# Certification, Accreditation, and Quality Control in Behavior Analysis

# J. Moore University of Wisconsin–Milwaukee G. L. Shook Behavior Analyst Certification Board, Inc.

Implementing quality control measures in the discipline and professional practice of behavior analysis is a challenging, but nevertheless important, step in the evolution of our field. The Association for Behavior Analysis currently seeks to ensure quality in behavior analysis by sponsoring an accreditation program for graduate academic programs and by promoting certification of individual practitioners. The accreditation reviews are conducted by ABA, whereas certification status is awarded by an independent, nonprofit credentialing entity: the Behavior Analyst Certification Board, Inc. Among the challenges that ABA faces as it pursues various quality control measures, particularly in its educational programs, are (a) how extensively should academic programs specify the verbal and nonverbal terminal repertoires in all three branches of behavior analysis (applied, experimental, and conceptual); (b) how extensively should programs that emphasize applied behavior analysis integrate science-based criteria for the evaluation of interventions; and (c) how extensively should programs that emphasize service delivery include training in formal research methodology.

*Key words:* accreditation, credentialing, certification, licensing, quality control, applied analysis of behavior, experimental analysis of behavior, conceptual analysis of behavior

Most disciplines and professions are concerned with quality control. That is, they want to ensure that the quality of training programs, and the skills of the individuals who enter into these disciplines and professions, meet certain conventionally expected standards. In addition, they want to provide for the continued improvement in the quality of the programs and professional services delivered. Behavior analysis is no different.

To be sure, the topic of quality control is sometimes controversial. As we shall see, implementing quality control measures entails both benefits and costs. In addition, quality control measures can be implemented by a wide variety of bodies (academic institutions, professional organizations, disciplinary societies, state and federal agencies) and can take a wide variety of forms (accreditation of instructional programs, credentialing of individual practitioners), not all of which are equivalent. Nevertheless, quality control is a fact of life.

The present article has three goals. First, it seeks to review some general implications of common quality control measures as they pertain to the discipline and profession of behavior analysis. Second, it seeks to review some specific ways that the Association for Behavior Analysis (ABA) and the Behavior Analyst Certification Board (BACB) have already begun to pursue quality control, in light of the foregoing implications. Third, it seeks

This article is based on addresses given by the first author at the conventions of the Behavior Analysis Association of Michigan, March 1999, in Ypsilanti, and the Association for Behavior Analysis, May 1999, in Chicago, and on addresses given by the second author at the conventions of the California Association for Behavior Analysis, February 2000, in San Francisco, and the Association for Behavior Analysis, May 2000, in Washington, DC. We thank Jim Todd and Roger Bass for their kind invitations, and Jack Michael, Jim Johnston, and Michael Hemingway for their helpful comments on several of the issues addressed here.

Correspondence concerning this article may be addressed to J. Moore, Department of Psychology, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin 53201 (E-mail: jcm@uwm.edu) or G. L. Shook, BACB, Inc., 519 E. Park Ave., Tallahassee, Florida 32301-2524 (E-mail: shook@bacb.com).

to identify some future challenges for behavior analysis in the area of quality control.

#### **BENEFITS AND COSTS OF QUALITY CONTROL**

Shook (1993, pp. 88–89) and Starin, Hemingway, and Hartsfield (1993, pp. 156–159) note that there are both benefits and costs to implementing quality control measures in a discipline and the professional activity it promotes. These benefits and costs pertain to the public, the profession, and the professionals who work in the area.

With respect to the public, quality control measures have the following benefits:

1. They make actual professional practices more consistent with general public expectations.

2. They publicly identify institutions and programs that provide education and training.

3. They provide for continuous improvement of services to the public.

4. When done by relevant professional organizations, they decrease the need for intervention by governmental agencies.

With respect to the profession, quality control measures have the following benefits:

1. They unify the profession by bringing together practitioners, students, and teachers in a conventionally accepted activity directed at improving preparation and practice in the discipline and profession.

2. They establish bureaucratic categories than can be used to describe the discipline and profession.

3. They stimulate self-evaluation and improvement of training programs in the discipline and profession, thereby enhancing the reputation of those programs.

With respect to professionals who work in the area, quality control measures have the following benefits:

1. They provide a means for professionals to set requirements by which new individuals can enter the profession.

2. They assure that students are exposed to educational programs that meet their needs and lead to competent practice.

3. They protect the ability to practice and earn a living.

4. They contribute to a professional identity.

5. They identify professionals who have satisfied regulatory criteria as a reference group for other professionals, employers, and consumers.

6. They enhance communication among professionals through the process of determining the regulatory criteria.

Of course, quality control measures also entail some costs, especially if implemented improperly:

1. They may increase the expense of services without increasing the quality.

2. They may restrict innovation, stifle creativity, and perpetuate outmoded approaches if appropriate standards are not followed.

3. They may restrict interaction between those individuals who are credentialed and those who are not, thereby producing insularity in the discipline and profession.

4. They may lead to a process of legal testing that can be bothersome, time consuming, and costly.

5. They may restrict the mobility of practitioners if formal recognition of the measures is restricted to the state in which they are credentialed.

Clearly, implementing quality control measures is a complex matter, not to be taken lightly.

#### SPECIFIC FORMS OF QUALITY CONTROL MEASURES

# Evaluation of Those Who Provide the Training: Accreditation

The range of efforts aimed at ensuring high-quality outcomes in educational and professional programs is quite broad. On the one hand, some quality control measures are aimed at those who provide the training. The implicit assumption is that if the program is of high quality, with appropriate evaluations of the individuals who are enrolled, then the probability is correspondingly high that individuals who graduate from the program will also be of high quality.

Accreditation is an example of a quality control measure aimed at those who provide the training. Accreditation is a status granted to an institution or specialized educational program that has been found by nongovernmental bodies, often a professional organization or a group of like institutions, to meet or exceed stated criteria of educational quality. The common practice is for a program that prepares students for a profession or occupation to be reviewed according to professional standards in the field. The institution or program conducts a self-study and is then visited by an evaluation team that consists of representatives of the accrediting body. The team submits a report of its visit to the accrediting body for final review and decision. Within this general procedure, the various accrediting bodies have developed a variety of individual procedures adapted to their own circumstances. For instance, readers connected with graduate departments of psychology are probably familiar with the accreditation programs run by the American Psychological Association for clinical psychology, counseling psychology, school psychology, and industrial and organizational psychology. Accreditation in almost all cases has grown from a check-list, process-oriented approach to a more flexible, outcome-based approach. Neither institutional nor specialized accreditation can guarantee the quality of individual graduates or of individual experiences within an institution or program, but each can give reasonable assurance of the context and quality of the educational program offered.

# Evaluation of Those Who Receive the Training: Credentialing

On the other hand, other quality control measures are aimed at those who

receive the training. Credentialing is an example of this sort of quality control measure. The following components are found in a number of credentialing programs, although usually all of the components are not included in any single program: (a) a registry of credentialed practitioners; (b) adherence to established professional standards: (c) endorsements that rate the performance of the individual; (d) specific course work requirements; (e) degree requirements; (f) experience requirements, frequently with some sort of supervision; (g) satisfactory performance on a professionally developed written examination; (h) evaluation of a work sample; (i) provision for maintaining expertise in the profession through continuing education; and (j) provision for discipline of individuals who violate established professional standards. The two most common forms of credentialing are professional certification and licensure.

Professional certification is a voluntary nongovernmental process of regulating a profession or occupation that is based on select eligibility requirements (often degree, course work, and experience), a professionally developed written examination, and some form of continuing education. Usually professional certification programs also contain a registry of certificants and provisions for discipline of certificants who violate established professional or legal standards. Most professional certification programs are national in scope and operate independently from state or national government. They usually are established, developed, and operated by representatives of the profession through a nonprofit corporation. Although most professional certification programs are "seeded" and initially funded by the profession's national organization, they are independent from it organizationally, and eventually become financially independent. In addition, although certification programs may trademark certain professional titles and restrict their use to persons certified by the program, individuals may nevertheless practice the profession without being certified.

Professional licensing is the process by which an agency of the state government authorizes an individual to engage in a profession or occupation. Licensing is a more restrictive form of credentialing than certification. The state grants a professional license to individuals who meet eligibility requirements (often degree, course work, and experience), pass a professionally developed written examination, and participate in some form of continuing education. Usually professional licensure programs also contain a registry of those licensed, some provisions for discipline of certificants who violate established professional standards, and a separate state-based evaluation component. Often licensure programs use a national examination as its evaluation instrument, perhaps developed with input from the relevant professional organization. For example, the American Board of Professional Psychology develops the examination content and examination instrument used by all 50 states to license psychologists. In a growing number of instances, states require national certification as a component of the licensure process.

In some cases, state law also includes a title act, which requires an individual to have the professional license to use the professional title, and a practice act, which requires an individual to have the professional license to engage in areas of practice specified by the licensing program as falling within the practice parameters of that profession. These matters should be of interest to practicing behavior analysts because given a psychology practice act in a state, individuals could not do anything that the act defined as the practice of psychology, perhaps including behavior analysis, unless they actually were licensed in psychology (or were specifically exempted). Consequently, a practice act in psychology that includes behavior analysis in its scope of practice could adversely affect individuals who are thoroughly

trained and experienced as behavior analysts but are not licensed as psychologists, because there could be severe restrictions on their ability to practice behavior analysis (see also discussions of these issues in Shook, 1993, p. 97; Starin et al., 1993, p. 155).

For behavior analysts, certification may offer certain benefits compared with licensure, particularly when the certification is at the national level:

1. Certification is voluntary, but it can help consumers, employers, parents, and others to identify qualified professionals.

2. Certification does not require or involve state legislative action; behavior analysts can avoid the effort and expense required to influence the political process and avoid the resulting political control over the profession.

3. Certification does not require state government infrastructure to develop or maintain the process because those duties are assumed by the certification board. States simply can recognize the certification and provide opportunities and funding for those who are certified as behavior analysts.

4. Certification is developed and maintained by behavior analysts rather than government. Thus, titles such as Board Certified Behavior Analyst can be trademarked by the board so that individuals who are not certified by the board cannot call themselves by that title.

5. National certification can be less costly than state licensure because there is an economy of scale. For example, the certification board can develop, distribute, and maintain the certification material on a national level, rather than having a single state do it. In addition, the cost of overseeing the certification process is spread across many parties, rather than being concentrated in a single state infrastructure that will want to recover costs through its fee structure.

6. National certification can also be less restrictive than state programs because it is not driven by state legislatures that would tend to regulate the profession more than would behavior analysts themselves. National certification has the added advantage of being recognized across state boundaries. Thus, individuals do not need to meet new credentialing requirements should they move to a different state.

7. Certification can be used as part of a state licensure program if licensure is ever deemed appropriate.

#### ABA AND QUALITY CONTROL MEASURES

## Accreditation of Graduate Academic Programs

In the late 1980s, ABA sensed the need to become more involved in guality control efforts. Consequently, ABA commissioned a task force to prepare a set of recommendations concerning the accreditation of master's and doctoral academic programs. These recommendations were adopted by the ABA Executive Council in 1991, and accreditation reviews began shortly thereafter (Hopkins & Moore, 1993). As originally conceived, the accreditation process concerns graduate academic programs, rather than associate or baccalaureate programs. If associate or baccalaureate programs in behavior analysis do become more prevalent (readers will note that there now exists an explicitly identified baccalaureate program in behavior analysis at the University of North Texas), then an accreditation process might be implemented for those degree programs as well, but no accreditation process for undergraduate academic programs is currently under development. As is customary in accreditation reviews, programs have considerable latitude in deploying resources to achieve their objectives.

The stated purposes of the ABA accreditation process are (a) to cause behavior analysts to be public and explicit about how behavior analysts are trained, (b) to occasion systematic and regular review of how behavior analysts are in fact trained, (c) to create a forum for sharing effective training methods, and (d) to protect the interests of behavior analysts as well as students and clients of behavioral services. ABA simply accredits graduate academic programs in behavior analysis, without regard to whether the program emphasizes applied, experimental, conceptual, or some mixture of all three, although the need for accreditation currently pertains more strongly to programs that emphasize applied behavior analysis than experimental or conceptual.

#### Accreditation Criteria for Master's Programs

The minimum standards for the accreditation of master's programs consist of an educational program with instruction in behavior-analytic approaches to research and conceptual issues that includes curriculum topics in the basic principles of behavior, within-subject research methodology and direct observation of behavior, conceptual issues, behavioral interventions (with such possible emphases as behavior therapy, behavioral teaching, or behavioral medicine), and a thesis, review paper, or general examination whose questions and methods are based on a behavior-analytic approach to problems or issues.

### Accreditation Criteria for Doctoral Programs

The minimum standards for accreditation of doctoral programs are a continuation of those at the master's level, and in fact assume that students have already satisfied those of the master's level. The doctoral standards consist of an educational program with instruction in behavior-analytic approaches to research and conceptual issues that includes advanced curriculum topics in the basic principles of behavior, within-subject research methodology and direct observation of behavior, behavioral interventions (with such possible emphases as behavior therapy, behavioral teaching, or behavioral medicine), and a dissertation, review paper, or general examination whose questions and methods are based on a behavior-analytic approach to problems or issues.

### Credentialing: Certification

Several years ago, Shook (1993) reviewed the varieties of credentialing and suggested that a broadly based certification procedure would be appropriate for behavior analysis. The advantages of certification have been outlined above. To be sure, the response cost of certification in any field is high. There is a lot of record keeping. There are particular costs associated with an examination: constructing the test, determining its validity, administering it, maintaining test security, keeping records, and so on. Nevertheless, certification remains an effective means by which quality control may be promoted in a field.

In this regard, Starin et al. (1993, pp. 159ff.) have described the process that has taken place over the last 20 years or so by which the state of Florida developed a comprehensive set of certification procedures to ensure that those who provide and oversee behavioral programming in state agencies were in fact competent to do so. Of special interest in the current article is the examination procedure, based on a task analysis.

In brief, a firm that specializes in criterion-based testing was hired by the state of Florida to develop reliable and valid examination items and scoring procedures. The firm consulted professional books and articles, surveyed professionals, and interviewed specialists in an effort to identify and describe the required areas of competence relevant to the practice of behavior analysis. The result was a thorough occupational analysis of what it means to be an applied behavior analyst or to practice behavior analysis (Shook, Hartsfield, & Hemingway, 1995). Each content area of the analysis specifies several tasks, with associated statements and objectives for knowledge, skills, and abilities (e.g., see Florida

Department of Children and Families, 1997). The implication of this task analysis for the design of educational programs will be addressed below.

## Certification and the Behavior Analyst Certification Board

As recently described on its Web site (http://www.bacb.com), the BACB is a nonprofit credentialing entity that has been formed as a result of national credentialing needs identified by behavior analysts, various agencies within a number of state governments, and consumers of behavior analysis services. Its main purpose is to develop, promote, and implement a voluntary national (and, if appropriate, international) certification program for practitioners of behavior analysis. In this regard, the BACB has established uniform content, standards, and criteria for the credentialing process. It seeks to ensure that the certification program meets (a) the legal standards established through state, federal, and case law; (b) the standards for national certification programs as established by the National Commission for Certifying Agencies; and (c) the best practice and professional standards of the profession of behavior analysis. Readers may also note that BACB certification is voluntary, and not in response to any particular state legislation, such as the title and practice acts discussed earlier.

The BACB certification program is based on the Behavior Analysis Certification Program launched by the state of Florida, described earlier. In fact, the BACB and the Florida Department of Children and Families have now executed an agreement that grants the BACB exclusive use of the Florida Behavior Analysis Certification Examination outside of Florida for the purpose of establishing a national certification program. The BACB and Florida continue to work together in developing the examination item bank and completing the job analysis renewal process. ABA supports the BACB and has provided both in-kind and financial assistance to aid the development process.

The various areas covered in the BACB task analysis and examination are described on its Web site as follows:

#### Theoretical and Conceptual Issues

1. Ethical considerations (knowing legal and ethical issues related to assessment and intervention).

2. Characteristics of applied behavior analysis (knowing fundamental assumptions, philosophy, and terminology that distinguish applied behavior analysis from other approaches).

3. Basic principles of behavior (knowing key terms, principles, and relations associated with the orderliness of behavior).

### **Behavioral Assessment**

1. Characteristics and rationale (developing hypotheses regarding behavior-change procedures, and then evaluating the effectiveness of those procedures from the information gained through behavioral assessment).

2. Descriptive analysis (formulating a preliminary statement that guides the collection of more specific data in an organized and conceptually systematic manner).

3. Systematic manipulations (systematically manipulating environmental variables to identify functional relations).

4. Measurement (measuring fundamental characteristics of behavior).

5. Data display (selecting and using the appropriate method for displaying data).

6. Data interpretation (selecting and using the appropriate method for interpreting and making decisions based on data).

# Establishing, Strengthening, and Weakening Behavior

1. Selection of targets for change, and intermediate and ultimate outcomes (identifying the behavior or behaviors targeted for strengthening or weakening in observable and measurable terms).

2. General issues regarding procedures (selecting behavior-change procedures that are consistent with the principles of behavior and published research).

3. Behavior-change procedures (strengthening or weakening behavior through reinforcement, punishment, stimulus control, and establishing operations).

4. Generality of behavior change (arranging training and other environments such that behavior is persistent and resilient).

5. Managing emergencies (selecting and using reactive strategies to address emergency situations).

### Cultural and Social Issues

1. Transfer of technology (selecting and using competency-based training for persons who will be responsible for carrying out behavioral assessment and behavior-change procedures).

2. Establishing support for behavior analysis services (using behavior analysis to establish systems that promote effective intervention by persons other than behavior analysts and that promote positive interpersonal relationships).

In addition, in recognition of the nationwide scope of the certification process, the BACB has taken great care to address other issues outlined by Shook (1993), such as (a) transfer standards to allow transfer of certification from the existing state programs (California, Texas, New York, Florida, Pennsylvania, and Oklahoma) to BACB certification; (b) eligibility standards for individuals who wish to take the BACB certification examinations; (c) renewal and recertification standards for certificants to maintain their BACB certification; (d) reentry standards for individuals who wish to reenter the certification program; and (e) professional (disciplinary) standards, reporting requirements, and review committee appeal procedures.

The BACB certifies practitioners at two levels. The first level is that of Board Certified Behavior Analyst<sup>®</sup> (BCBA®). Individuals who wish to become certified at this level must possess at least a master's degree, have 180 classroom hours of specific graduate course work (or meet other time-limited options), meet experience requirements, and pass the Behavior Analyst Certification Examination. The second level is that of Board Certified Associate Behavior Analyst<sup>®</sup> (BCABA<sup>®</sup>). Individuals who wish to be certified at this level must have at least a bachelor's degree, have 90 classroom hours of specific course work, meet experience requirements, and pass the Associate Behavior Analyst Certification Examination. The BACB contracts with a professional examination company to administer certification examinations.

Certification of behavior analysts is a voluntary process that is primarily designed for practitioners in the field, although a number of academics, researchers, and other nonpractitioners have chosen to become credentialed as well. Nonpractitioners have indicated that they have become certified to "set an example" and by so doing that they will encourage others, particularly students, to participate in the process.

In addition, because the certification examination tests basic principles and content of behavior analysis, some believe that it is a useful means to ensure that nonpractitioners have a firm foundation on which to build their academic, scientific, and philosophical careers. Scientists and philosophers can then develop the field further, academics can incorporate these new developments into what they teach students and, once they are widely accepted by the field, these new developments will be included in a future periodic revision of the examination content.

### TEACHING: THE TIE THAT BINDS ACCREDITATION AND CERTIFICATION

Accreditation of academic programs and certification of individuals in be-

havior analysis need not be mutually exclusive endeavors, of course. The link between accreditation and certification goes beyond requiring certificants to graduate from accredited programs, or having accredited academic programs provide continuing education experiences for certificants. For example, on a behavior-analytic view, "The first step in designing instruction is to define the terminal behavior. What is the student to do as the result of having been taught?" (Skinner, 1968, pp. 199-200). In other words, a well-designed course specifies the terminal behavior of the students who are enrolled in it. In a course that is based on this principle, students do not pass the course until they are able to engage in the terminal behavior.

A reasonable extension of this principle is that a well-designed educational program, such as one seeking accreditation, would consist of a set of such courses, and students do not graduate from the program until they have passed all of the courses in the set. Thus, accreditation procedures could conceivably require students to master a set of criteria in each course, and the program as a whole could conceivably require students to master all the courses.

Readers will note that a certification procedure such as the one based on the knowledge, skills, and abilities statements of the BACB already requires a set of terminal behaviors, identified by a nationwide survey. Accreditation procedures might link the design of academic programs with the terminal behaviors identified by such certification procedures as BACB, and specify the terminal repertoire, aggregated across all the courses, required to graduate from the program. Such a move would begin to simplify the quality control efforts of our discipline, although as will be discussed below, certain challenges remain.

#### CHALLENGES FOR THE FUTURE

What sorts of challenges do ABA and BACB face as they attempt to implement quality control measures? This question applies to both the accreditation of behavior-analytic educational programs and the certification of individual practitioners. A possible list of challenges, starting with broad, general topics and moving to narrow, specific topics is presented below:

1. Are both the verbal and nonverbal elements of the terminal repertoires adequately specified in all significant educational experiences and professional practices?

2. The terminal repertoire in applied behavior analysis is specified by the BACB objectives. However, behavior analysis also consists of experimental and conceptual analysis of behavior. Are the terminal repertoires in experimental and conceptual analyses of behavior similarly specified?

3. Assuming that terminal repertoires in experimental and conceptual analyses of behavior can be similarly specified, should the accreditation process for academic programs that emphasize experimental analysis also require that students possess terminal repertoires in both applied and conceptual analysis? If only one, which one? Should the accreditation process for programs that emphasize conceptual analysis also require that students possess terminal repertoires in both applied and experimental analysis? If only one, which one?

4. Do our accreditation criteria require applied programs to teach science-based, empirically validated technologies and interventions? As summarized in Hopkins and Moore (1993, pp. 120–121), these criteria would call for academic programs seeking accreditation to (a) develop a statement of the kinds of evidence and controls necessary for declaring a behavioral technology effective for a given problem; (b) sort existing technologies into those that research has proved to be effective and those that it has proved to be ineffective; (c) teach which technologies are effective and which are ineffective; (d) promote research that will analyze and develop training methods for

teaching students to employ effective technology; (e) promote research that will analyze and develop training methods and experiences for teaching students to work effectively; (f) educate consumers of behavioral technology and employers of behavioral practitioners about which technologies are effective and which are ineffective, and then to promote the use of effective technology; (g) develop a code of ethics that emphasizes, among other practices, the use of technologies that are effective and eschews those, except for research purposes, that are ineffective; and (h) use training methods and teach technologies that are informed at least partly by the eventual success of graduates of the programs.

5. Because the emphases in many applied programs range from delivering services to carrying out genuine scientific analyses aimed at producing generalizable knowledge, how much formal research training should go on in a program emphasizing service delivery? This last challenge is especially provocative. Readers may recall that Michael (1980) and Baer (1981) sparred over this problem several years ago, and the debate continues about the relations among basic research, applied research, and service delivery (see also Baer, Wolf, & Risley, 1968).

One approach that seems sensible to us is to contrast training in service delivery with training in conducting formal research in behavior analysis. Then, with respect to training in conducting research, training in conducting applied research could be contrasted with training in conducting basic research. What kind of training is relevant for practitioners who will simply deliver professional services? According to Johnston (1996, pp. 43-44), practitioners are ordinarily concerned with delivering an effective service, not with answering experimental questions about necessary and sufficient conditions expressed in the form of generalizable knowledge. The questions practitioners routinely face concern assessment of the presenting problem, selection of appropriate procedures from available technologies, adaptation of procedures to local circumstances, administration of procedures consistent with the technology's requirements, and tracking of the results.

How then might we characterize formal research training in behavior analysis, without regard to whether it is basic or applied research? It seems to us that for an activity to count as formal research in behavior analysis, rather than as service delivery, an important aspect of that activity should be aimed at producing artifacts in the form of reports or statements of generalizable knowledge that will enable others to act effectively without having to personally go through the same experiences. The artifacts should be consistent in most cases with the criteria identified by Diamond and Adam (1993): discipline related, innovative, replicable, documented or disseminated, peer reviewed, and significant impact. Academic disciplines themselves have identified these criteria as important, albeit in another context, that of identifying and evaluating the research component of faculty workload. In any case, particularly important among these criteria, in our estimation, is that the work be disseminated as generalizable knowledge as judged through the process of peer review.

Given this statement on what constitutes research in the analysis of behavior, how then might we conceive of the difference between basic and applied research? Often it is a matter of the use to which the artifact is put. Basic research is concerned with abstract specification of fundamental processes: reinforcement, stimulus control, punishment, escape or avoidance, and so on. The knowledge produced by such endeavors is expressed at an abstract level, without regard to whether one is formally concerned with the behavior of a rat, pigeon, or human.

In contrast, applied research is ordinarily concerned with the following issues (Johnston, 1996, p. 40): (a)

What is the nature of the problem? (b) what are the goals of behavior change? (c) what kinds of behavior are of interest? (d) what are their controlling variables? (e) what are the relevant principles and procedures for change? Answers to these issues lead in turn to the following analyses: (a) What are the procedure's overall effects? (b) what are the components of the procedure and their effects? (c) how do the components produce their effects? (d) how can the procedure be improved? Thus, applied research typically focuses on instances of concrete. socially significant behavior, with the aim of producing a desired change in the behavior. A truly valid accreditation process will need to recognize how effective programs in behavior analysis distinguish between service delivery and formal research, and then with regard to research, distinguish between basic and applied research. Given these distinctions, an accreditation process will need to be sure that society values the graduates of the accredited program, by virtue of the program's providing adequate training in the area it emphasizes such that its graduates can contribute to society. We are still a long way from knowing what balance of training and emphases is appropriate.

### SUMMARY AND CONCLUSIONS

Most disciplines and professions are intimately concerned with quality control. Quality control can be pursued in several different ways, notably by applying standards to those who provide training and to those who receive training. An example of quality control pertaining to those who provide the training is accreditation, whereas an example of quality control pertaining to individuals who receive the training is certification. Behavior analysis has a special obligation to ensure that its practitioners are competent in all phases of the discipline. The task will be difficult, but is in keeping with the behavior-analytic goal of contributing ultimately to the well-being of humanity.

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