

A SURVEY OF THE PSYCHODIAGNOSTIC ASSESSMENT  
TECHNIQUES UTILIZED BY SCHOOL PSYCHOLOGISTS

by

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## ABSTRACT

This study investigated the social-emotional assessment views and practices of school psychologists in the United States; the congruence in school psychological practice between theoretical orientation and assessment approaches; and the relationships between the views and practices of school psychologists and those of clinical psychologists as reported in the literature.

Results indicated that respondents were predominantly behavioral and cognitive behavioral in orientation; spent most of their professional time in the public schools; and engaged in a great deal of assessment. Behavioral assessment and projective testing occupied the greatest amounts of their social-emotional assessment time. Behavioral interviewing was the most-used behavioral technique followed by behavioral observation which was reportedly used by approximately one-third of the respondents with from 41% to 100% of clients. Assessment was viewed by the respondents as being primarily insightful in nature.

Comparisons of the results of the present study with similar studies conducted with clinical psychologists revealed differences in predominant orientations and work settings, and similarities in relative amount of time spent in assessment activities and overall views of assessment. Relationships in both clinical and school psychology between assessment practice and theoretical orientation were weak.

## CHAPTER 1

### INTRODUCTION

Assessment is a topic of great concern for school psychologists. Issues surrounding assessment have been hotly debated both within the profession itself and in legal and legislative arenas (Oakland and Laosa, 1977). Very little is actually known, however, about the assessment practices and preferences of school psychologists in this country today.

Bardon (1976, p. 790) contends that the revolutionary developments in the field of school psychology are important to the entire psychological profession. He notes that "there is much to be gained by continuing analysis of the specialty of school psychology, which, perhaps, more than any other in psychology mirrors the times and serves as an indicator of what may lie ahead for all of professional psychology."

Studies that have been conducted concerning the parameters and activities of the school psychological profession have largely neglected important assessment issues. Such studies have concentrated on variables such as the growth of school psychology (Kicklighter, 1976; Magary and Meacham, 1963), role conceptualization and preference (Farling and Hoedt, 1971; Meacham and Peckham, 1978; Ramage, 1979; Roberts, 1970), congruence between training and practice demands (Meacham and Peckham, 1978), and professional needs and problems in

general (Farling and Hoedt, 1971; Ramage, 1979). There has been no study conducted in the field of school psychology designed to determine prevalent assessment strategies and opinions in the profession related to assessment. This type of specific assessment information is essential to the profession so that training programs can be improved to more fully meet the crucial needs and problems faced in the field.

Another important assessment issue involves the orientation with which a school psychologist approaches the task. There are major differences in assumptions about personality which, in turn, lead to differences in the ways social-emotional behaviors are assessed (Mischel, 1968). Psychologists with professional orientations originating from state and trait theory and from psychodynamic theory have traditionally assessed human behavior by inferring underlying constructs that account for overt behavior. Psychologists with behavioral orientations, on the other hand, are concerned with the assessment of behavior itself and the relationship between behavior and the environment. Thus, methods of assessment differ greatly depending upon the assumptions held by the psychologists doing the assessing.

Traditional trait theories put the most emphasis in assessment on instruments that presumably tap the stable, enduring traits and states of the individual. Psychodynamic theories focus on the use of unstructured interviews and projective tests designed to reveal the underlying structures believed to be responsible for behavior. Behavioral methods lean heavily instead on direct measures such as observation in the natural environment or in an analogue situation, and

self-observation, as well as some indirect measures such as the behavioral interview, self-report, and ratings by others. These methods are designed and interpreted in such a way as to describe the functional relationships between the behavior observed and the environment surrounding it (Mischel, 1968).

One would suspect, therefore, that there is a very close relationship between professional orientation and social-emotional assessment methodology. A question that arises however, is whether this relationship is actually demonstrated in psychological assessment practice. Several studies suggest that it is not (Kanfer, 1972; Wade and Baker, 1977; Wade, Baker, and Hartmann, 1979; Wade, Baker, Morton, and Baker, 1978; Swan and McDonald, 1978). Whether or not this is the case in the profession of school psychology has not yet been investigated. Information about this relationship is very important because a lack of evidence for social-emotional assessment practice following fairly closely along the lines of predominant theoretical orientation may be a dramatic indication of some very crucial training needs in the area of assessment.

In addition to the need for information concerning assessment strategies and opinions of school psychologists, and for investigation into the relationship between professional orientation and assessment practices in the field, there is a need in the profession of psychology as a whole for a comparison between different professional specialties in psychological practice concerning approaches to social-emotional behavior assessment. Although many studies have been conducted in the

field of clinical psychology to determine the assessment practices and preferences of this specialty, no comparable study has been conducted within the specialty of school psychology. It is not now known how the assessment approaches of the two areas of applied psychology compare.

There are some serious assessment problems that can undoubtedly best be resolved by a cooperative effort of all professional psychology. First, however, we must know more precisely what those problems are. If similar problems and pressures are being faced by practitioners of both fields of psychology, this information would be very useful to the entire profession in directing our efforts in addressing these issues.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

Rapid developments influencing the practice of school psychology have prompted several studies to examine the parameters and problems of the profession. Magary and Meacham (1963) and Kicklighter (1976) investigated the rapid growth of school psychology. Kicklighter found that the number of school psychologists had more than doubled in the United States in the nine year period from 1966 through 1974. He estimated that in the school year 1974-75, there were about 8,500 to 9,000 school psychologists in the country. In 1978 Ysseldyke estimated that at that time there were approximately 12,000 school psychologists functioning in educational settings.

The actual and desired role and function of this rapidly increasing number of psychologists has also been carefully studied. Roberts (1970) found a wide diversity in functions performed and responsibilities assumed by school psychologists as reported by both psychologists and teachers surveyed. Psychologists reported that more involvement in most activities would be desirable except for the role of psychometrist which was generally considered to be overemphasized. Meacham and Peckham (1978) also explored the role of school psychologists across the country and reported that assessment was ranked first in order of importance in present job situations and second (after

consultation) in preferred order of importance. This sample reported that assessment had been emphasized even more in their training than it was in their present jobs.

Farling and Hoedt (1971) found that role and function of the school psychologist was the most frequently mentioned category as being in need of resolution by school psychologists nationally. They reported that "individual examinations, preparation of written reports and parent-teacher conferences appear to describe, in essence, the practice of school psychology throughout the country. This delineation of role and function tends to reflect an 'evaluator' and 'reporter of test results' characterization" (Farling and Hoedt, 1971, p. 83). Proposals of ideal roles and functions of school psychologists included more counseling, program planning, intervention, behavioral management, and consultation. An update of the Farling and Hoedt (1971) study conducted by Ramage (1979) found that present and ideal roles and functions were more congruent than originally reported. Individual psycho-educational evaluation was still reported as the most important function in present jobs, and ideal role rankings included less assessment in favor of more group counseling, research, and in-service training of teachers, but assessment was ranked relatively high in the ideal role category in this study.

Farling and Hoedt (1971) and Ramage (1979) also investigated more general professional needs and problems of school psychologists. In addition to examining such variables as background and training, certification requirements, professional affiliation, part-time

activities, and salary and contractual arrangements, they inquired into which skills were most in need of further development by school psychologists. Farling and Hoedt (1971) found that improved psychological and educational diagnosis, educational programming, behavior modification planning, counseling, and professional communications were the skills considered by school psychologists to be most in need of improvement. Ramage (1979) reported that overall the school psychologists sampled were very involved in continuing professional development to fulfill some definite needs.

The studies reviewed point overwhelmingly to the predominance of assessment in the functions and responsibilities of school psychologists. Emphasis was also found to have been placed on assessment in training programs, and although school psychologists apparently would like to see less of their professional time devoted to assessment, improved skills in psychological and educational assessment is seen as one of the primary needs for future professional development.

#### Relationships between Traditional and Behavioral Assessment

What is "assessment"? Goldfried and Pomeranz (1968, p. 76) define assessment as "the identification and measurement of a broad spectrum of relevant factors which are necessary to ensure the best possible alteration of a particular individual's maladaptive behavior." As mentioned above, there are some major theoretical disagreements and differences in psychological assessment methodology. Traditional approaches to personality assessment account for observed behavior by

inferring underlying constructs, while "in behavioral analyses the emphasis is on what a person does in situations rather than on inferences about what attributes he has more globally" (Mischel, 1968, p. 10).

Goldfried and Kent (1972) criticized the traditional "sign" interpretation of test responses, and contrasted this approach with the more empirical "sample" approach used by behavioral psychologists. Traditional approaches interpret responses on assessment tasks as "signs" or "indirect manifestations" of underlying personality structures. Behavioral procedures approach interpretation of assessment as a "sample" of the actual behavior of interest. A major concern is the level of inference required: "Assessment encounters trouble because it involves hazardous inferences. Very little inference is involved when a test is a sample of the criterion" (Cronbach, 1956, p. 173). Another major concern involves the relationship between assessment and treatment. While appropriate behavior cannot be predicted directly by traditional assessment techniques, selection of treatment and evaluation of the treatment applied are two of the primary goals of behavioral assessment (Ciminero, 1977).

In spite of tremendous influence of the behavioral approach in recent years as evidenced by the large amount of behavioral research being conducted and published (Haynes, 1978; Hoon and Lindsley, 1974; Kazdin and Wilson, 1978), and the rapidly increasing number of training opportunities available (Benassi and Lanson, 1972; Johnson and Bornstein, 1974), a serious concern has been voiced regarding the relative

neglect of behavioral assessment (Goldfried and Pomeranz, 1968; Kanfer and Saslow, 1969). Although several authors (Ciminero, 1977; Goldfried and Linehan, 1977; and Hersen, 1976) report a definite surge of interest in this area resulting in many new developments in behavioral assessment since the earlier concerns appeared in the literature, much work still remains to be done before assessment reaches the sophisticated level of the behavior change procedures themselves (Goldfried and Linehan, 1977).

There is as yet no general model for the selection of target behaviors, nor is there an accepted behavioral classification system (Ciminero and Drabman, 1977). The need for the development of norms for use with behavioral assessment strategies is frequently mentioned in the literature (Cone and Hawkins, 1977; Hartmann, Roper, and Bradford, 1979; Goldfried and Linehan, 1977; Nelson and Bowles, 1975). It has been pointed out that the lack of standardized behavioral assessment procedures and some critical dimensions and rules to follow leads to possible difficulties in determining the best treatment program to select (Kanfer, 1972; Kanfer and Phillips, 1970). In addition, Goldfried and Linehan (1977) note that the psychometric properties of behavioral assessment procedures have not received much attention compared to the vast number of psychometric studies that have been conducted on the more traditional assessment devices.

Of the many limitations of presently available behavioral assessment techniques discussed in the literature, some of the most immediate for applied psychologists are practical ones such as money,

time, equipment, and personnel. The use of behavioral techniques can be very expensive, especially in terms of training needed and time spent (Hersen, 1976; Sundberg, 1977).

There appears to be, therefore, a critical need for more and better behavioral assessment devices. It is emphasized throughout the assessment literature that there is a crucial need for research devoted to developing assessment techniques that are psychometrically sound, clinically meaningful, and economical to use.

All of these problems with available assessment techniques pose serious difficulties for the practicing applied psychologist who is left to his/her own resources in many cases to fill immediate assessment needs. Several studies have been conducted in the field of clinical psychology to determine how these psychologists are coping with assessment issues and difficulties.

#### Assessment Views and Practices of Clinical Psychologists

The assessment practices of clinical psychologists have, in fact, been a source of research interest for decades. Loutit and Browne (1947) compared the prevalent use of psychometric instruments available in 1946 to a similar study that had been conducted in 1935 by the Committee of Clinical Psychologists of the American Psychological Association (A.P.A.). The results of the 1947 study showed an increase in the use of the Rorschach and Thematic Apperception Test (T.A.T.) between 1935 and 1946. The T.A.T. had not yet been published in 1935, and the Rorschach, though published, was not yet widely known

known in the United States. Loutit and Browne (1947, p. 53) explained their findings by noting "the growing use of projective techniques in clinical use." Sundberg (1961) found further that the use of projective tests had increased from 1935 to 1959. He reported the Rorschach as the most widely used test and the instrument with the largest number of publications at that time.

McCully (1965, p. 279) reported that he found "little or no evidence to suppose that the familiar varieties of projective techniques (were) falling into disuse" at that time. In addition, a survey of the patterns of test usage in the United States conducted in 1969 still found four projective techniques among the ten highest ranked assessment instruments (Lubin, Wallis, and Paine, 1971).

Goldschmid, Stein, Weissman, and Sorrells (1969) conducted a survey of the training and practices of clinical psychologists. The largest group (24%) in this study claimed an eclectic orientation. This was followed by neo-Freudian (16.9%), behavioristic (12%), and Freudian psychoanalytic (11.6%). These respondents reported spending most of their time doing individual psychotherapy. Goldschmid et al., (1969, p. 92) reported that there seemed "to be a bias in the use of psychological tests in favor of assessing intrapsychic processes as opposed to those associated with decisions for selection, disposition, outcome, and vocational guidance." Thelen, Varble, and Johnson (1968, p. 521) found evidence, however, that "projective techniques (were) seen by many as declining in importance and not supported by research." Shemberg and Keeley (1970) again found shifts away from projectives in

training and an increase in the emphasis on objective techniques, especially in the newer training programs that were being developed.

In 1973 Garfield and Kurtz surveyed the directors of internship training, a majority of which complained that university training of psychology interns was inadequate. While emphasis on diagnostic testing was decreasing in the training centers at this time, internship sites were using psychological tests extensively for a wide variety of client problems. Internship supervisors had found interns overly critical of traditional diagnostic testing, and differences in orientation were presenting definite training difficulties. Developments in clinical psychology which accompanied these problems were "emphasis on community psychology and on behavioral approaches to clinical problems" (Garfield and Kurtz, 1973, p. 355).

Further evidence of difficulties with divergent theoretical orientation in the training of students and the requirements of the job market were reported by Levy and Fox (1975). Survey results of employers of clinical psychologists revealed that psychological testing skills, including the use of projective techniques, were required by more than 90% of the positions advertised in the A.P.A. Employment Bulletin during 1971-72. Levy and Fox (1975, p. 424) concluded that "academic clinicians who seek to minimize or exclude these skills in the graduate curriculum are most likely doing their students a serious injustice, for our colleagues engaged in the practice of clinical psychology tell us that psychological testing is very much alive."

As a result of the rapid changes and developments in psychology, studies of the activities and views of clinical psychologists have continued to be important. In 1976 Garfield and Kurtz published a study entitled "Clinical Psychologists in the 1970's." This study surveyed one-third of the membership of A.P.A. Division 12, the Division of Clinical Psychology. The mean age of their sample was 46.8 years, and over 97% of the respondents had a doctoral degree. The mean number of years of experience was 16.

It was found that 35% of the sample worked in institutional clinical settings such as general and psychiatric hospitals, clinics, or medical schools. Thirty percent were employed by universities, and just over 23% worked in private practice. Professional activities of these psychologists included individual psychotherapy (25% of professional time), teaching (13%), administration (13%), and diagnosis and assessment (10%). Psychotherapy, testing, and behavior modification combined to account for about 41% of the total professional time of these psychologists, and teaching, research, scholarly writing, and clinical and research supervision combined to account for about 35% of their time.

Inquiry into the theoretical orientations of the sample revealed that 55% of the psychologists considered themselves to be eclectic, 11% psychoanalytic, 10% learning theorists, and 7% "other" orientations. An examination of the opinions of these clinical psychologists suggested that academic psychologists tended to agree less with psychoanalytic values, to agree more with behavioral ideas,

and were less intuitive in their approaches than were practitioners. Psychoanalytic orientations were found to use more intuitive approaches; learning theorists tended to prefer more objective ones.

Garfield and Kurtz (1976) compared their results with a previous survey conducted by Kelly (1961) and found a decline in the percentage of clinical psychologists who were employed in medical settings, and an increase in those working in universities and private practice. As a result of further comparisons between the two studies, Garfield and Kurtz (1976, p. 9) concluded: "The percentage adhering to psychodynamic views appears to have declined."

Another study which was conducted at about the same time as the Garfield and Kurtz (1976) study was a follow-up of clinical psychology graduate students by Kelly, Goldberg, Fiske, and Kilkowski (1978). A comparison of the results of the two studies revealed that high percentages of both samples called themselves eclectics (58% and 55%), and this was followed in relative frequency in both studies by psychodynamic orientations (psychoanalytic and neo-Freudian, 13% and 15%). Garfield and Kurtz found that the majority of their sample was satisfied with their profession, however, while Kelly et al. (1978) found that nearly half of the clinical psychologists who had entered graduate school in 1947 and 1948 were quite dissatisfied. Psychologists in the follow-up study were found to use objective and projective assessment techniques about equally.

Two studies were published by Wade and Baker and their associates which examined the use and status of psychological tests, the

opinions of clinical psychologists regarding testing, and the relationships between particular test usage activities and professional orientation (Wade and Baker, 1977; Wade, Baker, Morton, and Baker, 1978). To obtain the data for these studies, a survey of clinical psychologists was conducted in which a questionnaire was mailed to every seventh member of the A.P.A., Division 12. Five hundred psychologists were surveyed, and a return rate of 50.1% was obtained.

The questionnaire that was used in these studies "was designed to assess current test-usage patterns, the opinions of clinicians on issues relevant to usage and utility of psychological assessment devices, and reasons for the controversy between critics and advocates of testing" (Wade and Baker, 1977, p. 875).

These investigators found that the mean time spent in various professional activities included private therapy 22%, teaching 18%, public therapy 13.8%, public administration 11.9%, research 10.3%, and academic administration 5.2%. Professional orientations reported were neo-Freudian 20.9%, eclectic 18.4%, behavior therapy 12.6%, Freudian 10.9%, reality therapy 6.3%, client-centered 5.9%, humanistic 4.2%, and communications 3.8%.

Data obtained concerning the testing activities of these psychologists revealed that over one-third of the total professional time devoted to private and public therapy (35.8% of the total) involved objective and projective test administration and evaluation. Over one-third of clients were administered objective tests and over one-fifth were administered projective tests. Seventeen percent of

the respondents reported using no tests, but of these, only 22.2% reported using behavioral observation. Instead, 72.2% said they used interviews for assessment purposes. They found no statistical differences according to orientation in the percentages of clients administered objective and projective tests.

In answer to queries regarding test utilization, respondents reported that test results were used in assessment by 47.7% of the psychologists, for assignment to treatment by 16.2%, and for both by 24%. Standardized scoring was reportedly used by 61.1% of the psychologists for objective tests and by 18.5% for projective tests. Personalized procedures, on the other hand, were said to be used by 38.9% of the respondents for objective tests, and by 81.5% for projective tests. These results suggest that while test results are often used in assessment and treatment decisions, clinical judgment is important in the testing process for most clinicians.

Investigation of opinions about testing revealed that testing was considered to be more of an "insightful diagnostic process" than an "objective technical skill" (respective mean ratings of 3.88 and 3.23 on a five-point Likert scale). It was found further that clinical psychologists doing a great deal of projective testing were more inclined to view testing as an insightful process than were psychologists doing more teaching and research.

Clinical psychologists responding to this survey recommended that students learn projective tests with a higher frequency than they recommended objective tests. The most frequent reason given for these

recommendations was the ability of the tests to reveal personality structure. These psychologists also rated previous clinical experience as the biggest factor in their decisions to use tests. This was followed by the capacity of tests to answer specific assessment needs and graduate training experiences. Survey data "suggest that personal clinical experience with tests and personality-structure assessment are generally more important reasons for clinicians' test usage than such psychometric factors as reliability or behavioral prediction" (Wade and Baker, 1977, p. 878). When asked to list advantages and disadvantages of tests, however, "few respondents listed aiding diagnosis or assessment as advantages of testing and many saw tests' psychometric characteristics as distinct disadvantages" (Wade and Baker, 1977, p. 878).

Test results analyzed according to theoretical orientation showed that behavioral therapists do as much testing as therapists of other orientations, although they do engage in less projective testing (Wade et al., 1978). Behavioral observation was often suggested as an alternative to traditional test disadvantages, but was apparently used by relatively few of the respondents.

In summary, the results of a survey conducted by Wade and Baker (1977) suggest that: (1) Clinical psychologists spend a great deal of their professional time doing testing. (2) Emphasis is placed largely on insight and experience by these clinicians. (3) Tests most often recommended to clinical psychology students are projective. (4) Clinical psychologists engaged in teaching and research are less likely

to recommend projective techniques than are applied clinicians. (5) Behavior therapists use fewer projective techniques than do therapists of other orientations, but few clinical psychologists are using behavioral observation as a predominant assessment technique. In conclusion, the authors suggest that

In spite of the views of some test critics that the information provided by many objective and projective tests is not reliable or valid (e.g. Chapman and Chapman, 1971; Mischel, 1968) and suggestions that training in testing is on the decline (e.g. Shemberg and Keeley, 1970), clinicians have definitely not abandoned testing . . . . Despite the criticisms of testing by predominant behavior theorists (e.g. Goldfried and Kent, 1972; Kanfer and Saslow, 1965; Mischel, 1968), self-labeled behavior therapists in this sample used tests with percentages of their clients comparable to those of clinicians with other orientations (Wade and Baker, 1977, p. 879).

The authors suggest that the apparent indifference to negative research results concerning projective tests on the part of the respondents may stem from their heavy reliance on personal experience for their assessment decisions. In addition, "a lack of practical alternative assessment procedures may lead to the use of psychological tests even by clinicians who are skeptical of their value" (Wade and Baker, 1977, p. 880).

In answer to some additional concerns expressed (Garfield, 1978) about apparent discrepancies between the Garfield and Kurtz (1976) and the Wade and Baker (1977) surveys, Baker and Wade (1978) carefully delineated important comparisons between the two studies. Representativeness of the smaller Wade and Baker sample was called into question by Garfield because, compared to Garfield and Kurtz

(1976), Wade and Baker found a larger percentage of clinical psychologists who claimed a neo-Freudian theoretical orientation (20.9% versus 5.3%). This discrepancy was explained by Wade et al. (1978, p. 4) by the presence of an "eclectic" option in the Garfield and Kurtz questionnaire "which suggests neo-Freudians are likely to select an eclectic category if given that option." Close agreement was found between other orientations even though the two surveys used different orientation labels and categories (Baker and Wade, 1978).

Similarly, though different activity categories were used in the two studies, percentages of time spent in professional activities were very comparable. Garfield and Kurtz (1976) reported that 41.2% of their respondents' time was spent in four therapy-related activities, while Wade and Baker (1977) found that therapy activities consumed 35.8% of their respondents' time. Teaching and research percentages were also very comparable, as were those for private practice. It was noted that a comparison between the two studies on testing activities was difficult to make because of wide differences in questionnaires, but these figures also were found to be reasonably comparable when the most similar categories were used.

A final comparison made by Baker and Wade (1978) in support of the representativeness of their sample concerned geographical distribution. A Pearson product-moment correlation of .96 was found between the percentages of respondents from the nine states contributing the most respondents in the Wade and Baker study and those same nine states in the Garfield and Kurtz study.

Garfield (1978) concluded that the results of these surveys point out the dire inadequacy of graduate training programs in clinical psychology. Baker and Wade (1978, p. 850) hesitated to lay all of the blame on graduate training however. They concluded that

clinicians of today may be like 18th-century physicians--looking for effective, successful assessment techniques where few currently exist. Admittedly, they may be looking in the wrong place, and they may be deluding themselves with respect to the success of their search; however, the personality research laboratory has not yet provided them with any easy answers, and until it does, clinicians may engage in much superstitious behavior.

In addition to the many studies in the literature that investigated assessment views and practices of clinical psychologists, there are studies that looked specifically at behavior therapists. Kanfer (1972) polled 30 psychologists considered to be leaders in the field of behavior therapy, and he found little uniformity in the use of standard assessment instruments. "The replies ranged from outright rejection of the question for formal procedures to the listing of a few procedures which are relatively unstructured, flexible, and generally not supported by specific research findings" (Kanfer, 1972, p. 419).

A larger study was conducted by Wade, Baker, and Hartmann (1979) in which every third full member of the Association for the Advancement of Behavior Therapy (A.A.B.T.) was mailed a questionnaire concerning work settings, professional activities, and specific therapeutic practices and opinions. A return rate of 63.8% was obtained of the 450 questionnaires delivered.

Results indicated that therapy activities take up the greatest portion of the respondents' time (28.4%), followed by teaching (19.4%)

and research (17.0%). Therapy was reported to be provided most often for anxiety, child management problems, marital difficulties, and depression; and treatment procedures used most often by the sample were operant conditioning techniques, systematic desensitization, and modeling. Behavioral interviews and observation were the two most used assessment techniques (53.8% and 33.9% of the clients respectively), followed by traditional interviews (24.7%) and behavioral surveys (20.3% of clients). Behavior therapists were found, however, to also use traditional tests among their assessment strategies. (The Minnesota Multiphasic Personality Inventory, the Rorschach, and the Thematic Apperception Test were used by 10% or more of the respondents.) In answer to questions regarding their reasons for using these tests, 44% reported that testing was required in their jobs.

Main advantages of the various assessment techniques reported were: objective tests--saving time (24.4%) and availability of norms (22.7%); projective tests--none (32.8%) and diagnosing pathology (17.2%); behavioral techniques--specific data provided on problem behaviors (64.2%) and results easily translated into treatment plans (28.4%). Main disadvantages reported were: objective and projective tests--inadequate psychometric characteristics (35.4% and 55.4% respectively) and irrelevance to problems (24.1% and 12.8%); behavioral techniques--impracticability in applied settings (43.8%) and inefficiency and time consumption (20.1%). Ratings (on a five-point Likert scale) of usefulness of information obtained from objective and projective tests were both below the mid-points.

Wade, Baker, and Hartmann (1979) compared these results to the previous studies done in clinical psychology. They reported that behavior therapists apparently devoted more time to research and less time to therapy than the sample responding to the Wade and Baker (1977) study. Less research activity had also been reported by Garfield and Kurtz (1976). Wade, Baker, and Hartmann (1979, p. 5) concluded from this data that "while behavior therapists and clinical psychologists in general do not differ greatly in their professional activities (with the exception of research), behavior therapists' attitudes and practices with respect to treatment and assessment differ radically from those with more traditional approaches."

One additional survey conducted by Hartmann, Baker, and Wade (1978) investigated the practices of behavior therapists further. A random sample of one-third of the Association for the Advancement of Behavior Therapy membership was queried as to their professional reading practices. It was found that applied behavior therapy and applied clinical journals were read most, while traditional experimental journals were read infrequently. These results were interpreted rather pessimistically since "behavior therapy after all, is frequently touted as being based on experimental psychology" (Hartmann et al., 1978, p. 13).

Finally, the practices of behavior therapists were investigated in a national survey by Swan and MacDonald (1978). These researchers randomly selected 840 members of the A.A.B.T. (1975 membership), and then actually surveyed 353 of these who identified themselves as behavior therapists. The mean age of this sample was 37.8 years.

Work settings reported were: private practice 28.5%, university department 28%, mental health clinic 13.3%, state or federal hospital 11.1%, and university counseling center 5.6%. Theoretical categories to which respondents felt most closely related were: eclectic 41.9%, operant 31.7%, cognitive 16.2%, respondent 4.5%, and other 5.4%.

Mean percentages of clients with whom various assessment techniques were utilized included: interview 89.4%, client self-monitoring 51.1%, interview with significant other 49.2%, direct observation 39.6%, information from consulting professionals 36.6%, role play 34.3%, behavioral written self-report measures 26.9%, demographic questionnaires 20.1%, personality inventories 20.2%, and projective tests 10.1%. Intervention technique use included: therapeutic relationship enhancement methods 57.8%, operant methods 50.2%, modeling 47.6%, self-management 44.8%, stimulation and role play methods 43.6%, attitude modification methods 33.6%, self-instructional methods 29.7%, aversion methods 17.7%, and expectation, hypnosis, and suggestive methods 16.1%.

A comparison between the Swan and MacDonald (1978) and the Wade, Baker, and Hartmann (1979) studies is difficult to make since different response categories were provided in many cases. However, both samples appear to rely heavily upon the interview in assessment, and they do comparable amounts of observation (33.9% of clients, Wade et al. and 39.6% of clients, Swan and MacDonald).

Conclusions drawn by Swan and MacDonald were: (1) Behavior therapists apparently consider assessment to be very important to the

therapy process since nearly 25% of their therapy time is devoted to assessment. (2) There appears to be a group emerging in the field reflecting a cognitive approach. (3) "There is a minimal relationship between types of assessment techniques employed in practice and the methods of assessment used in research" (Swan and MacDonald, 1978, p. 805).

### Purposes of the Present Study

In spite of heavy professional emphasis on assessment in the schools, none of the studies reported in the literature has investigated the specific assessment practices, preferences, and needs of school psychologists. One of the main purposes of this study was to lend evidence bearing on what assessment strategies and techniques are being utilized by school psychologists in this country today, especially in regard to social-emotional behavior. Further inquiry was made into why these strategies are chosen, and what aspects of present jobs and past training experiences of these psychologists are most influential in their choices.

Studies examining the assessment practices and preferences of clinical psychologists and behavior therapists have been conducted, and several of these studies suggest that differences in approach to assessment of social-emotional behavior in relation to theoretical orientation are not as clearly defined as would be expected. The second purpose of this study was to investigate the relationship in the specialty of school psychology between theoretical orientation and assessment practice. It specifically investigated major differences

in the approach to assessment of social-emotional behavior between psychologists who consider themselves to be following a behavioral orientation and those who are following more traditional theoretical orientations. The third and final purpose of this study was to compare the assessment views and practices of school psychologists with those reported in studies of clinical psychologists.

## CHAPTER 3

### METHOD

A survey was conducted in which a sample of school psychologists across the United States responded to a questionnaire concerning their theoretical orientations, professional activities in general, social-emotional assessment activities specifically, and demographic information.

#### Subjects

The 1978 membership directories of the A.P.A., Division 16 (Division of School Psychology) and the National Association of School Psychologists (N.A.S.P.) were combined to eliminate membership overlap, and the lists of names were numbered consecutively. Four hundred names were selected using random numbers generated by a computer programmed for that purpose. Random numbers were produced with replacement. If any number appeared a second time, another number was selected until the entire sample was obtained. A questionnaire return rate of 39.5% was obtained, and of the 158 subjects responding, 145 questionnaires were completed and usable for data analysis (36%).

Fifty-seven percent of the respondents were men and 41% were women. (Not every respondent who completed the questionnaire answered every item. Relative frequencies total 100% when non-responders on each item are included.) Age categories were as follows: 25 to 29

years, 12%; 30 to 34 years, 20%; 35 to 39 years, 19%; 40 years and over, 48%. The respondents reported their level of training as follows: masters degree, 7%; graduate work beyond the masters, 48%; doctoral degree, 43%. Years of practice in the profession included: 0 to 3 years, 17%; 4 to 6 years, 23%; 7 to 9 years, 17%; more than 9 years, 41%. (One percent of the respondents were students.) Seventy-two percent of the respondents reported graduating from a school psychology program, and 95% reported being certified in their respective states. Relative frequencies according to national professional organization membership were: A.P.A., Division 16, 51%; N.A.S.P., 69%.

Percentages of the respondents living in the various states were: Alaska, 1%; Arizona, 5%; Arkansas, 1%; California, 5%; Colorado, 1%; Connecticut, 3%; Florida, 4%; Georgia, 1%; Idaho, 1%; Illinois, 4%; Indiana, 3%; Iowa, 1%; Kansas, 3%; Kentucky, 1%; Maryland, 3%; Massachusetts, 3%; Michigan, 3%; Minnesota, 1%; Missouri, 1%; Nebraska, 2%; New Jersey, 7%; New York, 9%; North Carolina, 5%; Ohio, 6%; Pennsylvania, 5%; Rhode Island, 1%; South Carolina, 1%; Tennessee, 5%; Texas, 3%; Virginia, 2%; Washington, 2%; West Virginia, 1%; Wisconsin, 3%; District of Columbia, 1%. Regions of the country from which the respondents came were: northeastern, 33%, southern, 23%; mid-western, 28%; western, 14%.

#### Instrument

The questionnaire used was developed specifically to answer the research questions addressed by this study (see Appendix A). It was modeled after the questionnaire used in the Wade and Baker survey

of clinical psychologists (Wade and Baker, 1977; Wade, Baker, Morton, and Baker, 1978), and with their permission, portions of the present instrument were drawn directly from that questionnaire.

The survey instrument was seven pages long and consisted of three major parts: Part I, Professional Orientation and Activities; Part II, Social-Emotional Assessment activities; Part III, Demographic Information. Part II was divided into two sections. Section A dealt with objective and projective psychodiagnostic testing, and Section B dealt with behavioral assessment.

Items were of two major types. Respondents were asked either to check a category of a multiple-choice-type item, including some yes-no items, or to circle the appropriate number on a 5-point Likert scale. The only open-ended items included were those which gave respondents the opportunity to include an "other (please specify)" category on previous forced-choice items and one item that asked respondents to write the name of the state in which they lived.

#### Procedure

The questionnaire was printed in reduced type on yellow paper and mailed to the sample with a cover letter and a stamped return envelope. Statements of confidentiality and assumed consent to use data provided were printed on the front of the questionnaire along with general directions for its completion. The letter that accompanied the first mailing of the questionnaire explained the general purpose of the study and the need for it. The three major parts of the questionnaire were pointed out, and general directions for

completing the questionnaire were provided. In addition, the sample was told that the study was being sponsored by the A.P.A. Division 16, Committee on Behavior Modification and that copies of the completed study would be available to them on request. The letter that accompanied the second mailing of the instrument urged non-responders to complete the questionnaire so that the study would be representative. The questionnaire was again described as to purpose, major parts, and directions for completion. The cover letters used for the first and second mailings can be found in Appendix B. The first mailing of the survey was sent on May 16, 1979; the second on June 12, 1979. Each questionnaire sent was coded for follow-up, and only those individuals who had not responded to the first mailing at the time of the second mailing were sent a second questionnaire.

The data were analyzed using the Statistical Package for the Social Sciences (S.P.S.S.). Absolute and relative frequencies were obtained for all responses to each item. The data were then divided according to theoretical orientation for comparison purposes (behavioral and cognitive behavioral versus all other orientations; behavioral versus all others).

## CHAPTER 4

### RESULTS

General professional information about the respondents was gathered by asking them to indicate their predominant professional orientations; the approximate percentages of time devoted to various professional activities; the approximate percentages of professional time spent in various settings; and the approximate percentages of assessment time devoted to academic-related, social-emotional, and intellectual assessment. The highest percentage of respondents (20%) considered their predominant professional orientation to be behavioral. This was followed by "other" (19%), cognitive behavioral (17%), and reality-oriented (11%) theoretical orientations (see Table 1).

As indicated in Table 2, 73% of the respondents reported spending between 21% and 80% of their professional time engaged in assessment while the same high percentage of respondents reported spending 20% or less of their time doing research. The respondents reported doing slightly more consultation than therapy and counseling. The percentages of respondents working in the various setting categories are reported in Table 3. The most frequently reported work setting was, by far, the public schools with 71% of the respondents spending 41% to 100% of their time there. Almost half of the respondents reported spending 20% or less of their time in both private

Table 1. Predominant orientation

Theoretical Orientation	Absolute Frequency	Percentage of Total
Client-centered (Rogerian)	11	8%
Freudian	4	3%
Neo-Freudian	10	7%
Gestalt	4	3%
Transactional Analysis	3	2%
Behavioral	29	20%
Cognitive Behavioral	24	17%
Reality-Oriented	16	11%
Other	28	19%
Multiple Responses	13	9%
No Response to Item	<u>3</u>	<u>2%</u>
Total	145	100%

Table 2. General professional activities

Percentage time Spent	Therapy/ Counseling	Training	Adminis- tration	Research	Consulta- tion	Assess- ment	Other
0%-20%	57% (83)	64% (93)	63% (92)	73% (106)	30% (44)	21% (31)	12% (17)
21%-40%	26% (37)	8% (11)	12% (17)	8% (11)	39% (57)	29% (42)	3% (5)
41%-60%	6% (9)	6% (8)	7% (10)	0% (0)	16% (23)	28% (40)	2% (3)
61%-80%	3% (4)	3% (5)	1% (2)	0% (0)	1% (2)	16% (23)	0% (0)
81%-100%	3% (5)	1% (1)	4% (6)	0% (0)	1% (2)	3% (4)	1% (1)
No response	5% (7)	19% (27)	12% (18)	19% (28)	12% (17)	3% (5)	82% (119)
Total	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)

Table 3. Settings

Percentage Time Spent	Academic	Public Schools	Private Practice	Mental Hospital, Agency or Clinic	Other
0%-20%	39% (57)	12% (18)	49% (71)	42% (61)	20% (29)
21%-40%	4% (6)	4% (6)	6% (9)	1% (1)	0% (0)
41%-60%	2% (3)	2% (3)	3% (5)	2% (3)	1% (2)
61%-80%	3% (5)	10% (15)	1% (1)	1% (2)	0% (0)
81%-100%	10% (14)	59% (86)	4% (6)	5% (7)	3% (4)
No response	41% (60)	12% (17)	37% (53)	49% (71)	76% (110)
Total	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)

practice and mental hospitals, agencies or clinics, and only 10% reported spending 81% to 100% of their time in an academic setting. The time devoted to the three general types of assessment (academic-related, social-emotional, and intellectual) was fairly evenly split with 70%, 69%, and 71% of the respondents devoting between 21% to 80% of their assessment time to these activities respectively. As indicated in Table 4, slightly less time was apparently devoted to social-emotional assessment, with 48% of the respondents devoting between 21% and 40% of their assessment time to this activity.

Table 4. General assessment activities

Percentage Time Spent	Academic-related	Social-Emotional	Intellectual
0%-20%	20% (29)	23% (33)	19% (27)
21%-40%	34% (50)	48% (69)	29% (42)
41%-60%	23% (34)	19% (27)	33% (48)
61%-80%	13% (19)	2% (3)	10% (15)
81%-100%	6% (8)	5% (7)	7% (10)
No response	3% (5)	4% (6)	2% (3)
Total	100% (145)	100% (145)	100% (145)

Of the total amount of time devoted to social-emotional assessment, as shown in Table 5, the greatest amount of time was spent engaged in behavior assessment activities, followed very closely by projective testing and evaluation. Far less time was apparently spent administering and evaluating objective tests.

General views about social-emotional assessment in terms of whether assessment was considered to be an objective technical skill or more of an insightful diagnostic process were represented by the respondents on a scale of 1 (never) to 5 (always). Results indicate that the school psychologists responding to this survey viewed social-emotional assessment more frequently as an insightful process than as an objective skill. The mean respondent ratings were 3.8 and 3.1 respectively as shown in Table 6.

In order to determine how much objective, projective, and behavioral assessment respondents would rather be doing in comparison to their present practices, they were asked to indicate those preferences on a scale of 1 (much less) to 5 (much more). It was found that most of the respondents preferred to do the same amounts of these activities as they were doing presently. As indicated in Table 7, the mean ratings were: objective testing (2.9), projective testing (3.0), and behavioral assessment (2.7). Thirty-five percent of the respondents, however, did indicate a preference for doing more behavioral assessment.

If a percentage of the professional time of the sample was presently devoted to objective and projective psychodiagnostic testing, they were asked to further specify their testing activities by

Table 5. Social-emotional assessment time

Percentage Time Spent	Objective Test		Projective Test		Behavior Assessment	
	Administration	Evaluation	Administration	Evaluation	Administration	Evaluation
0%-20%	68% (98)	54% (78)	39% (57)	52% (75)	33% (48)	41% (60)
21%-40%	13% (19)	21% (31)	34% (50)	24% (35)	41% (60)	30% (43)
41%-60%	3% (4)	6% (8)	7% (10)	11% (16)	10% (15)	12% (18)
61%-80%	1% (2)	1% (2)	8% (11)	4% (6)	6% (9)	2% (3)
81%-100%	1% (2)	1% (2)	7% (10)	3% (4)	3% (4)	3% (4)
No response	14% (20)	17% (24)	5% (7)	6% (9)	6% (9)	12% (17)
Total	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)

Table 6. General assessment views

Scale	Objective Skill	Insightful Process
1 Never	5% (7)	0% (0)
2 Rarely	17% (24)	8% (6)
3 Sometimes	45% (65)	25% (36)
4 Frequently	26% (38)	51% (74)
5 Always	6% (8)	17% (25)
No response	2% (3)	1% (2)
-----		
Total	100% (145) $\bar{X} = 3.1$	100% (145) $\bar{X} = 3.8$

Table 7. Preferred activities

Scale	Objective Testing	Projective Testing	Behavioral Assessment
1 Much less	6% (9)	6% (8)	1% (1)
2 Less	10% (14)	8% (11)	4% (6)
3 Same	64% (93)	65% (94)	52% (76)
4 More	14% (20)	19% (28)	35% (51)
5 Much more	3% (4)	0% (0)	6% (9)
No response	3% (5)	3% (4)	1% (2)
-----			
Total	100% (145) $\bar{X} = 2.9$	100% (145) $\bar{X} = 3.0$	100% (145) $\bar{X} = 2.7$

indicating the type of evaluative or scoring procedure used (standardized, personalized, or both) for both objective and projective tests. The results reported in Table 8 indicate that objective tests and projective tests were scored most often using both standardized and personalized scoring procedures (46% and 56% respectively). The next most frequent response for objective tests was standardized scoring procedures (31%) and for projective tests, personalized scoring procedures (17%).

Table 8. Evaluative procedure

Scoring Procedure	Objective Tests	Projective Tests
Standardized	31% (45)	14% (21)
Personalized	6% (8)	17% (25)
Both	46% (66)	56% (81)
No response	18% (26)	12% (18)
Total	100% (145)	100% (145)

In addition, the sample was asked to indicate if objective or projective test results conflicted with their own personal opinions regarding a client, whether they would tend to accept their personal hypothesis, the hypothesis indicated by the test(s), or other hypotheses. Thirty-eight percent (55) indicated that they would tend to accept their

personal hypothesis; 10% (15) indicated that they would tend to accept the hypothesis indicated by the test; 38% (55) indicated "other" options; and 14% (20) did not respond to that item.

The views of objective and projective psychodiagnostic test users were further solicited by asking respondents to indicate on a scale of 1 (strongly disagree) to 5 (strongly agree) whether or not they believed that objective and projective tests were more valuable than published evaluative studies indicate. The mean rating for objective tests was 3.0, indicating that most respondents had "no opinion" concerning this item. The mean rating for projective tests was 2.4, indicating that most respondents tended to disagree with the statement that projective tests are more valuable than published evaluations would indicate (see Table 9).

The respondents were also asked to indicate on a scale of 1 (never) to 5 (always) what importance they would ascribe to ten factors listed if they were advising school psychology students why they should learn objective and/or projective psychodiagnostic testing techniques. As shown in Table 10, mean ratings on the factors listed were: client's personality structure (3.8), rapport with client (3.1), influence on client due to enhanced prestige (2.6), determination of the nature of the disturbance (3.5), a specialty specific to psychologists (3.5), enhancement of employability and/or income (3.4), juristic or legal requirements (3.5), institutional demands (3.0), ability to make accurate behavioral predictions (3.3), and incorporation of test results into treatment (3.4). Further information about the influence

Table 9. Value of instruments versus published evaluations

Scale	Objective Tests	Projective Tests
1 Strongly disagree	3% (4)	3% (5)
2 Disagree	26% (38)	20% (29)
3 No opinion	32% (46)	14% (21)
4 Agree	25% (36)	40% (58)
5 Strongly agree	3% (5)	12% (17)
No response	11% (16)	10% (15)
-----		
Total	$\frac{100\%}{X = 3.0}$ (145)	$\frac{100\%}{X = 2.4}$ (145)

Table 10. Importance of factors for school psychology students (objective and projective tests)

Factor	1 Never	2 Rarely	3 Sometimes	4 Frequently	5 Always	No Response	Total	$\bar{X}$ Rating
Personality Structure	1% (1)	2% (3)	23% (34)	56% (81)	10% (14)	8% (12)	100% (145)	3.8
Rapport	2% (3)	15% (22)	47% (68)	28% (40)	1% (1)	8% (11)	100% (145)	3.1
Prestige	7% (10)	31% (45)	41% (59)	12% (18)	0% (0)	9% (13)	100% (145)	2.6
Nature of Disturbance	0% (0)	8% (12)	38% (55)	36% (52)	10% (14)	8% (12)	100% (145)	3.5
Specific Specialty	6% (8)	8% (11)	23% (33)	43% (63)	12% (17)	9% (13)	100% (145)	3.5
Employability	3% (4)	14% (20)	30% (44)	35% (51)	9% (13)	9% (13)	100% (145)	3.4
Legal Requirements	1% (1)	8% (12)	30% (43)	46% (67)	7% (10)	8% (12)	100% (145)	3.5
Institutional Demands	1% (2)	2% (3)	14% (21)	89% (61)	12% (17)	9% (13)	100% (145)	3.0
Behavior Predictions	2% (3)	6% (8)	54% (78)	29% (42)	2% (3)	8% (11)	100% (145)	3.3
Treatment Plans	1% (1)	8% (12)	41% (60)	37% (54)	5% (7)	8% (11)	100% (145)	3.4
Other	11% (16) respondents listed other factors; 89% (129) respondents did not respond							

of various factors in psychologists' decisions to use objective and projective assessment techniques was obtained by asking the sample to indicate on a scale of 1 (no importance) to 5 (great importance) the significance of nine variables listed. Mean ratings on these were: graduate training experience (3.8), previous clinical experience (3.5), institutional requirements (3.4), availability in the job setting (2.9), statistical reliability and validity (3.0), time involved (3.0), availability of a classification system (2.7), availability of standardized procedures that can be used out of setting (2.8), and availability of normative standards (3.4) (see Table 11). These results indicate, therefore, that the factors considered by the respondents to be of substantial importance in social-emotional assessment include: information about personality structure, and graduate training experiences. Other relatively important variables include: determination of the nature of the disturbance, provision of a specialty specific to psychologists, legal requirements, incorporation of results into treatment, enhancement of employability and income, institutional requirements, and availability of normative standards.

Information on the use of behavioral assessment techniques was obtained by asking the sample to indicate the approximate percentages of clients with which behavioral interviewing, observation, analog measures, checklist and rating scales, and self-report measures were used. Forty-one percent of the respondents reported using behavioral interviewing with 41% to 100% of their clients, while 33% reported using behavior observation, 24% reported using checklists and rating scales,

Table 11. Importance of factors in decisions to use objective and projective tests

Factors	1 No Importance	2 Little	3 Moderate	4 Sub- stantial	5 Great	No Response	Total	$\bar{X}$ Rating
Graduate Training	1% (2)	7% (10)	22% (32)	41% (60)	19% (27)	10% (14)	100% (145)	3.8
Clinical Experience	5% (7)	12% (17)	23% (34)	38% (55)	12% (18)	10% (14)	100% (145)	3.5
Institutional Requirements	3% (5)	18% (26)	25% (36)	32% (46)	13% (19)	9% (13)	100% (145)	3.4
Availability in Institution	13% (19)	20% (29)	26% (37)	23% (34)	7% (10)	11% (16)	100% (145)	2.9
Reliability and Validity	4% (6)	21% (30)	40% (58)	21% (30)	5% (7)	10% (14)	100% (145)	3.0
Time Involved	6% (8)	19% (28)	42% (61)	20% (29)	3% (5)	10% (14)	100% (145)	3.0
Classification System	10% (14)	23% (33)	40% (58)	14% (20)	3% (4)	11% (16)	100% (145)	2.7
Standardized Procedures	8% (11)	26% (37)	32% (46)	14% (21)	4% (6)	17% (24)	100% (145)	2.8
Normative Standards	2% (3)	12% (18)	32% (47)	37% (53)	6% (9)	10% (15)	100% (145)	3.4

and 19% reported using self-report measures with 41% to 100% of clients. Eighty-one percent of the respondents reported using analogue measures with 20% of their clients or less (see Table 12).

Table 12. Use of behavioral assessment strategies

Percentage of Clients	Behavioral Interviewing	Behavior Observation	Analogue Measures	Checklists Rating Scales	Self-Report Measures
0%-20%	28% (41)	33% (48)	81% (117)	34% (50)	37% (54)
21%-40%	21% (31)	26% (37)	1% (2)	30% (43)	35% (51)
41%-60%	16% (23)	18% (26)	1% (1)	11% (16)	7% (10)
61%-80%	7% (10)	7% (10)	1% (1)	7% (10)	6% (8)
81%-100%	18% (26)	8% (11)	1% (2)	6% (9)	6% (8)
No response	10% (14)	9% (13)	15% (22)	12% (17)	10% (14)
Total	100% (145)	100% (145)	100% (145)	100% (145)	100% (145)

The importance of various factors in the decisions of the respondents to use behavioral assessment techniques was assessed by asking them to indicate on a scale of 1 (no importance) to 5 (great importance) the influence of eight factors listed. Mean ratings on these were: graduate training experiences (3.2), clinical experience (3.2), institutional requirements (2.6), empirical evidence linking problem to treatment (3.4), availability of systematic behavioral assessment procedures (2.9), statistical reliability and validity (2.8), and time involved

(2.7) (see Table 13). These results indicate, therefore, that a relatively important factor in the responding school psychologists' decisions to use behavioral assessment techniques is empirical evidence linking problem to treatment. Other moderately important factors are graduate training and clinical experience.

It was further inquired as to whether the sample would increase their use of behavioral assessment strategies if there were more published instruments available for use, normative standards available, or standardized procedures available that could be used out of setting. Seventy percent of the respondents indicated that they would increase their use of behavioral strategies if there were more published instruments; 73% indicated that they would do so if there were normative standards available; and 70% indicated that their use of behavioral strategies would increase if there were standardized procedures available that could be used out of setting. (Non-responders to these items included 13%, 12%, and 15% of the respondents respectively.)

The respondents were asked to indicate their current exposure to projective and/or objective testing information as well as to behavioral assessment information by checking all of the following items that applied to them: (1) have little exposure to new information; (2) receive relevant journals regularly; (3) read at least several relevant articles every six months; (4) now systematically collect and analyze data regarding these tests for personal use; (5) have personally performed research in this area for public consumption. As reported in Table 14, over 60% (for objective and projective test information) and

Table 13. Importance of factors in decisions to use behavioral assessment techniques

Factors	1 No Importance	2 Little	3 Moderate	4 Sub- stantial	5 Great	No Response	Total	$\bar{X}$ Rating
Graduate Training	4% (6)	19% (27)	34% (49)	26% (37)	8% (12)	10% (14)	100% (145)	3.2
Clinical Experience	6% (8)	15% (22)	32% (46)	31% (45)	8% (11)	9% (13)	100% (145)	3.2
Institutional Requirements	14% (21)	26% (38)	32% (46)	14% (21)	4% (6)	9% (13)	100% (145)	2.6
Availability in Institution	17% (25)	28% (41)	30% (44)	11% (16)	3% (5)	10% (14)	100% (145)	2.5
Empirical Evidence	1% (1)	12% (17)	30% (44)	42% (61)	6% (8)	10% (14)	100% (145)	3.4
Availability of Procedures	4% (6)	25% (36)	40% (58)	21% (30)	1% (2)	9% (13)	100% (145)	2.9
Reliability and Validity	7% (10)	28% (41)	32% (47)	20% (29)	2% (3)	10% (15)	100% (145)	2.8
Time Involved	7% (10)	26% (38)	41% (59)	16% (23)	1% (1)	10% (14)	100% (145)	2.7

Table 14. Exposure to information

Exposure	Objective and/or Projective Tests	Behavioral Assessment
Little exposure to new information	17% (24)	23% (33)
Receive relevant journals regularly	61% (89)	57% (82)
Read several articles every six months	62% (90)	56% (81)
Collect and analyze data for personal use	16% (23)	15% (22)
Performed research for public consumption	14% (20)	13% (19)

over 55% (for behavioral assessment information) of the respondents reported receiving and reading journals regularly while only 14% and 13% respectively reported performing research for public consumption. Seventeen percent of the respondents reported having little exposure to new objective and projective test information while 23% reported having little exposure to behavior assessment information.

Inquiry was made in addition into what stage in their careers the school psychologists in the sample first learned to administer objective, projective, and behavioral assessment techniques. It was found that graduate training was when the overwhelming majority of respondents learned these techniques: objective tests--83%, projective tests--88%, and behavioral assessment--56% (see Table 15).

Table 15. Stage in career assessment techniques were first learned

Stage	Objective Tests	Projective Tests	Behavioral Assessment
Undergraduate Training	11% (16)	5% (7)	14% (21)
Graduate Training	83% (120)	88% (127)	56% (81)
Post-graduate Training	4% (6)	5% (7)	24% (35)
No response	2% (3)	3% (4)	6% (8)
Total	100% (145)	100% (145)	100% (145)

Data obtained concerning the assessment views and practices of school psychologists were divided according to theoretical orientation for analysis. Those respondents that indicated a behavioral orientation were put in one category and all of the others were put in another. Behavioral and cognitive behavioral orientations were then put in a separate category, and all others were put in another. Data comparisons were made between these categories on the basis of time devoted to projective test administration, time devoted to behavioral assessment, use of behavioral observation and interviewing, general views of the nature of assessment, value of projective tests compared to published evaluations, and the importance of empirical evidence linking problem to treatment in decisions to use behavioral assessment.

It was found that both categories of behavioral psychologists reported spending less social-emotional assessment time engaged in projective test administration than either of the "all other" orientations categories. As reported in Table 16, 10% and 14% of the respondents in the two respective behavioral categories and 25% and 27% of the respondents in the two respective "all other" orientations categories reported spending 41% to 100% of their social-emotional assessment time administering projective tests. Similarly, respondents in both behavioral categories reported spending more time engaged in behavioral assessment than did those respondents in the "all other" orientations categories as shown in Table 17. Thirty-eight percent of the behavioral respondents and 25% of the behavioral and cognitive behavioral respondents reported devoting 41% to 100% of their social-emotional assessment time to behavioral assessment. Fourteen percent and 17% of the respondents in the two respective "all other" orientations categories reported spending that much time engaged in behavioral assessment. As shown in Table 18, however, the use of behavioral observation does not differ widely according to theoretical orientation. Use of observation with 41% to 100% of clients was reported by 34% of behavioral respondents, 23% of "all others," 31% of cognitive behavioral and behavioral respondents, and 34% of "all others." Table 19 indicates that use of behavioral interviewing with 41% to 100% of clients was reported by 52% of behavioral respondents, 38% of "all others," 50% of behavioral and cognitive behavioral respondents, and 35% of "all others."

Table 16. Social-emotional assessment time devoted to projective test administration by theoretical orientation

Percentage Time Spent	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
0%-20%	55% (16)	35% (41)	51% (27)	33% (30)
21%-40%	28% (8)	36% (42)	30% (16)	37% (34)
41%-60%	7% (2)	7% (8)	6% (3)	
61%-80%	3% (1)	9% (10)	6% (3)	9% (8)
81%-100%	0% (0)	9% (10)	2% (1)	10% (9)
No response	7% (2)	4% (5)	6% (3)	4% (4)
-----				
Total	100% (29)	100% (116)	100% (53)	100% (92)

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

Table 17. Social-emotional assessment time devoted to behavioral assessment by theoretical orientation

Percentage Time Spent	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
0%-20%	21% (6)	36% (42)	17% (9)	42% (39)
21%-40%	34% (10)	43% (50)	53% (28)	35% (32)
41%-60%	28% (8)	6% (7)	17% (9)	7% (6)
61%-80%	10% (3)	5% (6)	6% (3)	7% (6)
81%-100%	0% (0)	3% (4)	2% (1)	3% (3)
No response	7% (2)	6% (7)	6% (3)	7% (6)
-----				
Total	100% (29)	100% (116)	100% (53)	100% (92)

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

Table 18. Use of behavioral observation according to theoretical orientation

Percentage of Clients	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
0%-20%	28% (8)	34% (40)	32% (17)	34% (31)
21%-40%	38% (11)	22% (26)	36% (19)	20% (18)
41%-60%	31% (9)	15% (17)	19% (10)	17% (16)
61%-80%	0% (0)	9% (10)	6% (3)	8% (7)
81%-100%	3% (1)	9% (10)	6% (3)	9% (8)
No response	0% (0)	11% (13)	2% (1)	13% (12)
-----				
Total	100% (29)	100% (116)	100% (53)	100% (92)

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

Table 19. Use of behavioral interviewing according to theoretical orientation

Percentage of Clients	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
0%-20%	7% (2)	34% (39)	13% (7)	37% (34)
21%-40%	38% (11)	17% (20)	30% (16)	16% (15)
41%-60%	21% (6)	15% (17)	26% (14)	10% (9)
61%-80%	10% (3)	6% (7)	9% (5)	5% (5)
81%-100%	21% (6)	17% (20)	15% (8)	20% (18)
No response	3% (1)	11% (13)	6% (3)	12% (11)
<hr style="border-top: 1px dashed black;"/>				
Total	100% (29)	100% (116)	100% (53)	100% (92)

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

Comparison of the general views of the nature of assessment between orientation categories revealed that all of the orientations viewed assessment more frequently as an insightful process than as an objective technical skill (see Table 20).

Table 20. General views of the nature of assessment by theoretical orientation

Orientation	Frequently an Objective Skill	Frequently an Insightful Process	Total
Behavioral	24% (7)	55% (16)	29
All others*	27% (31)	50% (58)	116
Cognitive Behavioral and Behavioral	25% (13)	47% (25)	53
All others**	27% (25)	53% (49)	92

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

Ratings given on a scale of 1 (strongly disagree) to 5 (strongly agree) concerning the degree to which projective tests were thought to be more valuable than published evaluations indicate, according to theoretical orientation, are reported in Table 21. Mean ratings were: behavioral (2.8), all other orientations (3.5), cognitive behavioral and behavioral (3.3), and all other orientations (3.7). Importance ascribed to empirical evidence linking problem to treatment according to theoretical

Table 21. Degree projective tests thought to be more valuable than published evaluations of reliability and validity indicate by theoretical orientation

Scale	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
1 Strongly disagree	7% (2)	3% (3)	6% (3)	2% (2)
2 Disagree	31% (9)	17% (20)	32% (17)	13% (12)
3 No opinion	21% (6)	13% (15)	23% (12)	10% (9)
4 Agree	24% (7)	44% (51)	23% (12)	50% (46)
5 Strongly agree	3% (1)	14% (16)	4% (2)	16% (15)
No response	14% (4)	9% (11)	13% (7)	9% (8)
Total	100% (29)	100% (116)	100% (53)	100% (92)
$\bar{X}$ Ratings	2.8	3.5	3.3	3.7

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

orientation is reported in Table 22. Mean ratings, obtained by responses on a scale of 1 (no importance) to 5 (great importance) were: behavioral (3.9), all other orientations (3.3), cognitive behavioral and behavioral (3.7), and all other orientations (2.9). These data indicate, once again, that there are expected differences in responses between orientations but that these differences are not large.

#### Summary

School psychologists responding to this survey were predominantly behavioral and cognitive behavioral in orientation. They reported spending the largest amount of their professional time in public schools doing a great deal of assessment. These assessment activities reportedly included approximately equal amounts of academic-related, social-emotional, and intellectual assessment, and of the time spent in social-emotional assessment activities, behavioral assessment and projective testing apparently occupied the greatest amounts of these psychologists' time.

Assessment was viewed by the respondents as being primarily insightful in nature. In addition, information regarding a client's personality structure was considered a relatively important factor in social-emotional assessment. Other influential variables included graduate training, previous clinical experiences, institutional requirements, and availability of normative standards.

Behavioral interviewing was reported to be the most-used behavioral technique, followed by behavioral observation, which was reportedly used by approximately one-third of the respondents with

Table 22. The importance of empirical evidence linking problem to treatment in decisions to use behavioral assessment by theoretical orientation

Scale	Behavioral	All Others*	Cognitive Behavioral and Behavioral	All Others**
1 No importance	0% (0)	1% (1)	0% (0)	1% (1)
2 Little	7% (2)	13% (15)	6% (3)	15% (14)
3 Moderate	17% (5)	34% (39)	26% (14)	33% (30)
4 Substantial	59% (17)	38% (44)	57% (30)	34% (31)
5 Great	17% (5)	3% (3)	9% (5)	3% (3)
No response	0% (0)	12% (14)	2% (1)	14% (13)
-----				
Total	100% (29)	100% (116)	100% (53)	100% (92)
$\bar{X}$ Ratings	3.9	3.3	3.7	2.9

\*Includes all theoretical orientations included in the study except behavioral

\*\*Includes all theoretical orientations included in the study except cognitive behavioral and behavioral

from 41% to 100% of clients. Use of analogue measures was extremely low. Although most of the respondents reported a preference for continuing to do approximately the same amounts of the various social-emotional assessment activities as they were presently doing, very high percentages of the respondents indicated that their use of behavioral assessment strategies would increase with developments in published instrumentation, normative standards, and standardized out-of-setting procedures.

Although there were some expected differences on the basis of theoretical orientation in the use of the various assessment strategies and views related to social-emotional assessment, these differences were somewhat inconsistent. Behavioral respondents reported engaging in less projective testing and more behavioral assessment than did respondents with more traditional orientations. In addition, behavioral observation was reportedly used more by behavioral respondents than by "all others," but slightly fewer behavioral and cognitive behavioral respondents combined reported using behavioral observation with 41% to 100% of clients than did "all other" orientations combined. The nature of assessment was found to be viewed by most psychologists responding as more of an insightful diagnostic process than an objective technical skill regardless of orientation.

## CHAPTER 5

### DISCUSSION AND IMPLICATIONS

This study investigated the assessment views and practices of school psychologists in the United States; the relationships in school psychology between theoretical orientation and assessment practice; and how data obtained compared with that of similar studies conducted in the field of clinical psychology.

Results of the present study compared with the surveys conducted by Garfield and Kurtz (1976) and Wade and Baker (1977) and Wade et al. (1978) revealed several interesting trends. First, school psychologists apparently considered themselves to be of a behavioral orientation (20% behavioral; 17% cognitive behavioral) in relatively greater number than did clinical psychologists (10% learning theorists in the Garfield and Kurtz study; 12.6% behavior therapists in the Wade and Baker studies). Differences in orientation terminology used in the three studies, however, could account for at least part of this discrepancy. A Freudian theoretical orientation was selected by 11% of the respondents in both the Garfield and Kurtz (1976) and Wade and Baker (1977) and Wade et al. (1978) studies while only 3% of the respondents to the present study selected that option. Comparisons in the "Neo-Freudian" category were difficult to make due to differences in the way this information was obtained in the three studies.

Garfield and Kurtz provided their respondents with an "eclectic" option and found that 55% of the respondents chose that option while only 5% chose "Neo-Freudian." Wade and Baker et al. did not provide an "eclectic" option on their questionnaire, and 21% of their respondents chose "Neo-Freudian" while 18% wrote in "eclectic." In the present study, no "eclectic" option was provided, and only 7% of the respondents chose the "Neo-Freudian" option. (Nineteen percent chose "other" orientations and 9% made more than one response to the orientation item.)

Second, the work settings differed widely between clinical and school psychologists. While 35% of the Garfield and Kurtz respondents reported working in institutional clinical settings such as general and psychiatric hospitals, clinics, or medical schools, only 8% of the school psychologists in the present study reported spending 41% to 100% of their professional time in that type of setting. Twenty-three percent of the Garfield and Kurtz respondents reported working in private practice while only 8% of school psychologists responding to the present study reported spending 41% to 100% of their time in that setting. More clinical psychologists in the Garfield and Kurtz study also reported working in universities (30%) than did school psychologists in the present study (15% spending 41% to 100% of professional time in academic settings). We have no indication from either published survey of clinical psychologists of the relative numbers of clinical psychologists working in schools, but 71% of the school psychologists responding to the present study reported spending 41% to 100% of their professional time in public schools.

Third, while specific comparisons of general professional activities in the two fields of psychology were difficult to make due to differences in the way this information was obtained, both clinical and school psychologists reported spending a great deal of their time doing assessment. General assessment views were also apparently similar in the two fields of psychology. Survey results of both clinical and school psychologists indicated that assessment was viewed as more of an insightful diagnostic process than an objective technical skill. An important factor reported by both clinical and school psychologists for learning objective and projective testing techniques was the ability of the tests to reveal personality structure. Opinions concerning the value of objective and projective tests compared to published evaluations of these tests, however, apparently differed somewhat between the respondents in the two specialty areas. Objective and projective tests were viewed by clinical psychologists as being more valuable than published evaluations would indicate. Most school psychologists responding tended to disagree with the statement that projective tests are more valuable and to have "no opinion" on this issue concerning objective tests.

Further comparisons between school psychologists sampled in the present study and clinical psychologists surveyed by Wade and Baker (1977), and Wade et al. (1978), as well as behavior therapists surveyed by Wade et al. (1978) and Swan and MacDonald (1978) indicated that differences in the practices of both clinical and school psychologists on the basis of theoretical orientation were surprisingly

small. Behaviorally oriented psychologists from both clinical and school psychology samples were found to use fewer projective techniques than psychologists of other orientations, but traditional assessment techniques were used a substantial amount of the time by psychologists of all theoretical orientations. In addition, behavioral assessment techniques were not used to a much greater extent by behavioral psychologists than by psychologists of other orientations.

A comparison between behaviorally oriented clinical and school psychologists on the basis of the percentages of clients with whom observation was used revealed comparable results. Use of behavioral observation by behavior therapists was found by Wade et al. (1978) and Swan and MacDonald (1978) to be with 34% of clients and 40% of clients respectively. Results of the present study indicated that the highest percentage of behaviorally oriented school psychologists (38%) used behavioral observation with 21% to 40% of their clients.

Finally, Swan and MacDonald (1978, p. 805) noted that "the presence of a cognitive approach to behavior therapy (was) clearly indicated." This trend was apparent in the field of school psychology as well since "cognitive behavioral" was chosen by 17% of the respondents to the present study as their predominant theoretical orientation. This category ranked third following "behavioral" (20%) and "other" (19%) options.

One issue that arises when comparing school and clinical psychology survey results is why a higher percentage of school psychologists than clinical psychologists claimed a behavioral orientation.

Although the questionnaire used in the present study was adapted from the one used by Wade and Baker, it is possible that the addition of a behavioral assessment section to this instrument resulted in selective responding by the sample. If this is the case, a more intensive follow-up to this study is indicated. It is likely, however, that the use of different terminology in the studies compared resulted in differential responding to the orientation items. Specifically, probably not all psychologists that consider themselves to be of a behavioral orientation also consider themselves to be behavior therapists.

Another issue in need of further investigation is the finding that while 37% of the respondents to the present study classified themselves as behavioral or cognitive behavioral in orientation, 48% of them reported being 40 years of age or older. The question that arises is, if many of these older school psychologists were among those of a behavioral orientation, where did they get their training? Behavioral psychology training programs are relatively new to the field, so it is unlikely that psychologists 40 years of age or over received behavioral training in graduate school.

Due to a relatively small number of subjects in the present study in addition to the possibility of questionable accuracy inherent in any self-report type of data, results should be interpreted rather cautiously. However, a comparison of respondents to this study (N = 145, 36% of the mailing) with Farling and Hoedt's (1971) respondents (N = 3,138, 33% of the mailing) revealed several consistencies that give some evidence of sample representativeness. In the Farling

and Hoedt study 59% of the respondents were male and 40% were female. In the present study 57% of the respondents were male and 41% were female. Farling and Hoedt reported that 71% of their respondents were 35 years of age or older, and 67% of the respondents in the present study fell in that age category. Farling and Hoedt found that 79% of their respondents were primarily employed by a school system, while 71% of the respondents to this study reported spending 41% to 100% of their time in public schools. Involvement in private practice was found to be low in both studies.

#### Implications

This study, as well as previous studies reviewed, point to some crucial assessment needs in psychological practice today. This is most apparent when one considers the surprisingly weak relationships in both clinical and school psychology between assessment practice and theoretical orientation. With the widely divergent theoretical approaches to assessment represented by traditional and behavioral orientations, some clear differences in assessment practice would surely be expected. That this is clearly not the case in psychological practice today highlights the need for some definite improvements.

There is a need for training programs that more fully prepare psychologists to handle assessment problems in the field. Students in psychology are faced with some glaring inconsistencies between assessment theories and what is normally done and expected of them in practice. Training programs should include information about and experience in handling these inconsistencies so that assessment in

practice can become more appropriate to the treatment and placement needs of clients. This may include instruction on how to recruit, train, and manage volunteers to help in the collection of behavioral data; effective ways to present behavioral assessment data to professionals unfamiliar or even antagonistic to this approach; methodology for the development of local or classroom behavioral norms; and standards of evaluation for use with behavioral assessment devices as they begin to become available for use in the field. In-service training programs should also be provided for people working in the field who wish to update their knowledge and skills in assessment, particularly those who were trained in traditional assessment strategies.

This study, along with others reviewed, points out some important needs for future research and development in the area of assessment. Seventy percent of the respondents in this study reported that their use of behavioral assessment strategies would increase if there were more published behavioral instruments available that could be used in assessment practice. Seventy percent of the respondents reported that their use of behavioral assessment strategies would increase if there were standardized procedures that could be used outside the specific setting involved. Seventy-three percent of the respondents similarly reported that their use of behavioral assessment techniques would increase if there were normative standards available for use with these techniques. Considering these immediate assessment needs as reported by psychologists and the serious concerns voiced in the literature about the many limitations of behavioral assessment techniques that are available, the need for future research seems to be clear.

Reliability and validity studies on behavioral assessment techniques must be conducted so that credibility in the value of these strategies can be gained throughout the profession of psychology. Development of practical formats for behavioral assessment is also badly needed so that variables such as time, money, and setting factors become less of an impedance to their use. Norms for use with behavioral assessment techniques must also be developed. Norms are often necessary in the making of placement decisions, and if these were available for behavioral assessment strategies, placements would be augmented by specific information on how to intervene with the actual problem of concern. If practical as well as psychometric limitations are to be alleviated in the area of behavioral assessment, much work needs to be done as soon as possible.

Bardon (1976) contended that the field of school psychology mirrors what is to come for all of professional psychology. If this is so, this study may be an indication of a future of increasing numbers of psychologists in the profession trained to assess behavior and academic problems from a behavioral approach. With this will undoubtedly come more and more pressure toward development of practical behavioral assessment devices that meet important quality specifications and toward development of training programs that more adequately prepare psychologists to deal with the many assessment problems that exist in the profession today.

APPENDIX A

SURVEY INSTRUMENT

Assessment Questionnaire

Please check or circle the appropriate response for each item. All responses will be handled confidentially. Your consent to use the information you provide is understood by the return of the questionnaire.

## PART I - - PROFESSIONAL ORIENTATION AND ACTIVITIES

1. How would you characterize your PREDOMINANT professional orientation?
- \_\_\_\_\_ a. Client-centered (Rogerian)  
 \_\_\_\_\_ b. Freudian  
 \_\_\_\_\_ c. Neo-Freudian  
 \_\_\_\_\_ d. Gestalt  
 \_\_\_\_\_ e. Transactional Analysis  
 \_\_\_\_\_ f. Behavioral  
 \_\_\_\_\_ g. Cognitive Behavioral  
 \_\_\_\_\_ h. Reality oriented  
 \_\_\_\_\_ i. Other (please specify) \_\_\_\_\_
2. Approximately what percentage of your professional time is devoted to the following activities?
- a. Therapy/Counseling  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- b. Training (Academic or field supervision)  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- c. Administration  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- d. Research  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- e. Consultation  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- f. Assessment  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- g. Other (please specify) \_\_\_\_\_  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
3. Approximately what percentage of your professional time is spent in the following settings?
- a. Academic  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- b. Public schools  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- c. Private practice  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- d. Mental hospital, agency, or clinic  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- e. Other (please specify) \_\_\_\_\_  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
4. Considering your ASSESSMENT practices, what percentage of your professional time is devoted to:
- a. Academic-related assessment (achievement, perceptual, neuropsychological)  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- b. Social-emotional assessment  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%
- c. Intellectual assessment  
 \_\_\_\_\_ 0% to 20% \_\_\_\_\_ 21% to 40% \_\_\_\_\_ 41% to 60% \_\_\_\_\_ 61% to 80% \_\_\_\_\_ 81% to 100%

## PART II - - SOCIAL-EMOTIONAL ASSESSMENT ACTIVITIES

1. Approximately what percentage of your time related to social-emotional assessment is devoted to:
- a. Objective test administration (e.g. MMPI, Jesness Inventory, CPI)  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
- b. Projective test administration (e.g. Rorschach, TAT, Draw-A-Person)  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
- c. Behavior Assessment  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
- d. Objective test evaluation  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
- e. Projective test evaluation  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
- f. Behavior data evaluation  
 \_\_\_ 0% to 20% \_\_\_ 21% to 40% \_\_\_ 41% to 60% \_\_\_ 61% to 80% \_\_\_ 81% to 100%
2. How would you represent your views of social-emotional assessment in terms of the following factors:
- a. Assessment is an objective technical skill  
 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always
- b. Assessment is an insightful diagnostic process  
 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always
3. In comparison to your present social-emotional assessment practices, how much of the following would you RATHER be doing? Circle the appropriate number.
- a. Objective psychodiagnostic testing  
 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 much less less same more much more
- b. Projective psychodiagnostic testing  
 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 much less less same more much more
- c. Behavioral assessment techniques  
 \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 much less less same more much more

## PART II, SECTION A - - OBJECTIVE AND PROJECTIVE PSYCHODIAGNOSTIC TESTING

If a percentage of your time is devoted to objective or projective psychodiagnostic testing, please answer questions 4-9.

4. What sort of evaluative or scoring procedure(s) do you typically employ? (Indicate the most appropriate category.)
- a. Objective psychodiagnostic tests:  
 \_\_\_\_\_ Standardized or actuarial procedure  
 \_\_\_\_\_ Personalized procedure derived from clinical experience  
 \_\_\_\_\_ Both
- b. Projective psychodiagnostic tests:  
 \_\_\_\_\_ Standardized or actuarial procedure  
 \_\_\_\_\_ Personalized procedure derived from clinical experience  
 \_\_\_\_\_ Both

5. If objective or projective test results conflicted with your personal opinion (drawn from case history and/or interview) regarding a client, which hypothesis would you tend to accept?

\_\_\_\_\_ a. Your personal hypothesis  
 \_\_\_\_\_ b. The hypothesis indicated by the test(s)  
 \_\_\_\_\_ c. Other (please specify) \_\_\_\_\_

6. Based on your experience, please indicate to what degree published evaluations of reliability and validity reflect the value of objective and projective psychodiagnostic tests. Circle the appropriate number.

a. Objective tests are more valuable than published evaluative studies indicate.

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 strongly disagree disagree no opinion agree strongly agree

b. Projective tests are more valuable than published evaluative studies indicate.

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 strongly disagree disagree no opinion agree strongly agree

7. If you were advising school psychology students why they should learn objective and/or projective psychodiagnostic testing techniques, what importance would you ascribe to the following factors? Circle the appropriate number.

a. Testing yields information regarding the client's personality structure

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

b. Testing increases rapport with the client

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

c. Testing increases influence on clients due to enhanced prestige

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

d. Test evaluation is concerned with determination of the nature of the disturbance

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

e. Testing provides a specialty specific to psychologists

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

f. Testing enhances employability and/or income

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

g. Testing satisfies juristic or legal requirements

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

h. Testing satisfies institutional demands regarding diagnostic services

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

i. Test results enable psychologists to make accurate behavioral predictions

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

j. Test results are incorporated into treatments in a meaningful way

\_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5  
 never rarely sometimes frequently always

k. Please specify other important factors. (Optional)

\_\_\_\_\_  
 \_\_\_\_\_

8. Please indicate the importance of the following factors in your decision to use objective and projective assessment techniques. Circle the appropriate number.

a. Graduate training experience

	1	2	3	4	5
no importance		little	moderate	substantial	great

b. Previous clinical experience

	1	2	3	4	5
no importance		little	moderate	substantial	great

c. Requirements of the affiliated agency or institution

	1	2	3	4	5
no importance		little	moderate	substantial	great

d. Availability through the agency or institution with which you are associated

	1	2	3	4	5
no importance		little	moderate	substantial	great

e. Statistical reliability and validity

	1	2	3	4	5
no importance		little	moderate	substantial	great

f. Time involved

	1	2	3	4	5
no importance		little	moderate	substantial	great

g. Availability of a classification system

	1	2	3	4	5
no importance		little	moderate	substantial	great

h. Availability of standardized procedures that can be used out of setting

	1	2	3	4	5
no importance		little	moderate	substantial	great

i. Availability of normative standards

	1	2	3	4	5
no importance		little	moderate	substantial	great

9. Please indicate your current exposure to projective and/or objective testing information. Check all items that apply.

- a. Have little exposure to new information.
- b. Receive relevant journals regularly.
- c. Read at least several relevant articles every six months.
- d. Now systematically collect and analyze data regarding these tests for personal use.
- e. Have personally performed research in this area for public consumption.

## PART II, SECTION B - - BEHAVIORAL ASSESSMENT

If a percentage of your time is devoted to behavioral assessment, please answer questions 10-13.

10. Please indicate the approximate percentage of your clients with which you employ the following strategies:
- Behavioral interviewing (information gathered concerning specific behaviors and behavior settings of clients)  
 0% to 20%     21% to 40%     41% to 60%     61% to 80%     81% to 100%
  - Behavioral observation (direct measures of client behavior in the natural environment by observers)  
 0% to 20%     21% to 40%     41% to 60%     61% to 80%     81% to 100%
  - Analog measures (behavioral observations made in simulated laboratory experiences)  
 0% to 20%     21% to 40%     41% to 60%     61% to 80%     81% to 100%
  - Problem checklists or rating scales (a parent, teacher or peer rating the extent to which a client demonstrates certain behaviors)  
 0% to 20%     21% to 40%     41% to 60%     61% to 80%     81% to 100%
  - Self-report measures (client reports information about his/her own behaviors, preferences, etc.)  
 0% to 20%     21% to 40%     41% to 60%     61% to 80%     81% to 100%
11. Please indicate your current exposure to behavioral assessment information. Check all items that apply.
- Have little exposure to new information.
  - Receive relevant journals regularly.
  - Read at least several relevant articles every six months.
  - Now systematically collect and analyze data regarding these strategies for personal use.
  - Have personally performed research in this area for public consumption.

12. Please indicate the importance of the following factors in your decision to use behavioral assessment techniques. Circle the appropriate number.

- a. Graduate training experiences
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- b. Previous clinical experience
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- c. Requirements of the affiliated agency or institution.
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- d. Availability through the affiliated agency or institution
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- e. Empirical evidence linking problem to treatment
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- f. Availability of systematic behavioral assessment procedures
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- g. Statistical reliability and validity
 

1	2	3	4	5
no importance	little	moderate	substantial	great
- h. Time involved
 

1	2	3	4	5
no importance	little	moderate	substantial	great

13. Would you increase your use of behavioral assessment strategies if:
- a. there were more published instruments available for use with these strategies?  
Circle one.
 

YES	NO
-----	----
  - b. there were normative standards available? Circle one.
 

YES	NO
-----	----
  - c. there were standardized procedures available that could be used out of setting?  
Circle one.
 

YES	NO
-----	----

## PART III - - DEMOGRAPHIC INFORMATION

1. What is your present level of training?  
 \_\_\_\_\_ a. Masters degree  
 \_\_\_\_\_ b. Graduate study beyond the masters degree  
 \_\_\_\_\_ c. Doctoral degree
2. In what state do you live?  
 \_\_\_\_\_
3. Are you presently certified in the state?  
 YES NO
4. Did you graduate from a school psychology program?  
 YES NO
5. What national professional organizations do you belong to?  
 \_\_\_\_\_ a. American Psychological Association, Division 16  
 \_\_\_\_\_ b. National Association of School Psychologists  
 \_\_\_\_\_ c. Other (please specify) \_\_\_\_\_
6. How many years have you been practicing school psychology?  
 \_\_\_\_\_ a. Student  
 \_\_\_\_\_ b. 0 - 3 years  
 \_\_\_\_\_ c. 4 - 6 years  
 \_\_\_\_\_ d. 7 - 9 years  
 \_\_\_\_\_ e. more than 9 years
7. At what stage in your career did you first learn to administer objective psychodiagnostic tests?  
 \_\_\_\_\_ a. Undergraduate training  
 \_\_\_\_\_ b. Graduate training  
 \_\_\_\_\_ c. Post-graduate employment
8. At what stage in your career did you first learn to administer projective psychodiagnostic tests?  
 \_\_\_\_\_ a. Undergraduate training  
 \_\_\_\_\_ b. Graduate training  
 \_\_\_\_\_ c. Post-graduate employment
9. At what stage in your career did you first learn to use behavioral assessment techniques?  
 \_\_\_\_\_ a. Undergraduate training  
 \_\_\_\_\_ b. Graduate training  
 \_\_\_\_\_ c. Post-graduate employment
10. What is your age?  
 \_\_\_\_\_ a. 20 - 24  
 \_\_\_\_\_ b. 25 - 29  
 \_\_\_\_\_ c. 30 - 34  
 \_\_\_\_\_ d. 35 - 39  
 \_\_\_\_\_ e. 40 or over
11. What is your sex?  
 \_\_\_\_\_ a. Female  
 \_\_\_\_\_ b. Male

APPENDIX B

COVER LETTERS

May 14, 1979

Dear Psychologist:

The University of Arizona School Psychology Program is conducting a study to determine the assessment practices and preferences of school psychologists. The title of this survey is "A Survey of the Psychodiagnostic Assessment Techniques Utilized by School Psychologists." This study is being sponsored by the American Psychological Association, Division 16, Committee on Behavior Modification. Specific data about what psychodiagnostic assessment practices are prevalent in the field today and issues surrounding their use are major questions to be investigated. Such information will be valuable to the profession in directing its efforts toward improving assessment practices and better preparing school psychologists for conducting psychodiagnostic assessment.

Enclosed is a questionnaire designed to answer important questions about school psychological assessment techniques. Your responses are very much needed to make this study representative. The questionnaire is divided into three major parts. Part I consists of questions concerning your professional orientation and activities in general; Part II consists of questions concerning your social-emotional assessment activities; and Part III consists of questions about various demographic information. Please check or circle the appropriate response for each item. All responses will be handled confidentially. Your consent to use the information you provide is understood by the return of the questionnaire.

We hope to complete the data collection portion of the study by June 1, 1979. Your cooperation is greatly appreciated. If you would like a copy of the completed study, please write directly to me and one will be sent to you.

Sincerely,

Terry Anderson  
University of Arizona

Enclosures: Questionnaire  
Return envelope

June 11, 1979

Dear Psychologist:

Three weeks ago you received a questionnaire concerning your assessment practices and preferences. If you have already responded, thank you very much. If not, your cooperation is urgently requested. Your responses are very much needed to make this study representative.

Enclosed is another copy of the questionnaire. It was designed to answer important questions about school psychological assessment techniques. The questionnaire is divided into three major parts. Part I consists of questions concerning your professional orientation and activities in general. Part II consists of questions concerning your social-emotional assessment activities; and Part III consists of questions about various demographic information. Please check or circle the appropriate response for each item. All responses will be handled confidentially. Your consent to use the information you provide is understood by the return of the questionnaire.

We hope to complete the data collection portion of the study very soon. Your cooperation is greatly appreciated.

Sincerely,

Terry Anderson  
University of Arizona

Enclosures: Questionnaire  
Return envelope

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