

Chapter 9

The New Profession of Psychology

At the beginning of the twentieth century, psychology was still an academic discipline, meaning that most psychologists worked as college professors. Some of those were involved in applied endeavors as ways to supplement their income, the way Harry Hollingworth did throughout his career. But there were relatively few psychologists who worked in settings beyond the universities. Most of those who did were women because the academic jobs were largely closed to them except for positions in women's colleges such as Vassar or Wellesley. Grace Fernald (1879–1950) and Augusta Bronner (1881–1966) worked at the Juvenile Psychopathic Institute in Chicago, a site for research, diagnosis, and treatment of youths who had run afoul of the law. Leta Hollingworth worked for the City of New York at its Clearinghouse for Mental Defectives, doing interviews and administering intelligence tests to aid in proper referrals of individuals brought to the agency. Marion Bills (1880–1970) worked for the Aetna Life Insurance Company in Hartford, Connecticut, for 30 years, overseeing personnel selection and doing sales research. Elsie Bregman (1896–1969), a student of Cattell's, served as personnel officer at Macy's Department Store in New York City where, in the mental testing tradition of her mentor, she developed a battery of tests for employees.

Some male psychologists also held full-time applied jobs. One was J. E. Wallace Wallin (1876–1969), who worked as a school psychologist in St. Louis and other locations. Another was Henry Herbert Goddard (1866–1957), who was director of research at the Vineland Training School for Feeble-minded Boys and Girls in New Jersey. It was Goddard who learned of Alfred Binet's (1857–1911) intelligence test when he was on a research trip to Europe. Goddard would transform and translate the test for use in English, publishing his version of the Binet intelligence test in 1908 (see Zenderland, 1998).

Recall that, in 1917, Leta Hollingworth and J. E. Wallace Wallin had organized the American Association of Clinical Psychologists. The label "clinical psychologist" had a different meaning in 1917 than it does today. It was more of a generic label, often used synonymously with the term consulting psychologist, to indicate a psychologist who worked in a clinical or testing or advisory role. By 1917, many of these clinical psychologists were involved with psychological assessment of children or adults, and typically that meant intellectual assessment using the Binet test. Lewis Terman (1877–

1956), a psychologist at Stanford University, had revised the Binet scale in 1916, publishing a version of the test that would dominate the field of intelligence testing for decades, a test known as the *Stanford–Binet Intelligence Test* (Terman, 1916).

As evidence of the growing faith in the abilities of these practicing psychologists, two states passed laws in 1917 permitting judges to commit individuals to mental hospitals based on the expert testimony of clinical psychologists and without corroboration from medical experts. That was a major achievement for the fledgling practice of clinical psychology, and one that was vociferously opposed by the medical profession.

In 1917 the United States declared war on Germany and thus entered the Great War raging in Europe. The United States army sought the services of psychologists for two principal duties: to assess the intellectual functioning of military recruits and to assess soldiers and recruits with respect to job placement in the services. We have already mentioned the job that Walter Dill Scott did with regard to selection tests for the army, a program, you may recall, that tested more than 3.5 million individuals by the war's end. The other activity was headed by Robert M. Yerkes (1876–1956), who assembled a group of psychologists to develop group measures of intelligence. The tests had to be developed quickly, in a matter of months. Two tests emerged, known as the *Army Alpha* and the *Army Beta*. The latter was a test that could be given to individuals who were illiterate or for whom English was not their first language. These tests were used to assess nearly 2 million military personnel and recruits (Samelson, 1977; von Mayrhauser, 1989).

Not only did the war extend psychology's involvement in psychological testing, both in intellectual assessment and personnel selection instruments, but it also involved psychologists in the army hospitals, principally with assessment and treatment of what would have been termed "shell shock" victims (post-traumatic stress disorder or PTSD in today's language). The first personality tests developed by psychologists were constructed in World War I, intended to screen out soldiers who might be susceptible to shell shock. Those tests proved useless for that purpose, but other personality tests would prove more successful, including the projective personality tests of the 1920s and later (for example, the *Rorschach Inkblot Test*).

Urbanization in the twentieth century brought new problems to American society. Especially prominent was a rise in juvenile delinquency. With new waves of immigrants coming to America after World War I, that problem became even more salient with continued growth of the cities, poverty of many of the immigrants, and the social and cultural problems of being in a new country, often not speaking the dominant language. In a nationwide effort aimed at prevention of delinquency, the first child guidance clinic was established in 1921. By 1927 there were more than 100 such clinics, and more than 200 by the 1940s. Typically these clinics were headed by a psychiatrist, assisted by a clinical psychologist and one or more social workers. Thus the number of positions for applied psychologists continued to grow.

Since 1917, applied psychologists had petitioned the American Psychological Association (APA) to create a special division for clinical/consulting psychologists. Yet the APA was reluctant to do this, arguing that the by-laws of the association stated that its sole purpose was to advance psychology as a science. The APA permitted a clinical section for a few years but the arrangement never proved very satisfactory. In 1930 the Association for Consulting Psychologists (ACP) was formed as an organization to house psychologists who worked in applied settings, for example, clinics, businesses, schools. The group published the first code of ethics for practicing psychologists in

1933, something that consulting psychologists had been requesting from the APA for more than 15 years. The ACP also founded the first journal for professional psychologists, the *Journal of Consulting Psychology*, begun in 1937. Despite these considerable accomplishments, the ACP was mostly a New York-based organization that was never able to generate a national membership base. In 1938 it gave way to a new organization, the American Association for Applied Psychology (AAAP), which took over the ACP journal as its own publication. The AAAP began with an initial membership of about 400 psychologists in four divisions: clinical, consulting, educational, and industrial. This organization promoted the interests of professional psychologists well. Likely it would have continued as an independent organization for many years, but the emergency situation of World War II called for its merger with the APA in order to ensure high-quality training of clinical psychologists. That merger took place in 1945, creating a new American Psychological Association with a divisional structure borrowed from AAAP and a promise to the professional psychologists to pay more attention to the issues that concerned them. The new APA changed its by-laws to indicate that it was to advance psychology as a science and as a profession (Benjamin, 1997).

If there is any single event that was most responsible for the modern profession of psychology it was World War II. With the war coming to a close, some in the federal government were busy making plans to deal with the healthcare needs of the returning veterans. The planning had actually begun in 1942 when the government directed the Veterans Administration (VA) and the United States Public Health Service (USPHS) to greatly expand the pool of mental health professionals. The need was going to be critical at the war's end, and there simply weren't nearly enough psychiatrists available to meet the need, nor could many more be trained given the size of medical school enrollments and the number of medical students choosing psychiatry as their specialty. So where could they find these mental health professionals? Answer: clinical psychology.

The reason for the government's insistence on the merger of AAAP and APA was that one body represented those who practiced as clinical psychologists and the other body represented the university faculty who educated psychologists. Obviously those two groups needed to work together for the common good.

The VA and USPHS worked with the newly organized APA to (a) develop doctoral programs in clinical psychology, and (b) identify programs of acceptable quality. The former goal led the APA to work with university psychology departments to improve the extant clinical psychology training programs and to encourage departments not engaged in clinical training to initiate such programs. The latter goal led to the creation of the APA's accreditation program that began accrediting doctoral training programs in clinical psychology in 1946. The USPHS promised federal funds to psychology departments training clinical psychologists and the VA promised funding for practicum and internship training for clinical psychology doctoral students. As it turned out, the federal government was accurate in its forecast of a great need for mental health services for veterans. On April 1, 1946, a few months after the end of World War II, there were 74,000 patients being cared for by the VA. Of that number, 44,000 (nearly 60 percent!) were classified as neuropsychiatric patients (Miller, 1946).

The government was concerned about the quality of graduate training, which is why the VA and APA had worked together to establish the accreditation program that the APA would administer to assure some minimal level of quality in clinical programs. Medical schools had a standardized curriculum followed by all accredited medical

schools, and the government looked to psychology to function in a similar way. But psychology doctoral programs, which had been around since the 1880s, had never agreed to any standard curriculum for the doctoral degree in psychology (Benjamin, 2001). Thus the idea of creating such a uniform model, even if it was just for clinical psychologists and not for the rest of psychologists, was a difficult sell to academic psychologists, who were not keen on outsiders telling them how to structure their curriculum. With funds provided by the newly formed National Institute of Mental Health (NIMH), psychologists were urged to find a common training model (Baker & Benjamin, 2005).

Working with NIMH and the VA, the APA invited 73 people to a two-week conference in August 1949 in Boulder, Colorado, to attempt to create a framework for a grand educational experiment. They were asked to examine the then present methods of training psychologists for clinical work, to assess the current and future needs for psychological services, and to recommend a model, if possible, that would offer some level of standardization for how clinical psychologists were trained across diverse psychology departments. Academic departments had enjoyed more than 60 years of independent development; how could there possibly be any hope of consensus?

The agenda was full and the issues complex. The participants discussed such issues as the core curriculum; clinical specialties; private practice; master's-level psychologists; postdoctoral training; undergraduate student access to clinical courses; standards for agencies beyond the university that offered practicum and internship work; student characteristics for selection; financial aid for clinical students; training in ethics; the relationship of clinical psychology to other fields such as medicine, social work, and vocational guidance; licensing and certification; accreditation of programs; federal government involvement with clinical training; training of clinical faculty; placement of the internship (predoctoral or postdoctoral, in the university or outside); society's needs for clinical services; training in psychotherapy and other clinical skills; and training for research. Clearly the task was immense!

The meeting schedule for the two weeks was grueling. If there were any in the group who had looked forward to a summer vacation in the Rocky Mountains, they were quickly disabused of such fantasy. The published papers as well as the private papers and correspondence tell of a dedication to the task that is laudable. In the end the group accomplished what they had come to Boulder to do. They reached consensus on a large number of resolutions, endorsing a model for clinical psychology that called for extensive training in research and practice. Thus was born the scientist-practitioner, or Boulder model, a model that is very evident today in professional training. It is a model that has been much praised, much maligned, and, according to some, rarely if ever tried.

Psychologists had acquitted themselves well in World War II. Whereas their work had mostly been limited to psychological testing in World War I, their roles in the second war spanned the gamut of wartime activities: design of aircraft instrument panels, bomb sights, and other instrumentation; development of training protocols; contributing to the plans for the occupation of Germany and Japan after the war; intelligence work; military recruitment; propaganda; attitude studies; job selection; and testing prisoners of war. After the war, applied psychology benefited enormously, with the two greatest beneficiaries being clinical psychology and industrial psychology. But other fields prospered as well, such as counseling psychology, whose practitioners began being hired by the VA in 1952, the same year that the APA began accrediting doctoral programs in counseling psychology.

The growth of professional psychology in the last half of the twentieth century would be substantial. For example, by the 1970s, psychologists were the major deliverers of psychotherapy, something that had been virtually the sole practice of psychiatrists prior to World War II. (The fight to achieve that status, where clinical and counseling psychologists could practice independently, where they could be reimbursed for their services from insurance companies as part of healthcare coverage, where they would have hospital privileges, and now, in some states, prescription privileges for psychotropic medications, is a book in itself.) In addition to the older professional specialties, namely clinical, school, industrial-organizational, and counseling psychology, new professional specialties began to develop, including forensic psychology, health psychology, and sport psychology (see Benjamin & Baker, 2004). Although the profession of psychology is ever changing, the prospects for psychologists to serve in the public sector continue to look good. This is perhaps most evident in the field of healthcare, where psychology has a huge role to play in reducing deaths from the major killers, namely heart disease, cancer, and stroke, all of which have lifestyle variables as part of their etiology. For that reason, health psychology is the fastest growing of the professional specialties.

The Readings

The profession of psychology consists of many practitioner specialties, the largest of which is clinical psychology. The readings selected here focus exclusively on clinical psychology and more so on what is arguably one of the most significant events in the history of psychology, the Boulder conference of 1949 that produced the training model that is still used today by most doctoral programs in clinical, counseling, and school psychology. There are five readings, although three of them are very brief.

The first reading is chapter 3 from the Boulder Report, which was published in 1950 (Raimy, 1950). The chapter is entitled “Professional Training in the Light of a Changing Science and Society.” It acknowledges that this model training program is being established in the midst of significant changes in the science of psychology and within a post-war American society. It discusses concerns about validation of the instruments used in assessment (such as personality tests) and about therapeutic techniques. It comments on the dangers of a training model that is too uniform. It stresses a need to keep abreast of societal needs to have a clinical profession that will serve the public good. This chapter will give you a feeling for the compromise, caution, and courage that were manifested at this historic conference.

The second reading is by the editor of this book and by historian of psychology David Baker. Baker is the Director of the Archives of the History of American Psychology at the University of Akron (discussed in Chapter 1). This article describes the events in the second half of the 1940s that led to the Boulder conference. It provides a detailed description of the conference in terms of its structure, its goals, and its accomplishments. Emphasis is placed especially on the preparatory work of David Shakow (1901–1981), whose life-long interest in understanding and treating psychological disorders and whose diligent pursuit of clinical psychology as an established mental health profession provided much of the impetus for the growth of clinical psychology in the 1940s (see Cautin, 2006). In fact, Shakow’s 1947 committee report, which recommended a graduate training program in clinical psychology, was the structural backbone of the Boulder Report. Its importance is evidenced by its inclusion

as a 35-page appendix in the published report of the Boulder conference, the only topical appendix in the report (Committee on Training in Clinical Psychology, 1947).

The final three readings are brief commentaries, published in 2000, and written by three very distinguished clinical psychologists: George Albee, Peter Nathan, and George Stricker. Each has written about the Boulder model with the hindsight of 50 years. The comments are insightful and provocative. They raise important questions about the intent of the Boulder architects, the willingness of traditional academic departments to train for clinical service, the nature of the Boulder model in professional schools, the adoption of a medical model for clinical psychology, and the flexibility of scientist-practitioner training. Was the Boulder model a failure from the beginning? Was it tried and found wanting? Was it not tried? These commentaries speak to all of those questions and more. We expect you will find them to be fascinating reading.

Professional Training in the Light of a Changing Science and Society

Victor Raimy

Participants at the [Boulder] Conference were acutely aware that the formulation of training policies is a task that requires analysis of the needs of many segments of society as well as analysis of the over-all public need itself. In addition to the various clinical and age groups for whom the services of clinical psychologists are intended – such as behavior problem children, the aging, and the mentally disturbed – there also must be considered the professional needs of the graduate students undergoing training and of the members of allied professions. Furthermore, the events of the past decade that had brought such marked changes to clinical psychology served to emphasize the fact that the policies of today might well be out of date by tomorrow.

In one sense, the decision to train students broadly in clinical psychology so that their training will include clinical practice with all age groups, and in addition to train them in general psychology and in research methods, represents in itself something of a safeguard against the intensive cultivation of a small area of contemporary social need that might rapidly become insignificant as society and the allied professions undergo changes. For this reason, one of the most frequent comments at the Boulder Conference was that training in clinical psychology should be broadly professional in the doctoral program, leaving most specialization to post-doctoral experience.

The previous chapter discussed the views of the Conference in regard to the relation between clinical psychology and the needs of society. The

next section of the present chapter discusses the very likely possibility that changes will take place within clinical psychology. The final section of this chapter is devoted to various methods for insuring that when changes occur, in either social need or psychology itself, these changes will be recognized and incorporated into training programs.

The Validity of Present Assumptions in Clinical Psychology

Early in the Conference it was felt that some attention should be given to a survey of participants' opinions on the validity of current techniques in clinical psychology. Two extreme viewpoints are most likely to be elicited by such a survey: condemnation of the techniques as being poor, and therefore invalid; or acclamation of them as having demonstrated their usefulness, and as therefore being valid. Accepting either of the extreme viewpoints is probably a matter of individual optimism or pessimism motivated by the purposes one has in mind in making definitive statements. As in any other effort to reach an inclusive generalization, marked inaccuracies are very likely to become intermingled with adequate statements. The validity of the techniques of clinical psychology obviously can be considered only in terms of particular techniques used for specified purposes. Final decisions on the "validity" of a tool or a technique depend ultimately upon objective evidence. Yet at some point in the process, subjective opinions have demonstrable value, if only to chart the next logical steps in finding out how "good" one's present tools may be.

This was the spirit behind the discussions relating to the validity of present techniques in

From V. C. Raimy (Ed.) (1950). *Training in clinical psychology* (pp. 24–33). Englewood Cliffs, NJ: Prentice Hall. Reprinted by permission.

clinical psychology. That our techniques have considerable value must be regarded as an unstated accompaniment to the remainder of this chapter. The Conference would not have been called if this assumption were untenable. Since, however, a discussion of the validity and usefulness of techniques in an admittedly developing field is inevitably oriented toward finding weaknesses and places for desirable improvements, it is only to be expected that unflattering evaluations are likely to predominate. Furthermore, in the field of clinical psychology we have special reasons to be concerned with the validity of the assumptions underlying the techniques in daily use. All the mental health professions are in a similar position of being forced to use whatever techniques *seem* to be effective, since human welfare does not permit the considerable periods of time necessary to evaluate thoroughly those methods devised for diagnosis or treatment in the mental health area. Nor should it be overlooked that research in human personality represents one of the most difficult areas of scientific endeavor, as gauged by the present rash of untested theory in psychology, clinical psychology, psychiatry, and social work.

The urgent needs for service have sometimes forced the psychological worker to use inadequately tested tools and techniques. The war and postwar requests for service faced the clinical psychologist with many new demands for which he was only partially equipped. Since no other discipline seemed to be any better equipped for certain types of work in this field, the clinical psychologist usually accepted the responsibility of trying to do what he was asked.

The following report from a special committee appointed to consider the "validity of present assumptions" furnishes some of the tenor of discussions on this topic.

Social needs, demands for service, and our own desire to serve effectively have compelled us to engage in programs of action before their validity could be adequately demonstrated. We have, perforce, used tools in need of sharpening, and relied on intuition in lieu of data. We have accepted assumptions, sometimes uncritically, sometimes skeptically, and sometimes for the time being only or as "best available knowledge."

We are assuming, most broadly perhaps, that we are of service. We are assuming that we do know something about human behavior and its betterment, that our instruments and techniques are relevant and effective, that our training procedures enhance the competence and sensitivity of our successors, and that new knowledge of importance emerges from our research. We believe that many of these and other assumptions can be validated.

We accept assumptions of this order without apology. While we believe in what we are doing, we also accept the responsibilities it entails. At the same time we accept an obligation to evaluate our work and ourselves. We accept it as an obligation in some sense peculiar to clinical psychology, implicit in our role of clinician among scientists and scientist among clinicians.

Examining the validation task before us, this Conference finds encouragement in the progress we have made through the years – but it is chiefly impressed by the work that is still to be done.

We recognize the difficulties inherent in bringing scientific methods to bear upon living people, particularly upon the scientist himself, in validating method and criterion against each other simultaneously, and in measuring status in the midst of change and change from uncertain base lines of status. We recognize subtle conflicts between the therapeutic attitude and impartial objectivity. We are, nonetheless, determined, as a profession, to face the validation issue squarely. We challenge ourselves to make our predictions more explicit, and to subject them to rigorous verification tests, to deal with the socially significant, tangible problems of concern to the lay community, to fit theory to facts, methodology to function.

A summary of the Conference's attitudes toward the validity of our present techniques was approved, without a dissenting vote, in the form of the following resolution:

While the clinical psychologist has faith in the value of his service efforts, he is increasingly concerned with the improvement of the scientific status of his profession through meeting the needs for validation in the following areas.

- (1) Personality theories
- (2) Research methodology and validity criteria
- (3) Training procedures

- (4) The clinical psychologist himself as a participant observer and professional practitioner
- (5) The instruments and technique used in clinical practice.

Personality Theory. Although some participants may have come to the Conference prepared to do battle for or against certain specific techniques, the discussion during the opening days revealed such unanimity of opinion about the primary task of the clinical psychologist that what had been thought of as major battles turned out to be minor skirmishes. The discussion of technique validity pointed to one rather simple fact: only when there is general agreement on the major principles of personality organization will the problem of evaluating techniques designed to assess personality manifestations or to change personality functioning be much nearer solution. Without an underlying theoretical framework, the evaluation of a particular technique becomes an almost hopeless task of trying to decide whether one observer's opinion is any better than that of another. Observable data, in the form of objective behavior or even verbal report, form the only basis for progress in scientific psychology. Deciding what observable data to select for analysis constitutes the great contribution to be made by personality theory.

The Criterion. As in many previous meetings and in countless published articles, the problem of finding suitable criteria against which test or treatment results can be gauged was a major topic of lament. One sub-group reported, "The unavailability of good criterion indices and measurements constitutes a major obstacle to the validation of our techniques and theories. Ratings, clinical diagnoses, and the like, which commonly serve as criteria, leave much to be desired. Behavioral events seem to hold the greatest promise as dependable and meaningful criteria." This statement was obviously directed against the acceptance of "expert judgment" as a criterion for deciding whether, for example, a group of subjects actually were particular kinds of schizophrenics, whether particular patients under treatment had actually improved, and so forth. Who is mentally healthy and who is not mentally healthy also seems to be a problem in urgent need of solution.

Economics and Cooperative Research. Throughout every discussion of research in clinical psychology arose an insistent complaint over the sheer expense of assembling sufficient personnel, subjects, and time to make a thorough study of a given problem. Fragmented research seems to be uncomfortably characteristic of our present literature. New techniques or hypotheses spring into existence with impressive supporting theory or significant differences between groups, only to shrink into question marks after the passage of a number of years. Such developments are undoubtedly characteristic of scientific progress, but need not always be tasted to the dregs.

One possible solution is to encourage particular individuals to devote their lives to small areas in the hope that time will substitute for numbers; but many of the problems of psychology and psychiatry should not wait a lifetime for solution, although many undoubtedly will. Another solution, which has received much support in the physical sciences (atomic development) and the biological sciences (cancer research), lies in the possibility of cooperative investigation on a national or regional scale. Clinical psychology and psychiatry are badly in need of many extended investigations into the validity of their constructs in personality theory and the usefulness of their diagnostic and therapeutic techniques.

Unanimously, therefore, the Conference approved the following resolution:

This Conference approves national planning and cooperative group research among universities and other institutions on the evaluation of clinical techniques and personality constructs. Such investigations can often be carried on most effectively by large-scale carefully integrated program planning.

Implementation of this resolution must, of necessity, wait upon the efforts of individuals or small groups to provide significant and convincing research programs that can be widely endorsed and for which financial support can be secured. Since large-scale cooperative investigations seem at present to represent one of the most effective methods for securing badly needed research data, this resolution in reality presents a challenge to individuals in the research field to devise plans that will call forth the necessary support. The

implication for training is obvious. Universities should rather encourage students to consider the possibilities of cooperative research than insist upon the creative insights of the individual psychologist as the only method for conducting research investigations.

In summary, it seems that the Conference was quite willing to go on record as believing that our tools and techniques are badly in need of validation despite the fact that they serve some useful purposes at the present time. In the field of psychotherapy, validation of present techniques and development of more effective ones constitute two of the most pressing problems. It may well be that research designed to clarify principles of personality organization will be more effective for providing solutions to present problems of technique than will research in any other area.

Diversity versus Uniformity

It has been previously pointed out that the Conference deliberately decided to emphasize the importance of broad, fundamental training in the doctoral program as one means of insuring that clinical psychologists will have an opportunity to develop a professional *field* rather than a narrow specialty. An emphasis upon diversity can also help to prevent the professional stagnation that may result from a highly uniform training program so set in a particular orientation that the profession remains unresponsive to new or changed social and professional needs.

This interest in diversity does not mean that the Conference failed to reach any agreement on a basic minimum of training in clinical psychology. The following resolution was prepared to express the view of the Conference in this respect:

The graduate education of all clinical psychologists should involve thorough and intensive work in four areas:

- (1) General psychology, which includes such subjects as systematic, experimental, and social psychology
- (2) Clinical psychology and mental hygiene, which include broad training in theory, method, and techniques

- (3) Field work with a variety of clinical problems at different levels of responsibility
- (4) Research and methods of investigation.

Beyond these core areas, each department should provide additional education in accordance with its distinctive facilities and objectives. The resources of each university should be so integrated and used as to provide that diversity of methods and objectives which will insure the continued possibility of experimentation with new methods of education to the end that quality and vitality are not sacrificed for uniformity.

Such a policy of encouraging diversity of training might well be undetermined or blocked by accrediting bodies that insist upon uniformity as a short-sighted means of achieving immediate goals at the expense of more important, long-range objectives. Although the accrediting body for clinical training programs has itself been urging a policy of diversity, the Conference thought that future committees might change their thinking in this respect. Realizing that a policy of diversity should be fostered at all levels in order to insure its acceptance, the Conference adopted the following resolution, which was forwarded to the American Psychological Association at its Denver meeting in September, 1949:

We urge the creation of a committee with broad powers to examine and review educational philosophy, methods, and standards beyond those serving as the foundation for accreditation in any one field of applied psychology, and with the power to review accreditation policies and practices. (Further discussion of accreditation will be found in Chapter 15.)

The Pros and Cons of Uniform Training Programs. Although the Conference endorsed a policy of diversity in training programs, it also agreed upon a minimum core of common training. The following advantages and disadvantages of a uniform educational program were considered.

In some ways, highly uniform training provides protection to the public in that the title "clinical psychologist" then comes to have a very definite meaning. Such protection may be illu-

sory, however, in view of the fact that insistence upon uniformity may sacrifice the advantages to the public that may be gained more effectively by keeping the profession constantly aware of long-range objectives than by trying to satisfy immediate goals. Furthermore, employing agencies and institutions are well aware that most professional training attracts students with widely divergent goals and backgrounds so that selection of professional employees becomes a matter of selecting individuals with particular qualifications rather than of selecting employees because of the titles they bear. The inclusion of a common core of training should help to identify broadly those persons who have been trained as "clinical psychologists"; but not all clinical psychologists will have identical interests and competencies, any more than all lawyers are alike because they have the same degree and have passed similar examinations.

A highly uniform training would also make for easier relationships between clinical psychologists and members of allied professions, with whom clinical psychologists are in constant contact. Here again, the same counter-arguments seem to be valid. No one expects all persons called psychiatrists or psychiatric social workers to bear the same stamp. Differences in interest and area of activity are positive assets in those professions. Different persons with the same title cover broad fields of work in improving mental health, from children to the aged, and from minor maladjustments to serious psychoses. It was felt that the needs of the other professions will best be served if clinical psychology likewise supports a policy that trains persons for many types of clinical psychology rather than for one narrow specialty.

One of the most regrettable aspects of diversified training programs lies in the difficulty that arises when a student transfers from one institution to another. Time is almost inevitably lost in such transfers. Since, however, the number of

transfers is very small, and likely to become even smaller as admission to clinical training programs becomes more difficult to obtain, little action was taken on this problem. There are sometimes distinct advantages to students in being able to transfer from one university to another in order to study with staff members known for a particular specialty. Such cross-fertilization has been encouraged in the past. Its advantages may still be utilized in some instances by having students attend other universities for a semester or even a full year without transferring for completion of the degree.

Mention should also be made of two further points that were influential in the thinking of Conference participants. First, in its present stage of development, training in clinical psychology cannot afford to become crystallized. Second, a too uniform development is often conducive to compliance in the accepting of educational goals and methods, rather than to the use of individual initiative in the working out of more desirable programs.

In summary, the Conference felt that training programs for clinical psychologists must reflect the changing needs of society as well as the theoretical and technical changes taking place within the profession of psychology and its related fields. It was agreed that in view of the wide gaps in our present knowledge, the validation of our working assumptions is a task of the utmost importance. In addition to research carried out by individuals, group or cooperative research would help in arriving more quickly at answers to pressing problems of human welfare. In order to keep the profession sensitive to changes in society and in psychology, diversified university training programs should be encouraged, although a basic core of general and clinical psychology will be necessary to provide a certain amount of uniform background.

The Affirmation of the Scientist–Practitioner: A Look Back at Boulder

David B. Baker and Ludy T. Benjamin, Jr.

The science of psychology has responsibilities in the matter which cannot be evaded. The need for applied psychological work is great and unless psychology can provide adequately trained personnel, other disciplines, which recognize both the need and responsibilities, will take over the function of which are more properly the province of the psychologist. (Shakow, 1942, pp. 277–278)

It seems hard to imagine that 50 years ago professional psychology was in its infancy. The demand for professional psychologists increased dramatically after World War II, and the realization that demand greatly exceeded supply resulted in a flurry of activity among psychologists, government agencies, and institutions of higher education. The synthesis of this was the Boulder Conference on Graduate Education in Clinical Psychology (referred to throughout as the “Boulder conference”) held in Boulder, Colorado, from August 20 through September 3, 1949. A publication of the proceedings appeared in 1950 (Raimy, 1950).

The legacy of the Boulder conference is lasting. The mention of Boulder creates an instantaneous association with the scientist–practitioner model of training in professional psychology. Indeed, one outcome of the Boulder conference was a strong endorsement of the belief that the professional psychologist could and should be both researcher and practitioner. Psychologists have grown accustomed to this linkage, and for better or worse, the scientist–practitioner has become an axis around which

many decisions, judgments, arguments, and philosophies of training revolve (for a review, see Freedheim, 1992).

The Boulder conference was an ambitious undertaking. The debate over the scientist–practitioner model was one of the many substantive issues addressed by the 73 conferees during an intensive two weeks of self-evaluation of the then current values, beliefs, and practices in training for professional psychology. A look back at Boulder is instructive for many reasons. Among others, it highlights the contributions and motivations of those who were crucial in shaping professional psychology and reveals how those actions were shaped by the historical period in which they occurred.

Preludes to Boulder

Concerns about the training of professional psychologists had been voiced for decades before the Boulder conference (see Routh, 2000, this issue). The 1940s saw unprecedented attention to the issue, and in the span of a decade, the professional psychologist was engineered and produced in a way that has stayed more or less constant for half a century. As historical shorthand, it is often tempting to point to an individual as representative of a time, an event, or a movement. Many times such a designation can do a disservice as it may dismiss relevant information, context, and achievement. In a few other cases, the contributions of a single individual are of such magnitude that the designation is appropriate. It could be argued that this is true of the work of David Shakow (1901–1981), a psychologist whose contributions to the formal development of the Boulder model were substantial.

Shakow's 1941 American Association for Applied Psychology (AAAP) report

In 1941, David Shakow, chief psychologist at the Worcester State Hospital, was a member of the Committee on the Training of Clinical Psychologists that had been appointed by the AAAP. A. T. Poffenberger, who had attempted to set up a training program for clinical psychologists at Teachers College, Columbia University, in the 1930s (Morrow 1946), served as chair. In addition to Shakow and Poffenberger, the committee included Henry Murray, C. M. Louttit, Elaine Kinder, Joseph Zubin, Edgar Doll, Carl Rogers, Robert Yerkes, H. S. Liddell, Donald Lindsley, Donald Marquis, Carney Landis, Ward Halstead, Carlyle Jacobsen, J. Q. Holsopple and F. Heiser (Poffenberger, 1941). Shakow set much of the agenda for the initial meeting by providing a list of topics for discussion and providing a list of relevant references for reading.

The committee met for a day-long conference on May 3, 1941, at the New York Psychiatric Institute. Following the meeting, Shakow prepared a draft of a training document and asked Lindsley to distribute it to the committee members for reaction (Shakow, 1941). Shakow outlined a four-year PhD program in which the first year was given to establishing a systematic foundation in psychology and medical science needed for clinical work, the second year for psychometric and therapeutic principles and practices, a third year for internship experience, and the fourth year for completion of the dissertation (Shakow, 1942). Reaction to the report was largely favorable, although a few members, including Robert Yerkes, encouraged Shakow to adopt a broader perspective of professional psychology training to include such areas as “industrial psychology, educational psychology, [and] social-consulting” (Yerkes, 1941). Shakow (1942) responded,

In presenting this program of training of the clinical psychologist, it is recognized that the training is weighted in the direction of psychopathology, especially as it is represented in the psychiatric hospital. This is in part deliberate, in part due to the background and experience of the writer. With relatively few changes, however, the general scheme is adaptable to other clinical fields and even to the educational and industrial fields. (p. 76)

By August of 1941, Shakow's report had been endorsed by the committee and forwarded to the AAAP by Poffenberger, who recommended that the AAAP appoint a committee to design a program for the professional training of clinical psychologists.

The Penn State conference

At the annual meeting of the AAAP in Evanston, Illinois, in August of 1941, Poffenberger's recommendation was accepted and the Committee on Training in Clinical (Applied) Psychology was formed with Bruce V. Moore of The Pennsylvania State University (Penn State) serving as chair. There was continued concern that Shakow's plan failed to adequately incorporate a range of applied areas. As Moore noted,

This committee, which was originally authorized at the Evanston meeting in 1941, was continued at the New York meeting with instructions to expand its study to include all fields of application of psychology and make whatever reorganization of its membership would be necessary to expedite this expanded field of responsibility. (AAAP, 1943, p. 23)

The reorganization included the formation of three subcommittees: Educational Institutions, Health and Welfare Institutions (of which Shakow was a member), and Business and Industry.

On June 22, 1942, the Institute on Professional Training for Clinical Psychologists met at Penn State. The conference bulletin (*The Pennsylvania State College Bulletin*, 1942) described the purposes:

To provide for a conference of all psychologists interested in the professional preparation of psychologists, to provide an opportunity for the Committee on Training in Professional (Clinical) [Applied] Psychology of the American Association for Applied Psychology, to hold meetings and have hearings of other psychologists interested in professional training, and to provide an advanced symposium of lectures and seminars for graduate students preparing for professional work in clinical psychology.

Representatives of each of the three subcommittees presented papers related to their areas of interest and expertise. The outcome was an abbreviated outline of a training program (AAAP, 1943) largely along the lines of what Shakow had presented a year earlier to the AAAP.

The 1945 clinical training report

World War II saw the mobilization of psychologists in service to the war effort, which among other things included the integration of AAAP with the American Psychological Association (APA) in 1944. As part of this reorganization, AAAP's Committee on Training in Professional (Applied) Psychology and APA's Committee on Graduate and Professional Training merged and appointed the Subcommittee on Graduate Internship Training. The new subcommittee was chaired by Shakow and included many familiar names in clinical psychology training, including Robert Brottemarkle, Edgar Doll, Elaine Kinder, Bruce Moore, and Stevenson Smith (Morrow, 1946). The committee met at the Vineland Training School (where Doll was director of research) from October 12 to 14, 1944. The result of that meeting was the report "Graduate Internship Training in Psychology," which appeared in the *Journal of Consulting Psychology* in 1945 (Shakow et al., 1945).

The title of the report is somewhat misleading as it contained considerable discussion of an entire training program in clinical psychology, not only internship training. In discussing the current state of affairs the report noted,

The scope of activity permitted the clinical psychologist has generally been quite limited. To explain this situation, the suggestion has frequently been advanced that it was primarily due to the poor preparation of its practitioners and the low standards in the field generally. Whether this is so or not, certainly any real broadening of its scope can come only through the institution of sound professional instruction and standards. (Shakow et al., 1945, p. 244)

The committee was intent on elevating the status of clinical psychology:

We believe that there is general concurrence in our opinion that few clinical psychologists, as

they are at present prepared, can, at the end of their instruction period cope adequately with the problems with which they are faced. It is the purpose of this report to present a program which should go far towards remedying the situation for the future. (Shakow et al., 1945, p. 246)

The report's discussion of professionalizing clinical psychology supported the doctoral standard and gave rise to consideration of alternatives to the traditional PhD:

It is doubtful if anything less than a doctor's degree would be satisfactory for the practice of clinical psychology. Some question might be raised as to the kind of doctor's degree to be awarded. Although there are some reasons to adhere to the Ph.D. degree, the arguments for a truly professional degree, for example, a Ps.D. are many, and should be given careful consideration. (Shakow et al., 1945, p. 265)

The report, although a committee document, clearly carried the signature of David Shakow. By now there had been enough iterations of Shakow's triadic concept of diagnosis, therapy, and research to make it a permanent feature of the training landscape.

The Committee on Training in Clinical Psychology (CTCP)

The ever-increasing recognition of the need for professional psychologists in the public sector led the United States Public Health Service (USPHS) and the Veterans Administration (VA) to appropriate funds for training of professional psychologists (for an extended discussion, see Miller, 1946; Moore, 1992; Sears, 1947). The programs offered by these agencies were tremendous in scope and cost and were positioned to make professional psychology a dominant force in graduate education and within the newly reorganized APA. In 1947, the VA and the USPHS requested APA's assistance to detail how more professional psychologists could be trained. The CTCP was authorized to include a representative of general psychology, a department head, and a university administrator. APA President Carl Rogers asked Shakow to chair the committee, and by June of 1947, the remainder of the

committee was constituted to include Ernest Hilgard, E. Lowell Kelly, Bertha Luckey, Nevitt Sanford, and Laurance Shaffer. The task of the committee, which seemed enormous, was to (a) formulate a recommended program for training in clinical psychology; (b) formulate standards for institutions giving training in clinical psychology, including both universities and internship and other practice facilities; (c) study and visit institutions giving instruction in clinical psychology and make a detailed report on each institution; and (d) maintain liaisons with other bodies concerned with these problems, including the committees of the American Orthopsychiatric Association, the National Committee for Mental Hygiene, and others (APA, 1947, p. 539).

The committee was asked to have a report on a recommended training program by the September meeting of the APA. Concerned with the limited time available, Shakow (1947) sent each member a copy of the 1945 report "Graduate Internship Training in Psychology" (Shakow et al., 1945). As before, Shakow asked committee members to critique the report, and as before, the committee was largely unanimous in its support of the document. The CTCP report was submitted and endorsed at the 1947 meeting of the APA in Detroit and published in the *American Psychologist* in December 1947 (APA, 1947). Known as the "Shakow Report," it would become the central working document of the Boulder conference. It was the most comprehensive statement of training for clinical psychology ever written, offering detailed recommendations on achieving competence in diagnosis, therapy, and research.

The task of visiting and evaluating institutions giving instruction in clinical psychology was begun in February 1948 and resulted in two published reports on doctoral training facilities (APA, 1948, 1949). By 1949, the committee had accredited 43 doctoral training programs at 41 universities. At these universities, clinical psychology students represented nearly half of the doctoral students in psychology, with an estimated 175 receiving the doctoral degree in clinical psychology in 1949 (APA, 1949).

The committee applauded the efforts of these programs, but some serious concerns were raised. It was noted that clinical techniques were empha-

sized at the expense of instruction in theory and research methodology, prompting a call for more rigorous testing of basic assumptions in theory, practice, and teaching. The committee also believed that the scope of clinical psychology was too narrow. Although the focus on psychiatric hospitals and severely disturbed populations was justified as a response to social need, it was also noted that clinical psychology should be prepared to apply its skills to other social needs as they arose. Psychotherapy was also a pressing concern, and the committee advocated supervised experience throughout the training years, not just during internship or postdoctoral years.

Finally, the committee addressed the issue of students entering private practice:

Most all departments are opposed in principle to the private practice of clinical psychology. The Committee, as such, takes no stand on the question, though it is our consensus that the problems and responsibilities of clinical practice are so complex that, in our present state of knowledge, private practice by the single, independent psychologist offers much less value either to the client or to the psychologist than does the team or group approach in association with competent members of other professions. (APA, 1949, p. 340)

The Boulder Conference

By 1949, clinical psychology had a prescribed program of doctoral training, standards for accreditation of doctoral programs, accredited doctoral training programs and internships, growing ranks of students with strong government support, and a ready supply of employment opportunities. Relations with other mental health professions were cordial, as there were plenty of needs and jobs to be filled.

The USPHS was pleased with the progress of the CTCP but had concerns that the rapid expansion of professional psychology left little time for interaction and communication between VA hospitals, mental health centers, and university departments. What was termed "wide variation in practice and thinking" (Raimy, 1950, p. 8) led the USPHS to join forces with the APA to support conferences to formulate principles and procedures for the training of clinical psychologists.

At a joint meeting of the USPHS and the CTCP on September 5, 1948, the suggestion of a six-week summer institute to discuss problems in clinical training was made. The institute would be financed by the USPHS with a training grant of \$40,000 and would be sponsored by the APA.

On January 8 and 9, 1949, a planning meeting was held in Chicago. Members of the CTCP, the representatives of the APA board of directors, and Carlyle Jacobsen and John Eberhart of the USPHS met under the chairmanship of David Shakow to discuss the summer institute ("Report of the Planning Committee," 1949). Over the two-day meeting, major details of the institute were worked out. Among other things, a name had to be selected, and after some discussion there was agreement on the Boulder Conference on Graduate Education in Clinical Psychology. An executive planning committee, chaired by E. Lowell Kelly, that would oversee the conference was appointed to include two members of the CTCP, two representatives of the clinical directors group, one member from the departmental chairmen group, and two ex-officio members, one to represent the USPHS and the other an administrative officer ("Minutes of the Planning Committee", 1949).

Conference participants were to be selected from a number of sources. All the members of the CTCP would participate. The largest group would be composed of a representative from each of the university training programs evaluated during the 1948–1949 site visits. Universities were also to be represented by a number of department chairs of general and experimental programs. One person would represent internship centers from a hospital, clinic, and school program. A representative from the VA would be invited, as well as a psychiatrist, social worker, and psychiatric nurse as representatives of their respective disciplines. It was estimated that there would be some 60–65 participants. An invitation had been made to hold the meeting at the University of Colorado at Boulder, thus making it convenient for the participants to attend the annual meeting of the APA scheduled in Denver.

Victor Raimy, director of the clinical training program at the University of Colorado at Boulder, became the administrative assistant to the executive planning committee and did considerable

work on the logistics of the conference. Kelly convened the executive planning committee in Chicago on April 30 and May 1, 1949. The committee expressed the hope that the Boulder meeting would improve communication between individuals and institutions interested in the development of professional psychology, provide a new feeling of unity in psychology, and serve as a model for future training conferences ("Minutes of the Executive Planning Committee," 1949).

On Saturday, August 20, 1949, 73 participants from across the United States and one from Canada, representing a diverse mix of individuals and institutions, arrived in Boulder and settled into Regents Hall or various motels and cottages in the Boulder area (see Benjamin & Baker, 2000, this issue, for a list of participants and their affiliations). The conference opened with welcoming addresses by the vice president of the University of Colorado at Boulder and Karl Muenzinger, chair of the psychology department. Kelly provided an overview of the conference, and Robert Felix, of the USPHS, gave an address on the role of psychology in meeting the mental health needs of the nation. The agenda for the next 15 days consisted largely of intensive consideration of 18 key discussion points that addressed the issues germane to the development of a profession: needs and function, training, ethics, relations with other professions, certification and licensure, and so on. Each day participants were divided into four groups, each with a chair and a reporter. All groups considered the same topic during a morning session. In the afternoon, everyone would be assembled together to review and summarize the reports of each of the morning groups. The final days of the meeting gave considerable attention to clarifying the most significant issues relating to policy. Issues on which a consensus could be reached were framed as resolutions and endorsed by the conference. By the end of the conference, approximately 70 resolutions had been adopted.

1950: The published proceedings

The most complete report of what occurred during the Boulder conference can be found in *Training in Clinical Psychology*, edited by Victor

Raimy (1950). Essentially, each chapter covered one of the topic areas addressed by the conference. The report's appendix contained a reprint of Shakow's 1947 report on training in clinical psychology.

The conference had to serve many masters, one of which was its main benefactor, the USPHS. A resolution that served the needs of the USPHS also served as an opening for the introduction of the scientist-practitioner model, which was the embodiment of Shakow's trinity of diagnosis, therapy, and research:

The basic needs of our society for the services of clinical psychology are of two major kinds:

- a. Professional services to:
 - (1) Individuals through corrective and remedial work as well as diagnostic and therapeutic practices
 - (2) Groups and social institutions needing positive mental hygiene programs in the interest of better community health
 - (3) Students in training, members of other professions, and the public through systematic education and the general dissemination of information
 - b. Research contributions designed to:
 - (1) Develop better understanding of human behavior
 - (2) Improve the accuracy and reliability of diagnostic procedures
 - (3) Develop more efficient methods of treatment
 - (4) Develop methods of promoting mental hygiene and preventing maladjustment.
- (Raimy 1950, pp. 20–21)

The other master that had to be served was a vocal segment of the academic community that was scornful of the professional psychologist and doubtful about whether such a psychologist could also be a researcher:

There was much honest doubt whether all graduate students could be trained in both areas [research and practice]. Such doubts and questionings continued, for many, throughout most of the Conference. At the end, however, the original chasm seemed to have largely disappeared, and recognition of the importance of including research training in the preparation of all clinical psychologists was generally accepted. (Raimy, 1950, p. 23)

In a prophetic note it was offered that "The decision of the Conference to recommend the training of the clinical psychologist for research and practice, with equal emphasis on both, is likely to chart major policies in training institutions for some time to come" (p. 79).

A number of themes ran throughout the report, some unique to the conference, others common in the reports of the decade leading up to Boulder. The interests of the USPHS in prevention were echoed throughout Boulder, and a philosophy of understanding normal persons in the context of the environment in which they lived was often repeated. Together with earlier protests about Shakow's emphasis on the hospital-based training, a consensus emerged:

The majority of the Conference was clearly in favor of encouraging the broad development of clinical psychology along the lines that extend the field of practice from the frankly psychotic or mentally ill to the relatively normal clientele who need information, vocational counseling, and remedial work. Specialization in any of these less clearly-defined branches has now become an open issue that must be faced sooner or later. (Raimy, 1950, p. 113)

Looking back, it is easy to see that in 1949 the concept of clinical psychology included what would today be called counseling psychology. The comparison was not lost on the conferees who voted to support a recommendation that

The American Psychological Association and its appropriate division should study the common and diverse problems and concepts in the fields of clinical psychology and counseling and guidance with a view to immediate interfield enrichment of knowledge and methods. Consideration should also be given to the possibility of eventual amalgamation of these two fields. (Raimy, 1950, p. 148)

Such agreement was more elusive in the case of personnel and school psychology.

The market for mental health professionals was strong, and the perceived economic threat from professional psychologists was not high, making more collegial relations with allied disciplines possible. The conferees addressed issues of relationships with allied disciplines (psychiatry,

nursing, social work, and school, counseling, and personnel psychology), and the tone was clearly cooperative. This pleased the USPHS, which was far less concerned about professional rivalries and jealousies and much more concerned with developing a sound national mental health policy.

There were calls for better advising of students and improved mentoring in teaching, practice, and research. Discussion was given to the type of personality and the traits best suited for training. Rigidity, social prejudice, frequent changes in courses of study, and an excessive concern for helping others were mentioned as undesirable, and conferees agreed that more research on selection was desirable. The issue of diversity in the selection of doctoral students was debated, and with what was termed "minor exception" the conference affirmed that "Graduate students in clinical psychology should be selected solely on the basis of reasonably determined aptitudes for education and practice in the profession, without regards for economic status, race, creed, or sex" (Raimy, 1950, p. 122). The resolution was an ideal; the realities of the times were that prejudice and discrimination did occur.

The question of control was frequently addressed. In contrast to today, where the pursuit of large federal grants is akin to the search for the Holy Grail, 50 years ago there was fear of meddlesome purse strings attached to federal dollars. The conference went to great lengths to assert that the substantial financial support of the USPHS and the VA was not synonymous with government control. This concern was expressed through a unanimous resolution that read,

Despite the deep-seated and recurrent fear on the part of the universities, domination by the Federal Government through financial coercion appears up to this point to be at a minimum. Federal agencies are to be commended for their sincere efforts to avoid coercion or domination of educational programs. (Raimy, 1950, p. 162)

Control was also in question as the conferees struggled with accreditation. Many feared that accreditation of clinical psychology training programs would lead to blanket evaluations of

departments based solely on the merits of their clinical programs. This fear was justified given that clinical psychology training was relatively new with few experienced programs and even fewer experienced faculty. A larger concern was that accreditation would bring with it a demand for a uniform curriculum, thus denying individual departments the freedom to structure degree programs as they wished. It appeared to some that the CTCP held too much power in its role to develop and evaluate training programs. In response to this, the conference adopted a resolution stating that "the APA [should] consider the possible advantages of separating the two functions of establishing objectives and standards for training in psychology, on the one hand, and accreditation, on the other" (Raimy, 1950, p. 177).

Summary and Conclusions

In the aftermath of World War II, several influences were paramount in forcing academic psychology to recognize, albeit reluctantly, the coming professionalization of psychology. The federal government, wishing to avoid a repeat of blunders following World War I that led to significant dissatisfaction among veterans, took proactive steps to ensure that mental health needs of the new veterans would be met. The USPHS and the VA were mandated to expand significantly the pool of mental health practitioners, a direction that led not only to the funding of the Boulder conference but also to the development of APA's accreditation program, funded practica and internship arrangements with the VA and the USPHS grants to academic departments for clinical training.

The GI Bill, amended to include payment for graduate education, created tremendous interest in graduate programs in psychology. As a result, psychology programs were inundated with funded applicants, most of whom were interested in the application of psychology to clinical and other applied fields.

Graduate psychology departments were mixed in their views of this "blessing." The reality of a separate curriculum for professional training in psychology was a bitter pill for some academic psychologists to swallow. Graduate departments

feared that control of their programs would be taken over by external forces and that they would lose their right to determine their own curriculum. Further, they feared the domination of clinical training within their own departments and the effects of such educational emphasis on their traditional experimental programs.

The Boulder conference brought together these disparate needs and concerns, although one can argue about how well some points of view were represented with respect to others. It was a time of high anticipation and fear. The conference could easily have ended in failure, with such diverse interests being unable to reach any consensus. There are many letters in the correspondence of committee members that suggest disagreements serious enough to prevent the development of any single model of training. Instead, by most yardsticks that one could apply, the conference succeeded, perhaps beyond the dreams of many of those in attendance who were most invested in a model for professional training.

In evaluating the legacy of Boulder, several points are apparent. First, the conference succeeded because 73 individuals were able to agree to some 70 resolutions in 15 days, creating the scientist–practitioner model of professional training. Such consensus was arguably a remark-

able achievement. The endorsement of the model by academic units followed with little evident resistance, although it is clear that some Boulder-model programs were developed that bore little resemblance to the model's insistence on significant training in both research and practice. Second, as a response to social and political needs, the conference was clearly a success. The cooperation of the APA, the USPHS, and the VA benefited all three entities. Clinical psychology was given the financial support and backing to advance it as a profession, and the federal government was able to begin the process of securing the personnel needed to address the mental health needs of the nation.

The architects of Boulder were clear that their vision of training for professional psychology should be viewed as dynamic and experimental rather than fixed and prescribed. Certainly there are several variants of professional training extant today, yet the overwhelming majority of currently accredited programs in psychology label themselves as “Boulder-model” programs or “scientist–practitioner” programs. Still, new national conferences on professional training in psychology occur with some regularity as participants seek to resolve many of the same concerns debated by those at Boulder. The grand experiment goes on.

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The Boulder Model's Fatal Flaw

George W. Albee

The Boulder model contained a fatal flaw that has distorted and damaged the development of clinical psychology ever since. The flaw was *not* the insistence on scientific training for clinicians. It was the uncritical acceptance of the medical model, the organic explanation of mental disorders, with psychiatric hegemony, medical concepts, and language. More than anyone else, it was David Shakow, a respected clinician and scientist, who influenced the new field's training and orientation in the medical direction. Doing research at Worcester State Hospital, he accepted the concept of "mental disease" largely because there was no alternative for him. For years, he argued that clinical psychologists should be trained in the "best" places, psychiatric centers (Albee, 1969).

Psychology departments, after World War II, accepted uncritically and ignorantly the temptation to help train clinical graduate students in the mushrooming Veterans Administration (VA) mental health clinics, in VA hospitals, and in state hospitals. University hospitals were especially favored. Psychologists were needed to provide "psychiatric services," especially for the vast number of veterans needing interventions for mental and emotional disorders (Albee, 1998). By placing psychology graduate students in psychiatric settings for training and service, psychologists lost their students to the invalid, ideologically tattered, often incompetent psychiatric worldview. Psychologists violated, again out of ignorance and inexperience, the fundamental criterion for professional training: Train students in your own house, otherwise you are an ancillary profession (Albee, 1964).

Psychologists made another major error when they tried to educate clinical psychologists in university graduate schools, where psychology was not in control of its own budget and had no experience in professional preparation to control its own destiny. Professionals must be trained in separate professional schools. I was one of the first to argue for separate professional schools of psychology in universities, with separate psychological centers where psychologists spoke their own language (Albee, 1964). After nearly 20 years of the Boulder model, many psychologists had developed a strong opposition to the domination of clinical psychology by psychiatry and psychiatric models. These psychologists urged psychology to establish its own training-service centers where psychological learning models were presented, and the psychological model of mentoring was the norm (Albee, 1964). It was not to be. Clinical psychologists had learned to treat their "patients" in private offices and to collect from third-party payers who required only a medical-psychiatric diagnosis for reimbursement. Things might have been different with the choice of a national training committee chair steeped in learning theory and education rather than in hospital psychiatry. The course of psychological history would have been completely different. Psychology passed up a learning model more appropriate for its intervention (Albee, 1975).

There are major political differences between a medical/organic/brain-defect model to explain mental disorders and a social-learning, stress-related model. The former is supported by the ruling class because it does not require social change and major readjustments to the status quo. The social model, on the other hand, seeks to end or to reduce poverty with all its associated stresses, as well as discrimination, exploitation, and prejudices as other major sources of stress

leading to emotional problems. By aligning itself with the conservative view of causation, clinical psychology has joined the forces that perpetuate social injustice.

Psychologists are now stuck in a blind alley blocked by a for-profit health care system, a corporate world where the only concern is for the bottom line. Psychotherapy is effective, but it is too expensive to be profitable to the corporate health system, so psychotherapy is not

supported. Drug therapies, developed by the giant pharmaceutical companies, are in, and clinical psychology, long ago locked into the organic/medical model, has little choice but to go along. Now to survive psychologists must strive to obtain prescription privileges, an effort that further supports the organic/brain-disease model. Psychologists have sold their souls to the devil: the disease model of mental disorders (Albee, 1998).

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The Boulder Model: A Dream Deferred – Or Lost?

Peter E. Nathan

Over the past few years, a number of psychologists have written and spoken a good deal about empirically supported treatments. I have been among them (e.g., Nathan, 1996, 1998, 1999; Nathan & Gorman, 1998; Nathan, Stuart, & Dolan, in press). As a consequence, I have become very familiar with the rhetoric, pro and con, relating to what has turned out to be a surprisingly controversial issue, even among Boulder model psychologists. However, I acquired a new perspective on the issue recently when my brother, who is not a psychologist but is bright and learned nonetheless, responded to something I had written on the topic by asking me, simply, what all the fuss was about. Isn't it obvious, he said, that health professionals use the best science they can to guide them in their choice of interventions? Don't psychologists prefer treatments that research has shown are likely to be effective over those without empirical support?

Contrary to what we have told ourselves through the years about the primacy of the Boulder model for clinical training and practice, few clinicians undertake research or, for that matter, even read about it. The infrequency with which clinical practitioners utilize clinical research, an issue ever since Hans Eysenck (1952) published his initial evaluation of the effects of psychotherapy almost 50 years ago, continues to be a disappointment and an embarrassment to the discipline. David Barlow said very well almost 20 years ago what could also be said today:

At present, clinical research has little or no influence on clinical practice. This state of affairs

should be particularly distressing to a discipline whose goal over the last 30 years has been to produce professionals who would integrate the methods of science with clinical practice to produce new knowledge. (Barlow, 1981, p. 147)

The low utilization of clinical research findings by practitioners received renewed attention in the 1990s with the publication of practice guidelines and lists of empirically supported treatments. The most influential of these were produced by the American Psychiatric Association (e.g., 1993, 1994, 1995, 1996, 1997) and the Division of Clinical Psychology of the American Psychological Association (Division 12 Task Force, 1995, 1996, 1998). Although to many these documents simply spell out in appropriate detail the interventions all clinicians should be expected to know and be prepared to use, to others they are extremely troubling. They are troubling to some because they have the potential to interfere with practice and disenfranchise clinicians whose interventions have received little or no empirical support. They trouble others because despite marked advances over the past several decades in psychotherapy outcome methodology, the science that underlies empirically supported treatments, that methodology is still evolving. Whereas guild-based concerns about practice guidelines can generally be deflected, others are not so easy to dismiss, especially when they are expressed by respected colleagues who have devoted many years to the study of psychotherapy outcomes. For example, we must listen when Sol Garfield (1996) concludes, on the basis of his assessment of the science on which the report depends, that the language of the 1995 Division 12 Task Force report is overly strong and its recommendations are premature.

Nonetheless, even while I wish that the science underlying empirically supported treatments was a bit more mature, I am convinced it is strong enough to justify the key claims made for it. Accordingly, I believe that we can no longer justify choosing to endorse or not to endorse empirically supported treatments and practice guidelines, despite their evolving status (Beutler, 1998; Persons & Silberschatz, 1998). It is clear to me that even if we choose to reject empirically supported treatments and practice guidelines, they will not disappear. Rejecting them will simply mean that we have opted not to participate in their certain further development. The major consequence of that decision will be to give to another profession primary responsibility for the processes by which we choose our interventions, just as our diagnoses have been largely

shaped by a psychiatric nomenclature first published by the American Psychiatric Association in 1952.

It seems obvious to me that clinical psychology must finally do more than pay lip service to the Boulder model; the stakes for doing so are higher now than they have ever been. It is time to call upon the impressive psychotherapy research findings for which we are largely responsible to determine our own professional future. Allow me to reiterate: The choice is not between empirically supported treatments and practice guidelines or the old days. It is between empirically supported treatments and practice guidelines developed by and for psychology or empirically supported treatments and practice guidelines developed by and for psychiatry. To me, the choice is clear.

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The Scientist–Practitioner Model: Gandhi Was Right Again

George Stricker

Several years ago, I had lunch with a psychologist from Sweden. He asked me if it was true that most clinical psychologists in the United States had PhDs, and when I said that it was, he remarked about how wonderful it was that science was so intimately involved with practice in this country. I told him about David Shakow, who had the same illusion.

The scientist–practitioner model is the single most important statement of training philosophy in clinical psychology. Virtually every program either has adopted this model or has developed an alternative model in reaction to it. The model is as basic to training in clinical psychology as the Bill of Rights is to the foundation of our government. And yet, gentle reader, please sit down and try to write the first 10 amendments to the Constitution and see how far short you come. Then ask yourself when you last read the report written by Shakow (Committee on Training in Clinical Psychology, 1947) that forms the basis of the scientist–practitioner model or the report of the conference at Boulder that gave the model its name (Raimy, 1950). These works truly are classics, and Mark Twain defined a classic as a book that people praise but do not read. I suspect that there are very few trainers who actually have read those seminal documents, although most have clear opinions about their strengths and weaknesses. I must confess that I had not read them until I was preparing a chapter that required specific knowledge, despite having been engaged in training for decades before then, and that I was pleasantly surprised by what I found.

The excuse of ignorance did not apply to the people who set up training programs in the immediate post-Boulder years, as many of these were the people who had attended the conference and developed the model. Nonetheless, of the 83 accredited training programs that existed one decade after the conference, only one (Adelphi University) did not subscribe to the scientist–practitioner model as it had been distorted in that first decade. I say distorted because the students of that decade, in the main, sought jobs in the clinical arena, as was their probable intention when they chose graduate studies in clinical psychology, and they found themselves unhappy and woefully unprepared. Some stated that their success was despite, rather than because of, their graduate training (Garfield & Kurtz, 1976). They rebelled against the SCIENTIST–practitioner model that was the basis of their training, and a subsequent series of conferences first questioned (at Chicago; Hoch, Ross, & Winder, 1966) and then challenged (at Vail, Colorado; Korman, 1976) the Boulder blueprint. This was followed by the professional-school movement (Stricker & Cummings, 1992), which at its best embodies the intention of the scientist–practitioner model and at its worst expresses a scientist–PRACTITIONER or pure practitioner model.

What can be guessed about the intention of the conferees at Boulder, without considering the operationalization that followed and distorted the model? The model endorsed a thousand-flowers approach to training, specifically arguing against the conformity that followed the issuance of the report. The model's creators expected that some programs would emphasize one end of the continuum at the expense of the other but did not expect a bimodal distribution of programs that left little room in the center for programs

that truly valued both scientific and practitioner approaches. The model specifically recommended the adoption of standards of clinical competence for students, the active engagement in clinical practice by faculty members in clinical psychology, and the use of the predoctoral internship as an extension of graduate training rather than as a “repair shop” for omissions in the clinical curriculum.

Where, if anywhere, do such Boulder-model programs exist? Primarily they exist in the better professional schools, where faculty members do practice. In these schools, students receive extensive training in practice skills and are held accountable for clinical competence, and they also develop a scientific attitude toward their approach to clinical practice. This attitude often is not expressed through the sole and rigid use of experimentally validated approaches, although these certainly should be known and

used where appropriate, but rather through the application of available scientific knowledge and the adoption of the attitudes of skepticism, curiosity, and inquiry about practice that typify a good scientist. This is the local clinical scientist model (Stricker & Trierweiler, 1995; Trierweiler & Stricker, 1998), and to my mind, it comes closer to the intent of the scientist–practitioner model than some of the more vaunted university science exemplars that downplay the needs of practice, or some of the professional school exemplars that train technicians rather than true professionals.

It is reported that Gandhi was once asked what he thought about Western civilization and that he replied he thought it was a good idea and somebody should try it. Similarly, my feeling about the scientist–practitioner model is that it is a good idea and that more programs should try it as it was originally described.

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