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PSYCHOLOGICAL SERVICE DELIVERY IN THE U.S. SCHOOLS: AN APPLIED PSYCHOLOGY IN HUMAN RELATIONS

CURTIS A. VAUGHN

School psychological services were initiated during the early 20th century in several major U.S. cities. Changes in attendance laws and an increase of pupils with learning and behavior difficulties led to a need for individuals trained in both education and psychology. Examined in the present article is a selective overview of issues related to: (1) education and training of school psychologists; (2) school-based psychological service delivery, and (3) current challenges to the practice of psychology in the U.S. schools.

More than half the world's psychologists work in the United States and many psychologists from other countries have acquired some of their training in U.S. institutions. Contributing to the growth of psychology in the U.S. has been an emphasis on the development of an "applied theoretical discipline". Human relations in many areas of activity have been influenced in one way or another by professional psychology.

Applied psychology in the U.S. grew quickly in large degree because of the influence of the uniquely American system of psychology known as "functionalism". In *A Modern History of Psychology* Schultz and Schultz (1987) describe how functional psychology developed partly in reaction to "the absence in the "structuralist orientation" of German psychology on the useful and practical application of mental processes." Early American psychologists wanted to know not only how the mind functions but how the organism uses the mind in adaptation to the environment. The consequences and accomplishments of mental activity was of central interest to a functionalist orientation (Schultz & Schultz, 1987). The newly trained psychologists who returned from Germany transformed a uniquely German species of psychology into a uniquely American one by, "Taking psychology into the real world, into education, industry, advertising, child development, clinics, and testing centers, and making of it something functional in

subject matter and application" (Schultz & Schultz, 1987).

APPLIED PSYCHOLOGY IN THE SCHOOLS

Psychological services in the U.S. public schools were initiated in the early twentieth century in several major U.S. cities. The Chicago Bureau of Child Study, established in 1899 is usually considered the first public school program. The passage of school attendance laws provided an early impetus for the development of psychological services. As schools received an increased number of pupils with learning and behavior problems, a child study movement emerged in the form of child study bureaus and clinics. A corresponding increase in the employment of psychologists in the schools followed (see: Wiltse, 1895, for a historical overview of the child study movement, Phillips (1990) for a recent discussion).

Arnold Gesell was the first in the United States to hold a position officially titled "school psychologist". Gesell was appointed in 1915 by the Connecticut State Board of Education where his work became a stimulus for the development of special education in the state of Connecticut (Fagan, 1987).

In the early days, few applied psychology courses were available, except for limited study in clinical psychology, and a method of individual examination and intervention stemming from the work of Lightner Witmer at the University of Pennsylvania (Fagan,

1986). However, arriving with the rapid growth in psychological science and public education was the recognition of a need for the services of individuals with training in psychology and education; particularly, broad-based knowledge focusing on the problems of education and school children. A number of years passed before formalized procedures for quality control in psychological services through credentialing were developed. The most profound changes occurred from the mid-1950s through the mid-1980s.

EDUCATION AND PROFESSIONAL TRAINING

Who is qualified to provide psychological services in the public schools? What should be the requirements for training? The issue of training and credentialing has been a point of controversy within the field of school psychology. The debate centers on the training required to be called a psychologist (Fagan, 1987). The American Psychological Association (APA) has held the position that all psychologists should be trained at the doctoral level. The National Association of School Psychologists (NASP) has maintained the position that a master's degree plus a specialist credential suffices in meeting the job requirements of a school psychologist.

The debate over doctoral versus non-doctoral preparation has been observed throughout the development of training programs. The most intense debates have occurred since the American Psychological Association Council of Representatives took a firm stand in 1977 on the doctoral-level requirement for the title "professional psychologist".

A NATIONAL CERTIFICATION SYSTEM

Founded in 1969, the National Association of School Psychologists (NASP) made a pivotal contribution toward the development of school psychology with the 1988 establishment of a "national school psychology certification system" (NSPCS). More than 16,000 school psychologists hold the National

Certification in School Psychology. These individuals come from all 50 states and from several areas around the world" (*Communique* 1990). In order to maintain certification, every three years documentation of seventy-five hours of continuing professional development (CPD) must be submitted to a national certification board. Each state certification office and state superintendent of education has received the "Directory of Nationally Certified School Psychologists". A "Directory Supplement" is sent to these offices each year.

Although with a national certification system a single level of training and experience can be cited in response to questions pertaining to the credentialing of school psychologists, each state currently maintains its own certification criteria for the practice of school psychology. However, many school psychology training programs are being revised to meet the NSPCS standards, and a number of states are at some stage of adopting credentialing standards which recognize the NCSP and the National School Psychology Examination (Braccio, 1991).

Training programs are located in psychology and non-psychology departments in both colleges of education and colleges of Arts and Sciences. In a review of training practices for school psychologists, Fagan (1986) notes that "historically, distinguished programs have come from varying units and there is little reason to regard the location of programs in one academic unit as consistently superior to another".

The most authoritative source pertaining to graduate education in school psychology is the *Directory of School Psychology Graduate Programs* (McMaster, Reschly, and Peters, 1989). The *Directory* was designed to provide an "accurate and complete listing of all the school psychology programs in the United States". The 1989 *Directory* contains summary information for 203 of the 231 institutions providing school psychology graduate education.

Three levels of graduate training characterize preparation for school psychology practitioners in the United States: a Master's

Level program, a Specialist Level program, and a Doctoral Level program. The Specialist Level is the most frequent level of graduate education provided by university programs. Graduate education in school psychology at the specialist level is provided by 172 institutions, with 74 institutions providing graduate education at the doctoral level, and 15 institutions restricting graduate education in school psychology to the master's level.

Considerable variation exists in the number of semester hours required in school psychology graduate programs. The 1989 *Directory of School Psychology Graduate Programs* reports mean hours of about 41, 66, and 100 for Master's, Specialist, and Doctoral levels, respectively. For Specialist Level graduates, the Master's Degree is the most frequently obtained.

The annual publication by the American Psychological Association (APA), *Graduate Programs in Psychology*, provides information related to doctoral school psychology program standards which meet the rigorous APA accreditation criteria. In 1989 45.7% of the doctoral level programs reported full accreditation by APA.

DIRECT & INDIRECT SERVICE DELIVERY MODELS

Ideally, school-based psychologists integrate various approaches to create a comprehensive service delivery system. School psychologists sometimes fill specific roles for differing periods of time. More often they carry out a variety of roles within a school system.

The provision of psychological services encompasses both direct and indirect approaches to helping children. Psychological services in the schools have traditionally been conceptualized as *direct services* (Elliot & Witt, 1986). In the direct service approach the psychologist works with the individual referred for services. Included among the services involving direct contact between the psychologist and referred individual are: testing, counseling, and some forms of cognitive or behavioral treatments. Psychological testing (or the more complicated process of

assessment) can also be considered an "indirect service"; since the ultimate aim may be to determine through testing (or assessment) the character of a particular problem and if an individual is "eligible" for services that would be provided by another person at the school site.

In an *indirect service* delivery system psychologists interact primarily with other professionals (e.g. teachers), paraprofessionals (e.g. teacher aides), and lay persons (e.g. parents) who in turn work directly with clients. A primary goal of an indirect service model, such as consultation, is to expand the consultee's (e.g. teacher's) knowledge and intervention skills so that s/he can prevent or respond more effectively to similar problems in the future. Theoretically, indirect service delivery procedures provide the opportunity for benefiting larger numbers of individuals than direct service systems because more people are being utilized in the treatment or remediation of problems (Elliott & Witt, 1986).

CONSULTATION IN THE SCHOOLS

School-based consultation is viewed as one of the more important job functions of school psychologists; and, by practitioners as one of their most preferred job functions (Gutkin & Curtis (1982); Meacham & Peckam, (1978)). Consultation has achieved an increasingly higher level of sophistication in which there is a respectable degree of concordance regarding what is indicated by the term when it is identified with a specific model (e.g. Curtis and Zins, 1981).

The conceptual foundation for the work of the consulting psychologist comes from a variety of sources. Three major theoretical models are represented in the training and practice of school consultation (Gutkin and Curtis, 1982; Meyers, Parsons, & Martin, 1979; Reschly, 1976). These models are: (a) mental health consultation (Caplan, 1970), (b) organization development consultation (Schmick & Miles' 1971), and (c) behavioral consultation (Bergan, 1977). The models differ on issues such as theoretical bases, typical problems addressed, goals of con-

sultation, intervention methods, and criteria for evaluation of outcomes of consultation (Reschly, 1976).

In terms of service delivery, *interventions* resulting from consultation should be those which can be implemented by the consultee (e.g. teacher) rather than the consultant. Typically interventions include some kind of environmental manipulation. Among the major categories of environmental variables most often considered for modification are (1) reward and punishment contingencies, (2) curriculum content, (3), techniques of instruction, (4) teacher behavior, (5) peer behavior, (6) parent and sibling behavior, (7) the physical arrangement of the classroom, and (8) administrative policy.

Human systems theory and basic concepts in organization development have influenced a form of consultation which focuses attention on the "school system" rather than the individual child. Rather than attempting to help the troubled student to accommodate to the school, which is the direction of more conventional models of consultation, an organization-development viewpoint emphasizes changes which can be achieved through an examination of the interpersonal milieu of the school. Learning problems are seen as being influenced by socio-cultural aspects of the school. Proponents of this perspective point out that one advantage of a "school-self study" is that often other members of the school staff become actively involved in a collaborative endeavor (Schmuck, 1982; Schmuck, Runkel, Arends, & Arends, 1977). Examples of interventions designed by a school psychologist to provide systems level changes in a public school district are noted in an article by Snapp and Davidson (1982). Sandoval (1986; pp. 151-153) notes some of the problems inherent in an organizational-model for school-based psychological services.

A crucial aspect of consultation is the necessity of short-term follow-up to determine the effectiveness of the strategies adopted by the consultee as a result of the consultation. Treatment plans resulting from consultation are often viewed as "high probability hy-

potheses". Follow-up consultation may reveal the need for refinement or replacement of the original intervention program (Gutkin & Curtis, 1982; Dinkmeyer & Carlson, 1973; Sandoval, Lambert, & Davis, 1977).

CONSULTATION RESEARCH

School-based consultation has been reported to positively affect conditions and outcomes for children in a variety of ways such as: improved professional skills for teachers (Gutkin, 1980; Zins, 1981); teacher attitudes regarding the "seriousness" of children's problems" (Gutkin, Singer & Brown, 1980); improved teacher information and understanding of children's problems (Curtis & Watson, 1980); generalization of consultation benefits to other children in the same classroom (Jason & Ferone, 1978; Meyers, 1975); reductions in referral rates (Ritter, 1978); improved long-term academic performance (Jackson, Cleveland & Miranda, 1975); and reduction of varying behavioral difficulties (Spivack, Platt, & Shure, 1976).

In a review of school consultation research, Gresham and Kendell (1987) note three essential areas of investigation: (a) outcome research, (b) process research, and (c) practitioner utilization. The particular theoretical model within which consultation research is conducted also influences the nature of the independent and dependent variables considered in consultation, and the interpretation of research results.

Alpert and Yammer (1983) reviewed 132 school consultation research studies and reported that 30% (40 studies) dealt with the outcomes of consultations. In their review, 75% of the available consultation research dealt with behavioral consultation. Behavioral consultation has received the most empirical support (Medway, 1982). Gresham and Kendall (1987) cite an unpublished paper by Updyke *et al.* (1981) on the effectiveness of school consultation. Based upon a meta-analysis of the consultation literature, Updyke *et al.* report that the behavioral consultation model produces the largest effect size.

The majority of the school consultation research examined by Alpert and Yammer

(1983) was conducted in elementary school settings (59%), followed by special education settings (28%), preschool and kindergarten settings (11%), and junior high school settings (2%). No consultation outcome studies were reported for high school settings.

Included among the *outcome* variables of school consultation are: (a) changes in consultees' behavior; (b) changes in consultee's knowledge, perceptions, and or attitudes, (c) changes in client's classroom behavior, and (d) changes in the frequency of consultation utilization (Bergan, 1977; Gutkin and Gurtis, 1982; Medway, 1979, 1982; Meyers *et al.*, 1979; Pryzwansky, 1986).

Noted among the positive outcomes in the consultation research literature is the finding that teachers exposed to consultation services believe that their professional skills have improved as a result of consultation (Gutkin, 1980). In addition, teachers in schools with consultants report problems to be less serious than teachers in matched schools without consultants when presented with an identical list of child behavior problems (Gutkin, Singer, & Brown, 1980).

Underachieving children whose teachers and parents receive consultation services during 4th, 5th, and 6th grades have been noted to achieve significantly better on several academic measures at the time of high school graduation than a control group of underachievers (Jackson, Cleveland, & Merenda, 1975).

The most important *process* variable in consultation is "problem identification". The consultant's ability to help the consultee to define problems in behavioral terms has been reported to be one of the better predictors of plan implementation (Bergan & Tombari, 1975, 1976). In consultation interviews, behavioral cues (as opposed to medical model cues) reportedly lead to higher expectancies by teachers regarding their ability to solve problems. Expectancies, in turn, help teachers to define problems in behavioral terms (Tombari & Bergan, 1978).

Teachers are more likely to identify resources they are able to use in executing a plan for intervention if the consultant "asks"

rather than tells them how they can identify and use resources. Specifically, one study reports that the odds are 14 times greater that a teacher will identify resources and a way to carry out a consultation plan if the consultant asks rather than tells the teacher (Bergan & Neuman, 1980).

As judged by teachers, the perceived communication skills of consultants by consultees strongly influence the overall effectiveness of consultation (Gutkin, 1986). Genuineness, empathy, active listening, and paraphrasing are perceived by consultees as being indicative of good communication (Gutkin & Curtis, 1982). In the description of consultation plans, teacher's prefer "common-sense" language, and dislike the use of jargon (Witt, Moe, Gutkin, & Andrews, 1984). The amount of teacher time required, the severity of the client's behavior problem, and the type of intervention are notable dimensions to consider when evaluating teachers' acceptability of consultation plans (Witt & Elliott 1985). Positive interventions (reinforcement-based) are preferred over negative interventions (punishment-based); teachers view all interventions as being more acceptable as the severity of the behavior problem increases; and interventions which take less time are viewed by teachers as more acceptable than those requiring more time (Witt & Elliott, 1985).

Among the difficulties in evaluating the efficacy of consultation services are: (1) few studies include long-term follow-up to assess maintenance of behavior change as a function of consultation (Medway, 1982; Pryzwansky, 1986); (2) school consultation research has typically been univariate in spite of the multivariate nature of consultation as an intricate process influencing a number of interrelated variables.

As a partial remedy to some of these defects, Gresham and Kendall (1987) suggest the use of single case experimental designs, which negate the need for control groups. They reference a number of internally valid single case experimental designs in which the efficacy of school consultation could more effectively be demonstrated. (Note:

Martens and Witt (1988) describe an ecological approach to studying the processes and outcomes of consultation which may alleviate some of the difficulties noted above).

In *summary*, despite the aforementioned conceptual and methodological problems in consultation research, school-based practitioners note that two important advantages of consultation services are: (1) the avoidance of time-consuming normative evaluations, (2) lag time between referral and implementation of intervention or treatment is often shorter under consultation than traditional testing approaches (Fairchild, 1976; Tobiesen & Shai, 1971).

PSYCHOLOGICAL ASSESSMENT IN THE SCHOOLS

Although teachers and administrators view consultation as one of the most important aspects of the services psychologists provide (Curtis & Zins, 1981), many practitioners state that there is insufficient time for consultation related activities because of the diagnostic role requirements imposed upon them by the schools (Alpert & Tractman, 1980; Gutkin & Curtis, 1982; Meyers *et al.*, 1979). In large urban school districts, there are sometimes case backlogs with as much as a two year gap between time of referral and time of service delivery (Fairchild, 1976). School psychologists spend the largest percentage of their time in special education eligibility determination, which involves a heavy emphasis on assessment related activities

An assessment includes those activities related to the gathering of information which advances the understanding of an individual's functioning in the school or community. An assessment is directed toward the illumination of areas of relative strength and weakness, and, the generation of hypotheses regarding influences on an individual's development. The inquiry is guided by the nature of what has been "perceived" and communicated to the psychologist as being a "problem".

Assessment results are expected to assist the development of recommendations, and, facilitate a more reliable and valid decision

making process. The completion of an assessment incorporates procedures which focus on various aspects of the child's functioning in the school and home (or community) environments. Assessment procedures include: parent, teacher, and student interviews; a review of student records (e.g. school/medical); testing with standardized instruments and informal inventories; observations of an individual's behavior (e.g. classroom/school or home).

In surveys asking psychologists to note areas where they feel that training has been adequate, the areas of cognitive assessment, report writing, ethical and professional standards, and interpretation of assessment findings receive relatively high ratings (e.g. McKee *et al.* 1987, Reynolds, 1984).

Practitioners in urban and suburban settings are more likely to have specialized assignments in which they spend more than 25% of their time with a specific population of handicapped students (e.g. severely and profoundly handicapped or preschool populations) (Reschly and Connolly, 1990).

ASSESSMENT RESEARCH

Applied practitioners look to the field of assessment research for validation of methods and procedures which can be used in the schools. In terms of quality and content, substantial diversity exists in assessment research. Problem areas, as well as points of progress, have been documented (e.g. Keith, 1987).

A problem in some of the assessment research is the absence of theory guiding the research design and interpretation of results. Such a shortcoming seriously lessens the relevance of assessment research as a knowledge base for applied practitioners. Related to the unclear role of theory in the development and implementation of assessment research is the importance of an hypothesis testing approach. In his critique of assessment research, Keith (1987) indicates that at least one author has suggested that the traditional validity trinity (content, concurrent, construct) be replaced by a general hypothesis testing approach (Landy, 1986).

The lack of a testable hypothesis appears frequently in studies examining the concurrent validity of assessment instruments.

Two areas of research where exemplary progress has been made are: (1) "test validation", the process of validating a test and its items prior to publication; and (2) "test bias" (e.g. Jenson, 1980; Reynolds, 1982). Needing greater attention is research on the decisions and interventions which result from assessment; such as the methods by which important decisions, such as student placement are made following an assessment (Ysseldyke, Algozzine, Regan, & McGue, 1981). A related focus of recent research has been an examination of the differential affect that various kinds of information have on assessment related decisions (e.g. Cummings, Huebner, McLeskey, 1986).

SCHOOL PSYCHOLOGICAL SERVICES & THE LAW

Considering the important effect that assessment related activities can have in some areas of school related decision making, it is not surprising that school psychologists are often required to testify in courts or other legal forums. Every year the courts reach decisions in hundreds of cases, a number of which directly involve the delivery of psychological services in the public schools. Special education legislation has had perhaps the most discernible impact in this area. School psychologists must be aware of the effect that certain statutory definitions of equal educational opportunity have on "assessment related duties and functions". For example, handicapped public school students possess many rights under the Education for All Handicapped Children Act of 1975 (P.L. 94-142).

A recent book by a noted trainer in school psychology includes a section entitled, "The Law: an Expanding Influence on Education and the Profession". Discussed are concerns over issues such as: legal liability of school psychologists; the use of psychological expertise in the courts, testing programs in public education (Phillips, 1990). State credentialing and licensing is another important

issue for psychological practitioners in the schools. What can school psychologists do legally, and what are the legal bounds of practice? As noted by Phillips (1990; p. 97), "In some jurisdictions school psychologists are distinguished legally and in practice from psychological assistants, psychometrists, and other lower-level personnel for whom school psychologists have supervisory, and sometimes legal, responsibility and possible liability".

HUMAN DIVERSITY: A CHALLENGE TO EDUCATION

Also influencing the delivery of psychological services in the schools are the changing demographics of American society. In a chapter, entitled "Ethnicity and Culture In Psychological Research and Practice", Sue (1991) notes that "changes in the intellectual and social climate are accompanying variations in community perceptions of social services". The acceptance and application of psychological knowledge is being influenced by diverse, and sometimes competing, currents of thought representing differing value orientations.

From the late 1980's to the present, population diversity has become "a keynote" of the public schools where greater ethnic, racial, and social differences are now found. The 1990 population of American Indians/Eskimos/Aleuts (2 million), Asians (7.3 million), Blacks (30 million), and Latinos (22.4 million) represented growth rates of respectively, 38%, 108%, 13%, and 53% from the figures in 1980 (Anderson, 1991). One third of the United States population will be members of an ethnic minority by the early part of the 21st century (Jones, 1990).

As the range and complexity of children's social and developmental histories become more varied, the challenges of teaching and providing psychological services require a reexamination of methodologies. Current topics of interest at psychological conventions have focused attention on the need for placing psychological and educational issues in "cultural context". "Celebrating Diversity" was the title theme at the 1991

annual convention of the National Association of School Psychologists where speakers addressed such topics as "Responding to Cultural Diversity in Developing Effective Schools," and, "Prereferral Interventions for Language Minority Students." "Psychology in Education" was a focus of the 1991 American Psychological Association convention. Four school psychologists were appointed to participate in a ten member committee which initiated activities highlighting that theme.

The emphasis in psychology in the U.S. on ethnic diversity is timely, especially considering the fact that important ethnic group differences emerge on indicators of well-being such as lower levels of educational attainments and occupational mobility (Sue, 1991). Knowledge regarding cultural diversity has become recognized as an important component in the education and professional training of psychologists (Bronstein & Quina, 1988; Sue & Padilla, 1986).

Limitations exist when assessment instruments have not been standardized on various ethnic groups, particularly when ethnic individuals are distinctly different from the "mainstream Americans" (Brislin, Lonner, & Thorndike, 1973). A review of articles published over the last few years in the five journals devoted to theoretical and applied issues in school psychological services would reveal the serious effort focused on concerns such as "developing alternative methods for the assessment of minority students", and "linking assessment practices to intervention outcomes". Consultation, as a distinct set of skills, is also more widely being viewed as a "knowledge dissemination system" for the transfer of psychological knowledge to the educational process.

Psychology's response to current challenges continues to reflect the heritage of a functionalist orientation. Confronted by contemporary changes in American society the utilitarian role of psychology reasserts itself in articles such as: "Special Education Reform: School Psychology Revolution", Reschly (1988); "Educating Students with Learning Problems and the Changing Role

of School Psychologists" (Will, 1988); and, "Educating School Psychologists for Restructured Schools" (Rosenfield, 1991).

IN CONCLUSION:

If education is a process of cultural transmission, then applied psychologists who work in the schools are socialization agents, either directly or indirectly as a consequence of the direct and indirect methods through which they affect the lives of children. Professional psychology is very much a part of the struggle to understand and do something about problems in human relations.

To rephrase the two historians of psychology who are quoted in the introduction to the current discussion, "American culture has been oriented to the practical and the pragmatic, and people valued what worked" (Schultz & Schultz, 1987). Such a value orientation continues to present a severe challenge to psychological service delivery in the U.S. More importantly, for psychologists and non-psychologists alike, the study of the role of American psychology in a changing America can help one to better understand certain facets of American culture, its past as well as its future.

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