Order Number 9306205

University trainers' versus field supervisors' perceptions of training in school psychology: A comparative survey

Rubenstein, Barbara Rochelle, Psy.D.

Pace University, 1992

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

University Trainers' Versus Field Supervisors' Perceptions of Training in School Psychology: A Comparative Survey

by

Barbara R. Rubenstein

A Doctoral Project Submitted in Partial fulfillment of the Requirements for the Degree of Doctor of Psychology in the Department of Psychology at Pace University

NEW YORK

1992

PACE UNIVERSITY

PSYCHOLOGY DEPARTMENT
PSY.D. PROJECT
FINAL APPROVAL FORM

(Please type all information)

NAME: Barbara R. Rubenstein

TITLE OF PROJECT: University Trainers' versus Field Supervisors' Perceptions of Training in School Psychology: A Comparative Survey

DOCTORAL PROJECT COMMITTEE:

PROJECT ADVISOR: Dr. Leonard Bart
(Name)
Professor and Director of Field Training, Pace University
(Title) (Affiliation)

PROJECT CONSULTANT: Dr. John Stokes
(Name)
Associate Professor, Pace University
(Title) (Affiliation)

FINAL APPROVAL OF COMPLETED PROJECT:

I have read the final version of the doctoral project and certify that it meets the relevant requirements for the Psy.D. degree in School-Community Psychology.

Leonard J. Bart — 9/10/92
(Project Advisor's Signature) (Date)

John Stokes — 8/15/92
(Project Consultant's Signature) (Date)

ACKNOWLEDGEMENTS

I would like to express my gratitude to those whose efforts in my behalf helped to make this doctoral project possible.

I would like to expecially thank Dr. Leonard Bart, my advisor, for his sincere contribution of time and advice. His encouragement and constant reassurance were very important throughout every phase of the project's existence. Dr. Bart's knowledge and dedication to the field of school psychology guided me, and enabled me to maintain the direction and integrity of the project. His caring and understanding was invaluable and helped me through the times when I needed it the most.

I would also like to thank Dr. John Stokes, my consultant, for his invaluable knowledge and guidance. Dr. Stoke's support, patience, and consistent striving for high quality helped make this project more enriching and meaningful for me. Dr. Stokes expertise in research design and statistics were vital to the success of the project.

Special acknowledgment goes to Stephen Salbod for his computer assistance and practical suggestions. Steve's support, encouragement and statistical expertise throughout the entire project is extremely appreciated.

Special acknowledgment goes to my friends, Dennis Earle and Linda Scotti for their support and kindness. Their special assistance and clerical support enabled me to mass produce and distribute the survey in a highly professional

manner.

I am also especially indebted to all the professionals who participated in this study. Without their interest and coooperation, the research would not have been possible.

Finally I would like to express my most heartfelt acknowledgements to my close friends, and family. Janis and Joel Nasar's understanding and support is deeply appreciated. Harold and Benita Rubenstein have provided the emotional and financial support to help me accomplish this important milestone in my professional career. Their continous devotion, inspiration, understanding and patience have made it possible for me to achieve my goals. They have all been the "wind beneath my wings".

In loving memory of my grandparents

Nora and Al Sarfaty,

Esther and Joseph Rubenstein

Table of Contents

Table of Contents (continued)

List of Tables

List of Tables (continued)

List of Tables (continued)

List of Tables (continued)

List of Figures

CHAPTER I

INTRODUCTION

The relationship between university trainers and field supervisors is one that is crucial for the preparation of future school psychologists as well as for the continued development of the profession. School psychologists, in a growing and constantly changing field, have always been concerned with their roles, competencies, and adequacy of their professional functioning. As such, the training of school psychologists is a multifaceted and demanding task. Trainers, within both the academic and applied realms of the field, must be aware of the needs and trends within society-at-large and prepare students accordingly.

Historically, psychologists recognized the importance of dydactic training in academic institutions as well as the integration of field experiences in order to develop their skills for the "real world". Various models of graduate training reflect these aspects of professional preparation. Thus, the training of school psychologists incorporates the established scientist-practitioner model as well as newer models of training, such as the practitioner model.

Students first take a series of courses at the

university. Professional coursework in school psychology is conceptualized as an integrated program of selected areas. Although the specific knowledge, skills, and experiences necessary to train competent school psychologists are often unspecified by universities nation-wide, the foundations among them are relatively consistent. (Knoff, 1986)

Additionally, almost all future school psychologists are required to apply their university-based knowledge and experiences in the "field". This aspect of training, the internship, involves supervised time working directly with clients. The internship serves a major function for the student, as it is the critical last step in the complete training process. The student gains a better sense of which competencies are most needed as well as what the true role of a school psychologist is, while under the guidance of his or her field supervisor. There is much diversity in the internship experience as ascertained from the literature (Kurz, et. al., 1982, Bart & Rubenstein, 1986). Still it is one of the most important aspects of the students' training. Much of the final responsibility for preparing new school psychologists occurs during this phase (Khol, Matefy & Turner, 1972, Suran, Crivolio & Dupst, 1977).

Although the various models of training have been based on sound principles, psychologists in academia, research, and practice have shown their concerns over the potential discrepancies and conflicts they present. During an important, perhaps radical time of change within the field,

McCandless (1969) pointed out that "there are serious points at issue between front-line school psychologists and academic training psychologists" (p. 13). The academicians must educate students so they will be skilled for the job market even though many are out of contact with actual practice in the field. The practitioners, on the other hand, guide and supervise students during the internship, and thus are responsible for the students' professional preparation when in the field.

It is not only important to address the notion that different perceptions of training between academic-based and field-based school psychologists exist, but to determine what impact they have on the quality and effectiveness of training today. According to Bickman (1985), these conflicts and differences are not necessarily negative. The conflicts and persistent evaluation of science and practice contribute to the definition of psychology and sets the discipline apart from others. The issues and questions which arise from these differences are to be "...nurtured and respected, for their contributions to the distinctiveness of our discipline" (Bickman, 1985, p. 3).

The ultimate success of school psychology as a discipline is the extent to which its members meet the needs of the children, schools, and communities in which they serve. The goal of training is to produce competent professionals who will meet those needs. Preparation for those roles should be assessed, evaluated, even scrutinized,

in order to assure that a high quality of psychological services be given. It is essential therefore, that trainers not only keep abreast of current research and theory, but that they also closely monitor what is happening in the "real world" which is the domain of the field-based psychologist.

The purpose of this study was to gain a better sense of whether or not school psychologists are adequately prepared to face the challenges in schools today. Will they be adequately prepared to serve the needs of the clients they strive to help, and meet the demands of the positions they will eventually fill?

To fully investigate these questions, and to understand this issue in its entirety, we must first examine the historical context of school psychological training, and the development of school psychology as a discipline. The current trends and issues within the field will be reviewed and role definition within school psychology will be examined. Next, issues regarding the differing views held by academicians and practitioners will discussed. This will encompass various criticisms of training in general, and previous research investigating the relevance of training to practice within school psychology.

The unique facets of this study, including the methodology used, will be outlined. Finally, the contributions these findings have made to the growing body of literature regarding the efficacy of training school psychologists will be discussed.

Historical Context

The profession of school psychology and the training of school psychologists does not exist in a vacuum. Current training in school psychology has evolved from centuries of historical events, discoveries, and feedback from a variety of disciplines. The long established foundations, principles, and previous training models must be reviewed, for these form the assumptions on which current perceptions of training are based.

Early training in psychology was based on experimental method. Psychologists such as Weber, Wundt and Fechner tested the notion of individual differences in their laboratories. Along with others, they conducted studies in human reaction time, and individual sensitivity of the various senses. In fact, the field was so strongly tied to research that the first psychologists debated whether to consider the "new" discipline a natural or social science (Wolman, 1968).

Psychologists were trained as generalists. They worked as researchers and taught the growing base of knowledge and psychological theories in universities. The discipline as a whole did not gain much acceptance from other, more established areas of study such as medicine and philosophy. Yet the strong ties to the scientific method have been the pinnacle of its identity and the foundation of training new members into the field.

Psychology grew into a large, organized profession in

the 1940's, when the American Psychological Association began accrediting doctoral programs (Bergan, 1985). Much of this expansion in the United States was a result of the World Wars and the challenging new demands placed on all health professionals. During these times, psychologists found that they had an armamentarium of clinical, diagnostic, and research skills which could be quite useful. New Ph.D.'s found that they could apply their science directly onto populations who were very much in need.

Perhaps the most significant event with regard to training applied psychologists took place before the World Wars however. Lightner Witmer, an academician and experimental scientist, was one of many psychologists who began to turn his attention toward practical problems, which included ways to meet the needs of children. Although his work will be presented in detail later, it is important to note that he opened the first "psychological clinic". This clinic, part of the University of Pennsylvania where he was based, was intended to utilize the departments' research facilities to investigate "...the mental development in school children...by means of clinical and statistic methods" (Levine & Levine, 1970, p. 57).

In 1896 Witmer presented a paper to the American Psychological Association proposing his conceptualization for practical work in psychology. This proposal initiated the development of applied psychology as a clinical discipline in both the schools and hospitals. It also marked the first

formal training practicum or "internship" in psychology. Witmer's initiatives were some of the most influential factors on the nature of preparing all field-based psychologists today.

The Development of School Psychology

School psychology is said to have been founded in the years between 1890 and the beginning of the First World War. It was at that time that, among several other events, there was a general concern about the welfare of children. This was a time when mainstream psychology began to uncover revelations about the importance of childhood and the influential factors of the formative years. The turn of the 19th Century marked the beginning of the "Century of the Child" (Levine & Levine, 1970, p. 23). This led to the impetus for specialized applications of psychological knowledge that pertained to children.

There were two main problems related to children that initially caught the attention of psychologists and educators. One was an acute rise of juvenile deliquency in the United States in the late 19th and early 20th centuries. First generation immigrants grew apart from their parents who were from many foreign countries and cultures. Problems arising out of these gaps, as well as from changes in the nuclear family arose. Psychologists and educators were called upon to develop ways to deal with these children. This brought about the establishment of the first special class for disruptive children in 1899, located in New Haven,

Connecticut.

The other area of interest with regard to children, was in the acquisition on information and academic success. . . Throughout Europe, as well as the United States, much curiousity and frustration grew with regard to educating "mental defects" or "idiots" as the mentally retarded were called. Pioneers such as Seguin, Pinel and Itard brought much knowledge about these children to the field, which helped foster a more humanitarian approach for dealing with them. Schools needed help understanding the unique problems of the retarded as well as assistance in determining the kind of education that could be provided.

Psychologists found that they were utilizing their general knowledge and devoting their energies to these issues. The early founders of psychology such as G. Stanely Hall, and William James often gave lectures to teachers in the school system. They focused on helping teachers deal with the multitude of problems school children were facing. These series of lectures influenced another psychologist, Edward Thorndike, who in 1899 formally established the discipline of educational psychology at Teachers' College, Columbia University. Thorndike and others conducted a plethora of research related to memory, and the learning process. The concepts of child development, reward and punishment, and theories of learning were vital contributions.

Whereas these early events certainly set the stage for

the new discipline, two major forces gave way to the development of school psychology as we know it today. The first was the opening of the Cattell Psychological Clinic where specialized training practica took place. The second was the growing testing movement.

When Dr. Witmer opened the Cattell clinic, he intended its focus to be the research and practice of examining "...mental development in school children, as manifested in mental and moral retardation" (Levine & Levine, 1970, p. 57). He further supplemented this clinic with a hospital school, to be used for the treatment of such children. The clinic and hospital school were to be used for training teachers, social workers, even physicians. His primary goal however was to train students for a "new" profession, that of a "...psychological expert who would examine and treat children and who would work in connection with the schools (Levine & Levine, 1970).

Witmer, Healy and Bronner were among the leaders in developing special classes, which significantly contributed to modern school psychological services as well. This was an idea that Witmer promoted as a means of treating children with special educational needs who did not benefit from regular classes. His notion, similar to modern thought, was to provide classes that allowed for individual differences within the framework of the regular public school. (Levine & Levine, 1970)

By 1908, Witmer had written numerous articles on special

classes as part of the solution of reform for a school system that was considered to be failing to provide adequate education for all children. It wasn't until the 1930's however, that Witmer's initiatives were brought to fruition. By that time there were many more clinics around the country following his model and a variety of psychological services connected with the public schools.

The same year Witmer opened his clinic, marked the beginning of the testing movement. This was the second, but perhaps largest influential factor in the development of school psychology. The use of psychological tests to measure areas of functioning originated in Europe, specifically France. Psychological tests were developed as a means of dealing with the problems of school children similar to those problems experienced in the United States.

In simplest terms, there were children who did not comfortably fit the mold of education that was being offered. The French Ministry of Public Instruction sought ways of dealing with these children. The Ministry commissioned Alfred Binet and Theodore Simon to devise methods for selecting children who could not adapt to the regular curriculum.

Binet and Simon's sophisticated work on the development of the intelligence test in 1905, 1908, 1911, and its translations, revisions and adapatations to the American culture, gave tremendous impetus to the treatment of children and the establishment of professional school psychology. By

1916 Terman's revision of the Stanford-Binet Intelligence Scale became the most widely used form of test in the schools and would remain so for the next 25 years. The concept of "mental age" spread rapidly and became the first trade tools of the school psychologist.

Other developments in psychological testing impacted on school psychology as well. During World War I the Army Alpha Examination was developed in response to the urgent need for large scale evaluation of men's abilities. The use and development of these tests paved the way for standardized group tests to be used in the schools. Educational achievement tests, primarily used by educators, also expanded rapidly. In addition, developments in education and learning theory led to insights regarding the wide range of children's abilities, and fostered the notion of individual differences.

Although psychological concepts were certainly being utilized for the schools there were no official positions with the title "school psychologists" until 1915. That year, the Connecticut State Board of Education officially appointed Dr. Arnold Gesell, well noted for his work in developmental psychology, as a "school psychologist". Dr. Gesell's job was to "...make mental examination of backward and defective children in rural, village and urban schools" (Fein, 1974, p. 3). Thus, the first position in school psychology was created.

While early school psychologists were affected by the learning and experimental developments, they were more

affected by the psychiatric/psychoanalytic influences of Freud and Adler. Many historians have documented the impact of clinical psychology on school psychologists (Throw, 1966, Fein, 1974). After administering tests, which was their main role, school psychologists found that they were needed to address problems in mental health within the schools. Functioning as clinical psychologists within the schools, school psychologists often felt comfortable approaching problems using the array of theories that grew out of clinical psychology. Theories regarding the effect of the environment were expanding rapidly and school psychologists raised the question of how the school environment affected the child.

Perhaps the mark of the establishment of school psychology as a discipline unto itself occurred in 1947, the year Division 16 of the American Psychological Association was formed. This was the first major organizational development of psychologists whose purpose was stated as the application of psychological knowledge in the schools. (Bergan, 1985)

Current Trends and Issues

Several trends and issues throughout the development of school psychology are of particular significance. These trends and issues have had an impact on the various roles school psychologists undertake. In addition, they have influenced the development of training in school psychology. The trends and issues that will be discussed are the growth

of the profession, the school psychology service ratio, entry level, the increase of indirect services, and the broadening of roles.

Growth of the Profession

Until the 1960's there were very few educational programs in school psychology. Rapid growth in school psychology programs took place in the 60's following the growing demand for psychological services. The number of graduate programs in school psychology increased from 30 in 1961 to more than 160 in 1974 to over 200 currently (Goh, 1981). Much of this demand reflected changes in society, the acceptance and awareness of the needs of the services and an increase in federal mandates.

The demand for school psychologists and the subsequent increase in graduate programs had a highly significant implact on the field. As Fagan (1986) documents, at least one-half of the current school psychology programs have come into existence in the past 15 to 18 years. He describes the growth of the 1970's to the present as "professional purification period, or the "Thoroughbred Years" (Fagen, 1986, p. 16). In contrast to the preceding growth period called the "Hybrid Years" (p.16), during the purification period persons seeking preparation in school psychology have acquired education in school psychology programs. The programs are accredited in school psychology and the faculty in these programs have received training within school

psychology. This kind of preparation has led to more consistent credentials and professional preparation for school psychology.

School Psychology Service Ratio

Another significant impact on the practice of school psychology has been the psychologist-pupil ratio. The most direct effect the ratio has is on the number of school psychologists employed, hiring needs and thus, number of graduate programs. According to Fagan (1988) the service ratio of psychologists to pupils has increased dramaticaly over the years. He noted a trend toward increasingly larger (improved) ratios between school psychologists and public school enrollment. This was partially due to the increased number of special education programs.

Ratios are recommended or required in several states and may be indexed to overall school enrollment, or teachers employed. Kicklighter (1976) found the median ratio was 1 : 4800 with a range of 1 : 1000 in Connecticut to 1 : 47,000 in Wyoming. According to his study, most of the states were aiming for a 1 : 2000 or 1 : 3000 ratio.

Documenting later studies, Fagan (1988) noted that in 1986 the ratio was close to 1 : 2,100 (based on 1986 NASP Member data). The median ratio was 1 : 1,600 with 63% serving 2,000 or less and 77% serving 2,500 or less. According to Fagan's research, APA recommended a service ratio of 1 : 2,000, and NASP recommended one of 1 : 1,000.

Ratios can be established arbitrarily without empirical foundation related to expected roles and functions or quality of services. This accounts for the different recommendations made by APA and NASP. The most common method of establishing ratios however, is by determining the amount of psychoeducational assessment needed for a special population.

The method of establishing service delivery ratios raises another issue related of the ratios. Anderson, Hohenshil, and Brown (1984) found that a negative relationship existed between psychologist-to-student ratio and overall job satisfaction; job satisfaction declined as the ratio worsened. It is likely that ratios based on assessment alone do not take into account other school psychologist roles, such as consultation and counseling. Incorporating these job functions in future ratios may improve overall job satisfaction. (Fagan, 1986).

Workable ratio of pupils to psychological personnel are dependent upon a variety of factors, including the characterstics of the student population, its density, and the availabilty of other professional staff (Monroe, 1979). Although it may not be appropriate to set an ideal ratio from a national perspective there may be a need for a national position statement on provider-student ratios and the strategies for which they are established. (Fagan, 1988)

Entry Level

The education needed for entry level in school psychology has been an ongoing, complex debate. Although a

full discussion of this issue is beyond the scope of this paper, it is important to address several facts. There are five national organizations that currently influence the current entry levels in school psychology: NASP, APA, Division 16, the National Council for Accreditation of Teacher Education (NCATE), and the National Association of State Directors of Teacher Education and Certification (NASDTEC). Each association serves to formalize the profession, and provide guidelines for professional functioning, training and practice (Brown, 1979).

The answer to the question of entry level has not been fully resolved. Whereas most state departments of certification perceive entry level to be at or near the specialist level, APA's stand is that a professional psychologist must possess the doctorate. Both the APA and NASP publish standards for the provision of school psychological services which attempt to define entry level credentials for certification and/or private practice.

Legislation

Another area that has had a significant impacted on the field has been federal legislation, particulary with regard to special education. Since the late 1960's many court decisions have affected special education services in the public schools. These decisions have increased the rights of handicapped children and have influenced the procedures involved with special education. (Monroe, 1979)

The passage of the Elementary and Secondary Education

Act, The Education for All Handicapped Children Act of 1975 (Public Law 94-142) particularly increased the demand for school psychologists. Although school psychologists would not have prescribed their roles to be primarily in assessment as the law did (Hughes, 1979), the field became more visible and new funds and staff positions were created.

Various aspects of the laws led to specific implications for the practice of school psychology. Examples include the notion of due process, informed consent, confidentiality, nondiscriminatory assessment, and the concept of least restrictive environment. Each of these have had direct implications for the practice of school psychology, and thus influenced professional preparation.

Indirect Services

In addition to the growth of school psychology in general, significant trends have taken place within the field. One of these trends is a shift from a direct level of service to an indirect level.

Gilmore, who was concerned with fostering the identity of school psychologists, claimed that the field would be "seriously retarded" (1974, p. 95) if better training programs were not developed. Rather than provide lists of competencies, he developed dimensions of school psychology which incorporated that of direct versus indirect services. Direct services can be exemplified by competencies such as testing and individual counseling. Indirect services involve skills such as consultation, inservice training and acting as

an agent of change within the school system.

The notion of school psychologists assisting and influencing schools via indirect methods has gained much support (to be addressed in the section on role definition).

Broadening of Roles

Support for broad roles is another trend within the field. Many researchers compiled lists of competencies in which school psychologists function (Leton, 1964, Catterall, 1973, Gilmore, 1974). These type of studies focused on developing sets of competencies found to be essential for training school psychologists.

As an example, Goh (1977) reviewed the professional literature extensively and identified 38 competencies on which interns were evaluated. Via factor analysis he found nine major roles for which school psychologists were trained:

> "school-based consultation, educational assessment and remediation, behavior modification technology, psychological evaluation, psychotheraputic procedures, quantitative methods, community involvement and consultation, professional roles and issues, and psychological foundations" (p. 210-211).

Pfeiffer and Marmo (1981) used Gilmore's dimensions and developed 12 roles and functions. Based on the notion of direct versus indirect service activities, the roles they listed involved assessment, interventions, research and program evaluation, community involvement and curriculum

development.

These studies showed a gradual broadening of competencies needed to function as a competent school psychologist. This trend has direct implications for training, in that courses and field experiences need to prepare students accordingly.

Summary

In summary, five major trends that continue to have great impact within school psychology have been identified. Specific trends may affect university trainers and field supervisors differently. For example, the school psychology service ratio may present a more immediate impact on field supervisors. On the other hand, the ongoing issue of entry level may initially have a greater impact on university trainers. Nevertheless, both groups of trainers are significantly influenced by these trends and issues, each of which have the potential to affect the role of school psychologists.

Role Definition in School Psychology

Despite agreements and disagreements, school psychologists, in academia as well as practice, have sought to compile an understanding of the role of the school psychologist. School psychologists have written about their roles, (Fairchild, 1982, Shellenberger & Couch, 1984), their desired roles (Wright & Gutkin, 1981), as well as their desired and expected roles for the future (Reschly, 1980). Studies have been conducted pertaining to the role of the

school psychologist as perceived by administrators (Kirschner, 1971), teachers (Baker, 1965, Styles, 1965, Roberts, 1970, Lucas & Jones, 1970, Gilmore & Chandy, 1973), pupils (Culbertson, 1975), parents (Tidwell & Wetter, 1978, Weddig, 1984), graduate students (Graden, Christenson, Ysseldyke & Myers, 1984) and other school personnel (Knowles & Shertzer, 1969, Waters, 1973).

School psychology has often been compared to an adolescent, struggling over an "identity crisis" (McCandless, 1969, p. 13). This analogy reveals the complexity of the problem of role definition. Part of this dilema arose out of school psychology's initial ties to other disciplines, such as clinical psychology and the field of education.

Another factor contributing to this issue of identity is others' perception of the school psychologist's role. Meeting the demands or expectations of others, such as administrators and teachers, has put a strain on the role as the school psychologist him/herself perceives it (Barbanel & Huffenberg-Rutman, 1974, Anderson, Hohenshil & Brown, 1984, Miller, Witt, Finley, 1981).

As previously mentioned, the growth within the profession, and societal demands, led many school psychologists to enhance their potential. This involved steering away from the traditional roles and incorporating other roles within the broader areas of education, the educational process, and mental health. Some of the models of school psychology that have been postulated throughout the

literature include, but are not limited to: the clinician (Bardon, 1965), the educational programmer (Reger, 1965), the psychoeducational model (Vallett, 1963), the systems problem solver (Gray, 1963), the model of preventative mental health (Bower, 1965), the psychoeducational specialist (Granowsky & Davis, 1974), and various consultation models (Gallessich, 1974).

There is a plethora of studies defining school psychologists' roles, and a variety of proposed models for the practice of school psychology. This has led many researchers to conclude that although although the school psychologists' role has been defined by many of their colleagues, no agreement has been reached (Magary, 1966, Meacham, 1968, Morice, 1968, Silverman, 1969, Bardon, 1976, Barclay, 1971). A thorough review of the literature however, reveals that the models and studies tend to center around several major roles that have become particularly salient within school psychology. In addition, these main roles are typically utilized in current studies which investigate role definition and training within the field. It is important to review these areas, in order to reach an understanding of those areas in which school psychologists are to be trained. It is also of particular relevance to note the impact that various trends within the field have had. Although the actual roles individual school psychologists perform may vary considerably, the following descriptions of roles are consistently viewed as the major contributions (or potential

contributions) within the field.

The Role of Assessment

Historically, psychologists working in the school were initially trained within a variety of disciplines, all however, were trained in psychometrics. Psychoeducational assessment activities have been the most prominent of the services provided by school psychologists. As outlined in the previous section, the testing movement and developments in the field of special education greatly influenced the profession of school psychology. Assessment was defined as school psychology's initial realm of expertise (Monroe, 1979). School psychologists were the standardized test experts who categorized children according to their performance on the tests and recommended approporiate educational placements.

The testing role has been defined by Monroe (1979) as describing and interpreting the academic and social behaviors of children for the use of many people, but primarily for teachers and administrators. The services provided by a school psychologists operating in this role typically begin with a written referral from a teacher. Then a battery of tests is conducted. The battery varies somewhat among psychologists and children but nearly always contains a measure of intelligence, personality and academic achievement. Following testing the psychologists writes a report that contains a description of the child's behavior in the testing setting, a description of the test results and

how they compare with those of children of the same age, inferences about the nature of the child's difficulties (if found) and broad recommendations regarding the educational program that suits the child.

Bardon (1982) describes this particular role as Level 1, in which the psychologist functions primarily in a refer-test-recommend cycle. The emphasis is on the use of standardized tests, in order to identify and describe deficits, and where appropriate, recommend educational placement and possibly suggest very general interventions.

Dissatisfaction with with the testing role and controversy over the instruments themselves however, have plagued school psychologists. For example, studies have shown school psychologists' dissatisfaction with their job roles stem from their assessment responsibilities (Barbanel & Hoffenberg-Rutman, 1974, Wright & Gutkin, 1981). According to these surveys, the dissatisfaction stems from the high proportion of time spent in assessment activities, not the activity itself. In addition, school psychologists have been sharply criticized for a lack of sufficient non-discriminatory intelligence testing.

Some examples of problems within testing reflect potential prejudices that may be inherent in the test. Non-biased assesment has been found to be an area of great attention and concern.

Another area of concern is the issue of assessment of low incidence populations. Psychologists as well as

educators have become disappointed in traditional testing methods. Trends toward community living (the mental health movement) and a movement away from medical models have affected the need for tests that measure strengths.

The trend toward broader roles has significantly affected school psycholgists as psychometricians. As Bardon (1982) describes, future trends involve a broader psyhoeducational assessment role which is more oriented toward the specific referral problem. For example, not all children referred are given the same battery of tests. In addition, many more criterion-referenced instruments and behavioral measures should be used. It is thought that this orientation can yield more specific recommendations regarding what the parent and teacher can do to remediate the problem. Other areas within assessment include more natural observations and a focus on how the child interacts in his classroom.

Another change that has taken place is the considerable emphasis on use of multiple services and perspectives to evalutate children's learning problems. While the psychologist may still appear as the principal evaluator, the role is more that of coordinator with much greater attention given to consideration of teacher reports, observation, and other evaluations.

Assessment, as a whole, is considered a direct role. Certainly the laws pertaining to special education have impacted tremendously on the number of children who are

legally mandated for testing. Cases such as Jose P. and Lora, mandate testing at certain time intervals and ensure that it is conducted within a certain time frame (Bergan, 1985).

The overall conclusion is that assessment has been, and still is the main role of school psychologists. Much controversy has arisen about formal test measures, which have effected changes and more sophisticated measures (particulary regarding neuropsychology). In addition, theories other than medical models have swayed school psychologists to measure more areas and to include observations of children in more natural settings.

The Role of Counseling/Psychotherapy

Counseling is another direct role. The history of this role has been reported as difficult to trace (Gray, 1963). One can start from Witmer's Clinic, and actually the beginning of clinical psychology in this country. The first person referred to Witmer was a 14 year old boy who was a "chronic bad speller". This case deals with issues not typical of a traditional therapy model. With regard to cinical psychology, the drive and growth for therapy (considered to be clinical psychology's domain) came about after WWII, when the need for services was great.

Counseling/psychotherapy is provided either individually or in small group settings and has as its is purpose the enhancement of adjustment or development through the child's relationship with the psychologist and/or to other children.

The distinction between counseling and psychotherapy has often been unclear. Counseling is considered to be more short-term and adjustment oriented, while psychotherapy is defined more broadly (Monroe, 1979).

Various of types of counseling/therapy are conducted and discussed within the literature of school psychology. These include pschodynamic oriented therapy, behavioral and cognitive interventions, and short-term therapy.

Counseling, has been stated as the most controversial roles of the services provided by school psychologists (Monroe, 1979). The issue of counseling and psychotherapy has been controversial in all areas within society-at large, not only in the school. Limiting the discussion to school psychology, there is much reported controversy surrounding the issue of the school psychologists doing psychotherapy. Much of the controversy within the field, pertains to whether or not school psychologists should do therapy at all. In a national survey of school psychologists done by NASP (Ramage, 1979) school psychologists were asked about their roles and functions, yet were not asked whether they practice psychotherapy.

In other studies, that do acknowledge counseling/therapy as a role, there is still controversy. Some school psychologists report that this role is important while, others do not. Kirschner (1971) surveyed school psychologists in which 50% viewed therapy as unimportant. Half of the school psychologists within that 50% not only saw

it as unimportant, but also saw it as undesirable. Nevertheless, the results of many surveys regarding the role of school psychologists found that this role is indeed a salient one (Goh, 1977, Pheiffer & Marmo, 1981). Other studies found that is valued by teachers (Lucas & Jones, 1970) and superintendents (Kaplan, 1977).

The trends involving a broadening of roles and the movement away from medical models and direct services has affected the school psychologist in this area. The school psychologist may not ever hope to take care of the needs of schools by providing such direct clinical services. The literature has reflected the notion of a more broad role for the school psychologist, by considering counseling/therapy in the broader role of intervention (Monroe, 1979).

Intervention subsumes a variety of competencies including, but not limited to, counseling/therapy. For example, various classroom interventions, teaching others how to intervene (i.e., parent education, inservice programs for other school personnel), and broader school psychological delivery systems are viewed as important. These areas reflect the trend of the school psychologist intervening in indirect ways (e.g., classroom intervention, inservice programs), as opposed to the more direct ways (individual psychotherapy). One study found that teachers recognized the importance of the school psychologists' role in various intervention areas but did not view psychologists as effective in academic and classroom management areas

(Roberts, 1970).

The inservice role, as another example, has received considerable attention in recent years and reflects a major change regarding how the school psychologist influences children. Attention is expanded to specific groups of children or children in general. The school psychologist works with a group of school personnel to produce a broad effect on children rather than through one or two adults or directly with the child. Thus, the role is characterized by the school psychologist's providing expertise based on research or theory in such a way as to produce an attitude change or increase pertinent knowledge or skills in others. This competency enables others to function more effectively in their profession. (Monroe, 1979)

In conclusion, the role of counseling/therapy is largely a controversial one. Issues of appropriateness, effectiveness and the number of children who can be helped via direct methods have been discussed. Nevertheless, counseling and other forms of intervention are still considered to comprise the role that school psychologists perform, and are covered in training. Different models and philosphies have affected the nature of counseling, including psychodynamic approaches, behavioral oriented stategies, and ecological or systems approaches. In addition, a major trend is to consider counseling in the broader sense of intervention. Intervention may be in the form of counseling, but also includes other types such as inservice activities,

classroom behavioral strategies, and creating psychological delivery services as a whole.

The Role of Research

The research role has been defined as "the systematic collection and analysis of information relevant to decision making regarding children and their education" (Monroe, 1979, p. 33). Research is considered an indirect type of service. This is because it affects children and the learning process on a broader level than for example, individual counseling does.

Research has also been described as part of a major role in Grey's conceptualization of school psychology. The "data oriented problem solver" (Gray, 1963, p. 21) is a role that enables the school psychologist to bring certain points of view and special skills to problem solving. Most importantly, by conducting research, the school psychologist can approach problems of human behavior in a data oriented, empirical fashion.

Historically, research has its roots in traditional psychology and clinical psychology. Research was an area in which psychologists were typically trained; psychologists were empiricists.

The overall emphasis of research in schools has been a controversial issue. In so far as research has been a traditional role within psychology, trainers understand the importance of research and are committed to it. Personnel within school systems, whose backgrounds do not include

scientific thinking however, do not necessarily agree on the importance of research. (Gray, 1963)

Research has shown that principals and superintendents of schools ranked research low in importance (Kaplan et al., 1977, Lesiak and Lounsbury, 1977) whereas school psychology supervisors ranked it high in importance (Lesiak & Lounsbury, 1977). Bennet (1976) found that the push for involvement in research seems to be coming from university faculty in training programs, reflecting the importance of research by academicians.

The issue is a complex one, yet these differences have been accounted for in a variety of ways. One reason is the anxiety and ignorance about research. Studies have shown that school psychologists may have failed to explain to teachers and parents the meaning of the research, or the information that was learned from it. After an unrewarding experience with a psychologist, a teacher or principal is unlikely to be receptive toward the idea of supporting another research project. (Gray, 1963)

Lack of sufficient time and inadequacy of funding are other reasons that account for the different perceptions of the importance of research. Activities of research are seldom viewed as urgent whereas direct types of service are. With regard to funding, Philips (1982) points out that school psychologists are hired from teaching budgets, not research budgets. He also noted that research is a subordinate activity in psychology and education. Phillips' review has

revealed that most research is conducted within academic settings and studies have shown that few Ph.D.'s publish or engage in research.

There are certainly many examples of the importance of ad hoc, applied and basic research, as well as its positive impact with regard to learning. Ad hoc, also called action research, has been considered to be the best method of establishing the importance of research in the schools, since it can provide answers to questions individual teachers may have. Applied research is thought to be the area where school psychologists can make their greatest contributions, by helping to solve broad problems facing education (Gray, 1963). Conducting basic research may be the most controversial role within the schools. One aspect of basic research considered particularly important for school psychologists is the abiity to read and evaluate it (Phillips, 1982)

Program evaluation has become an increasingly popular and useful research endeavor in the schools. Sandoval (1978) notes that involvement in program evaluation increases the pychologists' ability to affect decision making within the schools. Program evaluation is also valuable in that it can facilitate planning and developing programs, as well as assessing outcomes. It has been reported that program evaluation is a difficult task and as such, training school psychologists in program evaluation is important (Maher, 1978).

As the role of the school psychologist moves from a direct to an indirect one however, it is felt that research will become more of a function. This change is most likely to be a slow one. Although there is some indication that groups of teachers value indirect services from school psychologists, surveys have shown that they more often prefer direct remedial services, and increased assessment activites (Ford & Migles, 1979, Roberts, 1970, Senft & Snider, 1980). Hughes (1979) found that superintendents and directors of pupil personnel services actually favored a lessening of assessment activities, however, reported that the administrators did not rate psychologists' expertise in systems level interventions as high.

Training programs have the opportunity to produce extremely useful researchers. There has been a general trend however, of decreased training and participation in research (Tindall, 1968, O'Callaghan, 1974). Much of this is the result of limited expectations by people in the schools. Schools tend to stress the direct service role, but turn to the school psychologist when some type of research is needed. (Bardon & Bennett, 1974). School psychologists have reported feeling incompetent or inadequately trained for research and have reported that it is not a role in actual practice (Herrron, Herron & Handron, 1984).

An important factor is the issue of level of training. Studies have shown that overall, doctoral level psychologists engage in more research activities (Medway et.al., 1978,)

than masters level psychologists do. Since the majority of practitioners in the schools have masters level training, one possibility for the future is that increased training in this area will be a more direct result of its perceived importance by the consumer rather than as a function of degree level. If one considers the issue of entry level, however, the balance of doctoral versus non-doctoral school psychologists may be altered. Perhaps the increasing number of doctoral level school psychologists, who may have greater expertise, will be a stronger influence on the future of research and program evaluation in the schools.

The Role of Consultation

Whereas the role of consultation is relatively new in the literature and training, it is not a new or a revolutionary idea. During the period just prior to WWII, mental health professionals who practiced in the schools focused more on individual childs' abilities, achievements, and intrapsychic conflicts. At that time school psychologists were said to have been emulating clinical psychologists. (Monroe, 1979)

This "clinical" period, in the 30's and 40's, reached its zenith in the 50's. At that time problems associated with the analogy between physical and mental illness stirred controversy. Psychologists questioned the efficacy of traditional psychotherapy as well as the service delivery system implied by the clinical model. These differing views affected the move toward consultation.

Other problems associated with the direct service model were experienced by the mental health professionals in the school. For example, children had to wait long periods of time for a psychological evaluation. The school psychologist was often bogged down with diagnostic work making effective communication with children, parents, and teachers impossible.

During the late 50's and early 60's educators sought increased communication with mental health professionals. Academic psychologists began to give lectures to teachers and other school personnel. Consultation emerged as an alternative to direct service. It came from a community approach rather than a clinical orientation, a prevention model rather than a psychotheraputic one. Thus, the consultation role incorporates the identification of environmental stressors present in the community that could cause mental health problems. (Myers, Parsons, & Martin, 1979)

There have been many important and useful theories of consultation. Gallessich (1983) defines consultation as "tripartite interactions in human service agencies" (p.6). That is, a consultant works with other employees regarding work-related issues. Gallessich also describes specific aspects of the consultation process in full detail. For example, she recognizes the importance and complexities of "entering" and "contracting" the consulation.

Caplan (1970) describes four types of mental health

consultation which were derived from psychoanalytic theories. The four types he discusses are: client-centered case consultation, consultee-centered case consultation, program-centered administrative consultation, and consultee-centered administrative consultation. Each type utilizes various techniques to reach the particular goals desired.

Other theories include process consultation (Schein, 1969) and organizational consultation (Schmuck, 1976). Whatever the theory or type, mental health consultation has been gaining increased focus as a useful professional technique. Schools have become recognized as the place where mental health specialists can affect all children. Thus, the school setting may have become one of the most important areas for mental health consultation.

The feasability of conducting consultation in the schools has been limited however. Research has shown that although this may be considered an ideal or even preferred role, it is not carried out in actuality. Some of the factors surrounding this problem have centered around a lack of sufficient training, and lack of time. Didactic and practicum courses devoted soley to school consultation have been a relatively recent occurance in graduate programs. Studies have shown that although school psychologists do identify consultation as one of the most important functions they can serve, they spend a significantly greater amount of time doing psychological assessment. (Myers, Wurtz, & Hanagan, 1981).

To conclude, school psychologists have viewed consultation as a valuable skill. Until recently, graduate programs have offered little training in this area. There are currently many theories and types of consultation thus, the actual role of a consultant is quite varied. Despite the usefullness and importance of this role though, time restraints and other problems significantly limit the amount of consultation school psychologists can actually do.

The Role of Educator/Communicator

This role has been defined in the literature as an expansion of other roles. According to Bardon's (1982) concept of "Levels of Service" the school psychologist functions as a "psychoeducational specialist", or at "Level 2" (p. 4) It involves an expansion and refinement of the "Level 1" (p. 2), or assessment role, as the school psychologist functions as an educator and communicator of psychological services.

The origins of this role came about in the early 50's, continuing into the 60's. It was considered to be a significant advancement in practice primarily because it gave attention to the child as a whole. It's purpose was to assist schools with a range of mental health problems using the most sophisticated, innovative approaches psychology had to offer at that time.

Changing times led to more advanced functions, as it became clear that psychological services within schools needed to be adapted and structured around specific problems.

Assessment took a more educational focus, as did attention to the effects of the environment (i.e., home and school) on school performance and behavior (Bardon, 1982).

This broader role involves not only classification of children for educational placement, but also assisting with other pupil problems. The school psychologist receives direct referrals from teachers, parents, administrators, and community agencies, but does not function as a test score reporter and interpreter. When appropriate, complete batteries of tests are administered. The batteries include various factors about specific influences on the presenting problems of the child, both from at home and at school. The school psychologist prepares a detailed report containing specific recommendations. Furthermore, he or she will often meet with teachers and parents to interpret the results of findings and engage in crisis intervention.

The most important distinction of this role, is that the school psychologist may become the liason between the school and the community. The psychologist is the interpreter for the school about the influences of outside agencies affecting the child's life. The beginnning "Level 2" school psychologist has a special interest in the schools and thus, focuses on psychological knowledge that pertains to them.

Granowsky and Davis (1974) conceptualized the psychoeducational specialist role as an alternative to traditional testing roles as well. In their model, the school psychologist could be a specialist in a community-

based psychological services center, or one that focuses on the social structure of the schools. Here again, the role is defined as one that reaches beyond the limited scope of a traditional evaluator for class placement decisions. The expanded role involves a more broad-based evaluation of the student's emotional and cognitive functioning, including specific recommendations and provisions for an ongoing monitoring of students' progress.

The most important aspect of the psychologists' work within this role is on useful communication with school personnel and parents. The emphasis is on active intervention in the classroom setting and mutual accountability of school personnel involved. A number of authors (Algozzine & Sutherland, 1977, Aliotti, 1977, Kratochwill, 1977) emphasize a move away from compartmentalized assessment procedures, thus reflect the trend toward a broad, indirect service role. They involve an increased concern with the following: underlying cognitive structures, learning strategies, testing strategies and limits during evaluation as well as modifying standardized evaluation procedures, diagnostic remediation procedures, and generalization from assessment results to actual learning situations. In addition, the value in considering familial and cultural influences on learning when making an assessment has been considered (Thurman, 1977).

Another aspect within this role, reflecting the trend toward a broad range of school psychological services, is a

focus on classroom related problems. The psychologist is likely to intervene with issues within the classroom. In light of these problems and interventions, observation of children in various settings are more specialized areas within the assessment process. Furthermore, school psychologists at advanced levels can conduct in-service activities with teachers, parents, and administrators. Working with school personnel and groups of children in the classroom enable school psychologists to reach more students.

A key factor of the psychologists' competence within this role is his or her ability to work within a team. This generally involves working in the school as an integral member of a multidisciplinary team. The team may consist of the social worker, guidance counselor, speech and learning disability specialists, administrators, etc. To be successful, each professional must be able to step outside his "role" and be open to learning from others. Each member must also be able to bring her special skills and resources to the issue at hand (Buktenica, 1970).

As the role of the psychologist as communicator expands, there is much support for increased affiliation between the school psychologist and community agencies (Silberberg & Silberberg, 1971, Klosterman, 1974). Brummit and Schieren (1970) and Sheare and Larson (1978) developed programs for emotionally disturbed children that utilized extensive services from community mental health centers. As another example, Kramer and Nagle (1980) proposed service delivery

suggestions for the South Carolina secondary schools, which involved school psychologists' increased cooperative efforts with guidance personnel, using the school newspaper to publicize potential psychological services, and made use of the community resources.

In sum, this role incorporates many advanced functions for school psychologists. It involves psychologists' working within multidisciplinary teams while maintaining their own ethical and professional standards. In addition, many of the competencies involved in this role reflect the trends toward indirect school psychological services as well as broader roles.

The Role of the Change Agent

The change agent is a new concept within role definition in school psychology. Using Bardon's (1982) concept of "levels", the role of the change agent, or "Level 3" is a further refinement of the advanced functions of "Level 2". Within this role, the school psychologist is involved in actions that influence school policies and procedures via supervision, education, and consultation with school personnel and professionals in the community. It may involve the development and evaluation of school programs and services. The school psychologist who functions as a Change Agent, is analogous to one who operates within an industrial/organizational model (Bardon, 1982).

Meacham and Peckham (1978) reviewed the school psychology literature extensively to develop a list of

competencies for their research on training. Their findings will be discussed in their entirety later, however, it is important to note that they underscored tne role of the "change agent" (p. 199) which was subsequently used in other studies. The role of the change agent, as defined in this study, pertained to a set of skills related to school psychologists' influence on the school system. It incorporated determining school system needs, and being more involved in school policies.

Others have conceptualized this role as a "psychoeducational specialist" (Granowsky & Davis, 1974). Toder (1975) sees teachers as the immediate change agent and school psychologists' as catalysts of change. Morrow (1975) viewed the school psychologist as the most capable of assuming a leadership role in a diagnostic process. That is, one who oversees the evaluations of other professionals and helps facilitate recommendations.

Thus, school psychologists as "change agents" are more often talked about in the literature and in training programs, than carried out in practice. School psychologists who wish to be more influential in the school system, aspire to carry out this role. Although competencies for this role are associated with doctoral level training, in practice it is not necessary. (Bardon, 1982) It certainly does involve the indirect approach to psychological services.

Professional Preparation

"The temptation in discussing training for the

> school psychologist, as indeed in discussing various roles for him, is to suggest a breadth and scope of training that would make him a superman". (Gray, 1963, p.282)

As Gray alludes to, the knowledge and training within school psychology is enormous. No one person can accomplish all of the functions in school psychology, nor are all school psychologists interested in performing the same activities. Before describing the nature of school psychology graduate programs, it is first useful to gain an overview education and training models in general.

Models of Training

The preparation of school psychologists involves both education and training. The distinction between education and training is an important one. Education, in its purest form, involves the acquisition of knowledge for its own sake, whereas training involves obtaining knowledge within a scholarly discipline for its occupational and professional relevance (Bergan, 1985).

Education enables a student to master the theoretical assumptions of his field. Upon training, the student learns the rules (i.e., day to day functions, ethics) which are specific to his chosen profession. Education, therefore, is a prerequisite to training. Students must understand the general principles underlying practice in order to avoid mastering only limited techniques which are likely to become obsolete. The impact of changes in professional practice

however, necessitate that graduate programs train future school psychologists with increasingly specific, sophisticated skills.

There is no set rule or mathematical formula which graduate programs use for measuring how much education and training to include in their programs. Instead, graduate programs must utilize both aspects of preparing school psychologists, depending on the outcome goals they set for their students. Various models of graduate programs incorporate various degrees of education and training.

The two major models in training today are the Scientist/Practitioner Model and, the Professional Model. The Scientist/Practitioner model was adopted at the Boulder Conference in 1949. It involves an emphasis on research rather than in professional training. Thus a training program would incorporate psychological knowledge, theory and a heavy concentration of empirical research. Field experiences are conducted at the end of the training process.

The Practitioner Model was legitimized by the Vail conference in 1969. It was developed partly in response to the deficiencies of scientist/practitioner-based education and training (those criticisms will be explored in detail later). The Practitioner Model involves an underlying assumption that training reflect humanistic and professional values, and societal needs. Field experiences are typically incorporated throughout one's graduate program. Practitioner competencies are emphasized over research skills.

It is important to note that a training model is an ideal that provides the conceptual framework for training programs. Although adhering to the conceptualization of the ideal, in reality, programs vary in emphasis. As a consequence, some programs based on the professional model may give more emphasis to rigorous research training than other programs following the scientist/practitioner model and visa versa.

Graduate Programs in School Psychology

Despite the presence of psychologists in schools in the early 1900's, by 1920 there were still no recognized school psychology programs. Psychologists who worked in schools prepared for practice in schools of education and/or psychology with a limited amount of applied course work and practical field experiences. According to Fagan (1988) during the period between 1920 to 1930 the first graduate programs specifically created to prepare school psychologists were initiated.

The professional literature is sketchy regarding contents of graduate programs training professional for school psychologists, particularly as they emerged in the 1950's (Brown, 1979). Instead of content, the professional literature focused on demographic variables, degrees offered, and departmental affiliation.

As a result of the increased growth in the field however, several researchers sought to elicit factual information concerning the organizational characteristics and

training emphasis of school psychology training programs. They attempted to simply identify the school psychology programs available nation-wide (Smith, 1964, Smith & Cardon, 1968, Constanza $ Walker, 1971, Bardon & Wenger, 1974, Goh, 1977), and identify the coursework commonly required in school psychology programs (Goh, 1977, Oakland & Zimmerman, 1986, Knoff, 1986).

With regard to coursework, training standards have been identified by the National Association of School Psychologists (NASP), which have been adopted by the National Council for Accreditation of Teacher Education Programs and the credentialing of school psychologists. The main topics incorporated into coursework include psychological foundations, educational foundations, assessment, intervention (direct and indirect), statistics and research design, and ethical and professional issues. The specific contents, texts, and experiences are however, are left to the discretion of individual training programs. (Knoff, 1986)

In addition to these main areas covered by the university in coursework, all training models incorporate practicum or internship experience. Goh (1977) found that the majority of training programs used a combination of university and field supervision for their interns, and none of the programs reported using university supervision exclusively.

Training programs today reflect the outgrowth of the ideas expressed throughout the history of school psychology

as well as the influences of NASP and Division 16 of the APA. Credentialing and accreditation requirements have also had an impact on the current development of graduate programs. As previously mentioned, the current trends indicate that school psychology training has undergone a process of "purification" (Fagan, 1988, p.16). That is, graduate training in the field from the 1970's to the present involves programs accredited as school psychology programs which are more consistent with the credentials needed for employment as a school psychologist.

The studies on effectiveness of training in school psychology will be addressed in detail further on. In order to fully appreciate these studies and the social climate out of which they grew, it is important to look at the controversies that have developed with regard to professional preparation in psychology as a whole, and school psychology as a specialty.

Criticisms and Controversies of Training:

Effects of the Academician/Practitioner Bipolarity

Controversy about the quality and nature of graduate education occurred within the field of clinical psychology by the early 1950's (Blau, 1973). Although many clinical psychologists assumed their training was effective, there were still some who raised important and interesting points. Many of the questions and concerns about training were framed within the context of discussions about the adequacy of the scientist-practitioner model. Arguments had been made that

the model emphasized research training to the detriment of practical clinical training (Leventhal & Shemberg, 1980).

Despite these concerns, other clinical psychologists noted a paucity of published research related to graduate training and the requirements of clinical psychology in actual practice. The importance of this topic was further evidenced by the formation of an American Psychological Association (APA) task force on evaluation of training services in clinical psychology in 1981. Little data existed which pertained to specific changes practitioners in clinical psychology would have liked to see academicians make in terms of how graduate students were being trained. In addition, research examining the training views of practitioners and academicians was significantly limited. (Edelstein, 1985)

Leaders in clinical psychology, whose development parallels school psychology, were the first to reveal painful truths about their professional preparation. During the years school psychology was in rapid expansion, clinical psychologists were beginning to criticize themselves harshly; they felt that they were not as well prepared for the work they were doing as they would have liked to have been.

The root of the problem, to a large extent, was the diverse perceptions of training among the scientific and professional communities, termed the "academic-professional bipolaraity" (Tryon, 1963, p. 134). The term referred to the different attitudes, perceptions, and personal agendas among the two camps within organized psychology -- academicians and

practitioners. These differences significantly affected decisions regarding the training of future professionals. It included the focus of coursework to be required in universities as well as the actual competencies students were expected to master during field work or internship.

Academic psychology, by nature, was concerned with theory and method without being necessarily concerned with its applicability. Academic research, designed to be pure and in its ideal form, was performed in the laboratory. Its main interest was in furthering knowledge as opposed to the social usefullness of the results.

Contrary to this appoach, practitioners, were primarily concerned with the application of theory and research to the immedate problems of the individual in society. Research in the field sought concrete answers for rather broad theoretical issues but was not as concerned about external validity as were researchers within academia.

To further illustrate the point, one psychologist empathized with the role of the academician. She stated,

> "...the academicians constantly are facing a dilemma. They have to anticipate what is happening in the field (even though many are out of contact with actual practice in the field) and at the same time, must anticipate what will happen in the future. When training programs admit students, trainers must educate those students so that they will be skilled for the job market three years

> later. Not only must academicians collaborate with the educational system in order to help predict the future in the field, but they must be aware of the trends within the profession....The well trained person must be able to...draw from and ultlize his/her training on the job and be able to develop new skills and techniques. Academicians must decide how...to best use training time." (Genshaft, 1985, p. 134)

It was recognized that practicing psychologists and university psychologists must jointly create the best graduate training. Thus, training must coincide with professional functioning in outside agencies as well as meet criteria of the university. Researchers pointed to the need for both academicians and practitioners to find way to prepare students more effectively.

In another, quite personal account, a clinical psychologist criticized his field:

> "...We share with you a sense that our practitioners, including many Ph.D.'s, are very ill prepared for the jobs they need to do in practice." (Peterson, 1981, p. 310)

Beginning almost three decades ago, historic conferences were called to deal with these concerns. It is useful to discuss the way clinical psychology dealt with this and briefly tap into the research that was conducted. As ascertained from the historical review, clinical psychology

and school psychology are closely tied and therefore, the training issues addressed by clinical psychologists were also examined by school psychologists. The specific issues within school psychology though, will be discussed in complete detail later.

Named after the town in which it was held, the Boulder Conference, in 1949 attempted to resolve differences among the scientific and practitioner communities and to stimulate communcation among the two camps (Abramowitz, 1981). At that time psychologists agreed that training needed to include theory, keep its strong ties to research, but focus on the supervised applications of psychology as well.

Questions raised at the Boulder Conference became the central topic for the Kikert Conference in 1967, and later for the Vail Confernce in 1969. These conferences were held to enable psychologists to come together and define their training needs. Among the focal points raised at these conferences was a continued concern for adequate training. Specifically, clinical psychologists generated more questions regarding the effectiveness of graduate programs. Were they adequately training psychologists for the applied work they were to be doing?

Much research was generated by these controversies, most of which bore out the concerns being raised. The first area researched was whether or not clinical psychologists were being trained adequately. In order to do this, most studies focused on the internship which surveyed the

perceptions of supervising clinical psychologists. Indeed, there was much reported dissatisfaction by supervising clinical psychologists about students'preparation for the internship and by the interns themselves (McCully, 1965, Hoch et. al., 1966, Scarlet, 1972, Goldenberg, 1973, Levitt, 1973, Weiss, 1975, Weiner, 1976, Stout, Holmes, & Rothstein, 1977, Phares, 1979).

Studies then focused on the areas in which interns were perceived to be weak. In general, internship directors claimed that interns received poor unversity preparation on important areas such as diagnostics and all aspects of clinical treatment. (Shemberg & Keeley, 1974; Shemberg & Leventhal, 1981).

The picture of training in clinical psychology was rather bleak. Clinical psychologists in general felt that they were not adequately equipped for the professional responsibilities they took on. In the late 1950's, a survey was conducted that contained, among others, the question, "If you had it all to do over, knowing what you know now, would you become a clinical psychologist again?" Only 60% of the respondents said they would (Kelley & Goldberg, 1959).

Clinical psychologists began to address the issue of the academician/pracatitioner bipolarity (Thelen & Ewing, 1973, Leventhal & Shemberg, 1980). One conclusion drawn was that there was a serious lack of communication between academicians and practitioners (Tyron, 1963, Shofield, 1969, Dana, Rice & Gurman, 1973, Autor & Zide, 1974, Gilliam &

Dana, 1976, Miller, 1977, Malouf, Haas & Farah, 1983, Edelstein, 1985). The general consensus was that there was a lack of continuing feedback among the two types of trainers and that this significantly hampered the competence of new psychologists.

Blau stated "Psychologists in practice have not published much about practice and the requirements of the real world" (1973, p.133). In his opinion, graduate training schools did not do enough to encourage ongoing feedback of psychology interns nor did they seek to evaluate the effectiveness of training. Ross (1974), in agreement, discussed the roles of universities and internship training centers. He claimed that the present model "is more likely to foster confrontation rather than dialogue, and conflict rather than collaboration." (p. 17).

Certainly, the research in the field of clinical psychology had some interesting yet disturbing points to make. This research supported the notion that graduate training, the perception of pre-internship preparation, and the effect of univerity-based versus field-based trainers were worthwhile areas of study (Sydiaha, 1966, Thelen & Ewing, 1970, 1973).

From these concerns, one might expect that academicians and practitioners would have different perceptions of training in psychology, including differing perceptions of training within school psychology. Perhaps field-based supervisors would not be satisified with the level of

preparation interns receive for specific competencies. This was the case found in several studies within clinical psychology. Competencies emphasizing clinical skills were often perceived as relatively weak. One might also expect that field-based school psychologists would not be satisfied with those skills closely tied to the needs of actual practice, or any other competencies they perceived to be important.

Another prediction, based on previous findings within the literature, can be made within the area of research. That is, academicians' perception of the importance of competencies within the research role may remain significantly higher than practitioners perceptions. It is unclear however, how these potential differences will affect training in this area.

Conversely, it is likely that practitioners would perceive other competencies as more important. That is, practitioners' "professional agendas" may be different from those of their academic colleagues. Field-based school psychologists may perceive a greater need for training within consultation, which represents an emphasis in indirect service. Field-based school psychologists who are not satisfied with or unsure of their current roles may also see a greater need for training within the Change Agent role. In addition, practitioners still may percieve training in traditional areas, such as diagnostics and psychotherapy, as inadequate.

In view of the increased attention in the literature related to perceptions of training, we might also expect that changes within training will occur, based on the results of previous research. Academicians may very well be aware of the results of studies which identify practitioners' perceptions. Furthermore, aspects of university training may reflect that knowledge, that is, by improving the preparation for broad roles and/or specific competencies.

A final prediction, gleaned from past literature pertaining to the academician/practitioner bilpolarity, is that both univerisity-based and field-based psychologists would desire formal means of communication with each other. This prediction is based on the fact that part of perceived inadequacies in training were the result of ineffective communication between the two types of trainers. The conclusions drawn from previous studies often emphasized the need for continous dialogue and feedback between universities and internship training cites.

Relevance and Effectiveness of Training in School Psychology

School psychologists, after establishing themselves as professionals in a separate, formalized discipline, dealt with similar controversies to those of their collegues in clinical psychology. Leaders in school psychology speculated that their training might not be relevant to practice. McCandless (1969) certainly regarded this as true, claiming that "the separation between academic and front-line school

psychologists is very wide" (p. 13). He clearly blamed the problem on the academician/practitioner bipolarity.

Historic conferences in school psychology were convened. The first of these in 1954, focused primarily on role definition of the field. This meeting, called the Thayer Conference, reflected school psychologists' early concerns about establishing and securing the profession, rather than focusing on training. There was though, a beginning emphasis on evaluating graduate programs (Brown & Cardon, 1982).

The Spring Hill Symposium, held almost 30 years later, focused primarily on the future of psychology in the schools. Controversies regarding role definitions were brought forth again and the previous issues related to training were explored in further detail. School psychologists continued expressing their need to evaluate the effectiviness of their graduate programs.

Finally, the Olympia Conference delved into many specific aspects of a more established discipline. Among the themes explored, was a growing concern about training, specifically, about the relationship between university preparation and its relevance to actual practice in the schools. School psychologists questioned the structure of their graduate programs, including the emphasis in coursework and practicum. There was a greater sense of the need for universities to demonstrate that their graduates possessed the competencies necessary to practice in the field.

Focusing on the positive aspects of these controversies, Peterson (1981) noted that psychologists did more to evaluate their own profession than any other professionals. He admired the discipline of school psychology in particular, because of its adherence to preparing new school psychologists to deal directly with clients.

> "Would it not be interesting," he asked, "if school psychology, young, small, a child among the professions yet an intelligent child growing wise, could teach the other professions how to bring knowledge to use in the public good?" (Peterson, 1981, p. 313).

Research investigating the adequacy of training in school psychology revealed inconsistencies. Whereas some studies reported that school psychologists saw their training as meeting the demands of current practice in specific areas, others noted that school psychologists saw their training as having little relationship to their practice.

One of the first studies that dealt directly with this issue found that school psychologists were overwhelmingly disappointed with their training. Giebink and Ringness (1970) sought to investigate practicing school psychologists' satisfaction with their training related to their current job responsibilities. They conducted a small-scale survey of practicing school psychologists in Wisconsin. Although there was great individual diversity of roles, as a whole most school psychologists reported that they perceived their

training to be inadequate. The authors pointed out the areas where the respondents were not satisified. These were consultation with teachers, psychotherapy, behavior modification, and working with referral sources.

The authors urged that their findings be interpreted with caution. Aside from a small sample size, many of their respondents might have earned degrees in programs other than in school psychology. Subjects, in general, were satisified with their practicum experiences. Despite these notes of caution however, the authors confirmed that there were many areas of weaknesses of practicing school psychologists in the late 1960's.

In a much broader, thorough study, Meacham and Peckham (1978) surveyed a national sample of practicing school psychologists. The questionnaire in this survey was developed from a review of the existing requirements in a sample of school psychology programs and a review of the previous literature. The researchers developed a list of skills and organized them under six major role functions: Assessment, Remediation, Interpretation, Consulting, Change Agent, and Research. Respondents were asked to rate their perceptions of their training, competence, practice, and preferred job for each of the 25 skills.

A significant finding was that respondents' rank order of priorities in their present job differed from their rank order of their training. That is, for some skills respondents reported having had more emphasis in university

training than needed for actual practice. For example, there was significantly less emphasis in practice than in university training within the assessment and research roles. Those areas in which subjects reported a greater emphasis in training than in practice were personality and intelligence testing, and developing and carrying out research.

The other 21 skills were perceived as receiving more emphasis in practice than in training. Among those, the skills associated with consulting, remediation, and change agent were most significant. The practicing school psychologists in this study showed an increased desire to function within the consultation and change agent roles, and a decreased desire to function within the assessment and research roles.

Part of this discrepancy may have been attributed to the fact that only 35% of the sample received their training and degree in a school psychology program. Thus, the majority of respondents in this survey, albeit representative of practicing school psychologists, were not formally educated and trained in programs which specialized in school psychology. In addition, the researchers warned that despite highly statistically significant results, the "practical" (p. 199) significance of the findings, was to some extent a matter of judgement.

Meacham and Peckham (1978) noted that there were still areas of preparation that school psychologists needed, but to which they were not exposed. Noting the discrepancy between

the focus in academia and practice, they concluded that "the practitioners know where they are headed and where they want to go. The training institutioms should look to them for guidance." (p. 205).

The focus of research then, derived from these earlier studies, was to explore the perceptions of training by academicians and practitioners in order to evaluate the adequacy of training in an equitable, comprehensive manner. Thompson and Prout (1983) were the first to base their study on perceptions of practitioners as opposed to the Directors of training programs. According to their findings, school psychology practitioners were not satisifed with the training they received, however, they did find that the current training practices related to social-emotional assessment were very much in line with current practices in the field. This study was narrow in focus, however, as it only examined training in social-emotional assessment.

In direct response to controversies addressed at the Olympia Conference, the National Association of School Psychologists (Reschly, Genshaft, & Binder, 1986) conducted a large survey covering current practitioner demographic information, NASP priorities, credentialing, issues related to learning disabilities and the mildly handicapped, job satisfaction, and an evaluation of training and continuing education needs. They used a random sample of NASP practitioner members, recent members of the NASP leadership, and a randomly selected sample of faculty.

Their overall results indicated a relatively high degree of similarity among practitioners' and faculty's responses with regard to the aspects of training they investigated (perceived quality and perceived areas in need of improvement). The areas that both groups felt training was best included, intelligence testing, assessment of mild mental retardation and learning disabilities, and behavior management. Both groups rated neuropsychological assessment and interventions in regular education for behavioral/emotional/learning problems as top areas that needed improvement. Practitioners in general however, listed more categories as needing improvement than did faculty members.

One limitation of this study, was a focus on measuring the quality of training primarily in areas related to assessment. Over half of the skills respondents ranked measured areas in assessment, only three skills related to consultation, and the rest pertained to interventions. The authors concluded that "much work remains to be done in reforming both graduate programs and the practice of school psychology" (Reschly, Genshaft, & Binder, 1986, p. 57).

Graden, Christenson, Ysseldyke, and Meyers (1984), who investigated adequacy in school psychology training, developed a comprehensive set of competencies for their survey. Via extensive literature review, they identified 59 skills that were organized within six major roles:

assessment, intervention, consultation, research/program evaluation, change agent, and communication/interpretation.

This study however, compared the perceptions of training by students in school psychology with practitioners. In general, students rated themselves as better trained than the practitioners rated them to be. Traditional skills in direct service were rated highly, however, both groups reported that they would require additional training on approximately one-half of the competencies, and that they received no training at all in 11 competencies.

These researchers stated that school psychology training is not yet meeting the demands of practice, and that areas of improvement were indicated to make training more congruent with recommended practice. They further postulated that school psychologists may not be doing a wider variety of important tasks because they haven't been adequately trained.

Contributions of the Present Study

Previous research examining the congruence between training and practice in school psychology has been inconclusive. Direct comparisons between univerisity-based school psychologists and field-based school psychologists, with the use of a comprehensive list of roles and competencies specific to the field of school psychology, have never been studied. Given the need for more, extensive research in this area, the present study will focus on academic versus field-based school psychologists and explore their perceptions of training in emerging new professionals

(i.e, school psychology interns).

University-based and field-based school psychologists might percieve the importance of these competencies differently. This study will help bridge those gaps by determining areas of agreement and disagreement. If interns in school psychology are indeed reported to be inadequately prepared by these two groups, it will be important to know which areas still need improvement.

As perceptions of training in school psychology has been deemed an essential and influential factor (Gilmore, 1974, Benson & Hughes, 1985, Trachtman, 1985), this study will explore conceptualizations of training. There may be discrepancies or weaknesses in training as a result of academicians' versus practitioners' notions about the salient roles of a school psychologist.

Although this research will not yield direct implications for a specific client population, it contributes indirectly. That is, the more congruent training is to the needs of actual practice, the more competent the professional. This ultimately leads to a more proficient, effective delivery of psychological services in the schools.

The major contributions of this project are to:

1) indicate areas of agreement and disagreement among university trainers and field supervisors;
2) produce a list of competencies school psychology

interns may not be adequately trained in (from perspectives of both university trainers and field supervisors).

CHAPTER II

METHODOLOGY

In order to address the issues presented by this study, a nation-wide survey of school psychologists was conducted. This chapter will outline, in detail, the procedures used, including the unique sampling method, and a thorough description of the questionnaire developed. Finally, the major research questions that have been posed, will be reviewed.

Research Participants

Approximately 800 surveys were mailed initially, comprised of 400 surveys for both university trainers and field supervisors. The operational definitions of the two groups of participants are as follows:

University Trainer - A Director or full-time faculty member of a school psychology graduate program.

Field Supervisor - A school psychologist, currently employed in a school system, who has or has had some involvement with school psychology interns on a supervisory level.

Potential respondents for the two groups were obtained differently. The list of university respondents were obtained by compiling lists of graduate progams in school psychology from the APA Graduate Study in Psychology, 1986, and Peterson's Graduate Programs in the Humanities and Social

Sciences, 1986. This review yielded a total number of 214 university graduate programs in school psychology.

Each University Director was sent a packet of research materials, consisting of a cover letter, four questionnaires, and a "List of Practitioners" form. The University Directors were asked to give a questionnaire to two or more full-time faculty memebers. This method was used to obtain the group of potential university trainer respondents.

The list of field supervisor respondents was obtained somewhat differently, however. In order to gather the most meaningful sample of supervisors, the University Directors were utilized again. In his or her cover letter, each University Director was asked to provide names of school psychologists who worked in school districts of close proximity, and who were also involved in supervising school psychology interns. In order to reduce bias, it was also suggested that those practitioners who had graduated from the university supplying the list, not be chosen to participate in the study.

This method to obtain potential field supervisor respondents was used for several reasons. Unlike many other studies, which relied on the NASP Directory, this study obtained a relatively matched sample. Additionally, many of the names in the directory might have excluded highly qualified school psychologists who did not belong to NASP. The present method maximized the likelihood that the field supervisors would be involved with supervising interns, as

opposed to having no involvement with the training process at all. (See the initial letter mailed to university directors in Appendix A).

Procedures

The survey was distributed via two major mailings, followed by three to four follow-ups per respondent group. The actual number of universities that were sent the initial research packet was 212. (Two programs were no longer in existence).

The research packet that consisted of the letter to the University Directors, was mailed first. Here, approximately 400 university trainers were the target group (made up of three respondents per university).

Approximately six months later, the list of practitioners, obtained by University Director responses, was finalized. The initial cover letters and questionnaires were mailed to the potential practitioner respondents, which consisted of approximately 400 school psychologists. (See Appendix B.)

Follow-up letters went out three to six weeks after each of those initial mailings. About three follow-ups were sent, after approximatetly two to four week intervals. In some cases, telephone calls to individuals were made.

All surveys were collated upon receipt and given specific identification numbers. These identification were based on the state and program, and aided in the collating of data.

Instrumentation

The measurement used was a carfully designed questionnaire, or survey. It was arranged as a booklet-style, four-page questionnaire (professionally printed), and consisted of four major parts.

Part I was a variety of questions pertaining to demographic and respondent identification data. Questions regarding the age, gender, and years of experience as a university trainer or field supervisor were asked. (See Appendix C.)

Parts II and III of the questionnaire were the major information gathering sections of the study. In Part II, the respondents were asked to rate a list of 59 competencies in school psychology on two dimensions of a numerical scale. The 59 competencies were broken down into the following: 12 competencies which fell under each role of Assessment, Intervention, and Consultation, nine competencies under Research/Program Evaluation, five under the role of Change Agent and nine under Communication/Interpretation. (See Appendix D.)

These competencies were based on the list of competencies used in the Graden, et. al. survey. (Permission was obtained from Dr. Graden over the telephone, by the author of this study). This list was selected for this study because of its comprehensiveness relative to training in school psychology in addition to its piloted performance as a reliable measure of skills. Graden, et. al. compliled the

list from a variety of sources including a review of the literature, NASP Guidelines, national lectures on training in school psychology, and consultation with the researchers' colleagues.

The third section of the questionnaire was exploratory in nature. It was developed in order to determine if there were similarities or differences in the way the two respondent groups perceived the level of carry over in training for pairs of major role functions. Each of the six major roles were crossed with the remaining five. Respondents were asked to rate the degree of "carry over" they perceived each pair to have. That is, based on a six-point scale, subjects were to determine if training in one role, prepared interns for functioning in the other role. The lower the score, the greater the level of perceived carry over. (See Part III of the questionnaire, Appendix E).

Part IV of the questionnaire consisted of one question pertaining to the degree of percieved need for more formal communication.

A separate page was provided for open-ended comments.

Research Questions

Because of the descriptive, exploratory nature of this study, the goal was to provide information, rather than proving or disproving a set of theoretical assumptions. Thus, this study will address the following research questions:

1. Do university trainers and field supervisors differ in their ratings of the importance of competencies needed in

school psychology?

2. Do university trainers and field supervisors differ in their ratings of the degree of university preparation they perceive interns possess?
3. Are there specific areas in which training is needed or areas in which there is an excess of training, as perceived by both groups?
4. Are there differences in the way university trainers and field supervisors perceive the patterns of carry over in training from one major role function to another?
5. Do university trainers and field supervisors differ in their perceived need for formal communication between the two groups?

CHAPTER III

RESULTS

This section will describe the results of the present study. First, descriptive statistics will identify the sample by age, gender, geographical region, years of experience, degree level, and orientation. Significant differences among the participants will be identified. Second, each research question will be addressed. Third, supplemental analysis will be described.

Descriptive Statistics

Representation of the Sample

Programs

The initial number of universities believed to exist was 211. The actual number of existing graduate programs in school psychology, according to the named sources was 208. Out of that number, 91 universities responded (either filled out surveys, or filled out surveys and provided a list of practitioners in the area). Therefore, the response rate, universities only, was 44%. These results are shown in Table 1.

Table 1

University Response Rate by Region

Region	States n=34	Univ. Prgms. n=91
Northeast	4	22
West	7	20
Midwest	10	25
South	13	24

The programs represented a total of 34 states: 22% were from the West, 28% were from the Midwest, 24% were from the Northeast, and 26% were from the South.

The majority of programs offered Masters degrees (44%) or Specialist level degrees (21%). Only 19% offered a Doctoral degree and 16% offered both a Masters and Doctorate. These results are shown in Table 2.

Table 2

Level of Degree(s) Offered by University Program Respondents

Region	Degree			
	Masters (n=40)	Mstr/Spec. (n=19)	Doct. (n=17)	Mst/Doct (n=15)
Northeast (n=22)	5	5	7	5
West (n=20)	13	2	3	2
Midwest (n=25)	13	5	4	3
South (n=24)	9	7	3	5

Note. N=91

Participants

The respondent sample was comprised of 130 university trainers (50% of available responses), 105 field supervisors (53% of available responses). The demographic variables analyzed were age, gender, years of experience, degree level, theoretical orientation, and region of the country. A Chi-square analysis was conducted on each variable to determine if the frequencies were greater than would be expected by chance. The region of the country variable was compared to NASP membership data (11/92). Demographic data are shown in Table 3.

Table 3

Demographic Data of University Trainers and Field Supervisors

Variable	University Trainers	Field Supervisors
Age	M 44.0	M 41.0
	SD 1.0	SD 9.1
Gender		
Male	67	45
Female	33	55
Years Experience		
Less than 10 yrs.	61	54
More than 10 yrs.	39	46
Degree		
Non-doctoral	5	57
Doctoral	95	43
Orientation		
Psychodynamic-analytic	6	3
Cognitive-behavioral	31	28
Other	63	69

Note. Entries other than age, refer to percentages.

Age. The mean age of the university trainers was 44 (SD 1.0). The mean age of the field supervisors was 41 (SD 9.1). The range for both groups was 25-65. Statistical analysis

revealed no significant differences between the groups.

Gender. The sample of university trainers was comprised of 67% males, and 33% females. 45% of the field supervisors were males and 55% were female. There were no significant differences between the groups, X (1,N=200) = .13.

Years of Experience. 61% of the university trainers reported having less than 10 years of experience, whereas 39% reported having more than 10 years of experience. 54% of the field supervisors reported having less than 10 years of exerience, and 46% reported having more than ten years of experience. No significant differences between the groups were found, X (1,N=200) = 1.52.

Degree. The majority of university trainers held doctorates (95%). Only 5% of the university trainers were non-doctoral level. The majority of the field supervisors held masters (33%) or specialist level degrees (24%), although a substantial number (43%) held doctorates. No significant differences were found, X (1,N=200) = 1.15.

Theoretical Orientation. Most of the trainers (63%) reported their orientation as being something other than psychodynamic-analytic (6%) or cognitive/behavioral (31%). Most of field trainers (69%) identified their orientation as one other than psychodynamic-analytic (3%) or cognitive/behavioral (28%). No significant differences were found, X (2,N=217) = .7, p<.40.

Region of Country. As can be seen in Table 4, 32% of the university trainers came from the Midwest, 27% came from the South, 26% came from the Northeast, and 15% came from the

West. With regard to the field supervisors, 32% were from the South, 30% were from the Northeast, 21% were from the West, and 17% were from the Midwest.

Table 4

University Trainers and Field Supervisors Response Rate by Region

Region	Trainers n=130	Supervisors n=105
Northeast	26	30
West	15	21
Midwest	32	17
South	27	32

Note. Entries refer to percentages.

The proportions of university trainers and field supervisors were compared with the proportion of members affiliated with the National Association of School Psychologists (NASP) for each region of the country. The results are shown in Table 5.

Table 5

Response Rate of University Trainers and Field Supervisors Compared with NASP Membership by Region

Region	Trainers & Supervisors	NASP Members
Northeast	28	27
West	18	18
Midwest	25	29
South	29	26

Note. Entries refer to percentages.

Table 5 indicates the percentage of trainers and supervisors obtained in each region of the country and the corresponding percentage of NASP members. Statistical analysis within each region, indicated that there were no significant differences between the proportions of trainers and supervisors and the proporation of NASP members (1992 membership data).

Review of Major Hypothesis

The research design for investigating differences between university trainers and field supervisors ratings of importance and level of preparation involved a two step procedure. The first step involved comparing the ratings of each group using a Multivariate Analysis of Variance (MANOVA) procedure. If the MANOVA was significant, then further

univariate F tests were carried out to determine where significant differences occurred.

Research Question 1

The first research question pertained to whether there were significant differences between university trainers and field supervisors in terms of their ratings of importance of each of the competency areas.

The first method of addressing this question was to obtain a rank order of univerity trainers' and field supervisors' overall ratings of importance. The groups means are presented in Table 6.

Table 6

University Trainers' and Field Supervisors' Ratings of Perceived Importance of Major Roles

	Trainers			Supervisors		
Role	Rank	M	SD	Rank	M	SD
Communication/ Interpretation	1	5.17	.54	1	5.15	.59
Assesment	2	5.05	.56	2	4.89	.64
Consultation	3	4.91	.69	3	4.74	.91
Intervention	4	4.61	.60	4	4.51	.81
Change Agent	5	4.28	1.03	5	4.24	1.86
Research/Program Evaluation	6	4.11	.83	6	3.55	.97

As can be seen in Table 6, university trainers and field supervisors ranked each overall role in an identical order. University trainers however, did rate each role as being higher in importance than did the field supervisors.

In order determine whether significant differences between groups existed within these majors roles, a Multivariate Analysis of Variance (MANOVA) was conducted. Trainers and supervisors ratings of the importance of competencies that comprised each role were utilized as dependant variables. On roles in which significant effects were found in the MANOVA procedure, univariate ANOVAS were conducted on each of the competencies to test for the effects of differences within specific competencies.

The MANOVA procedure (which is the multivariate analogue of univariate analysis of variance) was utlized with the present data in order to develop the probability of a Type I error, which might result from repeated univariate analysis of variance for each of the dependent variables.

Significant differences were found in the areas of Assessment (Hotellings Trace=.12, $F(12,199) = 2.00$ $p<.05$), Intervention (Hotellings Trace=.12, $F(11,201) = 2.16$ $p<.05$), Research/Program Evaluation, (Hotelling Trace=.26, $F(8,204) = 6.52$ $p<.001$), Consultation (Hotellings Trace=.19, $F(12,188) = 3.01$ $p<.001$), and Communication/Interpretation (Hotellings Trace=.14, $F(10,202) = 2.92$ $p<.01$). That is, university trainers rated those overall areas as significantly more important than did field supervisors. The analysis did not yield a statistically significant difference

in the area of Change Agent (Hotellings Trace=.03, $F(5,211) = 1.36$ $p<.239$). Tables 7 through 11 show the statistically significant means and standard deviations for the competencies within each major role.

Table 7

Mean Ratings of the Importance of Competencies within the Assessment Role

Competency	University Trainers	Field Supervisors
Nondiscriminatory assessment*		
M	5.34	4.99
SD	.86	1.22
Assessing the preschool child*		
M	4.61	4.23
SD	1.03	1.31
Evaluating the technical characterists of tests**		
M	4.92	4.41
SD	1.14	1.24

*$p<.05$. **$p<.01$.

Table 7 indicates that university trainers rated three assessment competencies as significantly more important than

field supervisors did. University trainers rated the ability to conduct nondiscriminatory assessment and to evaluate preschool children as significantly more important than field supervisors did. The trainers also rated the ability to evaluate validity and reliability (and other technical characteristics) of tests as significantly more important than field supervisors.

Table 8

Mean Ratings of the Importance of Competencies within the Intervention Role

Competency	University Trainers	Field Supervisors
Developing/conducting inservice programs*		
M	4.30	4.0
SD	1.05	1.15
Developing psychological service delivery systems*		
M	4.30	4.01
SD	1.05	1.15
Appropriate referral making**		
M	5.42	5.06
SD	.79	1.02

*p<.05. **p<.01.

Table 8 demonstrates that university trainers perceived three types of interventions as significantly more important than field supervisors did. University trainers percieved developing psychological service delivery systems, conducting inservice programs and knowing when and how to make appropriate referrals as significantly more important than field supervisors.

As seen in Table 9, university trainers perceived six out of the eight competencies within Research/Program Evaluation as significantly more important than field supervisors. The differences were highly significant in the areas of designing, conducting, disseminating and applying findings within school-based research. University trainers certainly perceived the role of research/program evaluation as more important than field supervisors.

Table 9

Mean Ratings of the Importance of Competencies within the Research/Program Evaluation Role

Competency	University Trainers	Field Supervisors
Designing research***		
M	4.05	3.0
SD	1.20	1.19
Conducting research***		
M	4.05	3.01
SD	1.19	1.19
Disseminating findings***		
M	4.0	3.43
SD	1.03	1.31
Applying findings***		
M	4.82	4.23
SD	.94	1.12
Evaluating IEP's*		
M	4.66	4.28
SD	1.13	1.26
Writing grant proposals*		
M	3.06	2.70
SD	1.16	1.49

*p<.05. ***p<.001.

Table 10

Mean Ratings of the Importance of Competencies within the Consultation Role

Competency	University Trainers	Field Supervisors
Entering/contracting with individuals**		
M	4.90	4.43
SD	1.0	1.35
Entering/contracting with organizations***		
M	4.17	3.47
SD	1.27	1.49

**$p<.01$. ***$p<.001$.

Table 10 indicates that university trainers perceived two competencies within consultation, as significantly more important than field supervisors. Entering/contracting with individuals and organizations were seen as significantly more important by university trainers.

Table 11

Mean Ratings of the Importance of Competencies within the Communication/Interpretation Role

Competency	University Trainers	Field Supervisors
Facilitating team process in decision making*		
M	5.17	5.44
SD	.96	.90

*$p < .05$.

The means in Table 11 are of particular interest, in that they demonstrate that field supervisors perceived one competency within Communication/Interpretation as significantly more important than university trainers did. Field supervisors found facilitating the team process in decision making to be of particular importance.

Research Question 2

The second research question dealt with ascertaining whether there were differences with regard to univerisity trainers' and field supervisors' perceptions of the level of preparation for the various competencies.

University trainers' and field supervisors' mean ratings for the level of preparation were ordered by rank. Group means for each major role are presented in Table 12.

Table 12

University Trainers' and Field Supervisors' Ratings of Perceived Level of Preparation for Major Roles

	Trainers			Supervisors		
Role	Rank	M	SD	Rank	M	SD
Communication/ Interpretation	1	4.17	.87	1	3.44	.95
Assessment	2	4.04	.77	2	3.40	.77
Consultation	3	3.88	1.02	3	3.31	.95
Intervention	4	3.58	.90	4	2.79	.86
Research/Program Evaluation	5	3.32	1.02	5	2.57	1.05
Change Agent	6	3.17	1.12	6	2.43	1.18

The mean ratings in Table 12 indicate that both groups perceive the level of preparation for each major role in identical rank order. University trainers and field supervisors rated interns' level of preparation in Communication/Interpretation as the highest, which preceded the ranks for level of preparation in Assessment, Consultation, Intervention, and Research/Program Evaluation. Trainers and supervisors rated interns' level of preparation in Change Agent as the lowest.

In order to find out whether there were significant

differences between university trainers and field supervisors with respect to the perceived level of preparation, another Multivariate Analysis of Variance (MANOVA) was performed using each groups ratings of the competencies within each role again. Individual competencies within each of the main areas were used as dependant measures. Significant differences were found in each main area.

Field supervisors rated interns as less prepared than University trainers did in each area. Tables 13 through 18 show the Univariate F tests, respectively, in the areas of Assessment (Hotellings Trace=.25, $F(12,183) = 4.07$ $p<.001$), Intervention (Hotellings Trace=.28, $F(11,196) = 5.01$ $p<.001$), Research/Program Evaluation (Hotellings Trace=.23, $F(8,198) = 5.67$ $p<.001$), Consultation (Hotellings Trace=.15, $F(12,186) = 2.38$ $p<,001$), Change Agent (Hotellings Trace=.13, $F(5,208) = 5.42$ $p<.001$), and Communication/Interpretation (Hotellings Trace=.20, $F(10,198) = 4.04$ $p<.001$).

Table 13

Mean Ratings of Level of Preparation for Competencies within the Assessment Role

Competency	University Trainers	Field Supervisors
Cognitive assessment***		
M	5.30	4.69
SD	.81	.94
Educational assessment***		
M	4.75	4.18
SD	1.08	1.05
Personality assessment***		
M	4.27	3.32
SD	1.20	1.21
Adaptive behavior assessment***		
M	4.22	3.33
SD	1.03	1.11
Nondiscriminatory assessment***		
M	4.01	3.33
SD	1.12	1.30
Preschool assessment***		
M	3.20	2.44
SD	1.31	1.08

(table continues)

Competency	University Trainers	Field Supervisors
Special population assessment***		
M	3.28	2.44
SD	1.36	1.13
Gifted child assessment**		
M	3.74	3.21
SD	1.33	1.21
Systematic observation***		
M	4.12	3.52
SD	1.22	1.20
Impact of social milieu***		
M	3.72	3.18
SD	1.20	1.07
Effect of learning environment***		
M	3.76	3.16
SD	1.21	1.24
Evaluating the technical characteristics of tests***		
M	4.35	3.71
SD	1.20	1.16

**p<.01. ***p<.001.

The means in Table 13 indicate that university trainers rated the level of preparation for every competency within

Assessment significantly higher than field supervisors did.

Table 14

Mean Ratings of Level of Preparation for Competencies within the Intervention Role

Competency	University Trainers	Field Supervisors
Designing IEP's***		
M	3.62	2.80
SD	1.22	1.24
Designing academic interventions***		
M	3.85	3.04
SD	1.22	1.17
Designing behavioral interventions***		
M	4.30	3.32
SD	1.10	1.13
Consulting/school curricula***		
M	2.87	2.18
SD	1.24	1.15
Conducting inservice programs***		
M	3.44	2.56
SD	1.25	1.25

(table continues)

Competency	University Trainers	Field Supervisors
Psychological service delivery***		
M	3.32	2.44
SD	1.28	1.26
Parent education training***		
M	3.27	2.50
SD	1.20	1.10
Appropriate referral making***		
M	4.35	3.30
SD	1.15	1.26
Counseling individuals***		
M	3.83	3.09
SD	1.34	1.32
Counseling groups**		
M	3.35	2.78
SD	1.32	1.31
Counseling parents/families***		
M	3.37	2.73
SD	1.29	1.25

**p<01. ***p<.001.

Mean ratings presented in Table 14 indicate that university trainers perceived interns' level of preparation for each Intervention competency significantly higher than

field supervisors did.

Table 15

Mean Ratings of Level of Preparation for Competencies within the Research/Program Evaluation Role

Competency	University Trainers	Field Supervisors
Designing research***		
M	3.60	2.69
SD	1.27	1.30
Conducting research***		
M	3.53	2.71
SD	1.28	1.23
Applying research findings***		
M	3.48	2.90
SD	1.20	1.23
Disseminating research findings***		
M	3.70	3.02
SD	1.24	1.27
Evaluating IEP's***		
M	3.80	2.78
SD	1.15	1.33

(table continues)

Competency	University Trainers	Field Supervisors
Evaluating educational programs***		
M	2.93	2.34
SD	1.28	1.20
Evaluating delivery systems***		
M	3.39	2.54
SD	1.36	1.26
Writing grant proposals***		
M	2.09	1.46
SD	1.32	1.39

***$p<.001$.

The mean ratings in Table 15 indicate that university trainers perceived the level of training in each Research/Program Evaluation competency significantly higher than field supervisors did.

Table 16

Mean Ratings of Level of Preparation for Competencies within the Consultation Role

Competency	University Trainers	Field Supervisors
Contracting with individuals***		
M	4.03	3.27
SD	1.23	1.32
Contracting with orgnanizations**		
M	3.19	2.66
SD	1.30	1.32
Identifying the problem**		
M	4.37	3.84
SD	1.16	1.27
Defining the problem***		
M	4.41	3.79
SD	1.18	1.28
Consulting/child as client***		
M	4.30	3.83
SD	1.30	1.22
Consulting/teacher as client***		
M	4.22	3.62
SD	1.26	1.16

(table continues)

Competency	University Trainers	Field Supervisors
Consulting/school as client*		
M	3.56	3.17
SD	1.42	1.22
Evaluating the consultation**		
M	3.66	3.16
SD	1.36	1.25
Terminating the consultation***		
M	3.78	3.09
SD	1.32	1.28
Behavioral consultation**		
M	4.27	3.73
SD	1.20	1.26
Mental health consultation**		
M	3.69	3.13
SD	1.33	1.26

*$p<.05$. **$p<.01$. ***$p<.001$.

The mean ratings in Table 16 show the Consultation competencies in which university trainers' perceptions of interns' preparation was higher than field supervisors' perceptions. There were no significant differences between trainers' and supervisors' perceptions of interns' preparation for organzational consultation.

Table 17

Mean Ratings of Level of Preparation for Competencies within the Change Agent Role

Competency	University Trainers	Field Supervisors
Identifying school system needs***		
M	3.12	2.37
SD	1.30	1.29
Acting as school "problem solver"***		
M	3.21	2.35
SD	1.34	1.32
Advocating for policy changes***		
M	2.86	2.22
SD	1.28	1.36
Facilitating school communications***		
M	3.25	2.51
SD	1.28	1.38
School-community liason***		
M	3.44	1.38
SD	2.66	1.27

***$p<.001$.

The mean ratings in Table 17 indicate that university trainers' rated interns' level of preparation for each Change

Agent competency significantly higher than field supervisors did.

Table 18

Mean Ratings of Level of Preparation for Competencies within the Communication/Interpretation Role

Competency	University Trainers	Field Supervisors
Interviewing***		
M	4.68	3.88
SD	1.05	1.19
Integrating assessment findings***		
M	4.68	3.92
SD	1.07	1.29
Report presentation***		
M	4.78	3.90
SD	1.01	1.21
Report writing***		
M	4.82	4.08
SD	1.01	1.25
Serving on multi-disciplinary team***		
M	4.57	3.78
SD	1.12	1.11

(table continues)

Competency	University Trainers	Field Supervisors
Facilitating team decision making***		
M	4.13	3.39
SD	1.18	1.27
Training decision making***		
M	3.21	2.51
SD	1.41	1.32
Communicating to community about psychological services***		
M	3.36	2.63
SD	1.32	1.23
Ethical/professional standards***		
M	5.10	4.40
SD	1.00	1.21
Testifying as expert witness***		
M	2.43	1.69
SD	1.33	1.34

***$p<.001$.

The mean ratings in Table 18 indicate that university trainers percieved the level of interns' preparation for each Communication/Interpretation competency significantly higher than field supervisors did.

Research Question 3

The third research question dealt with identifying specific competencies in which more training is needed or areas in which there was an excess of training. In order to ascertain specific areas that both groups perceived needed more training, the data was analyzed in the following manner. Competencies that both groups rated Importance at least 2 points higher than preparation were found. This method did involve subjectivity, however it was carried out in order to obtain meaningful results.

The results of this method did not yield any areas in which there was a perceived excess of training. It did identify many areas in which more training was needed. These results are presented in Table 19.

Table 19

Competencies for which Greater than 45% of Both Groups Rated Importance ≥ Preparation by at Least 2 Points

%	Competency
Assessment	
50.7	Conducting a personality/social-emotional assessment
47.0	Conducting nondiscriminatory assessment
52.4	Assessing the preschool child
49.5	Assessing special populations

(table continues)

%	Competency
47.0	Assessing the impact of the social milieu
48.8	Analyzing the effect of the learning environment
Intervention	
45.1	Designing classroom interventions/academic problems
48.6	Designing classroom interventions/behavior problems
45.5	Counseling individuals
46.0	Counseling parents/families
Consultation	
49.1	Intervening/Consulting with school as the client
45.1	Evaluating the consultation
Change Agent	
46.5	Facilitating communication in the school system
Communication/Interpretation	
48.8	Facilitating team process in decision-making
46.7	Communicating to the community about services
51.9	Testifying as an expert witness

As can be seen, there were 16 competencies which both groups identified as at least two points higher in importance than in preparation. The competencies listed in the table represent important areas in school psychology in which a higher level of training may be needed. For example, counseling families received high ratings with regard to level of importance ("very important" to "essential").

However, 46% of trainers' and supervisors' rated interns' level of preparation as "adequate" to "poor". It may be that additional training in this area will increase trainers' and supervisors' ratings for the level of preparation in counseling families to "excellent" or to "fully prepared".

Research Question 4

The fourth research question dealt with analyzing whether there were differences in the way university trainers and field supervisors perceived that patterns of carry over in training from one major role function to another. To address this question, six mixed design Analysis of Variance (ANOVA) (2x5) procedures were used, one for each major role function. This was conducted to assess whether university trainers and field supervisors perceived carry over among the pairs of roles in a significantly similar or disimilar fashion. Means and standard deviations for both groups are presented in Tables 20 through 25, which reflect the amount of perceived carry over between the major role function pairs. In each table, low mean values reflect a greater level of perceived carry over in training. Conversely, high mean values reflect a lower level of perceived carry over in training.

Table 20

Means and Standard Deviations of Respondents' Perceived Carry Over in Training Among Roles Paired with Assessment

Role Pair	University Trainers		Field Supervisors	
Assessment with:	M	SD	M	SD
Intervention	2.45	1.37	2.46	1.43
Consultation	2.90	1.28	3.00	1.41
Research/Program Evaluation	3.29	1.33	3.53	1.45
Change Agent	3.73	1.42	3.69	1.55
Communication/ Interpretation	2.78	1.32	2.67	1.28

Table 21

Means and Standard Deviations of Respondents' Perceived Carry Over in Training among Roles Paired with Intervention

Role Pair	University Trainers		Field Supervisors	
Intervention with:	M	SD	M	SD
Assessment	2.46	1.36	2.50	1.48
Consultation	1.96	1.03	2.09	1.03

(table continues)

Role Pair	University Trainers		Field Supervisors	
Intervention with:	M	SD	M	SD
Research/Program Evaluation	3.72	1.30	3.76	1.40
Change Agent	2.40	1.20	2.44	1.31
Communication/ Interpretation	2.57	1.20	2.47	1.09

Table 22

Means and Standard Deviations of Respondents' Perceived Carry Over in Training among Roles Paired with Consultation

Role Pair	University Trainers		Field Supervisors	
Consultation with:	M	SD	M	SD
Assessment	2.92	1.28	3.02	1.44
Intervention	1.96	1.03	2.09	1.03
Research/Program Evaluation	3.25	1.33	3.33	1.42
Change Agent	2.10	1.14	2.36	1.25
Communication/ Interpretation	2.23	1.19	2.28	1.07

Table 23

Means and Standard Deviations of Respondents' Perceived Carry Over in Training among Roles Paired with Research/Program Evaluation

Role Pair	University Trainers		Field Supervisors	
Research/Program Evaluation with:	M	SD	M	SD
Assessment	3.35	1.33	3.52	1.45
Intervention	3.70	1.31	3.80	1.40
Consultation	3.21	1.32	3.30	1.40
Change Agent	3.00	1.32	3.23	1.21
Communication/ Interpretation	3.40	1.42	3.54	1.25

Table 24

Means and Standard Deviations of Respondents' Perceived Carry Over in Training among Roles Paired with Change Agent

Role Pair	University Trainers		Field Supervisors	
Change Agent with:	M	SD	M	SD
Assessment	3.73	1.42	3.69	1.55
Intervention	2.40	1.21	2.44	1.31

(table continues)

Role Pair	University Trainers		Field Supervisors	
Change Agent with:	M	SD	M	SD
Consultation	2.09	1.13	2.37	1.26
Research/Program Evaluation	3.02	1.32	3.25	1.22
Change Agent	3.73	1.42	3.69	1.55
Communication/ Interpretation	2.57	1.20	2.70	1.22

Table 25

Means and Standard Deviations of Respondents' Perceived Carry Over in Training among Roles Paired with Communication/Interpretation

Role Pair	University Trainers		Field Supervisors	
Communication/ Interpretation with:	M	SD	M	SD
Assessment	2.80	1.31	2.68	1.28
Intervention	2.55	1.19	2.46	1.08
Consultation	2.18	1.17	2.26	1.08
Research/Program Evaluation	3.39	1.42	3.55	1.25
Change Agent	2.56	1.21	2.70	1.22

In all instances, no significant interaction or main effect was found between university trainers, field supervisors and role function pairs. (F (4,828)'s < 1 and F (1,207)'s < 2, respectively). University trainers' and field supervisors' perceptions of the pattern of carry over in training among role pairs are identical. As expected, in all six analysis, perceived carry over among role pairs were found to be significant (F (4,828)'s > 10.0). Source tables for the mixed ANOVA's are presented in Appendix F.

Research Question 5

The final research question dealt with university trainers' and field supervisors' reported need for more formal communication among each group with regard to training school psychologists. Chi Square analysis was used to address this question. The results did not yield significant differences among groups (X (3,N=210) = 6.04, p<.11). The data is presented in Table 26.

Table 26

Chi Square Results of University Trainers' and Field Supervisors' Reported Need for Formal Communication

Response	% Trainers	% Supervisors
1	26.1	39.0
2	60.0	50.5
3	11.3	10.5
4	2.6	0.0

Note. 1="much more is needed", 2="some more is needed", 3="slightly more is needed", 4="no further communication is needed".

The majority of university trainers (60%) and field supervisors (50.5%) responded to the question with choice #2, "Moderate; some more is needed". 31.9% of the total respondents (26.1% of the trainers and 38.9% of the supervisors) felt that "Much more is needed" (choice #1). Only 11% of the total sample (11.3% of the trainers and 10.5% of the supervisors) reported that "Slightly more is needed" (choice #3), and only 2.6% of the university trainers reported that "No further communication is needed" (choice #4), representing 1.4% of the total sample.

Supplemental Analysis

Trainer Versus Supervisor Relative Discrepancies:

In order to illustrate and explore the relative differences between groups, group means and standard deviations were converted into z scores (using separate group means and standard deviations for all 64 competencies). These results are presented in Figures 1 and 2.

Figure 1

Z-score Ratings of Importance of Major Role Functions for University Trainers and Field Supervisors

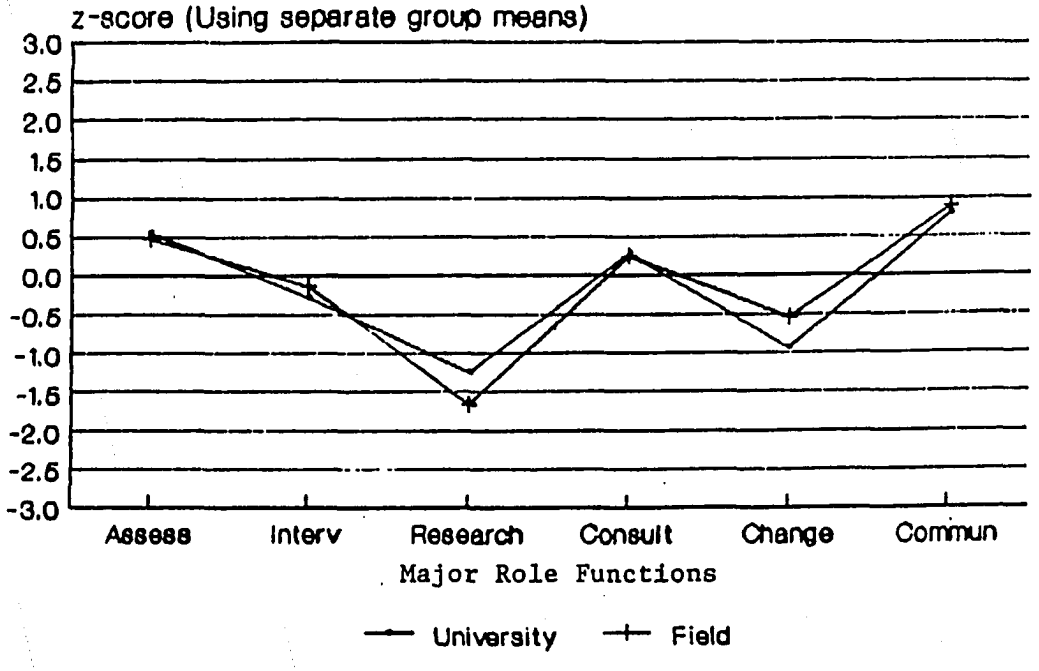
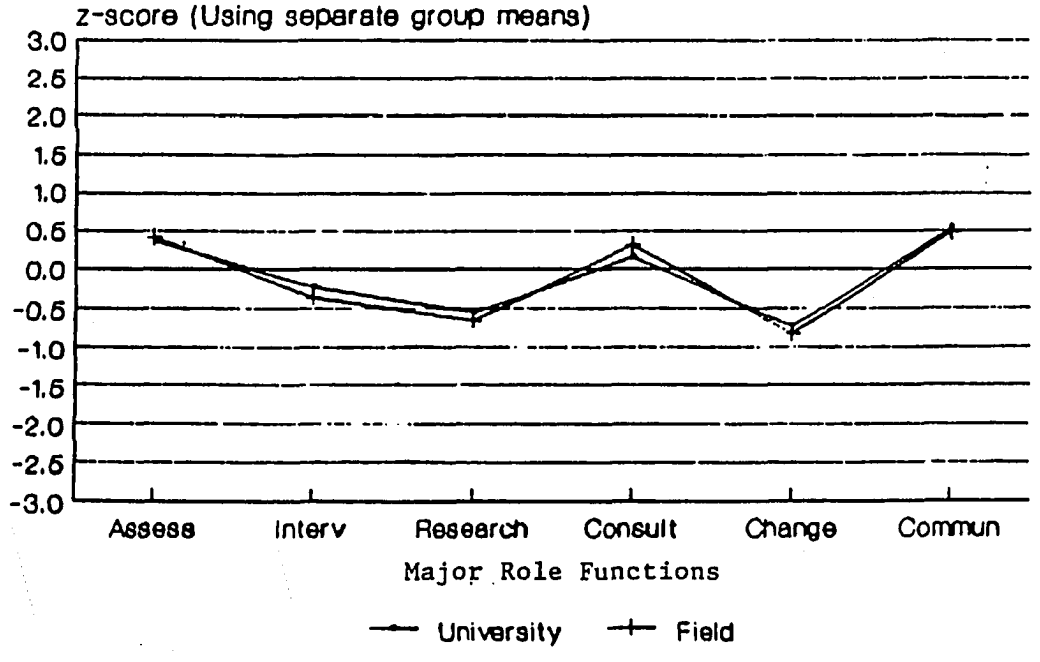


Figure 2

Z-score Ratings of Degree of Preparation in Major Role Functions for University Trainers and Field Supervisors



When the data was explored this way perceptions of importance and level of preparation appeared rather similar between the two groups. Thus, a portion of the significant findings may be attributable to the response styles of each group. For example, university trainers tended to give high ratings for level of preparation whereas field supervisors tended to give lower ratings. These response styles may be accountable for some differences found between the groups.

CHAPTER IV

DISCUSSION

In this chapter the results of the study and the implications of the findings are discussed. First, general findings are discussed. Next, the results of this study are compared with the results of other studies related to training in school psychology. Third, areas of agreement and disagreement between university trainers' and field supervisors' perceptions of training within each role are examined. The Academician/Pracititioner bipolarity is then discussed. Finally, suggestions for graduate education and training in school psychology are, and future issues within the field are addressed.

General Findings

One limitation of the present study was the response rate. Although there was adequate representation of trainers and supervisors within each region of the country, the sample represented about half of the targeted number. In addition, participant variables between groups (such as gender, age, and years of experience) did not reach statistical significance. Further analysis of the potential effects those dependent variables have were not analyzed in the present study. These limitations indicate that some caution be considered when interpreting the results.

Several overall conclusions can be derived from this study. Some of these findings were predicted, others were not. First university trainers and field supervisors did indeed have different perceptions of how interns are performing. In all areas examined, university trainers tended to perceive interns' as significantly more prepared than did field supervisors. This was predicted, as field-based supervisors, throughout the literature in this area, had been less than adequately satisfied with pre-internship preparation.

Although many of the differences supporting this trend reached statistical significance, caution interpreting these results must be used. The trend for field-based supervisors to rate interns' training lower than university-based supervisors, may be attributed to the response styles of each group.

The second overall finding, which was predicted, was that university trainers perceived the competencies comprising the Research/Program Evaluation role to be significantly more important than did field supervisors. However, the prediction that field supervisors would perceive the importance of many competencies significantly different than did university trainers, was not realized (only one competency reached statistical significance).

A third prediction was that university trainers would be aware of the results of previous research, and therefore changes within the profession could be identified. A

comparision of the results of this study with the results of previous studies did lend support for this prediction. Many of the areas perceived to need more training were different from areas previously reported to need more training.

Finally, as predicted, the overall majority of trainers and supervisors did report a desire for formal communication with each other. Most of the participants in this study were invested in keeping the lines of communication open, so that training in school psychology would remain congruent with practice.

Before discussing the specific findings of this study, it is important to examine the results of other training studies within school psychology. This information would provide a broader perspective on which overall conclusions would be based.

"Perceptions of Training" Survey Data Compared with Previous Research

In this section similarities and differences between the results of the "Perceptions of Training" Survey and the data from previous surveys were examined. By comparing the results of this study with results of previous studies, changes within the profession and new training trends can be identified. Although the results from several studies were be reviewed, the primary focus of this section was on comparing the results of the Graden, Christenson, Ysseldyke, and Myers (1986) survey of school psychology practitioners with the university trainers and field supervisors in the present study. The findings gleaned from these comparisons,

provided the most precise "data baseline" for future research.

First, comparisons were made between the present study and other studies which focused on the main roles of school psychologists. This section then identified comparisons between the present study with those which focused on specific competencies within the field.

Comparisons Within Main Roles

When the results of the present study were compared to the main findings in Graden et.al. (1984), and then Meacham and Peckham's (1978) research, changes within the profession and interesting similarities and differences were found. In Graden et.al., a sample of school psychology practitioners rated their perception of the quality of training for each of six main roles. These ratings were compared with the combined ratings of university trainers and field supervisors in the "Perceptions of Training" survey (who rated the level of preparation for each competency). The ranks for each group are presented in Table 27.

Table 27

Practitioners', Trainers' and Supervisors' (Supv's.) Rank Order of Level of Preparation for Main Roles

Role	Practitioners Rank	Trainers & Supv's. Rank
Communication/ Interpretation	1	1
Assessment	2	2
Consultation	3	3
Intervention	4	4
Change Agent	5	6
Research/ Program Evaluation	6	5

Note. The data in column 1 are from "A National Survey on Students' and Practitioners' Perceptions of Training" by Graden, et. al., 1986, School Psychology Review, p. 399. Adapted by permission.

As seen in Table 27, the practitioners in Graden's et.al. study and the trainers and supervisors in the present study ranked the perception of preparation for the roles in a similar manner. The perceived level of preparation for the first four areas were rated identically. The data shows that in both studies, research participants rated Communication/Interpretation first, Assessment second,

Consultation third, and Intervention fourth.

Differences between the trainers and supervisors and practitioners in Graden et. al. study were found. In the present study trainers and supervisors rated the level of preparation in Research/Program Evaluation as somewhat higher than practitioners in the Graden et.al. study did. Conversely, in the present study the level of preparation in Change Agent was rated lower (sixth or last) than in the previous study (fifth).

The data was then compared with Meacham and Peckham's study (1978), which was the earliest data of this nature available. Their sample of school psychology practitioners rated six main roles in terms of levels of training, skill needed in their present job (practice), their perceived competence, and in terms of the order in which they would prefer to function (preference). They rated the main roles (worded somewhat differently from those in current studies) from highest (1) to lowest (6). The results are presented in Table 28.

Table 28

Meacham and Peckham's (1978) Practitioners' Ratings of Main Roles

Role	Training	Practice	Competence	Preferred Job
Assessment	1	1	1	2
Consulting	3	2	2	1
Interpretation	2	3	3	4
Remediation	4	4	4	5
Change Agent	6	5	5	3
Research	5	6	6	6

Note. Taken from "School Psychologists at Three-Quarters Century: Congruence Between Training, Practice, Preferred Role and Competence" by Meacham & Peckham, 1978, Journal of School Psychology, p. 201. Adapted by permission.

As seen in Table 28, the data in column one pertain to the perception of training the sample received in each of the six roles. That is, these practitioners rated the level of training they received in Assessment as first, Interpretation second, Consultation third, Remediation fourth, Research fifth and Change Agent sixth. In terms of overall training, these ratings are similar to the ratings of practitioners in Graden et.al's. (1984) study and to the trainers and supervisors in the present study.

Important exceptions however, can be noted. In the area

of Assessment, Meacham and Peckham's (1978) practitioners rated this role as first in training, practice, and competence and second in terms of their preferred role. Assessment was ranked as second in preparation by practitioners in Graden, et. al., (1984) and by trainers and supervisors in the present study. In terms of its perceived importance, in the present study Assessment was rated as second, which is similar to the preferred role rating in Meacham and Peckham's (1978) study.

Significant shifts regarding the perception of the Communication/Interpretation role can be identified. In the Meacham and Peckham study, the role went from a rating of second in training to ratings of third in practice and competence (shown in Table 28). In the present study, Communication/Interpretation was rated as first in importance and in level of preparation. One can speculate that practitioners and university trainers perceived value of the competencies comprising the Communication/Interpretation role have indeed increased. This interpretation must be viewed with some caution, due to the potential differences among the specific wording used in each survey.

Table 28 shows the ratings of the practitioners in the Meacham and Peckham study in Consulting and Change Agent. Consulting was rated as third in training, but went up to second in practice and first in preferred role. Change Agent was rated as sixth in training and went up to third in preferred job. Clearly the practitioners in this sample had

a strong preference for Consulting and Change Agent roles. In addition, the authors noted that training in these areas was not congruent with practice. These discrepancies were not indicated in the Graden et. al. study nor in the present study. In the present study, Consultation was rated third in importance and in level of preparation. One conclusion that can be drawn is that there is no longer a strong perceived need for more training in these areas. This issue was further addressed in following sections.

Table 28 shows the Meacham and Peckham practitioner ratings in the area of Remediation (similar to present role of Intervention). As indicated by the table, Remediation remained in fourth place in terms of training, practice, and competence, but was rated as fifth in terms of preferred role. This sample clearly indicated a stronger desire for indirect areas, such as Consulting and Change Agent, over direct areas such as Remediation. In the present study, trainers and supervisors also rated Consultation as higher in importance than Intervention, but Intervention was perceived to be more important than Change Agent. Despite these differences, we can infer that school psychologists still have a strong preference for indirect roles.

The Meacham and Peckham practitioner ratings in Table 28 indicate that the Research role was perceived as second to last in training and dropped to last place in terms of practice, competence, and preferred job. However, these findings were somewhat misleading. Although Research was rated last in preferred job, it had a higher mean selection

in the preferred job variable than under the present job variable. When the mean ratings were examined, the authors concluded that the practitioners did feel competent in Research and preferred to do more than they were doing. The practitioners in Graden et. al. rated the quality of training in Research/Program Evaluation as sixth (last place) whereas the trainers and supervisors in the present study rated its level of preparation as fifth. It may be that the level of training in this area has increased, perhaps partly due to low level of perceived preparation documented in the literature.

Comparisons Within Competencies

The next level of comparison is to examine previous research related to perceptions of training within specific competencies. In the present study, competencies requiring additional training were identified by combining university trainer and field supervisor ratings. Those competencies for which more than 45% of both groups rated importance greater than preparation by at least two points were included (see Table 19 in Chapter III).

Those results will be compared with the results of Graden et. al's. (1984) research and with other studies. Graden et.al. (1984) identified those competencies in which over 60% of their sample indicated that additional training was required. Within the list of competencies reported as needing more training, the practitioners were also asked to identify those competencies in which they received no

training (only those competencies in which 30% of the sample indicated no training was given were included). Comparisons of results within main roles of Assessment, Intervention, Consultation, Research/Program Evaluation, Change Agent, and Commmunication/Interpretation, were made.

Table 29 shows the list of Assessment competencies that were found to need more training by the practitioners in Graden et. al's survey. When these results are compared with results of the present survey areas of agreement were noted. The practitioners and the trainers and supervisors in the present study agreed that more training was needed in assessing preschool children, special populations and conducting non-discriminatory assessment.

Table 29

Assessment Competencies for which Greater than 60% of Practitioners Rated as in Need of Additional Training

%	Competency
71.4	Assessing the pre-school child
68.3	Assessing special populations
71.1	Assessing adaptive behavior
62.6	Conducting non-discriminatory assessment

Note. From from "A National Survey on Students' and Practitioners' Perceptions of Training" by Graden, et. al., 1984, School Psychology Review, pp. 397-404. Adapted by

permission.

Interestingly, university trainers in the present study rated the importance of assessing pre-school children and non-discriminatory assessment as significantly more important than did field supervisors. Perhaps university trainers examined the results of previous research in this area more copiously than did school psychologists who are field-based. The significant higher ratings by university trainers in the present study may be a reflection of this notion.

When the proportions of research participants who identified these competencies as needing more training are compared, another noteworthy finding emerged. With regard to assessing pre-school children, 72% of the practitioners in Graden et. al's. study rated it as needing more training, compared with 53% of trainers and supervisors in the present study. Similarly, 68% of practitioners in the previous study rated assessing special populations in need of more training compared with 50% of trainers and supervisors. Conducting non-discriminatory assessment was rated as an area in need by 63% of the practitioners in Graden et. al's. study, compared to 47% of trainers and supervisors in the present study. Assessing adaptive behavior was found to be an area in need of more training by 71% of the practitioners in the previous study, whereas trainers and supervisors in the present study did not identify a strong need for more training.

These comparisons reflect a decrease in the percentage

of research participants who identified these competencies as needing more training. Although the differences among these proportions were not statistically significant, there may be a trend of improved training for those assesment competencies.

In the present study, more training was found to be needed in assessing the child's environment, that is, assessing the impact of the social mileau and analyzing the effect of the learning environment. These were not seen as needing more training in Graden et. al's. study. These differences may be attributed to the broadening of roles, a trend described in Chapter I.

With regard to personality assessment, 51% of the trainers and supervisors in the present study reported a need for more training. This finding is in disagreement with Prout's (1983) study of the patterns in training and use of social emotional assessment. Although the school psychology practitioners sampled in his survey were only moderately pleased with their training in this area, there was a high degree of congruence between current practice and training. It may be that training is philosophically congruent with practice (in terms of the emphasis given to various assessment measures) but a high degree of preparation is still perceived to be needed.

In the area of Intervention, the competencies perceived to need more training by Graden et. al's. sample are presented in Table 30.

Table 30

Intervention Competencies for which Greater than 60% of Practitioners Rated as in Need of Additional Training

%	Competency
71.4	Developing school system educational programs*
69.9	Providing parent education training
63.8	Consulting on school system curricula
63.6	Developing/conducting inservice programs
68.6	Counseling parents/families
65.8	Counseling groups

Note. From "A National Survey on Students' and Practitioners' Perceptions of Training" by Graden, et. al., 1984, School Psychology Review, pp.397-494. Adapted by permission.

* >30% indicated that no training was received.

Comparison of these results with results from the present survey indicates that the level of preparation for many of the competencies identified in Table 30 may have increased. Only one competency in the table (family counseling) was perceived as needing more training by trainers and supervisors in the present study.

In addition, there is evidence supporting the notion that university trainers have been sensitive to previous

research findings related to practitioners perceptions of training. One competency in the table, developing/conducting inservice programs, was perceived to be significantly more important by university trainers than by field supervisors. Furthermore, in the present study the level of preparation for this competency was not perceive to be discrepant from its perceived importance.

With regard to counseling, the practitioners in Graden et. al's. study and the trainers and supervisors in the present study seem to agree that more training is needed in counseling families. An area of disagreement between the studies is that in the previous study, group counseling reportedly needed more training, whereas in the present study, individual counseling is a perceived area of need.

Another area of disagreement was that in the present study, designing classroom interventions for behavior problems and academic problems was seen as needing more training. This finding was not evidenced in the Graden et. al. (1984) study, but was in agreement with the NASP (Reschly, et. al., 1986) survey. The NASP sample of practitioners and faculty rated interventions in regular education for behavioral/emotional problems as second in terms of the need for improved training. The perceived need for more training for these competencies may reflect the desire for broad roles, a trend within school psychology discussed in Chapter I.

Two competencies in Consultation, entering/contracting with organizations and organizational consultation, were

reported as needing more training in Graden et. al's. (1984) study. The present study was in disagreement, as these competencies were not found to need more training by trainers and superviors. Interestingly, university trainers perceived one of these competencies, entering/contracting with organizations, as significantly more important than field supervisors did. In the present study, intervening and evaluating consultation were found to need more training. Perhaps university training has improved as a function of previous research. School psychologists now perceive a need for consultation training at a more advanced level (i.e., evaluating consultation rather than entering and contracting).

Table 31 shows the competencies in Research/Program Evaluation which were previously found to need more training.

Table 31

Research/Program Evaluation Competencies for which Greater than 60% of Practitioners Rated as in Need of Additional Training

%	Competency
80.3	Writing grant proposals*
67.2	Evaluating psychological service delivery systems*

(table continues)

%	Competency
71.3	Evaluating school system educational programs*
61.1	Evaluating IEP's

Note. From "A National Survey on Students' and Practitioners' Perceptions of Training" by Graden, et. al., 1986, School Psychology Review, pp. 397-404. Adapted by permission.

* >30% indicated that no training was received.

In the present study, there were no Research/Program Evaluation competencies in which both trainers and supervisors identified as in need of more training. This may be an indication that training in Research/Progam Evaluation has improved. It is noteworthy though, that university trainers in the present study perceived two areas, writing grants and evaluating IEP's, significantly more important than field supervisors did. Again, those differences may be attributed to university trainers' utilization of previous research.

The competencies within Change Agent found to need more training by Graden et. al's. (1984) sample are presented in Table 32.

Table 32

Change Agent Competencies for which Greater than 60% of Practitioners Rated as in Need of Additional Training

%	Competency
68.2	Advocating for school changes*
66.5	Identifying school system needs
60.1	Acting as school problem solver
65.2	Facilitating school communication
60.3	Acting as school-community liason

Note. From "A National Survey on Students' and Practitioners' Perceptions of Training" by Graden, et. al., 1984, School Psychology Review, pp. 397-404. Adapted by permission.

* >30% indicated that no training was received.

There was agreement between the practitioners in Graden et. al. (1984) and the trainers and supervisors, that facilitating school communication needs more training. The other four competencies in Table 32, were not identified as needing more training in the present study. This may reflect an improved level of preparation in indirect service, a trend described in Chapter I.

In Communication/Interpretation, only testifying as an expert witness, was found to be an area in which over 60% of

the practitioners (Graden et. al., 1984) perceived a need for more training. University trainers and field supervisors in the present study agreed with this finding, as 52% of them (combined) rated preparation for this competency more than two points lower than importance.

Two other competencies, communicating about psychological services and training decision making, were found to be in need of more training by Graden et. al. (1984) (under Graden's cut off of 60% but noteworthy for this discussion). The trainers and supervisors in the present study (47%) agreed that communicating about services needed more training. In the present study however, facilitating the team process in decision making (opposed to training decision making) was rated significantly more important by field supervisors and perceived by both groups as needing more training.

Summary

In conclusion, comparisions of the results in the present study with those obtained in previous studies, indicate that there have been some changes related to professional functioning and training in school psychology. As an example, the perception of the importance and level of preparation in Communication/Interpetation now supersedes that of Assessment.

There was also evidence suggesting that university trainers have been responsive to the perceptions of practitioners. Areas of improvements were documented in many areas, which may have been attributed to previous research

findings.

Still, results obtained from all studies indicated an ongoing need for more training in several areas (i.e, non-disciminatory testing and family counseling). New trends and training needs however, were also identified (i.e., psychological assessment and intervention within the classroom).

Congruence of Training and Practice in School Psychology

The results of this study indicate that there is congruence between training and practice in school psychology. Various aspects of the results support this finding. First, university trainers and field supervisors ranked their perceptions of importance and level of preparation in an identical order. This indicates that values and perceptions between academic-based and field-based school psychologists were congruent. Supplemental statistical analysis revealed that there were no relative differences between the group ratings either.

Second, trainers and supervisors ratings of perceived level of preparation for each role corresponded with their ratings for perceived importance. For example, Communication/Interpretation was rated first in importance as well as first in preparation. Assessment was rated second in importance and second in preparation. Consultation ranked third and Intervention ranked fourth in both importance and level of preparation. The only areas in which overall

discrepancies were noted were in Research/Program Evaluation and Change Agent. Preparation for Research/Program Evaluation went from a rating of sixth place in importance to fifth place in level of preparation. Change Agent went from fifth place in terms of perceived importance to sixth place in level of preparation. These differences may be attributed to a variety of factors other than congruence of training, which will be addressed in the next section.

Another important aspect related to congruence of training and practice is that many of the areas perceived as significantly more important by university trainers, were the same areas found to be in need of more training in previous research. As an example, in the previous research 73% of the practitioners (Graden et. al., 1984) rated entering/contracting consultation with organizations as needing additional training (30% indicated they received no training at all). In the present study, university trainers perceived that competency as significantly more important than field supervisors did. One conclusion is that university trainers have reviewed previous findings and have altered their perceptions as a function of the knowledge they obtained.

There is other evidence supporting the notion that university trainers are indeed aware of the trends within the "front line" of school psychology. Facilitating the team process in decision making was the only area in which field supervisors rated significantly more important than university trainers. This same competency was rated at least

two points lower in preparation than importance by the university trainers (as well as the field supervisors).

Furthermore, several competencies which were found to need more training in the Graden et. al. (1984) study, seem to have shown signs of increased training. For example, in Graden et. al's. study, 81% of the practitioners indicated that more training was needed in testifying as an expert witness (and over 30% indicated no training was received at all). In the present study, 52% of the trainers and supervisors identified it as needing more training. Although the difference between these proportions was not statistically significant, there was a trend supporting the notion that university trainers have been responsive to needs within the field.

One value identified in the present study, common to university trainers and field supervisors, was the desire for communication among university-based and field-based professional groups. The overwhelming majority of trainers and supervisors felt academicians and practitioners in school psychology needed more formal communication, in order for training to remain congruent with practice.

It can be concluded that trainers and supervisors were clearly invested in meeting the demands of their field, particularly in terms of how school psychologists themselves, needs. This is an important aspect of the present study, as all of the participants received training in, supervised and/or taught within school psychology. As Fagan (1986)

indicated, school psychology has long been in a "professional purification" period (p. 16). School psychology is no longer in an acute identity crises, rather it appears to in an extended period of self definition.

The results in the present study reveal the most recent perceptions of training within the discipline of school psychology. There were areas of agreement and disagreement between trainers and supervisors about specific competencies which both groups identified as needing more training. In the following section the specific areas of agreement and disagreement between the two groups of trainers will be discussed.

University Trainers and Field Supervisors: Areas of Agreement and Disagreement

Specific areas of agreement and disagreement between trainers and supervisors will be identified. The main roles will be discussed in order of their perceived importance: Communication/Interpretation, Assessment, Consultation, Intervention, Change Agent, and Research/Program Evaluation.

Communication/Interpretation

Training in the competencies comprising this role has shown the most growth overall. A significant area of agreement was that both groups perceived Communication/Interpretation as the most important role within school psychology. It was perhaps surprising and gratifying to note that the competencies subsumed under this role are percieved as being more important than any other area, including Assessment. School psychologists have long

felt that assessment alone should not be the first priority in terms of actual practice. The results of this study support Bardon's (1982) concept of the "Level 2" school psychologist, in which he or she functions as an educator and communicator.

Another significant area of agreement between university trainers and field supervisors was that interns are best trained in this area. As expected, university trainers rated interns' level of preparation significantly higher than field supervisors did. Field supervisors as a whole, however, agreed that the level of university preparation for this role was relatively the highest.

One important finding was that field supervisors perceived facilitating the team process in decision making significantly more important than the university trainers. The need for training in this competency was not identified in previous research. It may not be a reflection of academician/practitioner discrepancy however, as university trainers did report the level of preparation in this area more than two points lower than importance. Rather, the need for more training in this competency may be attibuted to the growing number of mulitdisciplinary teams in schools, which have been federally mandated (Bergan, 1985). In future studies, we might expect to see improvements in terms of the preparation for fostering decision making in teams.

Other areas of agreement between trainers and supervisors were that more training is needed in

communicating to the community about school psychological services and in testifying as an expert witness. Communicating about school psychological services is perhaps still a relatively novel area which is now perceived to be important for school psychologists. With regard to testifying as an expert witness, it may be that a significant number of school psychologists (who did not participate in this study) do not perceive a need for more training in this area. One indication of this notion is that this competency was not included in the NASP (1986) survey.

Assessment

Significant areas of agreement were noted in the area of Assessment. Both trainers and supervisors ranked Assessment as second in importance and second in preparation. Consistent with the overall trends of this study (and of previous ones) was that university trainers ranked the level of interns' preparation significantly higher than field supervisors did.

One noteworthy aspect of the findings was the slight de-emphasis of the importance of and level of preparation for the competencies within this role. This may not be surprising however, in view of the past literature in school psychology. As noted in Chapter I, in previous studies the majority of school psychologists reported that assessment was the activity they performed the most, but not the first activity in which they wished to function. It can be concluded that the views of school psychologists in the past, have affected present and future training in the field.

In the present study, differences between the field-based and university-based trainers were found. That is, university trainers perceived non-discriminatory assessment, assessing preschool children, and evaluating the technical characteristics of tests significantly more important than field supervisors did. These differences however, may not be a reflection of poor communication between trainers and supervisors. When both groups were combined, non-discriminatory assessment and assessing preschool children were still identified as needing more training.

Part of these differences may be attributed to university trainers' knowledge of previous research (described in the previous section). The differences may also be attributed to the demands of current legislation. For example, new laws have impacted on the amount of preschool assessment conducted as well as affecting issues in non-discriminatory assessment (Brown, 1979).

Evaluating the technical characteristics of tests (viewed significantly more important by university trainers) may in fact need more focus by the universities. Although efficiency in this competency is certainly useful, the average school psychologist practitioner uses well known, established tests and measures.

Finally, lack of adequate preparation for these competencies may have much to do with the inherent difficulty they present. Non-discriminatory assessment (as well as

assessing special populations and social-emotional assessment) were issues with which even the most experienced professionals still grapple. (Monroe, 1979)

Another important finding of the present study reflects the trends and changes within school psychology. That is, trainers and supervisors identified a need for more trainng in classroom oriented assessment techniques. This is probably attributed to the broadening of school psychologists' roles and the increased value of expanding services in the classroom. As the pendulum of special education swings backward, "difficult" children are remaining in classrooms. As reported in the NASP (Reschly, et. al., 1986) study, more university preparation for these assessment competencies will be needed "in order for school psychologists to prepare for a different future that we seek, but may not, as a profession, be ready to serve" (p. 57).

One limitation of the present study was that psychoneurological assessement was not represented on the questionnaire. This area may in fact need more training as was evidenced in the NASP (Reschly, et. al., 1986) survey. Future studies in training should include this competency.

Consultation

There was much agreement between trainers and supervisors in the area of Consultation. Both groups ranked Consultation as third in terms of its overall importance and in terms of its level of preparation. It is of some interest to note that Consultation was rated lower than Assessment in terms of overall importance. One might have predicted that

Consultation would have been viewed as more important than Assessment, as was the case in the Meacham and Peckham (1978) study. The ratings of trainers and supervisors in the present study though, still fell within the top half of perceived importance.

In terms of overall level of preparation in Consultation, university trainers perceived interns' level of training significantly higher than did field supervisors (except in organizational consultation). The results of this study, however did suggest that universities have responded to the need for more training in Consultation. In Graden et. al's. (1984) study, 73% of the practitioners rated entering/contracting with organizations as needing more training. In the present study, trainers and supervisors perceived evaluating the consultation process as needing more training. Perhaps consultation is now an accepted role within school psychology and school psychologists may now be in a position of focusing on evaluation issues rather than considering whether or not to conduct it at all.

The notion of evaluating the consultation process was previously discussed. Trainers in the field were concerned with how to train students in consultation (Myers, Wurtz, & Hanagan, 1981). Broskowski (1978) noted the importance of training in consultation and discussed ways to evaluate it. Finally, in her discussion of training students in consulting in schools, Gallessich (1974) noted that "...trainers are perhaps even more burdened by the broader question of

evaluation of consultation services" (p. 148). The results of this study indicate that Gallessich's insights were correct.

Intervention

There was much overall agreement between trainers' and supervisors' perceptions within the competencies comprising the Interention role. As expected, university trainers rated the level of interns' preparation significantly higher than did field supervisors. Both groups however, rated Intervention overall as fourth in terms of both perceived importance and level of preparation.

One area of disagreement was that university trainers viewed three competencies as significantly more important then field supervisors did. Those competencies were developing inservice programs, developing school psychological delivery systems, and making appropriate referrals. University trainers' may have perceived a high need for training in developing inservice programs and developing school psychological delivery systems as a function of their awareness of previous results (i.e., Graden et. al., 1984). However, the university trainers still perceived making appropriate referrals significantly more important, which was not identified as needing more training in previous research. Referral to other professionals and/or settings has been considered the most appropriate initial school psychology intervention, particularly if there are signs of abuse, vision, or hearing problems (Bergan, 1985)

Despite its perceived importance by the university

trainers, appropriate referral making was not indicated as needing more training when the two groups were combined. Four Intervention competencies were rated by both groups as higher in importance than in preparation. Those were in the areas of counseling and designing classroom interventions. These areas will be discussed separately.

Ramage conducted a survey of school pyschologists in 1979, and found that 58% of them were involved in individual counseling. The recent trends in school psychology though, specifically the increased amount of indirect services and broadening of roles, may have negatively affected training in direct areas. It is possible that trainers have given more attention to other competencies within intervention, overlooking the continued need for training school psychologists in traditional areas.

Family counseling has consistently been perceived by trainers and supervisors as needing more training. The need for counseling families can be attributed to a variety of factors including the breakdown of the nuclear family, and legislation aimed at broadening the scope of family services to be provided in the schools (Lombard, 1979). The results of this study support Bergan's (1985) view that "more attention needs to be given to the purposes and practices of family intervention in the schools" (p. 103).

With regard to classroom intervention, the results of this study suggest that school psychologists may not be adequately trained in this area. Specifically, the

competencies rated more than two points higher in importance than in level of preparation were designing classroom interventions for academic and behavioral problems.

An increased need for training in these areas, may be a reflection of the NASP committment to develop alternative services within regular education. This committment arose from the needs of students classified as mildly handicapped, who are being increasingly being served in regular education as opposed to special education (Reschly, Genshaft, Binder, 1986).

Change Agent

The competencies subsumed under Change Agent are the most recent areas of study. Both groups rated this role as fourth in overall importance, following Intervention but preceeding Research/Program Evaluation. In addition, this was the only area in which there were no significant differences between trainers' and supervisors' perceptions of importance within individual competencies.

The fact that this role was perceived to be more important than Research/Program Evaluation by both groups is of particular interest. Clearly, both university-based and field-based school psycholgists perceive Change Agent, which reflects a high level of indirect services, as an important function. It is likely that this value will continue to affect school psychologists in the future.

In terms of level of preparation, university trainers rated interns' significantly higher than field supervisors did, however, both groups agreed that preparation for the

role ranked sixth (last) overall. Despite the overall low preparation ratings trainers and supervisors gave, trends indicate that school psychologists may in fact be getting increased training in Change Agent competencies. In the previous study (Graden et.al., 1984), advocating for school changes, identifying school system needs, acting as a school problem solver, and acting as school-community liason reportedly required additional training. In the present study, trainers and supervisors only identified facilitating communication in the school system as at least two points lower in preparation than in importance.

One possible explanation for the increased training in this area may be related to the period of growth in school psychology referred to as the "Thoroughbred Years" (Fagan, 1986, p. 16). According to this notion, training in school psychology has become consistent and uniform, enabling school psychologists to form a distinct professional identity. University-based and field-based school psychologists may now be in a position of expressing unified opinions within educational systems. Facilitating communication may therefore have become more plausible.

Another aspect of the Change Agent role is that it may be an area in which school psychologists feel comfortable functioning. In a study of rural school psychologists, Jerrell (cited in Benson & Hughes, 1985) found that those practitioners who were more involved in community liason activities described themselves as "networking types"

(p. 66). Involvement in activities within the Change Agent role were more a function of personal choice rather than of university preparation. In addition, a personal tolerance for ambiguity reportedly increased the probability that a school psychologist performed in Change Agent competencies, which are less well defined than traditional roles.

Research/Program Evaluation

The greatest differences between university trainers and field supervisors in this study were based on their perceptions of training for the Research/Program Evaluation role. University trainers perceived the majority of competencies within this role to be significantly more important than field superviors did. The competencies which university trainers percieved significantly more important were designing and conducting school-based research, applying and disseminating school-based research findings, evaluating IEP's, educational programs and delivery systems, and writing grant proposals. In addition, university trainers' rated the level of interns' preparation for every competency within the role, significantly higher than field supervisors did.

These differences however, must be viewed in context. Although university trainers perceived the majority of the Research/Program Evaluation competencies as significantly more important than field supervisors did, they still rated the role last in terms of its overall importance (relative to the other main roles). Some agreement was evidenced therefore, as both groups rated Research/Program Evaluation in sixth place relative to its importance, and in fifth place

relative to its level of preparation.

Nevertheless, the significant differences obtained may have major implications within the training process. The past literature in psychology reveals university-based psychologists' continued desire for an emphasis in research. The results of the multidimensional scaling in the present study illustrated university trainers' conceptualization of the Research/Program Evaluation role. The group perceived Research/Program Evaluation as having more "carry over" in training with the Intervention role, than field supervisors did. The results of this study support the notion that university-based school psychologists perceive much value in the research role. It follows that they would continue to perceive competence in research as an important role for future school psychologists.

University trainers' significantly higher perceptions of the importance of Research/Program Evaluation may also be attributed to the very nature of graduate education. Field-based school psychologists should be able to understand research, even if they will never actually conduct it (the lack of research in schools has has been discussed in Chapter I). The school psychology practitioner still needs to keep abreast of current research in order to administer the most valid tests, and provide the most effective interventions. The university trainers therefore, have a greater responsibility than do the field supervisors, of ensuring students' competence in the role.

The Academician/Practitioner Bipolarity Today

Conflicts between the scientists and the practitioners have been a force behind the initiation of conferences and of research pertaining to education and training in psychology. There are some who believe that an academician/practitioner "bipolarity" exists within psychology today. For example, the members of an APA planning committee pertaining to issues and concerns in graduate education (Bickman, 1985), presented a model of education which incorporated the professional roles of educator, investigator and practitioner. They noted that resistance to new models of training should be anticipated, due to the unpreventable tensions created by the "polarities" (p. 3) within psychology. Members of the committee noted,

> "it is the relationship between the research mission and the professional mission that has continued to be a source of debate, contention and reevaluation." (Bickman, 1985, p. 5).

Kimble (1984) surveyed the views of psychologists who had diverse professional identifications. The results demonstrated large differences between the participants with respect to their professional and scientific values. Yet there is also evidence that the notion of two divergent value systems has existed since 1907, which was the year William James's spoke of the contrast in psychology between the "tough minded" and the "tender hearted" (cited in Spence, 1987, p. 1052).

The conflict between science and practice has not only

been reflected through psychology's founders and discussed within the APA, but has been demonstrated in psychology departments. For some time, academic scientists have been concerned about potential inadequacies of the Ph.D. degree, and whether or not it met its expectations of being primarily a research degree. There has also been concern that the shift from the study of basic research psychology to training for service areas would contribute to a deterioration of the foundations of the field. (Strickland, 1987)

The majority of psychologists today however, recognize the need for incorporating both "worlds" within the field. The scientist and practitioner views are perceived by many, as two dimensions along a continuum, rather than as a single bipolar dimension (Spence, 1987). This view has been reflected in the APA planning committee, whose members stated,

> "the traditional dichotomy between research and professional practice is yielding to a conceptualization that is more sensitive to the wide variety of activities in which psychologists engage" (Bickman, 1985, p. 10).

Much of the discussion related to training today focuses on the notion of "centripetal" and "centrifugal" forces in psychology (Altman, 1987). Centripetal forces have been defined as "consolidating and unifying" ones, whereas centrifugal forces have been defined as "diverging and

separating" (p. 1058). Altman believes psychology is presently in a period of "centripetal" trends.

These trends are neither intrinsically good or bad, rather, they serve equally important purposes. The ultimate goal for both academicians and practitioners may be best served by the interaction of these forces (Odegaard, 1987), which keep professionals "alert to the need for change and improvement" (p. 1052). Indeed, the conclusion drawn by the APA planning committee was that the challenge of graduate education in psychology was to "achieve diversity within unity with responsibility" (Odegard, 1987, p. 1083)

These views pertain to school psychology as well, as there are places for both scientists and practitioners. Whether or not there is an innate conflict between academicians and practitioners may still be of some debate. However as Bardon (1985) suggests, the "separation of scientific from professional psychology can lead to a steril technology" (p. 96). That is, education and training should reflect the values within both groups.

These concepts have already had implications for training. One positive outcome, and major change with regard to training, did evolve from the controversy and subsequent research. New models of training within academia have since been initiated and been given strong support. These models provide more emphasis on the clinical application of psychological knowledge.

Examples of these are the professional schools of psychology, and the Doctor of Psychology (Psy.D.) degree

programs. These changes are reflections of the attempt to bridge the gaps between academician's and practitioner's and of the contributions both groups have to offer future psychologists.

The best way for academicians and practitioners to learn from each other is through continued research and communication. Survey research in the area of perceptions of training has helped improve graduate education and perhaps has even helped change the course of the field. In the following section, the implications the results of the present study have for education and training in school psychology, will be discussed.

Implications for Education and Training in School Psychology

There are still many unresolved issues pertaining to the professional preparation of psychologists. These reflect ongoing concerns within education and training. Among these concerns are, whether to provide a core or an individualized curriculum, entry level degree issues, appropriate setting and organizational issues, and program quality and control. These continue to be discussed and resolved through the American Psychological Association (Strickland, 1987).

It appears that there is no single ideal way to prepare future psychologists. Furthermore, no single research can fully address all of these concerns. Rather, the integrity of various training philosophies should be respected for what they each have to offer. Graduate education and training in contemporary psychology falls along a continuum, in which

various aspects of scientific and practitioner elements are emphasized. (Strickland, 1987)

Research related to perceptions of training has been utilized as a way to assess "scientific" and "practitioner" components of training. The present study has focused on examining university versus field based trainers in school psychology. The results supplement an ongoing data base of knowledge which can then be utilized for future training within the field.

Several recommendations for improving education and training in school psychology will be discussed in this section. The following areas were chosen because they represented perceptions from the majority of respondents, that is, both university and field based trainers. The areas to be discussed are the importance of research, specific areas in need of more training, and the need to maintain communication between University and Field trainers.

The Importance of Research

One suggestion with regard to training in school psychology, is that school psychologists should continue to communicate the importance of research. In this study there were no specific research competencies that were viewed as in need of more training. In fact, there was some evidence which suggested training in this area has improved. The results of this study did indicate however, an overall decline in the perceived importance of training for research. This was evidenced by the low overall "importance" ranks

Research/Program Evaluation received by both groups, despite the fact the university trainers rated the role as significantly more important than did field supervisors.

The issue appears to be a matter of communicating the importance of research in school systems, rather than one of a need to increase professional preparation. As discussed in Chapter I, there are many reasons for the lack of psychological research in schools. Some of the reasons cited were lack of sufficient time, inadequate funding, and disinterest on the part of school administrators. Furthermore, the results of this study indicated that field supervisors in school psychology rated the Change Agent role higher in importance than the Research/Program Evaluation role.

Psychological research in the schools is particularly important because the results can potentially affect all other aspects of the school psychologists' function. It is also important because, like assessment, research is an area specific to the discipline of psychology. It is a role by which school psychologists can make unique contributions.

Specific Areas in Need of More Training

Whereas trainers' ratings for the level of preparation for several competencies increased, there were several areas which were found to be in need of more training. Among the areas in need of more training were family counseling, assessment and intervention within the classroom, and facilitating communication school system wide. The

competencies to be discussed in this section were selected for two reasons. First, at least 45% of both university and field trainers rated each competency at least two points higher in importance than in level of preparation. Second, the need for further training in these areas reflects trends within the field, as well as the changing needs of the population-at-large.

Family counseling. The results of this study demonstrated that both groups of trainers viewed family counseling as at least "very important". When ratings for both groups were combined, 46% rated interns' level of preparation in this areas two points lower than their ratings for its importance. Although University trainers perceived interns' level of preparation in family counseling to be significantly greater than field supervisors did, the trainers' mean rating was only "adequate".

Although family counseling is not a traditional area of intervention for psychologists, the increasing needs of families today and the impact they have on children's learning cannot be overlooked. In order to continue providing effective psychological services in the schools, psychologists will have to broader their role further by incorporating family intervention skills. School psychologists in particular can provide important services for families and thus function in vital roles. Administrative rules and regulations implemented by public laws have clearly reinforced the need to intervene in this

area (Bergan, 1985). Future education and training in school psychology should provide more emphasis on family intervention in the context of helping children with school learning and behavioral problems.

Assessment and Intervention within the classroom. The results in this study clearly show support for the growing trend of increasing psychological services for children in regular education. The specific competencies in this area (for which both trainers perceived a need for more training) were: assessing the impact of the social mileau, analyzing the effect of the learning environment (i.e., classroom, teacher), and designing classroom interventions for behavioral and academic problems.

The overall ratings for perceived level of preparation for these areas were not necessarily so low. Field supervisors rated interns' level of preparation for each of these competencies as "adequate". University trainers rated interns' level of preparation in designing classroom interventions for academic problems as "adequate", and rated preparation for designing behavioral interventions, and classroom assessment as "good".

More education and training is needed however, because of the increased importance these areas are perceived to have. Almost half of both groups of trainers rated these areas as "very important" to "essential".

Given the trend toward serving more mildly handicapped students in regular education, and federal mandates to place

students in the least restrictive environment, school psychologists in the next decade will be called upon to deal with more complex classroom problems. Further education and training will be needed in assessing and managing the special needs of children within a realm of learning environments.

Facilitating communication school system wide. The results of this study supported the notion that school psychologists perceive their role as Change Agents to be increasingly more important. The overall Change Agent role was ranked higher in importance than the Research/Program Evaluation role by both groups. In addition, 47% of both groups of trainers rated the importance of facilitating communication school system wide two points higher than they rated interns' level of preparation.

As evidenced in this study, school psychologists clearly see themsleves more as "communicators/interpreters" than as mere "testers". As their role expands into more indirect services, school psychologists may find themselves to be even more useful resources for the entire school system. Facilitating communication school system wide will involve working with administrators, teachers, paraprofessionals, and members of Parent Teacher Associations. The specific method of education and training in this area however, may not be so easily defined. Exactly how to prepare school psychologists to function in this role may be an important area for future research in and of itself.

The Need to Maintain Communication Between University and Field Trainers

The overwhelming majority of trainers and supervisors expressed the desire for more formal communication between universities and training cites. Many school psychology graduate programs do incorporate ongoing feedback from field supervisors. However in this sample, only 3% of the university trainers and none of the field supervisors felt that "no further communication is needed".

Whatever the model of education and training may be, one way to ensure its quality is to have ongoing feedback between internship cites and university programs. School psychologists in the future will undoubtedly continue to function in vital roles. As school psychologists strengthen their professional identity, it is likely that their role will continue to broaden and have more influence on the children, families, and school systems they serve. As was recently stated during an APA conference, "education will fail if psychology, the science of mind and behavior, does not have a central role" (Spielberger, 1991). Continued research in the area of professional preparation will help ensure that education and training in school psychology will remain congruent with the demands of practice.

Conclusion

In conclusion, the results of this study found significant areas of agreement and disagreement related to university trainers' and field supervisors' perceptions of

training in school psychology. Those similarities and differences pertained to trainers' and supervisors' perceived level of importance and degree of preparation for each competency, skills perceived to need more training, perceived patterns of carry over in training, and perceived need for more formal communication. Each of these areas are discussed.

In terms of the perceived level of importance, the two groups did not show significant differences for the majority of skill areas. There were some areas in which university trainers did perceive the level of importance to be significantly greater than did field supervisors. Most of those were within Research/Program evaluation, three were within Assessment, three within Intervention and two were within Consultation. Field supervisors perceived one area within Communication/Interpretation as significantly more important than did university trainers. This was expected, given the realities of working in a school environment, which emphasizes skills in communication rather than research.

With regard to the perceived level of preparation, university trainers and field supervisors evidenced significantly different perceptions. Overall, university trainers perceived interns as significantly more prepared in most areas. This was attributed to survey response styles, ongoing training needs in the field, and changing needs within society-at-large. The present study also noted improvements in training, as various competencies reported to

be in need of more training in previous studies, were no longer perceived as such.

With regard to the areas that were found to be in need of more training in the present study, there were a total of 16 competencies in which both groups rated the level of preparation at least two points lower than the level of importance (these were identified and discussed in previous sections). No areas were found to be in excess of training.

There were no significant findings with regard to trainers' and supervisors' perceived patterns of carry over in training. Both groups perceived similar patterns of the level of carry over within pairs of the various major role functions.

Finally, there were no significant differences with regard to the perceived need for more formal communication. The majority of both groups rated that at least "some" more is needed. Continued communication between university trainers and field supervisors will help broaden the growing data base of knowledge pertaining to congruence of training and practice. This will help assure a high quality of psychological services in schools.

References

Abramowitz, E. A., (1981). School Psychology: A Historical Perspective. School Psychology Review, 10(2), 121-126.

Algozzine, R.F., & Sutherland, J. (1977). Non-psychological foundation of learning disabilities. Journal of Special Education, 11, 91-98.

Aliotti, N.C. (1977). Covert assessment in psychoeducational testing. Psychology in the Schools, 14, 438-443.

Altman, I. (1987). Centripetal and Centrifugal Trends in Psychology. American Psychologist, 42(12), 1058-1069.

Anderson, W.T., Hohenshil, T.H., & Brown, D.T. (1984). Job satisfaction among practicing school psychologists: A national study. School Psychology Review, 13(2), 225-230.

Autor, S.B. & Zide, E.D. (1974). Master's level professional training in clinical psychology and community mental health. Professional Psychology, 5, 115-121.

Baker, H. (1965). Psychological services: From the staff's point of view. Journal of School Psychology, 3, 36-42.

Barbanel, L., & Hoffenberg-Rutman, J. (1974). Attitudes towards job satisfaction of school psychologists: A comparative study. Psychology in the Schools, 11(4), 425-429.

Barclay, J.R. (1971). Descriptive, Theoretical and

Behavioral Characteristics of Subdoctoral School Psychologists. American Psychologist, 26, 257-280.

Bardon, J.I. (1965). Problems and Issues in school psychology. Journal of School Psychology, 3(2), 1-14.

Bardon, J.I. (1976). The state of the art (and science) of school psychology. American Psychologist, 31(11), 785-791.

Bardon, J.I. (1982). The Role and Function of the School Psychologist. In C.R. Reynolds & T.B. Gutkin (Eds.), The Handbook of School Psycholgy (pp. 3-13). New York: John Wiley & Sons.

Bardon, J.I. & Bennett, V.C. (1974). School Psychology. Englewood Cliffs, N.J.: Prentice Hall.

Bardon, J.I., Constanza, L.J., & Walker, N.W. (1971). Institutions offering graduate training in school psychology 1970-71. Journal of School Psychology, 20(2), 252-260.

Bardon, J.I. & Wenger, R.D. (1974). School psychology training trends in the early 1970's. Professional Psychology, 7, 31-37.

Bart, L., & Rubenstein, B.R. (1986). [Evaluations of internships in graduate psychology programs: Frequencies of assessment criteria]. Unpublished raw data.

Bennett, V.C. (1976). "Applied" research can be useful: An example. Journal of School Psychology, 14, 67-73.

Bergan J. (1985). School Psychology in Contemporary Society: An Introduction. Columbus: Charles E. Merrill.

Bickman, L. B. (1985). Issues and Concerns: Graduate Education in Psychology. Bickman, L. & Grosslight J., Co-coordinators. Manuscript. (Available from APA, Educational Affairs Office, 17th Street NW, Washington, DC).

Blau, T.H. (1973). Exposure to Competence: A Simple Standard for Graduate Training in Professional Psychology. Professional Psychology, 133-135.

Bloom, B.L. (1973). Community Mental Health: A Historical and Critical Analysis. New Jersey: General Learning Press.

Bower, E.M. (1965). Reactions to the Conference. Journal of School Psychology, 3(2), 36-39.

Broskowski, A. (1978). Evaluation of Consultation Training Programs. Professional Psychology, 9(2), 210-215.

Brown, D.T. (1979). Issues in accreditation, certification, and licensure. In G.D. Phye & D.J. Reschly (Eds.), School psychology: Perspectives and issues. New York: Academic Press.

Brown, D.T. & Cardon, B.W. (1982). Synthesis and Editorial Comment. School Psychology Review, 11(2), 195-198.

Brummit, H. & Schieren, A.G. (1970). The perfect set up: A study of intensive service. Psychology in the Schools, 7, 3-13.

Buktenica, N. (1970). A multidisciplinary training team in the public schools. Journal of School Psychology, 8(3),

220-225.

Caplan, G. (1970). Theory and practice of mental health consultation. New York: Basic Books.

Catterall, C. D. (1973). A Competency Based School Psychology Internship. Journal of School Psychology, 11(3), 269-275.

Culbertson, F.M. (1975). Average Students' Needs and Perceptions of School Psychologists. Psychology in the Schools, 12(2), 191-196.

Rice, D.G. & Gurman, A.S. (1973). Unresolved issues in the Clinical Psychology Internship. Professional Psychology. 10(3), 403-408.

Dana, R.H., Gilliam, M. & Dana, J.M. (1976). Adequacy of Academic-Clinical Preparation for Internship. Professional Psychology, 7(1), 112-116.

Edelstein, B.A. (1985). Empirical Evaluation of Clinical Training. The Behavior Therapist, 8(4), 67-70.

Fagan, T. K. (1986). The Historical Origins and Growth of Programs to Prepare School Psychologists in the United States. Journal of School Psychology, 24(1), 9-22.

Fagan, T. K. (1988). The Historical Improvement of the School Psychology Service Ratio: Implications for Future Employment. School Psychology Review, 17(3), 447-458.

Fairchild, T.N. (1982). The school psychologist's role as an assessment consultant. Psychology in the Schools, 19(2), 200-208.

Fein, L.G. (1974). The Changing School Scene: Challenge to Psychology. John Wiley & Sons, New York.

Ford, J.D., & Migles, M. (1979). The roled of the school psychologist: Teachers' preferences as a function of personal and professional characteristics. Journal of School Psychology, 17(4), 372-378.

French, J.L., Smith, D.C., & Cardon, B.W. (1968). Institutions offering graduate training and financial assistance in school psychology. Journal of School Psychology, 6, 261-267.

Gallessich, J. (1974). Training the School Psychologist for consultation. Journal of School Psychology, 12(2), 139-149.

Gallessich, J. (1983). The Profession and Practice of Consultation. Jossey-Bass, CA.

Genshaft, J. (1984). A Reaction to "A National Survey on Students and Practitioners Perceptions of Training". School Psychology Review, 13(3), 406-407.

Giebink, J.W. & Ringness, T.A. (1970). On the Relevancy of Training in School Psychology. Journal of School Psychology, 8(1), 43-47.

Gilmore, G.E. (1974). Models for School Psychology: Dimensions, Barriers, and Implications. Journal of School Psychology, 12(2), 95-101.

Gilmore, G.E. & Chandy, J. (1973). Teachers' Perceptions of School Psychological Services. Journal of School Psychology, 11(2), 139-147.

Goh, D.S. (1977). Graduate Training in School Psychology. Journal of School Psychology, 15(3), 207-216.

Goldenberg, H. (1973). Contemporary clinical psychology. Brooks-Cole, Monteray, CA.

Graden, J., Christenson, S., Ysseldyke, J. & Myers, J. (1984). A national survey on students' and practitioners' perceptions of training. School Psychology Review, 13(3), 397-405.

Granowsky, S., & Davis, L.T. (1974). Three alternative roles for the school psychologist. Psychology in the Schools, 11 (4), 415-421.

Gray, S. (1963). The Psychologist in the Schools. New York: Holt, Rinehart and Winston, Inc.

Gredler, G.R. (1973). Ethical and legal factors in the practice of school psychology. Professional Psychology, 4(3), 359-361.

Herron, W., Herron, M., & Handron, J. (1984). Contemporary School Psychology: Handbook of Practice, Theory and Research (2nd ed.). Rhode Island: The Carroll Press.

Hoch, E.L., Ross, A.D. & Winder, C.L. (1966). Professional preparation of clinical psychologists. American Psychological Association, Washington D.C.

Hughes, J.N. (1979). Consistency of administrators' and psychologists' actual and ideal perceptions of school psychologists' activities. Psychology in the Schools, 16(2), 234-239.

Kaplan, M.S., Clancy, B., & Chrin, M. (1977). Priority

roles for school psychologists as seen by superintendents. Journal of School Psychology, 15(1), 75-80.

Kelly, E.L. & Goldberg, L.R. (1959). Correlates of later performance and specialization in psychology: A follow-up study of the trainers assessed in the VA selection research project. Psychological Monographs 73(12, whole No. 482).

Khol, T., Matefy, R., & Turner, J. (1972). Evaluation of APA Internship Programs: A Survey of Clinical Psychology Interns. The Journal of Clinical Psychology, 28(4), 562-569.

Kimble, G.A. (1984). Psychology's two cultures. American Psychologist, 39, 833-839.

Kirschner, F.E. (1971). School psychology as viewed by the supervisors of school psychological services. Journal of School Psychology, 9, 343-346.

Klosterman, D. M (1974). The role of the school psychologist in a community mental health center. Psychology in the Schools, 11, 269-274.

Knoff, H. M. (1986). Graduate Training in School Psychology: A National Survey of Professional Coursework. Manuscript, University of South Florida, (Available from NASP, 1511 K Street NW, Washington, DC).

Knowles, R.R., & Shertzer, B. (1969). Attitudes toward the role of the psychologist and the counselor in the secondary school. Journal of School Psychology. 7(1), 40-47.

Kramer, J.J., & Nagle, R.J. (1980). Suggestions for the delivery of psychological services in secondary schools.

Psychology in the Schools, 17, 53-59.

Kratochwill, T.R. (1977). Advances in Behavioral Assessment. In C.R. Reynolds & T.B. Gutkin (Eds.), The Handbook of School Psychology, 314-350.

Kurz, R.B., Fuchs, M., Dabek, R.F., Kurtz, S.M., & Yarris, E. (1982). Characteristics of predoctoral internships in professional psychology. American Psychologist, 37(11), 1213-1220.

Lesiak, W.J., & Lounsbury, E. (1977). Views of school psychological service: A comparative study. Psychology in the Schools, 14, 185-188.

Leton, D.A. (1964). School Psychology: Its purposes and directions. Psychology in the Schools, 1(2), 187-190.

Leventhal, D.B. & Shemberg, K.M. (1980). Professional Clinician's Beliefs About the Activities of Academic Clinicians. The Journal of Clinical Psychology, 33, 21-23.

Levine, M., & Levine, A. (1970). A Social History of Helping Services: Clinic, Court, School, and Community. New York: Appleton-Century-Cofts.

Levitt, E.E. (1973). Internship versus campus: 1964 and 1971. Professional Psychology, 4, 129-132.

Lombard, T.J. (1979). Family-oriented emphasis for school psychologists: A needed orientation for training and professional practice. Professional Psychology, 10. 687-696.

Lucas, M.S., & Jones, R.L. (1970). Attitudes of teachers of mentally retarded children toward psychological reports and

services. Journal of School Psychology, 8, 122-130.

Magary, J. F. (1966). A School Psychologist is... Psychology in the Schools, 3(4), 340-341.

Maher, C.A. (1978). A synoptic framework for school program evaluation. Journal of School Psychology, 16(4), 322-333.

Malouf, J.L., Haas, L.J., & Farah, M.J. (1983). Issues in the Preparation of Interns: Views of Trainers and Trainees. Professional Psychology: Research and Practice, 14(5), 624-631.

McCully, R.S. (1965). Current attitudes about projective techniques in APA approved internship training centers. Journal of Projective Techniques and Personality Assessment. 29, 271-280.

McCandless, B.R. (1969). Points at Issue Between Practical and Academic School Psychology. Journal of School Psychology, 7(2), 13-17.

Meacham, M.L. (1968). Reinforcement theory as a basis for clinical school psychology. Psychology in the Schools, 5(2), 114-117.

Meacham, M. L., & Peckham, P. D. (1978). School Psychologists at Three-Quarters Century: Congruence Between Training, Practice, Preferred Role and Competence, Journal of School Psychology, 16(3), 195-206.

Medway, F.J., Delp, P., Ierace, C., Lazarus, S., & Westphal, K. (1978). Research activities of doctoral school psychologists. Journal of School Psychology, 16,

34-41.

Meyers, J., Parsons, R., & Martin, R. (1979). Mental Health Consultation in the Schools. San Francisco: Jossey-Bass Inc.

Meyers, J., Wurtz, R. & Hanagan, D. (1981). A National Survey Investigating Consultation Training Occurring in School Psychology Programs. Psychology in the Schools, 18(3), 297-302.

Miller, C.D., Witt, J.C., & Finley, J.L. (1981). School psychologists' perceptions of their work: Satisfactions and dissatisfactions in the United States. School Psychology International, 2(2), 1-3.

Miller, P.M. (1977). Evaluation of Trainee Performance in Psychology Internship Programs. Journal of Clinical Psychology, 30(4), 2-5.

Morice, H.O. (1968). The school psychologist as a behavioral consultant: A project in behavior modification in a public school setting. Psychology in the Schools, 5, 253-261.

Monroe, V. (1979). Roles and Status of School Psychology. In G.D. Phye & D.J. Reschly (Eds.), School Psychology: Perspectives and Issues (pp. 25-45). New York: Academic Press.

Morrow, L.W. (1975). An alternative approach to the delivery of school psychological services. Psychology in the Schools, 12(3), 274-278.

Oakland, T.D. & Zimmerman, S.A. (1986). The course on individual mental assessment: A national survey of course

instructors. Professional School Psychology, 1, 51-59.

O'Callaghan, S. (1974). Publication trends in school psychology: 1963-1973. Journal of School Psychology, 12(4), 269-275.

Odegaard, C.E. (1987). A Historical Perspective on the Dilemmas Confronting Psychology, American Psychologist, 42(12), 1048-1051.

Peterson, D. (1981). Overall Synthesis of the Spring Hill Symposium on the Future of Psychology in the Schools. School Psychology Review. 10(2), 307-314.

Pfeiffer, S. I., & Marmo, P. (1981). The Status of Training in School Psychology and Trends Toward the Future. Journal of School Psychology, 19(3), 211-216.

Phares, J. (1979). Clinical Psychology: Concepts, methods, and Profession. Dorsey, Homewood, IL.

Phillips, B. (1982). Reading and Evaluating Research in School Psychology. In C.R. Reynolds & T.B. Gutkin (Eds.) The Handbook of School Psychology (pp. 24-48). New York: John Wiley & Sons.

Prout, T. H. (1993). School Psychologists and Social-Emotional Assessment Techniques: Patterns in Training and Use. School Psychology Review, 12(4), 377-383.

Ramage, J. (1979). National survey of school psychologists: Update. School Psychology Digest, 8(2), 153-161.

Reger, R. (1965). The Medical Model in Special Education, Psychology in the Schools, 9(1), 8-12.

Reschly, D.J. (1980). School psychologists and assessment in the future. Professional Psychology, 11(6), 841-848.

Reschly, D.J., Genshaft, J., & Binder, M.S. (1986). The 1986 NASP Survey: Comparison of Practitioners, NASP Leadership, and University Faculty on Key Issues. (Available from National Association of School Psychologists, 1511 K Street, NW, Washington, D.C. 20005)

Rice, D.G. & Gurman A.S. (1973). Unresolved Issues in the Clinical Psychology Internship. Professional Psychology, 4(4), 403-408.

Roberts, R.D. (1970). Perceptions of Actual and Desired Role Functions of School Psychologists by Psychologists and Teachers. Psychology in the Schools, 7(2), 175-178.

Ross, A.O. (1974). Diagnostic testing in a behaviorally oriented clinical training program. Journal of Clinical Psychology, 2(1), 18-21.

Sandoval, J. (1978). Methodological issues in school-based evaluation. Journal of School Psychology, 16, 356-367.

Scarlet, M. (1972). Controversy surfaces on professional training. APA Monitor, 3(11), 1.

Schein, E.H. (1969). Process Consultation: Its Role in Organization Development. Addison-Wesley, CA.

Schmuck, R.A. (1976). Process consultation and organization development. Professional Psychology, 7(4), 626-631.

Senft, L.B. & Snider, B. (1980). Elementary school principals assess services of school psychologists nationwide. Journal of School Psychology, 18, 276-282.

Sheare, J.B., & Larson, C.G. (1978). The odd couple: Effective public schools/mental health joint programming to provide educational/theraputic services to emotionally disturbed students and their families. Psychology in the Schools. 15, 541-544.

Shellenberger, S., & Couch, K.W. (1984). The school psychologist's pivotal role in promoting the health and well-being of children. School Psychology Review, 13(2) 211-215.

Shemberg, K.M. & Keeley, S.M. (1974). Training Practices and Satisfaction with Preinternship Preparation. Professional Psychology, 5(1), 98-105.

Shemberg, K.M. & Leventhal, D.B. (1981). Attitudes of Internship Directors Toward Preinternship Training and Clinical Training Models. Professional Psychology, 12(5), 639-646.

Shofield, W. (1969). The role of psychology in the delivery of health services. American Psychologist 19, 675-680.

Silberberg, N.E. & Silberberg M.C. (1971) Should schools have Psychologists? Journal of School Psychology, 12, 321-328.

Silverman, H.L. (1969). School Psychology: Divergent role conceptualizations. Psychology in the Schools, 6, 266-271.

Smith, D.C. (1964-65). Institution offering graduate training in school psychology. Journal of School Psychology, 3, 58-66.

Spence, J.T. (1987). Centrifugal Versus Centripetal Tendencies in Psychology: Will the Center Hold? American Psychologist, 42(12), 1052-1054.

Spielberger, C. (1991). Education reform in the United States. Symposium conducted at the American Psychological Association annual convention, San Francisco, California.

Stout, A.L., Holmes, G.R., & Rothstein, W. (1977). Responses by Graduates to Memory of Their Internship in Clinical Psychology. Perceptual and Motor Skills, 45, 863-870.

Styles, W.A. (1965). Teachers' perceptions of the school psychologist's role. Journal of School Psychology, 13, 23-37.

Suran, B.G., Crivolio, A.J., & Kupst, M.F. (1977). A rating scale for the selection of internship applicants. Journal of Clinical Psychology, 33(2), 591-596.

Sydiaha, D. (1966). A survey of psychologists in Canada. The Canadian Psychologist, 7a, 413-485.

Thelen, M.H. & Ewing, D.R. (1970). Roles, Functions, and Training in Clinical Psychology: A Survey of Academic Clinicians. American Psychologist, VOL*** , 550-554.

Thelen, M.H. & Ewing, D.R. (1973). Attitudes of Applied Clinicians toward Roles, Functions, and Training in Clinical Psychology. Professional Psychology, 4(1), 28-34.

Thurman, S.K. (1977). Congruence of behavioral ecologies: A model for special education programming. Journal of Special Education, 11, 329-333.

Tidwell, R., & Wetter, J. (1978). Parental evaluations of psychoeducational reports: A case study. Psychology in the Schools, 15(2), 209-215.

Tindall, R.H. (1968). Research in the training programs of school psychologists. Journal of School Psychology, 11(1), 58-73.

Toder, F.A. (1975). An alternate method of functioning for the school psychologist. Psychology in the Schools, 12, 405-408.

Trow, W.C. (1966). The Future of School Psychology by Extrapolation. Psychology in the Schools, 3(2), 131-134.

Tyron, R.C. (1963). Psychology in Flux: The Academic-Professional Bipolarity. American Psychologist, 18, 134-143.

Vallett, R.E. (1963). The Practice of School Psychology: Professional Problems. New York: Wiley.

Wallin, J.E., & Ferguson, D.G. (1967). The development of school psychological services. In J.F. Magary (Ed.) School Psychological Services. Prentice-Hall: New Jersey.

Waters, L.G. (1973). School psychologists as perceived by school personnel: Support for a consultant model. Journal of School Psychology, 11, 40-46.

Weddig, R.R. (1984). Parental interpretation of psychoeducational reports. Psychology in the Schools, 21(4), 477-481.

Weiss, S.L. (1975). The clinical psychology intern evaluates the training experience. Professional Psychology, 11,

435-441.

Wolman, B.B. (1968). Historical Roots of Contemporary Psychology. Harper & Row, New York.

Wright, D. & Gutkin, T.B. (1981). School psychologist's job satisfaction and discrepencies between actual and desired work functions. Psycholgical Reports, 49(3), 735-738.

Appendix A

Dear Chairperson:

As an academic researcher in the area of school psychology, I am examining the perceived relevance of university training to the needs of current practice. Based on previous research, school psychologists viewed their training as having a limited relationship to their roles and functions in the schools. Are there areas that need improvement to make training and practice more congruent? Do academic and field-based school psychologists agree on various aspects of training? I am asking your cooperation in assisting me with a research project investigating these important questions.

I am a doctoral candidate in the School-Community Psychology program at Pace University in New York. As part of my studies, I am investigating perceptions of training in school psychology by surveying professionals who are based primarily in academic or field settings. You have been chosen as a participant because of your involvement in educating future school psychologists.

I realize that I am asking you to take time out of your busy schedule, however your professional experience and views are necessary to help explore issues in this vital area. Your cooperation will be greatly appreciated as it is only professionals such as yourself who can provide the raw data needed for this research.

Enclosed please find three (3) copies of questionnaires entitled "Perceptions of Training in School Psychology". Please complete one questionnaire and give the others to two full-time faculty members. Their participation will further enrich the study by enabling me to sample a diversity of opinion within an academic institution. The questionnaire consists of four parts and a separate page included for any comments you might like to add (optional). It takes approximately 15-20 minutes to complete.

To compare the views of field-based professionals with your views I need to identify school psychologists in your

(cont'd.)

community. As you are probably aware, the fact that school psychology internships are not generally listed in the APIC directory makes it difficult to gather data that focuses on school psychology field training. Therefore, I have also enclosed a form "List of Practitioners". I would appreciate it if you would provide the names and addresses of one to five practicing school psychologists; the list may contain names of school psychologists who supervise interns from your program but not of those who have graduated from your program. This list is essential as I will send questionnaires to the school psychologists you name and ultimately compare all responses on a nation-wide basis.

All materials may be returned in the self addressed, stamped envelopes provided.

I will gladly send all participants a summary of the study's findings--simply indicate whether you would like a copy by writing your name and address on the pink "Comments (Optional)" sheet. It is expected that the information obtained from this research will help identify perceived strengths and weaknesses in school psychology training and uncover discrepencies in perceptions between academic and field-based school psychologists. Thank you for considering this project and I do hope you are able to participate.

Sincerely,

Barbara R. Rubenstein

Barbara R. Rubenstein, M.S., Ed.
Psy.D. Candidate

Encls.

Appendix B

Dear School Psychologist:

As an academic researcher in the area of school psychology, I am examining the perceived relevance of university training to the needs of current practice. Based on previous research, school psychologists viewed their training as having a limited relationship to their roles and functions in the schools. Are there areas that need improvement to make training and practice more congruent? Do academic and field-based school psychologists agree on various aspects of training? I am asking your cooperation in assisting me with a research project investigating these important questions.

I am a doctoral candidate in the School-Community Psychology program at Pace University in New York. As part of my studies, I am investigating perceptions of training in school psychology by surveying professionals who are based primarily in academic or field settings. Your name was referred to me by the University Chairperson of a school psychology program in your area. You have been chosen as a participant because of your involvement in training future school psychologists within a field-based setting.

I realize that I am asking you to take time out of your busy schedule, however your professional experience and views are necessary to help explore issues in this vital area. Your cooperation will be greatly appreciated as it is only professionals such as yourself who can provide the raw data needed for this research.

Enclosed please find a questionnaire entitled **"Perceptions of Training in School Psychology"**. The questionnaire consists of four parts and a separate page included for any comments you might like to add (optional). It takes approximately 15-20 minutes to complete and may be returned in the self addressed, stamped envelope provided.

I will gladly send all participants a summary of the study's findings--simply indicate whether you would like a

(cont'd.)

Appendix B (continued)

copy by writing your name and address on the pink "**Comments (Optional)**" sheet. It is expected that the information obtained from this research will help identify perceived strengths and weaknesses in school psychology training and uncover discrepencies in perceptions between academic and field-based school psychologists. Thank you for considering this project and I do hope you are able to participate.

Sincerely,

Barbara R. Rubenstein

Barbara R. Rubenstein, M.S., Ed.
Psy.D. Candidate

Encls.

Appendix C

PERCEPTIONS OF TRAINING IN SCHOOL PSYCHOLOGY

Part I: DEMOGRAPHIC INFORMATION

Directions: Circle your response or fill in the blank for the items indicated.

1. Age: _____ 2. Sex: 1. Male 2. Female

3. Highest degree held:

1. Bachelors	3. Specialist	5. Ph.D.
2. Masters	4. Psy.D.	6. Ed.D.

4. Indicate the number of years you have worked as a school psychologist:

1. 0	3. 6-10	5. 16-20
2. 1-5	4. 11-15	6. over 20

A. Which level have you had the most experience in?

1. Elementary 2. Junior High 3. Senior High

B. Your school system is primarily:

1. Urban 2. Suburban 3. Rural

5. Indicate the number of years you have trained school psychology students in a university setting:

1. 0	3. 6-10	5. 16-20
2. 1-5	4. 11-15	6. over 20

A. What percentage of Masters and/or Doctoral level students have you trained?

Masters _____% Doctoral _____%

B. Your university is primarily:

1. Urban 2. Suburban 3. Rural

6. Indicate the number of years you have worked in a supervisory capacity with school psychology interns:

1. 0	3. 6-10	5. 16-20
2. 1-5	4. 11-15	6. over 20

A. What percentage of Masters and/or Doctoral level interns have you supervised?

Masters _____% Doctoral _____%

7. Briefly describe your major orientation:

_____

Questions 8-11 are for University Chairpersons only.

8. Is your program:

1. APA approved 2. Non APA 3. Provisional

9. Indicate the number of years your program has been existence:

1. 0	3. 6-10	5. 16-20
2. 1-5	4. 11-15	6. over 20

10. Degree(s) offered:

1. Masters	3. Psy.D.	5. Ed.D.
2. Specialist	4. Ph.D.	6. Other_____

11. Internship required?

1. Yes 2. No

A. If Yes, indicate time requirements:

_____ day(s) per week for _____ year(s)

Appendix D

Part II: Competency Ratings

Following is a list of possible roles that school psychologists interns may perform and competencies that interns may possess with regard to these roles.* This list is not intended to be exhaustive, rather it is intended as a set of competencies which any school psychologist intern may possess in some combination.

For each competency, rate its importance with regard to your evaluation of interns, and rate the degree of university preparation you perceive most interns possess.

Importance	Preparation
6=Essential	6=Fully prepared (needs no additional training)
5=Very Important	5=Excellent
4=Important	4=Good (above average)
3=Moderately important	3=Adequate
2=Helpful, but not necessary	2=Fair (below average)
1=Not too important	1=Poor
0=Not important at all	0=Completely unprepared (needs extensive training)

COMPETENCIES IN ASSESSMENT	Importance	Preparation
• conducting an individual cognitive assessment		
• conducting an individual educational assessment		
• conducting a personality/social-emotional assessment		
• assessing adaptive behavior		
• conducting nondiscriminatory assessment		
• assessing the preschool child		
• assessing special populations (i.e., low incidence handicaps)		
• assessing the gifted child		
• using systematic observational techniques		
• assessing the impact of the social milieu (i.e. school, home)		
• analyzing the effect of the learning environment (i.e., classroom, teacher)		
• evaluating the technical characteristics of tests		

COMPETENCIES IN INTERVENTION	Importance	Preparation
• designing individual educational programs (IEP's)		
• designing classroom interventions for academic problems		
• designing classroom interventions for behavior problems		
• consulting on school system curricula		
• developing/conducting inservice programs		
• developing psychological service delivery systems		
• providing parent education training		
• knowing when and how to make appropriate referrals		
• counseling individuals		
• counseling groups		
• counseling parents/families		

* from Graden, Christenson, Ysseldyke & Meyers (1984)

Appendix D (continued)

COMPETENCIES IN RESEARCH/PROGRAM EVALUATION	Importance	Preparation
• designing school-based research		
• conducting school-based research		
• disseminating research findings		
• applying research findings in school settings		
• evaluating individual educational programs (IEP's)		
• evaluating school system educational programs		
• evaluating psychological service delivery systems		
• writing grant proposals		

COMPETENCIES IN CONSULTATION*	Importance	Preparation
• entering/contracting with individuals		
• entering/contracting with organizations		
• identifying the problem		
• defining the problem		
intervening through consultation:		
• consulting with child as the client		
• consulting with teachers as the client		
• consulting with school as the client		
• evaluating the consultation		
• terminating the consultation		
utilizing specific modes of consultation:		
• behavioral consultation		
• mental health consultation		
• organizational consultation		

COMPETENCIES FOR THE ROLE OF CHANGE AGENT	Importance	Preparation
• identifying school system needs		
• acting as a "problem solver" for school system needs		
• advocating policy changes for the school system		
• facilitating communication in the school system		
• linking school personnel with community resources		

COMPETENCIES IN COMMUNICATION/INTERPRETATION	Importance	Preparation
communication skills:		
• interviewing school professionals & parents		
• integrating assessment findings from various sources		
• reporting findings so that recipient can understand them		
• writing reports		
• collaborating with professional colleges (i.e., serving on multi-disciplinary teams)		
• facilitating team process in decision-making		
• training others in effective team decision making		
• communicating to the community about school psychological services		
• applying ethical and professional standards		
• testifying as an expert witness		

* competencies from Gallessich, J., University of Texas

Appendix E

Part III:

Following are pairs of major role functions school psychologist interns may be trained. These are the major roles which have been defined in the previous section (refer back to Part II for the list of competencies comprising each role). For each pair, rate the extent that training in one role prepares the intern for functioning in the other role. That is, if training in the first role of each pair "carries over" to functioning in the second role to a great extent, check a number close to the left side of the scale. If not, check a number closer to the right side of the scale.

	scale					
	MUCH CARRY OVER					LITTLE CARRY OVER
1: Assessment Change Agent	(1)	(2)	(3)	(4)	(5)	(6)
2: Intervention Research/Program Evaluation	(1)	(2)	(3)	(4)	(5)	(6)
3: Communication/Interpretation Assessment	(1)	(2)	(3)	(4)	(5)	(6)
4: Research/Program Evaluation Consultation	(1)	(2)	(3)	(4)	(5)	(6)
5: Change Agent Intervention	(1)	(2)	(3)	(4)	(5)	(6)
6: Research/Program Evaluation Communication/Interpretation	(1)	(2)	(3)	(4)	(5)	(6)
7: Consultation Change Agent	(1)	(2)	(3)	(4)	(5)	(6)
8: Assesment Research/Program Evaluation	(1)	(2)	(3)	(4)	(5)	(6)
9: Communication/Interpretation Intervention	(1)	(2)	(3)	(4)	(5)	(6)
10: Research/Program Evaluation Change Agent	(1)	(2)	(3)	(4)	(5)	(6)
11: Consultation Intervention	(1)	(2)	(3)	(4)	(5)	(6)
12: Change Agent Communication/Interpretation	(1)	(2)	(3)	(4)	(5)	(6)
13: Consultation Assessment	(1)	(2)	(3)	(4)	(5)	(6)
14: Communication/Interpretation Consultation	(1)	(2)	(3)	(4)	(5)	(6)
15: Assessment Intervention	(1)	(2)	(3)	(4)	(5)	(6)

Appendix F

Table 33

Summary of Mixed ANOVA'S per Main Role Function

	Assessment			Intervention		
Source	df	MS	F	df	MS	F
UT/FS	1	.42	.10	1	.21	.06
Error	207	4.41		210	3.29	
PCO	4	53.06	41.60	4	88.02	79.69
UT/FS x PCO	4	.95	.74	4	.34	.31
Error	828	1.28		840	1.10	

	Consultation			Research/Program Eval.		
Source	df	MS	F	df	MS	F
UT/FS	1	.42	.10	1	.21	.06
Error	207	4.41		210	3.29	
PCO	4	53.06	41.60	4	88.02	79.69
UT/FS x PCO	4	.95	.74	4	.34	.31
Error	828	1.28		840	1.10	

(table continues)

Source	Change Agent df	MS	F	Communication/Interpretation df	MS	F
UT/FS	1	3.80	1.15	1	.26	.07
Error	207	4.40		204	3.53	
PCO	4	73.58	66.27	4	44.04	44.00
UT/FS x PCO	4	.90	.81	4	.92	.91
Error	828	1.11		816	1.00	

Note. UT = University Trainer, FS = Field Supervisor, PCO = Perceived Carry Over.

Appendix G

Barbara Rubenstein has permission to adapt tables from a 1984 article published in the School Psychology Review (A National Survey of Students' and Practitioners' Perceptions of Training) by J. Graden, S. Christenson, J. Ysseldyke, and J. Meyers. The tables will be adapted for Ms. Rubenstein's doctoral project. All authors have been notified.

Dr. S. Christenson

Dr. Sandra Christenson
University of Minnesota

Appendix H

8/12/92

To Whom It May Concern:

Ms. Barbara Rubenstein has permission to adapt a table from a 1978 article by Meacham and Peckham published in the Journal of School Psychology for her doctoral project. The article, in general,dealt with the congruence between training and practice in school Psycholgy.

Very truly yours,

Merle L. Meacham, Professor Emeritus
University of Washington