Clinical Behavior Analysis and Clinical Social Work: A Mutually Reinforcing Relationship

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Clinical behavior analysis (CBA) and clinical social work (CSW) have the potential to gain much from one another. The existing synergistic relation between the fields, however, is largely under-recognized, overwhelmed by the stronger disciplinary and historical associations among behavior analysis and psychology and education. This paper reviews the similarities and differences between CBA and CSW, how they have enriched each other, and the potential for greatly expanded relations between the two fields.

Key words: clinical behavior analysis, clinical social work, behavior analysis training

Clinical behavior analysis (CBA) enjoys a strong empirical foundation, but has relatively few professional practitioners. Clinical social work (CSW) has many practitioners, but the discipline's behavioral foundations are relatively weak. The thesis of this paper is that these two fields have the potential to gain much from one another. Moreover, the existing synergistic relation between the fields is largely under-recognized. The similarities and differences between CBA and CSW, how they have enriched each other, and the potential for greatly expanded relations between the two fields is reviewed in the balance of this paper.

Clinical Behavior Analysis

CBA represents the application of empirically based psychosocial interventions, largely derived from contemporary learning theories, to the amelio-

ration of various behavioral disorders. These disorders include both public and private events, and subsume dysfunctional overt behavior, thoughts, and affective states. Although the term *mental disorders* is eschewed by the behavior analyst, the field of CBA embraces the phenomena contained within the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994). Problems relating to health care, comportment in school settings, and so forth also are subsumed by the term *clinical*.

In its purest form, CBA possesses five defining features: (a) The intervention is clearly derived from empirically based learning theory, specifically respondent, operant, and observational learning principles. (b) Data are gathered and reported based upon the responses of individuals, and possess reasonable levels of reliability and validity. (c) The outcome measures are closely derived from the direct observations of actual behavior in real-life settings. (d) An experimental analysis clearly demonstrates that the intervention exerted a functional relation to improved clinical outcomes. (e) The focus of intervention is on a problem of social or interpersonal importance.

CBA focuses on the salience of learning theory variables in potentially accounting for contemporary problems

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experienced by individuals, but there is no assumption that learning mechanisms are necessarily etiologically responsible for these problems. Rather, the behavior analyst investigates their possible role, in as parsimonious a manner as is legitimate.

Clinical Social Work

The practice of CSW is defined by the profession itself and by legal statutes enacted by the various states. The major professional organization is the National Association of Social Workers (NASW), comprised of over 160,000 members holding BSW, MSW (the large majority), and doctorates (mostly PhDs and a very few DSWs). Clinical social work is defined by the NASW (1989, p. 4) as

The professional application of social work theory and methods to the treatment and prevention of psychosocial dysfunction, disability, or impairment, including emotional and mental disorders. It is based on knowledge of one or more theories of human development within a psychosocial context. . . . Clinical social work services consist of assessment; diagnosis; treatment, including psychotherapy and counseling; client-centered advocacy; consultation; and evaluation.

Although it was not written by behaviorally trained professionals, there is nothing in this definition that seems at variance with the practice of CBA.

Legal statutes that define CSW vary from state to state, but the definitions provided in Florida and Georgia, two states with strong regulations governing the practice of licensed clinical social workers (LCSW), are typical. Florida (Department of Professional Regulation, 1992, pp. 2–3, italics added) states that

The "practice of clinical social work" is defined as the use of *scientific* and applied knowledge, theories, and methods for the purpose of describing, preventing, evaluating, and treating individual, couple, marital, family or group *behavior*, based on the person-in-situation perspective of psychosocial development. . . . The purpose of such services is the prevention and treatment of *undesired behavior* and enhancement of mental health. . . . Clinical social work treatment includes, but is not limited to: 1. Counseling, 2. Psychotherapy, 3. *Behavior modification*.

It is notable that the claim is made that CSW is based on scientific knowledge. What does this do to the clinical psychologists' frequent assertion that theirs is the only mental health discipline founded on both science and practice (see, e.g., Sanderson, 1995)? Also notable is the fact that CSW focuses upon behavior, and that behavior modification falls within the scope of social work practice. These three features imply that CSW can be a congenial home for behavior analysts.

In Georgia, the practice of clinical social work is defined as

Psychosocial evaluation through *data collection* and analyses to determine the nature of an individual's mental, cognitive, emotional, *behavioral*, and interpersonal problems or conditions; counseling, and psychotherapy to individuals, marriages, couples, families and groups. (Georgia Composite Board, 1995, p. 4, italics added)

Again, it is clear that behavior is a focus of clinical social work intervention, and the phrase "data collection" would certainly be heartwarming to the behavior analyst.

The Overlap Between CBA and CSW

Is there significant overlap between the practice of CBA and CSW? Yes; however, the practice of CSW is much more tightly regulated, requiring in almost all states an MSW from a program accredited by the Council on Social Work Education, several years of post-MSW supervised clinical experience, passing a multiple-choice written examination, and the provision of letters testifying to the high moral character and clinical competence of the applicant (see Thyer & Biggerstaff, 1989).

Despite the existence of these requirements, once a CSW is licensed, virtually any practice is acceptable, and there is no mandate that CSWs provide empirically supported psychosocial assessment methods or interventions, although some tentative steps are being taken in this direction (see Myers & Thyer, 1997; Thyer, 1995). To some extent, the clinical behavior analyst

may be uncomfortable affiliating with a discipline in which practitioners can engage in past-life regression therapy, neurolinguistic programming, polarity therapy, and other non-empirically based interventions. Similar examples can be found, however, among the practices of clinical and counseling psychology, and in education.

Even in the world of behavior therapy, pure behavior analysis is quite rare. Many so-called behavioral interventions contain only selected features of those characteristics that define CBA. In many cases, behavioral treatments are applied but no data are collected, graphed, or evaluated. In others, group designs are used to evaluate average outcomes rather than single-subject designs portraying individual data. Frequently the outcome measures used in behavior therapy studies are pencil-and-paper measures completed by clients or rating scales completed by significant others. Directly assessing behavior in a demonstrably reliable manner is rarely used as an outcome measure in evaluations of behavior therapy. Sometimes, nonbehavioral interventions are applied and evaluated using single-subject experimental designs!

I suspect that the spread of behavior analysis within social work and other existing mental health disciplines will not spring forth fully formed. Rather, small steps will become institutionalized that approximate CBA. For example, most contemporary social work research texts and MSW programs provide their graduate students with training in single-subject research designs. Indeed, social work accreditation standards mandate that students be taught to "conduct empirical evaluations of their own practice and those of other relevant systems" (Council on Social Work Education, 1991, p. 137). This language is completely compatible with CBA.

Readers may be surprised to learn that surveys of licensed clinical social workers find that 37% endorse a behavioral orientation, and that 62% en-

dorse a cognitive-behavioral one (see Strom, 1994). In this particular study, wherein practitioners could indicate more than one favored orientation, the behavioral and cognitive-behavioral positions were accepted by a higher proportion of practitioners than any other theoretical perspective, except for a psychodynamic one (endorsed by 83% of respondents). Cognitive-behavioral was more widely accepted than ego psychology, humanistic, gestalt, systemic, and ecological theories, all of which have been around for decades. This change is remarkable for a field in which the behavioral perspective was minimally evident two decades ago, and compares favorably with the 50% or so of professional psychologists who are members of the American Psychological Association (APA) who also define their orientation as behavioral or cognitive-behavioral (see Resnick, 1997, p. 467).

It compares even more favorably with the latest data compiled about the primary theoretical orientations of the clinical psychology members of Division 12 of the APA. In the latest such survey (Norcross, Karg, & Prochaska, 1997), reporting data from 1995, only 13% of the respondents chose behavioral as their primary theoretical orientation. This was down from 16% in 1986 and 14% in 1981, and up from 10% in 1973 and 8% in 1960. Among APA clinical psychologists belonging to Division 12, those adhering to a behavioral orientation may have peaked in the mid-1980s. Meanwhile, the cognitive and eclectic-integrative perspectives enjoyed almost twice as many adherents. The corresponding figures for the cognitive orientation were 2% (1973), 6% (1981), 13% (1986), and 24% (1995); for the eclectic-integrative orientation they were 36% (1960), 55% (1973), 31% (1981), 29% (1986), and 27% (1995).

Can behavior analysts find a conceptual home in clinical social work? Yes, apparently one at least as welcoming as that within clinical psychology. From my perspective, the widespread

acceptance of a cognitive-behavioral orientation within social work is a step in the right direction. With time, the conceptual confusion that distinguishes cognition from behavior will be corrected, and the entire field will be seen as purely behavioral (see Thyer, 1992). This leads us to the next point of convergence, conceptual analysis.

Conceptual Analysis

The current edition of the *Social Work Dictionary* provides a definition of *behavior* that is congruent with that held by radical behaviorists:

Any action or response by an individual, including observable activity, measurable physiological changes, cognitive images, fantasies, and emotions. Some scientists even consider subjective experiences to be behavior. (Barker, 1995, p. 33)

Perhaps one of the scientists who Barker was referring to was B. F. Skinner, who devoted a considerable amount of his professional career to providing conceptual analyses of behavior that occurs within the skin, which Skinner labeled *private events*. His book *About Behaviorism* (Skinner, 1974) contains chapters dealing with subjects such as "The World Within the Skin," "Perceiving," "Verbal Behavior," "Thinking," and "The Inner World of Motivation and Emotion." It is clear that behavior analysis and, to a lesser extent, social work have moved past the misconception that the proper subject matter of behaviorism is limited to publicly observable behavior.

One hallmark of the behavior-analytic perspective is a focus on the reciprocal relation that occurs between person and environment. Skinner described it thusly:

Men act upon the world and change it, and are changed in turn by the consequences of their action. Certain processes which the human organism shares with other species, alter behavior so that it achieves a safer and more useful interchange with a particular environment. When appropriate behavior has been established, its consequences work through similar processes to keep it in force. If by chance the environment

changes, new forms of behavior disappear, while new consequences build new forms. (Skinner, 1957, p. 1)

Also,

We no longer look at behavior and environment as separate things or events but at the interrelation among them. (Skinner, 1969, p. 10)

For the past several decades, clinical social work has prided itself on adhering to a so-called person-in-situation perspective. For example, the introduction to the *NASW Standards for the Practice of Clinical Social Work* begins by stating "Historically, the social work profession has focused on both people and their social environments" (NASW, 1989, p. 3) and notes that "The perspective of person-in-situation is central to clinical social work practice" (NASW, 1989, p. 4), a point also made by Mattaini: "The purpose of social work is to enhance adaptations among clients (whether they are individuals, families, communities, or other entities) and the systems within which the clients are embedded—the environment" (1995, p. 1).

Here are some other examples of this perspective within clinical social work:

The human being and the environment reciprocally shape each other. People mold their environments in many ways and, in turn, they must then adapt to the changes they created. (Germain, cited in Bloom, 1992, p. 407)

People use an almost infinite variety of *learned* [italics added] capacities to research and sustain an adaptive balance between their needs and goals and the properties of the environment. (Germain, 1981, p. 323).

The ecological perspective makes clear the need to view people and environments as a unitary system within a particular cultural and historic context. Both person and environment can be fully understood in terms of their relationship, in which each continually influences the other within a particular context. . . . Ecological thinking examines exchanges between A and B, for example, that shape, influence, or change both over time. A acts, which leads to a change in B, whereupon the change in B elicits a change in A that in turn changes B, which then changes or otherwise influences A, and so on. (Germain & Gitterman, 1995, p. 816)

Given statements such as these, there

seems to be a natural conceptual congruence between clinical social work and behavior analysis. Unfortunately, the systems-orientation language of social work practice seems to have developed completely independently of the science of human behavior represented by behavior analysis. Social work relies on metaphor and analogy, on the application of terminology borrowed from the disciplines of cybernetics and ecology, to develop "lenses" through which to view human beings. What it has not developed are effective psychosocial interventions based upon any empirically based theory of human behavior. In social work, "The ecosystems perspective offers no prescription for intervention" (Barker, 1995, p. 114). "It is not a model, with prescriptions for addressing cases; it does not draw from a particular theory of personality; it does not specify outcomes. It is often misunderstood as being a treatment model" (Meyer, 1988, p. 275). It almost seems as if social work, while "talking the talk" of conceptual behavior analysis, fails to "walk the walk." Gambrill (1994) is one social worker who has lamented the fact that many intervention models in her field fail to acknowledge their debt to behavior-analytic principles and practices.

Nevertheless, behavioral principles and practices are making considerable inroads into the education and practice of social workers. The ecological systems/person-in-environment perspectives found within social work are highly congruent with the stimulus-organism-response-consequence (SORC) model of CBA. The conceptual model of behavior analysis is increasingly being represented as among the contending theories for social work practice, at all levels of intervention (e.g., Oplente & Mattaini, 1997; Thyer, 1987b, 1988, 1996; Thyer & Myers, 1997, 1998).

Empirical Research

The use of single-subject research designs is one area in which clinical

social work has outperformed any other human service profession in implementing behavior analysis (see Thyer & Thyer, 1992, for a review). The major impetus for this movement was the inclusion in the 1982 *Curriculum Policy Statement* of the Council on Social Work Education of the requirement that students of social work be taught designs suitable for the evaluation of one's own practice (Council on Social Work Education, 1982). Since that time, single-subject designs have been widely taught in both graduate and undergraduate social work programs. Considerable effort has gone into conducting follow-up studies of the extent to which MSW students actually apply single-subject designs in practice. Education in the use of single-subject designs is also provided in social work in-service training and continuing education programs, not only in the United States but also in the United Kingdom and Europe (see Dillenburg, Godina, & Burton, 1997; Gerdes, Edmonds, Haslam, & McCartney, 1996; Kazi, Mantysaari, & Rostila, 1997; Kazi & Wilson, 1996). Many schools of social work are now requiring that BSW and MSW students complete single-subject designs as a part of their internship training. The promotion of single-subject designs as a tool to evaluate clinical practice is more pervasive within social work than in any other human service profession. Numerous research textbooks devoted to single-subject designs have been authored by social workers; one (Tripodi, 1994) is titled *A Primer on Single-Subject Design for Clinical Social Workers* and has been produced by the profession's official publishing outlet, the NASW Press. Even in its attenuated versions, social work's advocacy of single-subject designs represents a significant step towards developing an empirical orientation to evaluating practice.

Related to this, social worker Walter Hudson has pioneered the development of computer software for use by practitioners that affords a user-friendly approach to enter, graph, and print single-

subject data formatted in the manner used by behavior analysts. One major evaluation research text focusing on the use of single-subject designs includes this software along with the textbook (Bloom, Fischer, & Orme, 1995). A similar software program developed independently by Charles Auerbach and his colleagues with the School of Social Work at Yeshiva University in New York City has been used and favorably rated by several hundred MSW students.

CBA's emphasis on empirical research is increasingly becoming the focus of social work practice. A recent meta-analysis of social work nomothetic outcome studies found that 45 reports had been published in journals between 1990 and 1994. Of these 45 studies, 22 (49%) were based on a cognitive-behavioral perspective, and yielded an effect size greater than any other orientation represented by more than one study (Gorey, Thyer, & Pawluck, 1998).

Sometimes the contributions of social workers who are active in behavior-analytic research are overlooked because their professional training and affiliations are not clearly evident. For example, some have served on editorial boards of the *Journal of Applied Behavior Analysis* and other behavior journals in our field, but are unrecognized as social workers because of the generic PhD after their names.

One exciting area of behavior-analytic research in which social workers have taken the lead is the establishment of the Walden Fellowship, a voluntary organization located in New York City dedicated to the development of behavioral and cultural practices in the areas of self-education, consultation in solving human problems, and cultural design research. Founded in 1991 by social worker Mark Mattaini (1991), the Walden Fellowship is not a utopian community; rather, it is a group of established and novice behavior analysts who meet regularly. Among the activities of the Walden Fellowship is to offer the pub-

lic self-education workshops, a personal and family problem-solving consultation service, organizational consultation, and community research projects in areas such as violence prevention, women's issues, and child maltreatment (see Mattaini & Twyman, 1996). Thus the Walden Fellowship serves as a support group for its members as well as provides clinical behavior-analytic services and research for New York City residents.

Clinical Practice

At present, the professional application of behavior analysis is almost exclusively conducted by practitioners who are licensed or otherwise legally regulated under the auspices of one of the existing mental health professions (e.g., psychology, social work, nursing, counseling, etc.) or other professional groups (e.g., educators, speech therapists, etc.). The legal existence of clinical behavior analysis as an independent profession remains in its infancy, despite the attempts by some to establish it as such.

The areas of overlap between the practice of CBA and CSW are so many and obvious as to not require extensive attention (see Thyer, 1983). Clinical social work embraces virtually every significant social issue and problem of interpersonal importance. The same claim is legitimately made by CBA. Social work has a longer history as a recognized institution for addressing these problems, whereas CBA possesses greater potential to help actually solve them.

Training

Most schools of social work do not currently provide good training for individuals who wish to become competent behavior analysts. Similar to the situation within psychology and education, the model seems to be that of one or more dedicated behavior analysts who exist in uneasy harmony with their nonbehavioral colleagues who form the majority of the depart-

mental faculty. One *can* obtain excellent training in CBA through consciously affiliating with such superb practitioners, and eventually be licensed as a psychologist, school psychologist, or clinical social worker.

In the past I have suggested that non-clinically trained behavior analysts who wish to obtain practice credentials consider earning the MSW degree (Thyer, 1989). The practice of clinical social work is legally regulated in all 50 states (Thyer & Biggerstaff, 1989), and the parity gap in reimbursement patterns between social workers and psychologists is closing. Interesting, many managed care firms are finding it more cost effective to hire MSW therapists than doctoral-level psychologists, and social work continues to be seen as a growth field for the foreseeable future. There are about 120 accredited MSW programs in the United States, each of which provides a venue for earning the MSW that is a prerequisite for licensure. The scope of clinical social practice is quite broad, and practically speaking includes everything that psychologists and psychiatrists do, with the exceptions of psychological testing and prescribing medications. Clinical social workers are legally recognized as diagnosticians capable of using the *Diagnostic and Statistical Manual* (indeed, a social worker, Janet Williams, DSW, was the coeditor of earlier editions of the manual) and have the authority to authorize the emergency commitment to psychiatric hospitals of individuals at risk of harming themselves or others. Clearly, licensure as a clinical social worker is a viable career track for behavior analysts who seek an identity as a practicing mental health professional. Moreover, for the PhD trained in experimental or developmental psychology, the MSW takes less time (about 18 months) to complete than a "re-tread" program in clinical or counseling psychology. I take great delight in quoting behavior analyst Steven Hayes, who has written,

When I counsel undergraduates I tell them that if they simply want to be psychotherapists to go to a good school of social work with a clinical emphasis. . . . Some of the clinicians I respect most in my locality are social workers. (Hayes, 1986, p. 594)

An alternative career track is available to clinical social workers who wish to acquire competence in behavior analysis. Because of the small number of doctoral social work graduates produced each year by the 53 PhD and DSW programs (about 250), most faculty announcements for social work academic openings mandate that applicants possess a MSW and a doctorate in social work or a closely related field. A number of MSWs have earned PhDs with a behavior-analytic focus, and returned to academia with homes in social work. For example, Stephen Wong received his MSW at the University of Wisconsin, and his PhD in psychology from Western Michigan University, a superb combination of professional and academic training. Richard Dangel received his PhD in Human Development at the University of Kansas after completing his MSW. Individuals thus dually trained in two disciplines, social work *and* psychology or education or others, not only can bring to bear a desirable interdisciplinary focus to their work but also enjoy twice the employment opportunities than persons who are educated in a single field. Stephen Wong, for example, has been a licensed clinical psychologist, but he also teaches in a school of social work.

Some behavior analysts and social workers have collaborated in producing social work texts, with Arthur Schwartz and Israel Goldiamond's (1975) *Social Casework: A Behavioral Approach* being an early example. Behavior analyst and psychologist Elsie Pinkston collaborated with clinical social workers to produce *Effective Social Work Practice: Advanced Techniques for Behavioral Intervention with Individuals, Families, and Institutional Staff* (Pinkston, Levitt, Green, Linsk, & Rzepnicki, 1982). Conversely, a number of social workers have

contributed textbooks to the clinical behavioral literature. Social worker Richard Stuart DSW, past president of the Association for Advancement of Behavior Therapy, authored the best selling weight control self-help book titled *Slim Chance in a Fat World: Behavioral Control over Obesity* (Stuart & Davis, 1972), a volume that explicitly incorporates behavioral methods. Moreover, Stuart was singularly instrumental, as a consultant with Weight Watchers International, for having that program include significant behavioral elements in its weight loss regimen (see Stuart, 1978). The prolific Stuart also pioneered texts on contingency contracting (Stuart, 1975) and behavioral self-control (Stuart, 1977). Moreover, his 1969 article titled "Operant-Interpersonal Treatment for Marital Discord," published in the *Journal of Consulting and Clinical Psychology*, was among the earliest attempts to apply operant theory to marital treatment, and set the stage for the subsequent development of behavioral marital and family therapy (Stuart, 1980). He was also a leader in the discussion of the implications of behavioral technology for individual freedom and civil liberties (see Davison & Stuart, 1975).

Social worker and psychologist Eileen Gambrill authored the monumental *Behavior Modification: Handbook of Assessment, Intervention and Evaluation* (Gambrill, 1977), which is over 1,200 pages long and is one of the earliest comprehensive texts dealing with behavior analysis. Social workers Richard Dangel and Richard Polster (1985) edited a superb early textbook on *Parent Training* containing chapters by behavior analysts such as Don Baer, Sidney Bijou, Karen Budd, Israel Goldiamond, Bill Hopkins, John Lutzker, and Montrose Wolf. As a final example, social workers Joel Fischer and Harvey Gochros (1977) edited a two-volume *Handbook of Behavior Therapy with Clinical Problems*, another pioneering treatment that presented an early contribution of social workers to the field of behavioral treatment of a

particular set of diagnoses. Over 10 years ago a bibliography (Thyer, 1985) found over 50 books written by social workers that could be labeled behavioral in nature, and the field has exponentially grown since then. As the above citations illustrate, just as behavior analysts have contributed to the social work literature, there are many examples of the contributions clinical social workers have made to the field of clinical behavior analysis.

Impediments and Conflicts

The most serious impediments to the spread of behavior analysis within social work are continuing misconceptions about the behavioral perspective that are perpetuated in our discipline's textbooks, classrooms, and less formal avenues of communication. Incorrect but terribly destructive myths abound, such as "behaviorists ignore client feelings and relationship variables in treatment," that we "treat only the symptoms of underlying problems, not the real issues," that "symptom substitution is a common side effect of behavioral intervention," or that "Behaviorism is simply outmoded stimulus-response theory." These are so pervasive that the occasional countercontrols (e.g., Thyer, 1991) are largely ineffective.

In the past, advocates of behavior analysis have placed a strong emphasis on the importance of conducting *experimental* analyses of behavior. In other words, if one's data do not demonstrate a clear and unambiguous functional relation between a behavioral intervention and clinical outcome, then one's endeavor was in some way incomplete or imperfect. I believe that this is a legacy of the professional origins in the animal laboratory of many of the founders of our field. Themselves shaped through training rats and pigeons, with all the associated precision of automated equipment, knowledge of preexperimental histories, and genetically controlled stocks of subjects, when it came time to apply be-

havioral principles it was perhaps natural to demonstrate the same degree of experimental control over the behavior of clients suffering from serious problems (see Thyer, 1984). In practice this meant the use of methodologies such as obtaining prolonged and stable baseline data prior to intervention, using withdrawal phases or multiple baseline designs, all of which involve delaying or removing treatment. These experimental features are quite difficult to implement in routine clinical practice, and have led some social workers to argue that single-subject designs are too rigorous to be used in social work (e.g., Thomas, 1978).

One solution to this dilemma is simple. Instead of trying to demonstrate in clinical practice that one's behavioral intervention *caused* a client to get better, a CBA or CSW can use single-subject research designs to empirically demonstrate that one's client *did* get better (Gambrill & Barth, 1980). There is no need in most clinical situations to prove causality, or even the more limited goal of demonstrating a functional relation between intervention and improvement. Parents do not require rigorous proof that their child's schooling caused him or her to acquire reading skills, or that the prescribed antibiotics cleared up an ear infection. Validly documenting positive outcomes alone is sufficient in most practice contexts.

Thus, one suggestion to promote behavior analysis within social work is to replace strict standards of experimental control with less stringent standards of empirically based methods of accountability. Be more tolerant of clinically friendly research approaches, such as the A-B design, and reinforce their use in practice by nonbehavioral colleagues. Taking data derived from pencil-and-paper rapid assessment instruments is a step in the right direction (compared to not taking *any* data at all), and should be praised. The development of a mature field of behavior-analytic social work will more likely evolve through shaping successive approximations than by an initial insis-

tence upon the most rigorous standards of experimental control. Mansoor Kazi has performed pioneering work in this regard, training students and practitioners in elementary principles of collecting empirical data from individuals and graphing these using simple single-subject designs. Dozens of these may be found in his highly recommended new book, *Single-Case Evaluation by Social Workers* (Kazi, 1998).

A second impediment has been an insistence upon a careful procedural description of the independent variable. This of course is a laudable hallmark of the laboratory researcher who is interested in a rigorous science of behavior. We have a long way to go, however, before this can be reasonably undertaken with burdened clients in the real world. Extraneous and intrinsic variations are always present, and these greatly complicate conducting true functional analyses. Even the advent of treatment manuals and other protocol-driven therapies (Van Hasselt & Hersen, 1996) has not resolved the problems associated with inadequate specification of the independent variable (see Addis, 1997). Once again the solution is a fairly simple one: Initially suspend this level of experimental rigor. If we focus on answering the question Do I have credible data that suggest my client got better? rather than Do my data *prove* that my client got better because of my treatment? the prospects for encouraging the empirical evaluation of the outcomes of clinical practice are greatly enhanced. If the human services (clinical behavior analysis, psychology, social work, psychiatry, etc.) adopted such a standard, minimal though it may seem to traditional experimentalists, this would represent a quantum leap towards promoting the *science* of clinical practice.

Does this mean throwing the behavioral baby out with the experimentalist's bath water? Perhaps not. Look at the evolution of CBA from the late 1950s until the present. Early published examples of behavior analysis and therapy could not possibly find

their way into the contemporary pages of the *Journal of Applied Behavior Analysis*. We call this gradual adoption of more stringent standards "scientific progress." However, when extending contemporary behavior analysis into other fields in the human services that have been minimally influenced by the experimentalist tradition, some temporary retrenchment or relaxation of methodologically sophisticated standards may be necessary in order to gain the enduring foothold that will serve to establish a significant presence. Once behavior analysis is securely in place within social work, more rigorous research standards can be gradually implemented.

Disciplinary rivalries occasionally arise between clinical social work and other fields such as psychology, but the embryonic nature of clinical behavior analysis as a separate professional field has sheltered it from most such conflicts. For example, Florida regulates behavior analysis as a distinct profession, and its certified behavior analysts are exempt from the license-to-practice acts regulating psychology, social work, and related fields. However, these other fields are uneasy with certifying behavior analysts for a variety of reasons, and may challenge its continuance at any point (Starin, Hemingway, & Hartsfield, 1993). Meanwhile, some Florida LCSWs are becoming certified behavior analysts, and these dually credentialed individuals may help to defend the state-supported certified behavior analyst program. Again, given the nascent nature of behavior analysis in most other states, frictions related to scope of practice, fees, and third party reimbursement policies have limited conflicts between social workers and behavior analysts.

Efforts to develop behavior analysis as an independent discipline are hampered by increasingly strict state regulations that endorse behavior modification as falling within the scope of practice of clinical psychology, clinical social work, marriage and family therapy, counseling, and so forth. As stated

earlier, the legal definition of clinical social work in Florida specifically includes behavior modification (Florida Department of Professional Regulation, 1992, p. 3). This has had negative repercussions on the efforts to expand Florida's behavior analysis certification program as an independent discipline (Developmental Services Program, 1996), and professional social workers may, in a worst case scenario, lobby against the establishment of behavior analysis certification programs that are not subsumed under the rubric of previously established mental health disciplines.

The potential for other conflicts exists when roles overlap. For example, the federal Department of Education supported legislation passed by Congress in 1997 titled the Individuals with Disabilities Education Act (IDEA), which among other provisions described the role of social workers in school settings. One responsibility is "designing and managing behavioral interventions" ("Expanded IDEA Role," 1998, p. 7). Such a task is traditionally the responsibility of the school psychologist or behavior specialist. As social work becomes more behavioral, the boundaries between it and behavior analysis will possibly conflict.

Among the additional factors that mitigate against a closer relationship between CBA and CSW are the negative views members of each discipline frequently hold about the other. For example, here is what one behavior analyst had to say about social workers:

I had a stereotype of social workers as "do-gooders" who stood in the way of effective behavioral treatment, or who shuffled paper all day and spouted off about client rights. (Bailey, 1987, p. 207)

Although Bailey corrected this stereotype in the rest of his editorial, such admissions suggest that other CBAs might view social workers negatively. No less disturbing are the corresponding views of some social workers regarding behavior analysis, such as

those of the psychoanalyst Herbert Strean:

Behaviorists wish to ignore . . . that human beings have wishes, anxieties, defenses, form transferences, and often fear change. (Strean, 1981, p. 155)

or the opinion of the social work educator, Helen Northern:

In all models of practice, *except perhaps behavior modification* [italics added] and task-centered practice, relationship is accorded great importance as a dynamic for growth and change. (Northern, 1982, p. 97)

or that of Max Bruck:

Behaviorists are interested entirely in the manipulation of stimulus-response connections to change maladaptive behavior to more adaptive behavior. (Bruck, 1968, p. 43)

CBA's greatest asset is its demonstrated ability to help clients resolve serious problems. Definite, albeit slow, progress is being made in seeing a less negative and more positive perspective of behavioral theory and practice within social work.

Steps Towards Greater Integration

As outlined in an earlier paper, modestly titled "Can Behavior Analysis Rescue Social Work?" (Thyer, 1987a), the following steps are a few ways in which CBAs can have a positive influence on the practice of social work:

1. Conduct a greater number of behavior-analytic studies in public and private social work agencies and in public welfare offices. Deal with more complex problems, attempting to help greater numbers of persons of color, and individuals from politically, socially, or economically oppressed groups.

2. Seek out social workers and offer to provide in-service training, consultation, or supervision at low or no cost.

3. Seek out social workers and offer to involve them in your research projects.

4. Submit behavior-analytic articles to mainstream social work journals. All of them have published behaviorally oriented articles, and some explicitly

recruit them (e.g., *Research on Social Work Practice*, published by Sage Publications, Inc.).

5. Earn an MSW and become involved in social work education, training, and practice.

Social work *is* paying attention to the need to measure client problems in a reliable and valid manner, *is* keenly interested in accountability issues such as demonstrating whether or not its clients are getting better, *does* wish to apply the practical findings of scientific research to the betterment of the human condition and to place the profession on a stronger empirical footing. Indeed, it is in social work's own self-interest to do so. The fact that behavior analysis can help in all these areas represents important points of leverage through which CBAs can gain influence in the design and conduct of social services. Numerous behavior analysts have made their professional home in the practice and academy of clinical social work. It can be a comfortable habitation, with many reinforcers (sometimes stretched rather thinly). Please consider joining us.

REFERENCES

- Addis, M. E. (1997). Evaluating the treatment manual as a means of disseminating empirically validated psychotherapies. *Clinical Psychology: Science and Practice*, 4, 1-11.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Bailey, J. S. (1987). Editorial. *Journal of Applied Behavior Analysis*, 20, 207.
- Barker, R. L. (Ed.). (1995). *The social work dictionary*. Washington, DC: NASW Press.
- Bloom, M. (1992). A conversation with Carel Germain. In M. L. Bloom (Ed.), *Changing lives: Studies in human development and professional helping* (pp. 406-409). Columbia, SC: University of South Carolina Press.
- Bloom, M., Fischer, J., & Orme, J. (1995). *Evaluating practice: Guidelines for the accountable professional* (2nd ed.). Needham Heights, MA: Allyn & Bacon.
- Bruck, M. (1968). Behavior modification theory and practice: A critical review. *Social Work*, 13, 43-55.
- Council on Social Work Education. (1982). Curriculum policy statement for the master's degree and baccalaureate degree in social

- work education. *Social Work Education Reporter*, 30(3), 5-12.
- Council on Social Work Education. (1991). *Handbook of accreditation standards and procedures*. Alexandria, VA: Author.
- Dangel, R. F., & Polster, R. A. (Eds.). (1985). *Parent training*. New York: Guilford.
- Davison, G. C., & Stuart, R. B. (1975). Behavior therapy and civil liberties. *American Psychologist*, 30, 755-763.
- Developmental Services Program. (1996). *Behavior analysis certification: Information and application booklet for the March, 1996 examination*. Tallahassee, FL: Author.
- Dillenburg, K., Godina, L., & Burton, M. (1997). Training in behavioral social work: A pilot study. *Research on Social Work Practice*, 7, 70-78.
- Expanded IDEA role through regs urged. (1998, March). *NASW News*, 43(3), p. 7.
- Fischer, J., & Gochros, H. (Eds.). (1977). *Handbook of behavior therapy with clinical problems*. New York: Pergamon.
- Florida Department of Professional Regulation. (1992, October). *Board of clinical social work, marriage and family therapy, and mental health counseling* (Florida Statute 491 and Rule Chapter 21cc). Tallahassee, FL: Author.
- Gambrill, E. (1977). *Behavior modification: Handbook of assessment, intervention, and evaluation*. San Francisco: Jossey-Bass.
- Gambrill, E. (1994). What's in a name? Task-centered, empirical, and behavioral practice. *Social Service Review*, 68, 578-599.
- Gambrill, E., & Barth, R. (1980). Single-case study designs revisited. *Social Work Research and Abstracts*, 16(3), 15-20.
- Georgia Composite Board. (1995). *Rules of the Georgia Composite Board of Professional Counselors, Social Workers, and Marriage and Family Therapists*. Atlanta: Author.
- Gerdes, K. E., Edmonds, R. M., Haslam, D. R., & McCartney, T. L. (1996). A statewide survey of licensed clinical social workers' use of practice evaluation procedures. *Research on Social Work Practice*, 6, 27-39.
- Germain, C. B. (1981). The ecological approach to people-environment transactions. *Social Casework*, 64, 323-331.
- Germain, C. B., & Gitterman, A. (1995). Ecological perspective. In R. L. Edwards (Ed.), *Encyclopedia of social work* (pp. 816-824). Washington, DC: NASW Press.
- Gorey, K. M., Thyer, B. A., & Pawluck, D. E. (1998). Differential effectiveness of prevalent social work practice models: A meta-analysis. *Social Work*, 43, 269-278.
- Hayes, S. C. (1986). A training model in search of a rationale [letter]. *American Psychologist*, 41, 593-594.
- Kazi, M. A. F. (1998). *Single-case evaluation by social workers*. Aldershot, UK: Ashgate Publishers.
- Kazi, M. A. F., Mantysaari, M., & Rostila, I. (1997). Promoting the use of single-case designs: Social work experiences from England and Finland. *Research on Social Work Practice*, 7, 311-328.
- Kazi, M. A. F., & Wilson, J. (1996). Applying single-case evaluation methodology in a British social work agency. *Research on Social Work Practice*, 6, 5-26.
- Mattaini, M. A. (1991). Walden 1.9: Successive approximations. *Behavior and Social Issues*, 1, 53-60.
- Mattaini, M. A. (1995). The foundations of social work practice. In C. Meyer & M. A. Mattaini (Eds.), *The foundations of social work practice* (pp. 1-15). Washington, DC: NASW Press.
- Mattaini, M. A., & Twyman, J. S. (1996). The Walden Fellowship experiments. *Behavior and Social Issues*, 6, 97-107.
- Meyer, C. H. (1988). The ecosystems perspective. In R. Dorfman (Ed.), *Paradigms of clinical social work* (pp. 275-294). New York: Brunner/Mazel.
- Myers, L. L., & Thyer, B. A. (1997). Should social work clients have the right to effective treatment? *Social Work*, 42, 288-298.
- National Association of Social Workers. (1989). *NASW standards for the practice of clinical social work*. Silver Springs, MD: Author.
- Norcross, J. C., Karg, R. S., & Prochaska, J. O. (1997). Clinical psychologists in the 1990s: Part I. *The Clinical Psychologist*, 50(2), 4-9.
- Northern, H. (1982). *Clinical social work*. New York: Columbia.
- Opulente, M., & Mattaini, M. A. (1997). Toward welfare that works. *Research on Social Work Practice*, 7, 115-135.
- Pinkston, E. M., Levitt, J. L., Green, G. R., Linsk, N. L., & Rzepnicki, T. L. (1982). *Effective social work practice: Advanced techniques for behavioral intervention with individuals, families, and institutional staff*. San Francisco: Jossey-Bass.
- Resnick, R. (1997). A brief history of practice—expanded. *American Psychologist*, 52, 463-468.
- Sanderson, W. C. (1995, March). Which therapies are proven effective? [letter]. *APA Monitor*, 26(3), 4.
- Schwartz, A., & Goldiamond, I. (1975). *Social casework: A behavioral approach*. New York: Columbia University Press.
- Skinner, B. F. (1957). *Verbal behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Skinner, B. F. (1974). *About behaviorism*. New York: Knopf.
- Starin, S., Hemingway, M., & Hartsfield, F. (1993). Credentialing behavior analysts and the Florida Behavior Analysis Certification Program. *The Behavior Analyst*, 16, 153-166.
- Strean, H. (1981). A critique of some of the newer treatment modalities. *Clinical Social Work Journal*, 9, 155-170.
- Strom, K. (1994). Social workers in private

- practice: An update. *Clinical Social Work Journal*, 22, 73–89.
- Stuart, R. B. (1969). Operant-interpersonal treatment for marital discord. *Journal of Consulting and Clinical Psychology*, 33, 675–682.
- Stuart, R. B. (1975). *Treatment contract*. Champaign, IL: Research Press.
- Stuart, R. B. (Ed.). (1977). *Behavioral self-management*. New York: Brunner/Mazel.
- Stuart, R. B. (1978). *Act thin, stay thin*. New York: Norton.
- Stuart, R. B. (1980). *Helping couples change: A social learning approach to marital therapy*. New York: Guilford.
- Stuart, R. B., & Davis, B. (1972). *Slim chance in a fat world: Behavioral control over obesity*. Champaign, IL: Research Press.
- Thomas, E. J. (1978). Research and service in single-subject experimentation: Conflicts and choices. *Social Work Research and Abstracts*, 14(4), 20–31.
- Thyer, B. A. (1983). Behavior modification in social work practice. In M. Hersen, P. Miller, & R. Eisler (Eds.), *Progress in behavior modification* (Vol. 15, pp. 173–215). New York: Academic Press.
- Thyer, B. A. (1984). Will the “cult of the laboratory” hinder the spread of applied behavior analysis? *Psychological Reports*, 54, 900–902.
- Thyer, B. A. (1985). Textbooks in behavioral social work: A bibliography. *The Behavior Therapist*, 8(8), 161–162.
- Thyer, B. A. (1987a). Can behavior analysis rescue social work? *Journal of Applied Behavior Analysis*, 20, 207–211.
- Thyer, B. A. (1987b). Contingency analysis: Toward a unified theory for social work practice. *Social Work*, 32, 150–157.
- Thyer, B. A. (1988). Radical behaviorism and clinical social work. In R. Dorfman (Ed.), *Paradigms of clinical social work* (pp. 123–148). New York: Guilford.
- Thyer, B. A. (1989). Social work: Professional opportunities for behavior analysts. *The Behavior Analyst*, 12, 89–91.
- Thyer, B. A. (1991). Behavioral social work: It is not what you think. *Arete*, 16(2), 1–9.
- Thyer, B. A. (1992). The term cognitive-behavior therapy is redundant [letter]. *The Behavior Therapist*, 15(5), 112, 128.
- Thyer, B. A. (1995). Promoting an empiricist agenda within the human services: An ethical and humanistic imperative. *Journal of Behavior Therapy and Experimental Psychiatry*, 26, 93–98.
- Thyer, B. A. (1996). Behavior analysis and social welfare policy. In M. A. Mattaini & B. A. Thyer (Eds.), *Finding solutions for social problems: Behavioral strategies for change* (pp. 41–60). Washington, DC: American Psychological Association Press.
- Thyer, B. A., & Biggerstaff, M. A. (1989). *Professional social work credentialing and legal regulation*. Springfield, IL: Charles C. Thomas.
- Thyer, B. A., & Myers, L. L. (1997). Behavioral and cognitive theories. In J. R. Brandell (Ed.), *Theory and practice in clinical social work* (pp. 18–37). New York: Free Press.
- Thyer, B. A., & Myers, L. L. (1998). Social learning theory: An empirically-based approach to understanding human behavior in the social environment. *Journal of Human Behavior in the Social Environment*, 1, 33–52.
- Thyer, B. A., & Thyer, K. B. (1992). Single-system research designs in social work practice: A bibliography from 1965–1990. *Research on Social Work Practice*, 2, 99–116.
- Tripodi, T. (1994). *A primer on single-subject design for clinical social workers*. Washington, DC: NASW Press.
- Van Hasselt, V. B., & Hersen, M. (Eds.). (1996). *Sourcebook of psychological treatment manuals for adult disorders*. New York: Plenum.