

Credentialing Behavior Analysts and the Florida Behavior Analysis Certification Program

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Nearly 1,000 professions are regulated in one or more of the 50 states. Behavior analysis is not regulated as a distinct profession except in Florida. Typically, the regulation of behavior analysis is subsumed within other professions (such as psychology) whose practices often differ considerably from those of behavior analysis. This paper provides an overview of the common methods of regulation and discusses the pros and cons of regulating behavior analysis independently of other professions. It also describes how one state agency in Florida has regulated behavior analysts through the Behavior Analysis Certification Program, with a historical summary of the development of the training curriculum and certification examination and description of current efforts to refine and expand the regulation of behavior analysts. Suggestions for establishing formal regulation of behavior analysts in other states are also given.

Key words: regulation of behavior analysts, registration, certification, licensure

Prior to the 20th century, few professions were regulated formally. During this century, however, occupational regulation has flourished. Today, nearly 1,000 occupations are regulated by one or more of the 50 states (Young, 1987). Few would be surprised to find out that physicians, dentists, attorneys, teachers, and psychologists are regulated. However, many other professions are also subject to governmental regulation; these include such diverse groups as auctioneers, barbers and cosmetologists, travel agents, ferret breeders, fingernail technicians, and medical record librarians. Except in Florida, behavior analysts are not regulated as a separate group of professionals.

Prior to the 1970s, occupational regulation was viewed favorably. However, during the past two decades considerable

controversy over occupational regulation has developed. Proponents hold that governmental regulation of professions is necessary to protect the public from incompetent or unscrupulous practitioners. Opponents hold that governmental regulation provides few benefits and has many faults. For example, Durant (1987) wrote:

Under the pretext of ensuring quality control, occupational licensing in America restricts competition and choices for the ordinary consumer. It is a form of domestic protectionism, which, like all protectionism, ultimately harms the consumer. Higher prices, fewer choices, and less innovations prevail; economic freedoms are diminished. (p. ix)

This paper explores the pros and cons of credentialing behavior analysts independently of other professionals and describes how one state agency has developed a certification program for behavior analysts. An overview of the common methods of regulation is provided, followed by a selective review of the literature on professional credentialing and some recommendations for regulating behavior analysts. Next, a historical overview of the development of the Florida Behavior Analysis Certification Program's training curriculum and certification examination is given. This is followed by a description of current ef-

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forts to refine and expand the certification program. Finally, suggestions for establishing formal regulation of behavior analysts in other states are offered.

Most established professions have developed informal regulatory systems that include codes of ethics, standards of practice, and investigations into allegations of misconduct or malpractice. Typically, informal systems operate under the auspices of professional organizations. Because of the complexities (e.g., due process) and the possibility of litigation involved in policing the practices of its members, many professional organizations do not adequately investigate complaints and discipline their members.

More formally, some states have given statutory authority to certain professions to regulate themselves. Although the professional organization supposedly operates independently of governmental regulation, it is heavily influential. The organization is usually the entity that first lobbies for regulation and often drafts the regulatory statutes. It is also influential in deciding who may sit on the administrative board that sets policies and procedures for regulation of the profession. Statutory authority commonly comes in one of three forms: registration, certification, or licensure. These regulatory mechanisms are described below, but the reader should be cautioned that there is a great deal of variability among states with respect to the exact requirements for each. This is especially evident for registration and certification, which are often used interchangeably.

Registration is the least stringent of the formal regulatory models and usually requires little more than listing one's name on an official roster. A state agency or a state or national organization or board may be the registering agency. Sometimes, the practitioner is required to meet certain educational and/or experiential criteria. Generally, persons do not have to be registered to practice the profession, but only registered persons can hold themselves out as "registered." Young (1987) estimated that 643 occupations are regulated through registration.

Certification enables individuals meet-

ing certain educational, experiential, and/or other criteria (e.g., citizenship, age, good moral character) to apply for a state-issued certificate. Typically, certification requires candidates to demonstrate their expertise by passing an examination. Certification does not limit the practice of the profession to individuals holding the certificate, but only those individuals with certificates may designate themselves as "certified." Young (1987) estimated that 65 occupations are regulated through certification.

Licensure is the most stringent form of regulation and has been defined as: a process by which a governmental agency restricts entry into an occupation by defining a set of functions and activities constituting a "scope of practice," grants permission to engage in that practice only to persons meeting predetermined qualifications, and establishes structures and procedures for screening applicants and granting licenses to practice.

Unlike certification and registration, which restrict only the use of certain professional titles, licensure restricts the practice of the profession to individuals holding a license. This is sometimes referred to as a "practice license," and the legislation authorizing it is a "practice act." The practice act is the most common form of licensure. Less common is the "title license" or "title act," which is a combination of certification and practice licensure. This form of licensure prohibits practice of the profession by unlicensed persons only if they also hold themselves out by restricted titles. As long as they do not use proscribed titles, they may practice the profession. "Licensure" as used in this article will refer to the restriction of practice, unless otherwise specified.

A title act has recently been struck down by the United States Court of Appeals, 11th Circuit. This decision (*Abramson v. Gonzales*, 1992) may have profound effects on practitioners of behavior analysis. Prior to the decision, Florida did not regulate the practice of psychology but did prohibit the use of certain selected titles by unlicensed persons. The suit was brought by the Florida Psychological Practitioners' Association and unlicensed psychologists, social workers,

and mental health therapists. The plaintiffs argued that because Florida law did not impose any regulation on the *practice* of psychology, restriction of *titles* related to psychology violated the First Amendment right to free speech. The court agreed and ruled that Florida statutes prohibiting unlicensed persons from holding themselves out as psychologists infringed upon constitutional protections of commercial speech. As long as commercial speech truthfully and accurately describes lawful activities, it, according to the court, is entitled to First Amendment protections.

Consequently, the Florida Psychological Association successfully lobbied the state legislature to move up the effective date of a previously approved practice act from 1995 to 1992. This law restricts the practice of psychology, which includes behavior analysis, to only licensed psychologists, irrespective of what they call themselves. When this legislation was being considered, the Florida Association for Behavior Analysis (FABA) (with assistance from Jon Bailey, Gerald Shook, and Steven Taylor) was successful in gaining an exemption for behavior analysts. However, individuals within the Florida Psychological Association have indicated that they will attempt to have this restriction removed. If they are successful, many highly effective behavior analysts will be prevented from practicing, thereby reducing the availability of quality services to consumers. The problem is not limited to Florida. Some states now allow behavior analysts to practice without being licensed in psychology or another profession. If these states require behavior analysts to be licensed, behavior analysts and consumers will face the same potential problems as those in Florida. Other states now restrict the practice of behavior analysts to licensed individuals. We contend that subsuming the regulation of behavior analysis under other professions is inadvisable for several reasons.

First, behavior analysis emerged as an alternative to traditional psychology and developed its own worldviews, philosophy, principles, procedures, course work,

and experiential criteria. These differ distinctly from other schools of behavior change, although persons in other fields sometimes make use of behavior-analytic procedures. Behavior analysis, therefore, is not a subset of other approaches to changing behavior but is a separate field.

Furthermore, restricting the practice of behavior analysis to only those who have fulfilled the requirements of psychology licensure or a related field necessarily reduces the amount of behavior-analytic training and experience available to the behavior analyst. For instance, to be licensed as a psychologist, an individual must develop expertise related to theories of personality, norm-referenced testing, and so on. Licensing laws are often so stringent in their requirements for traditional course work and experience that the amount of behavior-analytic courses and experience available is severely curtailed. One is forced to become a psychologist first and a behavior analyst second. Students, and ultimately their potential consumers, are best served by taking the courses that will be most relevant to their future activities. Often, course work in traditional psychology does not serve that function.

Many of the fields now regulated separately are more similar to each other than they are to behavior analysis. For example, under Florida statutes, licensed psychologists may engage in counseling, psychotherapy, sex therapy, hypnosis, behavior analysis, psychological testing, psychoanalysis, biofeedback, psychoeducational evaluation and therapy, and psychological diagnosis. Licensed clinical social workers may engage in counseling, psychotherapy, sex therapy, hypnotherapy, behavior modification, consultation, crisis intervention, client-centered advocacy, and providing information and education to clients. Although each of these professions is regulated separately, many of the practices of the two professions are similar. Behavior analysts, in contrast, perform few of these activities; it makes little sense to force the regulation of behavior analysis into these other professions.

Finally, the professions that are regulated are numerous and diverse and vary from state to state. For instance, the Florida Department of Professional Regulation currently regulates the practices of 45 professions and issues licenses or certificates in 81 specialties. Ostensibly, the primary reason for regulation of an occupation is protection of its consumers' mental, physical, or fiscal health. It seems peculiar that occupations such as barbering, fingernail technology, and interior design are regulated but behavior analysis is not. Behavior analysts frequently work in situations in which a person is at risk for serious harm and an inappropriate intervention could produce deleterious and long-lasting effects.

PROS AND CONS OF FORMAL REGULATION

We have argued that subsuming the regulation of behavior analysis within that of other professions is inappropriate. We are left with the question of whether or not the practice of behavior analysis should be regulated at all. The issues are both philosophical and empirical. A substantial corpus of research has addressed the impact of occupational regulation on members of the occupation and its consumers. This literature indicates that professional regulation affects service providers and consumers in several major areas: entry into the profession, cost of services, quality of services, occupational mobility, and innovation.

Restrictions on Entry

Licensing statutes typically restrict the practice of a profession unless an individual meets certain educational and experiential criteria and passes an examination. Recently, the utility of academic credentials and written examinations as discriminators of qualified individuals has been questioned. For example, educational and experiential criteria have been found to differ widely among states regulating practice of the same profession (e.g., Cathcart & Graff, 1978; Institute of Medicine [IOM], 1989; U.S. Department of Health, Education, and Welfare

[HEW], 1971), illustrating the capricious nature of these requirements. A further problem with many examinations is that their content is not based on empirical evidence that the tested knowledge, skills, and abilities are related to consumer outcomes (e.g., Hogan, 1979; IOM, 1989; Kane, 1982; Young, 1987). Another criticism of licensing examinations is that passing criteria have sometimes been adjusted to reduce the number of persons entering the profession, especially when the general economy is struggling (e.g., Maurizi, 1974; Young, 1987). (These criticisms are leveled primarily against licensure. Because certification does not attempt to restrict practice of the profession, these issues are largely irrelevant.)

Cost of Entry and Services

Entry into a profession may also be restricted by the imposition of high entry costs in terms of fees paid by entrants and training and experiential requirements. Several studies have indicated that stringent regulation increases the cost of services when compared with less stringent regulation (e.g., Begun, 1981; IOM, 1989; Muzondo & Pazderka, 1980; Pazderka & Muzondo, 1983; Shepard, 1978; White, 1978). The costs are, of course, absorbed by consumers and do not affect all consumers equally. Durant (1987) summed up the effect of licensing on the poor as follows:

Under occupational licensing, the heaviest burden falls on the poor. All of us are denied choices and opportunities, but the poor are especially burdened with higher costs and often must do without a particular service or commodity. (p. ix)

Or, because of high costs in a highly regulated profession, consumers may resort to lower cost alternatives that may not be effective in meeting their needs. When practice of the profession is not restricted, competition keeps the price down and makes the services more available and affordable.

Quality of Services

Proponents of professional regulation argue that it is necessary to protect the public from unqualified or unscrupulous

practitioners. Persons who are registered, certified, or licensed are generally considered to have expertise and competence unequalled by practitioners who have not obtained these professional credentials. For instance, few of us would consider seeking medical attention from an unlicensed physician.

Although there is some evidence that increasing the restrictiveness of regulation increases the quality of service (e.g., Begun, 1981; Martin, 1982), the bulk of this research indicates that increasing occupational restrictions, especially licensing, has a neutral or negative effect on the quality of services (e.g., Carroll & Gaston, 1981; Maurizi, 1980; McChesney & Murriss, 1979; Young, 1987). However, licensing gives credibility to all licensed persons, irrespective of whether or not they deserve it (Young, 1987). In effect, licensing does not necessarily increase the quality, but does increase the cost of services.

Certification, although not entirely free of these risks, is less likely to result in harmful effects on potential consumers. Like licensing, certification cannot guarantee effective services, but it can increase the likelihood that the practitioner meets some minimal qualifications. This provides the consumer with some guidelines to use when seeking services. Without these, consumers are left to select from an undifferentiated universe of potential service providers and to rely on more nebulous criteria to make their initial selections. Although a history of interaction with the service provider will still be an important source of critical information, certification does provide an important "first cut" criterion. When regulation is coupled with consumer advocacy on the part of the discipline (e.g., by providing training on how to interact with a potential service provider) the consumer should be much better able to select a practitioner efficiently and confidently.

Occupational Mobility

Licensing statutes often restrict practice by not recognizing practitioners li-

censed in other states. Highly restrictive and arbitrary requirements are often imposed so as to reduce the number of practitioners coming into the state. This limits mobility of practitioners, limits trade, and increases the cost of services (e.g., Boulter, 1980; HEW, 1971; Kleiner, Gay, & Greene, 1982; Perloff, 1980; Pratt, 1980). This is particularly prevalent in the southern and western states, which tend to attract persons wanting to relocate.

Innovation

Regulation has been widely criticized for reducing innovation and stifling creativity. Because laws and rules create standards of practice and provide for discipline of practitioners violating these standards, conformity, not innovation, seems to be the norm. Further, protection of economic turf from "outsiders" also is likely to maintain the status quo.

Agras (1973) presented several other reasons for avoiding regulation (specifically certification) of behavior therapists. Foremost among these is that certification may reduce interactions among basic researchers and clinicians and among behavior analysts and members of other relevant disciplines. This interaction, according to Agras, is vital to the future of behavior analysis both as a developing profession and as a powerful influence on other scientists interested in behavior change. Interaction between the basic and applied fields is already of serious concern to behavior analysts (e.g., Dietz, 1978; Hayes, Rincover, & Solnick, 1980; Michael, 1980; Pierce & Epling, 1980; Poling, Picker, Grosset, & Hall-Johnson, 1981) and is clearly not the result of regulation. The Florida Behavior Analysis Certification Program curriculum actually serves to promote some interchange between the basic and applied areas by requiring knowledge in many areas related to the experimental analysis of behavior.

As to the interactions among behavior analysts and persons from other disciplines, the Florida experience is that certification has actually helped to expand

the interactions of practitioners working in divergent fields (e.g., teachers, psychologists working in mental health programs, professionals working with delinquent children and troubled families). The certification program proposed in Florida encourages professionals from various disciplines to become certified and, through continuing education, to increase their skills in both behavior analysis and in related areas (e.g., normalization, pharmacology).

Agras (1973) also pointed to the possibility that certification will allow a few well-positioned practitioners to regulate the criteria. In a certification program, adjusting the curriculum to remove outdated components or adding new information can be difficult. Nevertheless, this process is critical and must ensure that input comes from both knowledgeable professionals and other individuals with varied perspectives. If this process is followed, the chances for the perpetuation of dogma are reduced.

Conclusions and Recommendations

Several conclusions are apparent from the foregoing. Laws restricting the practice of an occupation benefit primarily the members of that occupation at the expense of its consumers. Because registration, certification, and certain forms of licensing do not attempt to restrict practice of the profession, they are free of many of these limitations.

The federal government apparently agrees. In a 1970 revision to the Public Health Service Act (Public Law 91-519), Congress required the Department of Health, Education, and Welfare (now the Department of Health and Human Services) to report on the major issues associated with, and recommendations for, licensure, certification, and other qualifications for the practice or employment of health personnel. The report was issued in 1971 and called for a 2-year moratorium on the enactment of new legislation aimed at establishing new categories of health personnel "that define functions narrowly and that establish rigid requirements for education and testing" (HEW, 1971). Although the re-

port was not a federal initiative but was originated by the American Hospital Association and the American Medical Association to slow down the number of licensed health care professions (American Occupational Therapy Association [AOTA], 1988), it did serve to point out a number of problems with restrictive laws governing professional practice.

In 1985, Congress directed the Department of Health and Human Services to study and make recommendations regarding the role of health personnel in health care delivery (i.e., Public Law 99-129, the Health Professions Training Act of 1985). The study was conducted by the Committee to Study the Role of Allied Health Personnel under the auspices of the Institute of Medicine (1989), which found that

It appears that widespread use of licensure carries with it higher costs to consumers, reduced access to health care services, and reduced flexibility for managers. People in health care careers are inhibited from changing fields and from advancing within their fields by rigid requirements imposed by state regulatory mechanisms. Although these control mechanisms are designed and carried out in the stated interest of protecting the health and welfare of the public, their effectiveness in this regard has been mixed at best. (p. 253)

Further, the study went on to say that

The committee recommends statutory certification for fields in which the state determines there is a need for regulation because this form of regulation offers most of the benefits of licensure with fewer of its cost. Medicare and other third-party payers should accept state title *certification* [italics added] as a prerequisite for reimbursement eligibility. Such certification can and should be based on examinations and other eligibility criteria the states may establish. (p. 255)

Based upon empirical regarding benefits to the consumer, state regulation for behavior analysts should not restrict practice. Registration, certification, and title licensing fit this requirement. Although, according to *Abramson v. Gonzales* (1992), others could hold themselves out as behavior analysts, only persons who have met specified criteria can hold themselves out as "registered," "certified," or "licensed" behavior analysts. State regulation should require that certain educational and experiential criteria are met. These requirements should

be based upon empirical evidence that they are related to consumer outcomes and should be continually evaluated. Likewise, an examination should be developed based upon empirical evidence that the content reflects skills that are related to client outcomes and protections. A passing score should be set that keeps unqualified persons from passing while allowing competent practitioners to pass. Although not perfect, the field of psychometrics has several methods for determining these scores. When these are coupled with the focus of behavior analysis on direct observation and scientific methodology, empirically determined passing scores can be set. Continuing education should also be required. The HEW study (1971) stressed the importance of practitioners keeping current with advances in the field. The regulation should promote interactions with both the basic and applied areas and other relevant fields. This can be done through educational and experiential criteria, examination content, and continuing education. Decisions of importance regarding regulation should not be limited to a few well-positioned practitioners (such as a small, tightly controlled administrative board) but should include consumers and many members of the profession.

When appropriately conceived and implemented, formal regulation of a profession can meet the needs of both its members and its consumers. The Florida Behavior Analysis Certification Program, which has certified over 1,000 persons as behavior analysts over the past decade, meets these needs. The program was designed to increase the likelihood that persons conducting behavior analysis are, at least, minimally competent to do so and has been successful in meeting this objective. We offer this program as a model upon which others considering formal regulation of behavior analysts can build.

FLORIDA BEHAVIOR ANALYSIS CERTIFICATION PROGRAM

History

Johnston and Shook (1987) have previously described the early history of the

Florida Behavior Analysis Certification Program. What follows is a description of the events leading to the development of the program and subsequent refinements.

In 1972, humiliating and allegedly abusive procedures were used, in the guise of behavior modification, on persons residing in a large state-operated facility. Subsequently, a task force of nine nationally recognized experts in behavior analysis, developmental disabilities, and law was established to provide the state with recommendations regarding the behavioral treatment of persons with developmental disabilities. Among the recommendations was that Florida develop training and other procedures to ensure that individuals who provide and oversee behavioral programming are competent to do so.

The then Division of Retardation (now called Developmental Services) established a set of procedures to increase competence. Among these was a series of training sessions in behavior analysis that were offered throughout the state. These training sessions were first offered in 1975 and were developed into stronger competency-based training programs over the next several years. By 1979, persons who completed the training and passed a 2-day essay examination on its content were given certificates. Subsequently, a practical component (including observation and recording of behavior from videotapes) was added to the examination.

The need for a more reliable and valid examination program that was in accordance with the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1985) led to the development of a formal testing instrument. This was a major undertaking that required specialized training in the development of reliable and valid examination items, scoring procedures, and analysis of item and test results. Consequently, a firm specializing in criterion-referenced testing was hired to complete this project. A task analysis was conducted to identify and describe the areas of competence and

performance standards relevant to the practice of behavior analysis. This was based upon review of the previous examination, professional books and articles, survey results from practitioners in behavior analysis, consultation with an advisory team of content experts, and interviews with specialists in behavior analysis. Test-item specifications were developed and then reviewed by an advisory team before the consulting firm developed individual test items. The test items were submitted to additional review by the advisory team, by experts in behavior analysis, and by practitioners. In order to facilitate preparation for the examination, the firm also developed two companion documents for study and testing of the identified competencies and tasks. The *Behavior Analysis Curriculum Guide* is a 238-page manual describing in detail the areas in which candidates should be competent. The *Behavior Analysis Evaluation Guide* is a 413-page manual containing pretests and posttests using sample examination questions. It also contains other material helpful to the student or instructor in preparing for the certification examination. These guides are not designed to be the sole source of preparation for the examination but rather are adjuncts to other materials.

The initial forms of the criterion-referenced examination consisted of a combination of free-response and multiple-choice questions designed to test the knowledge of major concepts and rules. Each part of the examination required 1 day to complete. The component involving observing and scoring behavior from videotapes was not included in the criterion-referenced examination due to problems of reliability and limited sampling of competencies, which would have made it difficult to defend in potential legal proceedings.

Determination of the passing score was based upon an accepted psychometric procedure. Sixteen persons representing all facets of the Developmental Services system reviewed each form of the examination, discussed the risks of false-positive and false-negative decisions about competence in behavior analysis, examined test analysis data on each form

of the examination, recommended initial minimum passing scores, reviewed the percentage of candidates who would pass and fail based on the different passing scores, and ultimately reached a consensus on the minimum score necessary to demonstrate competence. The risks associated with failing too many candidates and with passing those who might be unqualified were also considered. The agreed-upon score was 69% correct.

The multiple-choice and free-response answer sheets for the initial forms of the examination were scored by members of the Florida Behavior Analysis Peer Review Committee, who were doctoral-level experts in behavior analysis and developmental disabilities. Two members independently scored each answer; if there was a disagreement as to its correctness, a third member independently evaluated the answer.

Through 1986, the examination was administered by the Developmental Services program. In 1987, the Developmental Services program contracted with the Florida Department of Professional Regulation (DPR), the state agency charged with regulating professional practitioners, to administer, machine score the multiple-choice items, and report the results of the examination. Scoring of the free-response items continued according to the original procedures. The original consulting firm developed another form of the examination based on analysis of test-item results and a challenge to certain items that had been made in an administrative hearing. The decision to contract with the DPR proved to be beneficial, because this agency is equipped to deal with the myriad details that are involved in the development, administration, and scoring of such examinations.

The DPR gradually converted the examination to a multiple-choice format until, in 1991, the examination consisted entirely of multiple-choice questions. Although the multiple-choice format has obvious limitations, the contingencies surrounding the examination necessitated this change. Hundreds of persons were now taking the examination annually, which made grading of free-response

items highly time consuming and costly. It was estimated that grading the 17 free-response items on the 1990 examination cost more than \$8,000. Furthermore, grading free-response items is more subjective than multiple-choice items and therefore more likely to be troublesome if an examinee wishes to challenge grading and scoring of the examination in an administrative hearing.

Continued development of the examination items was a substantial undertaking. Florida, like many other states, is burdened by limited fiscal resources. Fortunately, the decision makers in the Developmental Services program were responsive to the need for upgrading the examination and conversion of the questions from a free-response to a multiple-choice format and therefore allocated additional resources to the project. The Developmental Services program and the DPR planned a multiphase revision and upgrading process. The number of examination questions in the item bank was inadequate, so trained volunteers wrote more than 400 new questions. Prior to being added to the item bank, items were reviewed, and revised when necessary, by content experts. Prior to their use on the examination, the new items were pilot tested at the 1991 convention of the Association for Behavior Analysis in Atlanta and at the 1991 annual meeting of the Florida Association for Behavior Analysis. Based upon examinee performance and comments, items were added to the item bank in their original form or were revised before being added.

In 1991 a new passing score was also established. The previous passing score was set when the examination consisted entirely of free-response items and may not have been a valid discriminator of competence on a multiple-choice examination. Furthermore, the DPR recommends that passing score studies be conducted no less frequently than every 5 years; the previous passing score study

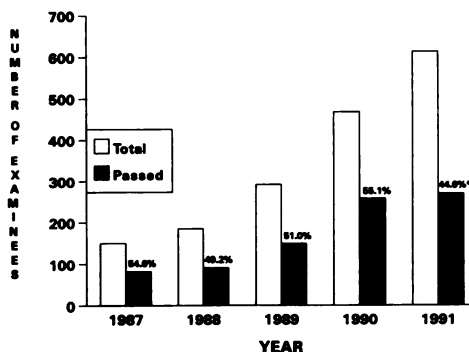


Figure 1. Number of persons taking the Behavior Analysis Certification Examination (filled bars) and number of persons passing the examination (hatched bars) since its transfer to the Department of Professional Regulation. The asterisk represents a change in the passing score from 69% correct to 81.5% correct and conversion of the examination to an entirely multiple-choice format.

exceeded this guideline. The final passing score was set at 81.5%.¹

Since its inception, the number of candidates taking the examination has grown each year. Figure 1 shows the number of candidates taking and passing the examination since the Developmental Services program contracted with the DPR to administer and score the examination 5 years ago. The percentage of persons passing the examination was approximately 50% until the 1991 examination, when the passing score was raised. In 1991, the percentage of candidates passing the examination was 44.6%. Since the certification program began, over 1,100 persons have passed the exam. Furthermore, although the Behavior Analysis Certification Program was originally intended only for individuals working with persons with developmental disabilities and is still administered under the auspices of the Developmental Services program, it has attracted numerous individuals from the private sector and several other agencies, most notably the state mental health and public school systems. These agencies are finding the certification program to be of value in selecting qualified employees, and some actually

¹ A detailed description of item writing, review and revision, pilot testing, and passing-score determination procedures may be obtained from Fae Hartsfield, Bureau of Testing, Florida Department

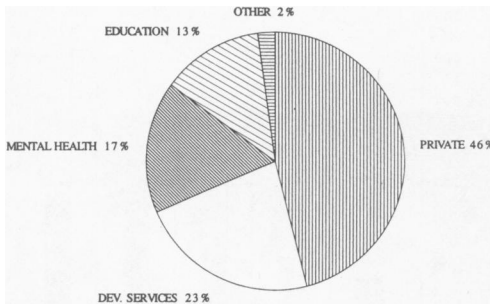


Figure 2. Percentage of persons taking the 1991 Behavior Analysis Certification Examination by agency affiliation.

require their staff to become certified as part of their performance standards. Figure 2 shows the percentage of the total candidate population taking the 1991 examination by agency affiliation. During the examination's early years, all of the candidates came from the Developmental Services program and its vendors; none came from outside the system. By 1991, nearly one third of the candidates came from outside the Developmental Services system.

Future Directions

Although the basic certification program has met most of the expected outcomes, most important of which is increasing the number of persons with entry-level knowledge of behavior analysis, the expansion of the role and responsibilities of behavior analysts within the Developmental Services program and concerns that the examination did not distinguish between highly and minimally competent practitioners indicate that major changes are needed. The Developmental Services program has proposed several major revisions to the certification system to protect the public more fully from unethical and ineffective practices. These are discussed below.

Single versus multiple levels of regulation. Currently, the certification program requires only that candidates taking the examination demonstrate that they have had either college course work in behavior analysis or have had a workshop designed to prepare them for the

examination; there are no other requirements. Developmental Services is concerned that there is a wide diversity in the competence of persons who pass the examination. To increase confidence that persons who pass the examination are competent, changes in the training and experiential requirements for examination eligibility are being considered. There are two proposals currently under consideration. The most restrictive regulation would certify only those individuals who have a minimum of a masters degree from a graduate program with behavior analysis as its central focus and who meet certain experiential criteria (e.g., 1,000 hr of supervised experience designing, applying, and supervising the implementation of behavioral procedures). These individuals would be able to approve and monitor the most highly intrusive procedures allowable under Florida statutes. The working title for this level is "Certified Behavior Analyst."

The second proposal would certify, in addition to the above individuals, persons who have a baccalaureate degree and some special training in behavior analysis. These persons could approve and monitor procedures less intrusive than those approved by the Certified Behavior Analyst. The working title for these individuals is "Certified Behavior Specialist."

A major issue with both methods is what to do with persons who are already certified. There are two options: grandfather all currently certified persons at the highest level or, if multiple levels of regulation are implemented, grandfather all persons at the level most appropriate to their education, training, and experience. There are difficulties inherent in both approaches. The former would place many individuals at a level of certification beyond their expertise. The latter would require these persons to submit their credentials for screening to a committee that would have to review a large number of applications. There would likely be a number of persons dissatisfied with their assigned level. Ultimately, these decisions will be based upon administrative costs and what is best for consumers and practitioners.

Eligibility. Changes in the eligibility requirements to take the examination are also being proposed. The quality of training programs for the certification examination varies dramatically from instructor to instructor. Moreover, there are no restrictions on who may provide training; anyone who chooses to offer training may do so. Developmental Services has proposed that persons who offer training designed to prepare students for the certification examination must themselves be certified in Florida or meet the requirements for certification (e.g., for persons providing training out of state). Further, it has been proposed that a minimum of 90 hr of in-class instruction be required for the specialist level; the behavior analyst level would require no special instruction because these individuals would be able to take the examination based upon graduate course work and experience.

Continuing education. Another proposed change is the requirement for continuing education units (CEUs). There is currently no continuing education requirement. If multiple levels of regulation are implemented, each would have a different requirement. For example, the behavior specialist level would require 16 hr, and the behavior analyst level would require 24 hr annually. Because there are valuable training opportunities given by professionals in disciplines other than behavior analysis (such as normalization and issues related to developmental disabilities in general), a proportion of CEUs related to topics outside of behavior analysis would be approved.

Standards of practice and discipline. Setting minimum standards of practice and disciplinary actions for practitioners who violate these standards has also been proposed in the revisions to the certification system. Currently, there is little recourse for consumers or Developmental Services with respect to practitioners who violate basic standards of practice. Without recourse, unethical or incompetent practitioners may continue to practice indefinitely without fear of penalty. The provisions that call for disciplinary action include conviction of a

crime that relates to the practice of behavior analysis, falsifying records, sexual battery or misconduct, fraudulent practices, impairment due to substance abuse, and failure to meet the minimal standards of performance in professional activities. Disciplinary actions range from a public reprimand to permanent revocation of certification.

Curriculum. The existing curriculum was developed in 1983 and has not been updated significantly. To reflect recent changes in the field of behavior analysis and to correct some errors of omission and commission, the entire curriculum is being revised. There are now 10 major content areas over which candidates are tested. These have been expanded and refined by content experts such that the new curriculum contains 13 content areas (e.g., measurement of behavior). Each of these areas has been broken down into several tasks that cover more specific requirements (e.g., how to do event recording). Finally, each task has been broken down into yet more specific objectives that describe exactly what must be done in order to meet the requirement. Collectively, the areas of competence, tasks, and objectives represent a job or task analysis for the practice of applied behavior analysis. Once these areas and their associated tasks have been fully developed, a survey form will be sent to behavior analysts in Florida and across the nation. The data from the Florida behavior analysts will be used to direct development of the curriculum for the Florida examination. Because several other states have approached the Florida Developmental Services program to discuss the possibility of adopting the examination, behavior analysts in other states will be surveyed to ensure that the curriculum and examination will be reliable and valid in these other states as well. Respondents will be asked to rate each item with respect to the proportion of time they allocate to each area and the potential for harm to the consumer from incorrectly performing it. If Developmental Services elects to create multiple levels of regulation, respondents will also be asked to answer a variety of background questions to determine which of

the proposed levels of certification matches their current position. Separate analyses will then be conducted to determine which tasks constitute the required knowledge for each of the different certification levels. Certainly, there are some tasks that are essential for behavioral specialists, whereas other tasks may not be critical to their day-to-day activities. Based upon the results of this survey, the final job analysis will be completed and examination items developed for all new tasks.

Transfer of regulation. Another proposal is to move the certification program from under the auspices of Developmental Services to the Florida Department of Professional Regulation. It is likely that some individuals and agencies do not use the current examination because it is viewed as pertinent only to the Developmental Services system. By moving the entire certification program to the DPR, it may have more credibility with individuals and agencies outside Developmental Services. Increased credibility may increase the number of persons receiving training for and taking the examination. Of course, the ultimate goal of training larger numbers of persons in behavior analysis is that more consumers will have access to proven, effective services. To transfer regulation of behavior analysts from Developmental Services to the DPR requires that the Florida Legislature to be convinced of the advisability of the change. In working with the legislature, Developmental Services is trying to balance the needs of the Developmental Services program and its clients with the needs of all the citizens of Florida and the field of behavior analysis in general. There is general opposition to this transfer on the grounds that it would lend professional status to a field that does not differ sufficiently from fields already regulated and that behavior analysis does not present a sufficient degree of risk to citizens to warrant regulation. Convincing professional associations that oppose the move, the Florida Legislature, and other decision makers that the field of behavior analysis does differ from other methods of behavior change and

that the risks of misuse are substantial is critical to the success of this initiative.

CONCLUDING REMARKS

The decision to regulate behavior analysts is not one that is to be made lightly. Although there are a number of quite compelling arguments supporting registration, certification, or title licensure of behavior analysts, there are several other factors of which persons considering formal regulation should be aware.

Much of the recent success in revising and updating the curriculum and the examination is directly attributable to several individuals who have donated their time to this project. These individuals have taken time off from their regular activities, often losing income in the process, and have traveled, paying their own way, to participate in the revision processes. Florida is fortunate to have a large number of highly competent behavior analysts, many of whom have donated their time to improve the certification process. Given Florida's poor fiscal situation, continued involvement of volunteers is essential.

Even though volunteers have been used whenever possible, the development and maintenance costs of the certification program have been significant. The development of the original examination and curriculum guides cost approximately \$125,000. Beginning with the 1987 administration, the average annual expenditure (including program staff time) was approximately \$40,000. This amount included administering, scoring, and reporting the results of the examination, in addition to routine activities related to examination administration. In 1990, efforts began to expand and refine the examination significantly and, consequently, the associated costs increased. The current annual expenditure is approximately \$70,000, with nearly \$45,000 going towards examination administration and the remainder toward development work. In these times of fiscal hardship, such costs might give pause to other states considering a similar program. Even though the Florida exami-

nation and related materials could be purchased from the Developmental Services program, thus reducing costs significantly, maintenance and continued refinement would still require either a good deal of financial support from a state agency or a fairly large pool of practitioners who would seek, obtain, and maintain certification through a fee system.

Before costs can be realistically discussed, however, regulation must first be a strategic goal of key decision makers and practitioners. There must be an organization that will devote resources toward attaining that goal. There are advantages to regulating behavior analysts, the most important of which is the protection of the consumer; perhaps a good beginning point would be for organizers to enlist their support.

The Florida Developmental Services program is intensifying its efforts to evaluate the certification program systematically. There has been a dearth of formal complaints from consumers, and reports from those responsible for oversight of the behavioral system indicate that there are few allegations of misconduct by behavioral practitioners. The reasons for the limited number of allegations are unknown. One possibility is that, although there are informal mechanisms, there are no formal mechanisms to report alleged misconduct. On the other hand, perhaps the system is working; certification training and examination may be responsible for preventing misconduct. Support for the latter notion comes from systems in Florida in which behavior analysis certification has not been given the same high priority and in which there is a much higher incidence of allegations of misuse of behavioral techniques than there has been in the Florida Developmental Services program.

Anecdotal reports suggest that the higher quality of behavioral services may be due, at least in part, to certification. The Florida Behavior Analysis Peer Review Committee and others have long found a direct relation between the quality of behavioral programming and the number of certified behavior analysts in

a facility or geographical region. Furthermore, systems that do not emphasize the provision of services by well-trained behavior analysts have more allegations of mistreatment than do systems in which certified behavior analysts are active. Although we do not yet have empirical data, we do know that within other parts of the Florida behavioral services system we are better able to disseminate information, upgrade regulatory standards, and increase the number of settings within which certified behavior analysts work.

In conclusion, there are a number of arguments for and against formal regulation of behavior analysts. Individuals or organizations considering regulating the profession within their state need to be prepared for opposition from many camps and on many fronts. Special-interest groups, the legislature, state agencies, and others may contend that it is unnecessary, too costly, and won't work, and they will likely propose dozens of other arguments opposing formal regulation of the profession. In this article, we have argued that some form of regulation is necessary to protect the consumer and that the Behavior Analysis Certification Program in Florida has shown that regulation can succeed. Although there are potential pitfalls, these are not inherent to regulation itself but to the methods by which regulation is conceived and implemented. When appropriately conceived and implemented, formal regulation of behavior analysts can not only fulfill its primary mandate of protecting the consumer but can also work to increase the visibility and viability of the field, thereby increasing the numbers of individuals who can benefit from its powerful technology.

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