. As with national association memberships, there is a general motivational effect that might be expected as well. Involvement with a state organization may encourage

further contact with and training in the field.

A second area of benefits is educational. A state-level behavior analysis organization creates an invaluable mechanism for providing explicit training in the field to a broad cross-section of individuals in the state. For instance, recall that at its annual three-day convention FABA offers a preconvention institute, a number of workshops, and the usual addresses, symposia, and poster sessions, much of which is approved by different organizations for CEU credits. However, its second two-day meeting during the year has an even more direct educational focus. This is a theme-oriented conference, whose theme is chosen to support the organization's goals or the member's interests for development. In addition, FABA may eventually offer "stand-alone" workshops throughout the state related to the state's certification program or other topics of interest.

Of course, one of the major reasons for founding a state professional association is to develop a mechanism for influencing events in the state in ways that are in the interests of the discipline, and there is no question that an effective organization can indeed be a potent force for behavior analysis as a discipline and on behalf of its concerns for the care of various treatment populations. In part, a state behavior analysis association's influence stems from various characteristics of its membership, including its size, the breadth of settings in which members work, the positions that they hold in these settings, and the effectiveness with which the organization involves them in its agenda.

As the last point suggests, however, an organization's influence is also determined by the effectiveness with which it approaches its political goals. For instance, if a particular issue is best approached with individual actions by members (either the entire membership or some subset of it), then there must be some mechanism for ensuring that the members are interested and informed about the issue and know how and when to act. If the issue is one that is best approached by representing the position of the organization as a whole, then how and when it is represented to whom must be added to the general stature of the organization in evaluating its political effectiveness.

However, reference to political goals and single issue cases should not imply that organizational influence is only relevant to legislative actions. More often the goals concern the administrative policies, rules, and procedures of a state agency that affect the delivery of behavior change services. Examples here include state regulations governing the use of behavioral procedures, more appropriate state job titles and requirements so that behaviorally-trained people can be more easily hired, higher pay grades for certified individuals, policies for managing the use of psychotropic drugs, and a focus on outcome instead of process by state quality assurance teams.

Political goals also refer to such varied matters as improving the employment opportunities for all levels of behaviorally-trained individuals, attracting more members from fields that are not well represented in the organization, encouraging more behaviorally-trained individuals to attempt to win contracts with the state to offer services as private vendors, lobbying for the inclusion of behaviorally-trained individuals on state quality assurance monitoring teams, tighter contractual requirements on vendors offering behavioral services to clients, funding for behaviorally-based treatment programs, and licensure for behavior analysis as a profession.

There are a number of ways that an organization's influence can be exercised. Letters over the signature of the association president addressed to the proper individuals expressing the official position of the membership on an issue are relatively easily arranged. Official positions that have been voted on by the membership can also be publicized by printing them in a newsletter and getting them reported in newspapers. A letter-writing campaign by members is also a familiar technique (which FABA recently used to influence government action when

the research budget and mission of the Florida Mental Health Institute was gutted in the governor's budget request).

More often a degree of subtlety is called for, and this may mean personal lobbying of target individuals by members of the executive board or members who are well-connected to the issue. Another useful approach is to build issue-specific alliances with other groups. A particularly useful technique is to use the annual meeting to good effect by arranging for the issues of interest to be the focus of scheduled sessions such as symposia or panel discussions. In doing so individuals whose behavior is the target of change (e.g., agency officials) can be invited to participate in some way, thus insuring that they will be present and hear certain points of view expressed. FABA's conference on the use of psychotropic drugs was very effective largely because of this tactic. Old-fashioned political lobbying of legislators is actually the most complicated method, and behavior analysts have a lot to learn from the professional lobbyists who provide very effective competition for legislator's time and attention. FABA has only recently reached the point in its political development that this tactic is feasible, and its 1987 spring conference was devoted to educating itself in the details of these techniques.

Develop Training Contingencies

Given the major role of paraprofessional/practitioner members of the field at the state level, the development of contingencies that will effectively motivate qualified individuals to offer an appropriate and broadly available array of training opportunities and other individuals to participate in that training becomes another important facet of disciplinary development. The behavioral complexity of this goal makes a contingency analysis quite useful here. It must address questions such as: What curricula should be offered statewide? Who is qualified to teach these curricula? What contingencies can be arranged to encourage them to offer such training? In what settings and contexts should such training be offered? With what frequency should such training be offered? At whom should different types of training be aimed? What contingencies can be arranged to encourage them to participate in training? How can administrators whose support is necessary be encouraged to cooperate? How can the various contingencies be managed on a long-term basis?

For the purpose of present discussion, some general and obvious categories of training can be articulated. First, there are formal graduate degree programs in behavior analysis offered through higher education institutions. Second, the same academic resources can support formal undergraduate training that involves some degree of specialization in behavior analysis in the context of undergraduate majors, usually psychology or special education. Third, these same faculty, as well as adjunct faculty otherwise employed in the community, can offer stand-alone and special sources for college credit, which might be taken by both students enrolled in degree program as well as individuals who are fully employed in the community. Fourth, there are short courses and workshops offered on a commercial and free-standing basis. Fifth, the same short courses and workshops can be offered at the expense and under the aegis of state institutions and private vendor facilities by outside consultants. Sixth, in-house courses can be offered by qualified professional employees to their subordinates. Seventh, informal and unscheduled in-service training can be offered by professional and paraprofessional employees to their subordinates in the workplace. Eighth, a state professional association can arrange professionally-taught institutes and workshops either associated with conventions and conference or on a free-standing basis. Ninth, attendance to annual meetings and conferences can serve a clear training function.

All of these categories of training exist in Florida, although at varying levels of development. Speaking very broadly, there seem to be five general contingency systems behind these different types of training. First, from the beginning there was the already-described acceptance by

the program office of a behavioral model of client habilitation training. This was certified and developed into meaningful contingencies by such entities as the Behavioral Programming Manual, the PRC, the BPRC, and all of the other parts of the state's effort to improve the quality of habilitation programming to its clients. Each of these components embodies many contingencies that directly impact the availability of and participation in training in behavior analysis. For instance, in its on-site reviews of districts and institutions, the PRC routinely encourages and pressures administrators, professionals, and paraprofessionals to arrange for local training opportunities and participation. It does this both formally and informally in a variety of ways, such as by suggesting to district personnel how they can write vendor contracts that earmark money for vendor-sponsored training for their employees.

Second, standards often mandate that training in programmatic issues must be part of a pre-service or in-service package, and behavioral programming is often introduced to entry-level staff through this mechanism. Although behavioral programming is not a required in-service topic, it is a popular one because it has practical consequences for the staff and facility and its looked on favorably by those who monitor this requirement. This results in local contingencies motivating workers to use sound behavioral procedures.

The certification program is a third major component of Florida's behavior analysis training contingencies. Although it is formally under the control of the state through the program office and thus directly related to that office's commitment to a behavioral model, the certification program is important beyond its obvious impact on motivating individuals to obtain certification-oriented training, which in turn augments the likelihood that they will be more effective in their programming-related work on the job. The certification contingency also helps develop training mechanisms that can be used for training that is focused on special areas of behavioral procedures (such as acquisition procedures) or that offers higher levels of training to those who are now qualified. For example, once a faculty member goes through the steps necessary to offer a certification course at his or her institution at times or places or in ways especially convenient to non-degree students, this mechanism is more likely to be used for other curricular goals.

Of course, a major motivation for training beyond that necessary to earn certification will come from a proposed continuing education requirement for maintaining certified status. This contingency encourages a continuing demand for training that will probably need to be gradually increasingly advanced, and this demand promises reinforcers to those who can offer to satisfy it. It is hard to underestimate the importance to the discipline of a growing number of individuals throughout the state who are willing to enroll in formal training experiences, albeit reluctantly in some cases.

A fourth set of contingencies is outside of direct state control but is certainly closely related to the program office's commitment to behavioral programming. FABA is an important part of the training picture because its efforts are so explicitly training-oriented. Its annual convention, spring conference, and newsletter are all largely focused on improving members understanding of all facets of a behavioral approach to human services. The motivation of individuals to join and attend meetings comes partly from the effects of any formal training they may have received in the past and from job-related contingencies. A professional association does not have the powerful contingencies of employment, however, and must make sure that the training and social experiences of attendance are effective reinforcers so that the limited potential membership pool will attend meetings regularly.

The fifth facet of the profession's training contingencies in a state is formal degree programs in behavior analysis. Such training is usually at the graduate level, although this need not be the only focus.

In fact, any human service area requires and has appropriate employment for far more people with baccalaureate than master's and doctoral degrees. Although the number of people who will earn a degree in a behavior analysis program is small compared to the number of paraprofessionals who will come into the field via workshops, short courses, and on-the-job training, their importance is certainly disproportionately large. It is these individuals who by their actions in employment settings will arrange the contingencies for paraprofessionals at a local if not personal level. In fact, it has been the experience in Florida that the best single predictor of the quality of behavioral programming at a facility is the number of personnel who have degree-based formal training in the field.

Putting It All Together

Although the importance of these general principles seems clear from our experiences in Florida, it is also obvious that the particular combination of conditions that developed in Florida and the sequence in which they evolved is unique. Adapting these principles to the varying circumstances in other states should therefore be approached with considerable study and planning.

The first step should certainly be careful assessment of the present status of all of the factors that the above principles directly and indirectly reference. For instance, with regard to the recommendation to base the effort in a human services system, it will be important to evaluate the relative advantages and disadvantages of working within the different services areas available (e.g., retardation, mental health, education, aging, corrections, public health). Which service is closest to commitment to a behavioral model for service delivery? Which service has the greatest number of employees in the central and regional offices who are supportive of the behavioral model? With which service is a behavioral push likely to generate the least opposition by other professions? For which service is the behavioral community in the state best prepared to offer expertise? Which system offers fiscal advantages for the behavioral community?

After working through this kind of detailed evaluation of the status of the different facets of each general principle, the next step is to develop a broad plan outlining the different courses of action that need to be pursued and the sequence in which they should be approached. Of course, the components in Florida's history constitute only one particular and semi-accidental sequence, so the possibilities of other arrangements can only be speculated.

Certainly, a viable community of doctoral-level professionals (probably at least partly university-based) is a likely prerequisite for any course of action. It is this group that will constitute the source of motivated leadership and that will be able to keep the state-level development consistent with the national dimensions of the field. This population will have to include a sufficient number who are interested in the challenge, who are willing to devote a significant portion of their professional time to the endeavor, and who have the collective areas of professional, political, and social skills necessary to work with the chosen human service agency and with a broad range of bureaucratic and paraprofessional/practitioner individuals whose careers and interests are outside of the academy.

The next step is less clear and would seem to depend partly on unique circumstances within each state. If a useful relationship already exists between the behavioral community and a human services system of state government, it may be best to begin developing this association further. Exactly what courses of action are selected will depend on idiosyncratic factors, of course, but increasing the interactions between the behavioral community and influential individuals in the service agency at central and regional levels would seem to be a key to other achievements. Working toward some kind of continuing advisory or consulting role for behavior analysts

is one approach, and offering to help the agency with specific problems that it faces is an attractive entry. In developing this relationship, however, it may be important to go beyond the usual consulting role involving an individual or two who are already well-known to the agency to instead make it clear that this is a broader relationship with the state's behavioral community. Formalizing the relationship with board or committee status might help. The initial focus of such a group might be to help the agency assess and improve the delivery of behavioral services in the field with the advantage of experts in a relevant discipline.

In the absence of a convenient entree into a state agency, an alternative is to organize a state professional association. An active state association is a valuable mechanism for working toward so many goals that it should be near the top of the agenda anyway. Forming a steering committee and organizing the first convention, perhaps in concert with a state service agency, is something that academics are likely to be good at. In our opinion, however, it is critical that from the beginning the association fully involve the non-academic behavioral community and that it build a membership that is predominately paraprofessional- or practitioner-based in the chosen service delivery system. Of course, one of the tactics of this association should be to involve individuals from the service agency, which will facilitate progress toward the goal of formalizing some kind of relationship between representatives of the profession and the agency.

Eventually, the process of state-level development will spawn the issue of professional quality control. Describing the issue in terms of controlling the quality of behavioral service delivery is somewhat misleading, however. Although that may be one of the objectives, the mechanism for addressing it will serve other functions that are equally important (for instance, motivating training in behavioral procedures, developing training opportunities throughout the state, increasing the demand for behaviorally-trained personnel, protecting the professional community). The usual range of options includes registration, certification (of individuals, training programs, or delivery programs), and licensure.

There are too many complex matters embedded in this topic for proper treatment here, but one or two seem especially relevant. For instance, there is a question of whether the chosen mechanism (certification of individuals, for example) is under the control of the state agency or the profession through its state organization. In Florida, although the certification program is formally controlled by the Developmental Services Program Office, the profession through the PRC has been an equal partner in the venture at every step (except when it is time to pay the bills). A proper certification program is extremely expensive to develop and maintain, and an improperly constructed and administered examination is far worse than no program at all. A state organization is not likely to have the financial resources for such an effort. An agency-sponsored program has the advantage of controlling numerous contingencies through its role as an employer and through its contracts with vendors who supply behavioral services that can make a certification program effective.

Another important matter is the level of service at which quality control efforts are aimed. There are a number of reasons for focusing, at least initially, on the paraprofessional/practitioner level. First, it is at this level in many service areas that the behavioral training and skills promoted by quality control programs are most useful and necessary. Training at direct care levels is largely wasted unless these supervisory personnel have the knowledge to support them, and training at professional levels has less impact because of the limited numbers of such individuals in any service system.

Second, if the state association has a practitioner membership base, the same level of focus in a quality control and training program will support the association's goals of developing behavioral training mechanisms in the state, improving the behavioral credentials of members, augmenting the quality of be-

sion from undesirable publicity and assault by other disciplines, and increasing the visibility and impact of the behavhavioral practice, encouraging membership and identity with the discipline, and publicizing the profession in favorable ways.

Third, a paraprofessional level of focus can develop the profession within the state in most of the ways it wants without worrying other professional groups and motivating them to take steps to protect their interests. For instance, a state psychological association would almost certainly be quite concerned if a professional association or state agency took steps to certify doctoral-level behavior analysts but would be far less inclined to take protective action if the certification was "only" at a paraprofessional level.

In summary, putting these general principles together into a coordinated plan of action is largely a matter of adapting their generalities to the varying circumstances in each state, while remaining alertly opportunistic. No broad plan is likely to go more than a year or so without modification, so it is not the plan but the planning that is important. There must be a continuing core of behavior analysts who work closely together to resolve professional differences so as to create a coordinated effort, who collate their individual skills and contacts on behalf of the effort, and who devote some portion of their parochial professional interests and energies to the broader interests of the discipline as a whole.

STATE-LEVEL DEVELOPMENT OF THE DISCIPLINE

One could hardly argue that the kinds of activities described in this paper are not good for the discipline as a whole. However, the real importance of the contributions of state-level activities on behalf of the field's development is that they are partly different than those that result from national activities. Although activities in support of more parochial professional interests within the state do carry out the broad national agenda loosely defined in the discipline's national journals, books, and meetings, they do so in ways that are either different or simply more effective than those available to the same individuals acting only through its national associations and publications. In addition, state-level activities can accomplish objectives that are important to the discipline but that simply cannot be pursued nationally.

One example of how state-level activities can pursue the interests of the overall discipline, though in different or more effective ways, concerns the national goal of increasing the number of behavior analysts on university and college faculty. Nationally, this goal is only approached very indirectly by simply trying to develop the general vitality of the discipline's research and technological enterprise and, thus, the attractivenes of its representatives to academic departments.

At the state level the approach can be more direct. The collective contingencies that encourage a demand for baccalaureate, master's, and doctoral training in behavior analysis create a pressure for more behavioral faculty to serve this demand, which can be conveyed quite personally to a board of regents, college deans, and department heads by agency officials articulating state needs. For instance, in Florida, the program manager for Developmental Services in one of the districts is also a member of the board of trustees for one of the state universities. The result: the district funds a position for a behavior analyst at the university. Furthermore, it is likely that many of the eleven District Behavior Analysts that are now being or will eventually be hired and located in the district offices will develop adjunct relations with nearby colleges.

Another item on the national agenda is to influence public policy in ways consistent with behavioral philosophy and literature. Although this objective is pursued through national associations, it is also supported by the kind of state-level apparatus described here. For instance, objectives such as behaviorally-based and limited use of psychotropic drugs, right to effective treatment, and supplanting

cognitive explanations of behavior with environmental ones may be more effectively aided by activities in the context of individual state concerns.

Each of these objectives is continually pursued in Florida by a complex of interacting courses of action. The PRC through its monitoring role, FABA through its conferences and conventions, and the program office through its policies and contingencies face these issues with a variety of effective actions. Perhaps part of the reason for their effectiveness is that in each case, the objective is likely to be addressed in their context of particular issues that are locally important in their own right. For example, cognitivism is attacked in the process of providing the most effective treatment to clients, and the right to effective treatment is an issue in the context of using procedures that are appropriate to the case at hand, although the behaviorally-appropriate use of psychotropic drugs was approached directly on its own merits.

Some goals can simply be successfully approached only at the state or local level. Developing the paraprofessional level of the discipline is one example. Individuals with little or no formal academic training in the field but who are involved in delivering behavior change services do not usually attend national conventions or subscribe to archival journals. Their recruitment, training, and motivation can really only be pursued through the kind of mechanisms described in this paper. The importance of this paraprofessional wing of the field is almost certainly insufficiently appreciated. These individuals far outnumber those with degree training in the discipline, and they are most often the point of contact between the field and the public. Although very few of them will acquire graduate training in the field, they are nevertheless professional behavior analysts in every other way. The attention that the "real" professionals can give to this portion of the field would seem to be one of the wisest investments that we can make.

Finally, another, more amorphous objective concerns integrating the discipline into everyday life and providing a disciplinary presence at the state level for members and non-members alike, subtly encouraging cultural acceptance of behavioral attitudes and the discipline promoting them. This, too, is probably more effectively accomplished when a state-level agenda compliments efforts at the national level. In Florida, the collective behavioral "movement" (fortunately, it is probably thought of as a movement by only a handful of people) has indirectly made considerable progress in this direction as it has worked toward more immediate objectives. Certainly within the developmental services community, the field of behavioral analysis is a daily presence, and no one even remotely connected with this pervasive human service system is untouched. However, other branches of the state's Department of Health and Rehabilitative Services have become increasingly affected, especially mental health, which is taking step after hesitant step toward a behavioral model. Even outside of human services activities, the profession has a greater presence in Florida than it did ten years ago. After all, all of the people who work in developmental disabilities are also ordinary citizens who, like others, take a little bit of their careers with them when they leave work each day. In addition, FABA is increasingly having a broader impact on behalf of the profession through its political agenda.

The evolution, maturation, and expansion of a field is driven by its technological abilities and the contributions to the quality of life that they confer. In the United States, the delivery of human services is largely the responsibility of state and local governments. Furthermore, state government is the level at which all relevant agencies can be coordinated. Thus, it is at the state level that technologies must be organized and disseminated if they are to deliver their potential effectiveness, and it is at the state level that professions must deliver if they are to improve the quality of citizen's lives.

Developing itself at the state level should be assigned a high priority on the overall agenda of the field of behavior analysis. Although many of the described

activities as well as other kinds of efforts are certainly going on in other states, if we could accomplish in each state the level of disciplinary development that has been achieved in Florida, we would find behavior analysis being recognized as the dominant intellectual and professional force in the area of human services delivery throughout the country and our broader national goals far closer to satisfaction.

REFERENCES

May, J. (1975). Legal, moral, and ethical consideration in behavior-modification. In D. Gentry (Ed.), *Applied behavior modification* (pp. 21–32). St. Louis: Mosby.

May, J. G., Risley, T. R., Twardosz, S., Friedman, P., Bijou, S. W., Wexler, D. et al. (1976). Guidelines for the use of behavioral procedures in state programs for retarded persons. *M. R. Research,* NARC Research & Demonstration Institute, *1*(1).