THE DELIVERY OF PSYCHOLOGICAL SERVICES IN SCHOOLS

Concepts, Processes, and Issues

Edited by
Stephen N. Elliott and Joseph C. Witt

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PSYCHOLOGY OF EDUCATION

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PSYCHOLOGY OF EDUCATION

Volume 15

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STEPHEN N. ELLIOTT AND JOSEPH C. WITT

LONDON AND NEW YORK

First published in 1986 by Lawrence Erlbaum Associates, Inc.

This edition first published in 2018
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-138-24157-2 (Set)
ISBN: 978-1-315-10703-5 (Set) (ebk)
ISBN: 978-1-138-06965-7 (Volume 15) (hbk)
ISBN: 978-1-315-11554-2 (Volume 15) (ebk)

Publisher's Note
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Stephen N. Elliott
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Louisiana State University

LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
1986 Hillsdale, New Jersey London

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Lawrence Erlbaum Associates, Inc., Publishers
365 Broadway
Hillsdale, New Jersey 07642

Library of Congress Cataloging-in-Publication Data

The Delivery of psychological services in schools.

Includes indexes.
1. School children – Mental health services.
2. School psychologists. I. Elliott, Stephen N.
II. Witt, Joseph C.
LB3430.D45 1986 371.4'6 86-11543
ISBN 0-89859-581-9

Printed in the United States of America
10 9 8 7 6 5 4 3 2 1

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Acknowledgments

This book has come about because of the gifts and energies of many people. We are hopelessly in debt to so many who, individually and collectively, have dramatically influenced the quality of this volume. Although it is difficult to know where to start and end in acknowledging the many who have contributed in innumerable ways, the listing here should make it abundantly clear that this volume is the result of the efforts of many people.

Our most immediate gratitude must go to the contributors themselves. Their dedication to scholarship and academic craftsmanship made our task a pleasure. We extend a warm thank you to the authors for their cooperation, persistence, and patience during the writing, editing, and revision process. Their scholarship and friendship are valued.

A number of dedicated professionals gave their time and talents to review and provide comments on the chapters of this book. Thus, we gratefully acknowledge Jim Carroll, Jack Cummings, Terry Gutkin, Jerry Harris, Nadine Lambert, and Walter Pryzwansky. In addition, two of our students, Lester Andrews and Mary Von Brock, provided helpful editorial assistance.

As psychologists who recognize the importance of the environment on behavior, we wish to acknowledge the Department of Psychology at Louisiana State University as well as James Geer (Department Head) and Henry Snyder (Dean of Arts and Sciences), who continue to make it possible for us to work productively and efficiently. We are also grateful for the opportunity to work with Frank Gresham and other members of the Driftwood Association who not only stimulate us intellectually, but infuse the process of doing our work with enjoyment.

Finally, but most especially, we want to thank our families for their patience, understanding, and encouragement during the completion of this volume.

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Preface

Seymour Sarason, of Yale University, has wondered aloud about how a being from outer space would react if allowed to observe our schools for a few days. What would a being with no preconceptions notice if given the opportunity to hover above the organized chaos of our schools? Sarason posits that certain processes and procedural regularities would very soon become apparent to the being (e.g., small people sit in orderly rows and listen while one larger person stands in front of a room and talks to them). Once these regularities are identified, it then becomes possible to question whether that particular regular way of doing things is the best way to do things. For example, perhaps learning can occur more effectively when children sit in a circle, work at home, or are taught by peers rather than teachers.

Although the contributors to this volume were not provided with a space craft, their task was somehow to rise above the day-to-day activities of school psychologists and examine the larger process-oriented issues that influence our field. The task is analogous to examining a river from different vantage points. If we look at a small stretch of river from the bank, we will notice whatever is within sight. However, the amount of river that we see is controlled by our perspective and by the circumstances that cause us to see that particular part of the river. If that section of the river is very narrow and the water runs quickly over rapids, then we may assume the entire river looks that way. However, if we observe the river from the air, we get a much wider perspective of not only what the river looks like, but where it is going and the many tributaries contributing to it. Similarly, with this volume, our goal was to obtain the collective wisdom and perspective of some of the freshest thinkers in school psychology concerning the most forceful currents influencing

the delivery of psychological services in schools. It is our hope that this examination of the existing *process* regularities will provoke questions about their workability.

This book grew out of a perception that *process* issues within school psychology have not received the attention they deserve. For the most part, school psychologists have been most concerned with the *content* of what they do. Thus, there has been a great deal written about the actual, desired, and ideal roles and functions of school psychologists. This book is emphatically *not* about those roles and functions. Rather, it is about the major *concepts, processes, and issues* that serve as foundations for the field.

The volume is organized into three parts: Basic Issues, Models and Settings, and Evaluation and Development. Elliott and Witt begin with a description of the major conceptual dimensions and the fundamental questions that affect the practice of school psychology. This chapter was provided to all contributors to the volume before they commenced writing and, in many ways, serves as an advanced organizer for the text. In Chapter 2, Ysseldyke reviews the current status of school psychology practice. Bardon, in Chapter 3, presents a detailed review of the considerations and issues that determine *how* school psychologists should carry out their work, with an emphasis on the vast knowledge base which has been accumulated within psychology and educational psychology. Finally, Stewart, in Chapter 4, provides an illuminating discussion of clientage and service delivery in the schools.

Part 2 focuses on psychological service delivery issues as they are affected by particular models of service delivery and the settings in which service is provided. In Chapter 5, Curtis and Zins elucidate organizational factors known to influence the structuring of service delivery. Sandoval, in Chapter 6, presents a detailed comparative discussion of various models of service delivery. The remaining three chapters in this section discuss conceptual and logistical hurdles encountered when delivering psychological services in various settings. Specifically, Jackson (Chapter 7) describes hurdles confronting service delivery in urban settings, Kramer and Peters (Chapter 8) cover services in rural settings, and Argulewicz (Chapter 9) reviews services in bicultural settings.

Part 3 consists of various evaluation and development issues that influence school psychology. In Chapter 10, Kratochwill, Feld, and Van Someren describe numerous issues and methodologies for the evaluation of school psychological services. Chapter 11, by Fry, examines the impact of educational and psychological research on the practice of school psychology, and Chapter 12, by Phillips, discusses the impact of education and training on practice. In Chapter 13, Christenson, Abery, and Weinberg argue cogently for an ecological model of service delivery and emphasize the interface between school, home, and community settings. Finally, Conoley and Gutkin, in Chapter 14,

offer a reconceptualization of school psychology as an indirect service delivery model and discuss the training and practice ramification of such a model.

Taken together, the chapters provide a comprehensive view of major service delivery issues within school psychology. In addition, virtually all of the chapters offer suggestions about needed directions for the field and many identify avenues by which these new directions can be accomplished.

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1 Fundamental Questions and Dimensions of Psychological Service Delivery in Schools

Stephen N. Elliott
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Schools provide an ideal setting for the delivery of psychological services. This supposition is based on the belief that schools are relatively predictable environments where children spend hundreds of hours during formative years interacting with significant adults and peers. It is estimated that collectively 67 million children, parents, and teachers are directly involved with kindergarten through high school (Hummel & Humes, 1984). In addition to the favorable setting and large number of potential clients, many of the goals and processes of education are highly consistent with those of psychology. Both professions want to see children develop cognitively, emotionally, and physically to their fullest potential. In sum, no other social system provides a more comprehensive opportunity to impact children and parents. Yet, psychology is a "guest" in education's house, which is akin to living with friends who frequently fight and also occasionally are targets of public criticism. Thus in addition to its own shortcomings, psychology runs the risk of additional public criticism through association with education. We believe, however, it is a risk well worth taking!

This book, and particularly this chapter, focuses on concepts and proceses that influence the delivery of psychological services in schools. To date, relatively little has been written specially about the delivery of school psychological services even though it was a major topic at the Thayer Conference (Cutts, 1955) and the Spring Hall Symposium (Ysseldyke & Weinberg, 1981). Instead of focusing on delivery systems, previous authors have examined related areas such as the roles of school psychologists (Bardon, 1965; Monroe, 1979; Reger, 1965; Valett, 1965) and the administrative organization of psychological services (Cutts, 1955; Elkin, 1963; Herron, Green, Guild, Smith, & Kantor, 1970; Rettke, 1971). The primary purpose here is to examine *concepts, processes,* and *issues* involved in delivering psychological services to school children.

FUNDAMENTAL QUESTIONS FOR SERVICE DELIVERY

As a means of analyzing present arrangements for delivering psychological services in schools, we will pose and explore answers to four basic questions: What are the major service goals of school psychologists? Who is the client when psychologists work in schools? What are the major theoretical orientations of service delivery systems? Are school psychological services socially valid and effective? In an earlier volume entitled *School Psychology: Essentials of Theory and Practice* (Reynolds, Gutkin, Elliott, & Witt, 1984), we examined similar questions and found it a useful heuristic for conceptualizing service delivery practices and issues. We hope that by revisiting the first three questions and initiating an exploration of the fourth, we will foster further understanding of concepts and processes central to successful school psychological services.

What are the Major Service Goals of School Psychologists?

Education has been characterized as the major path to personal development and success. Consequently, the public has high and varied expectations for schools. In many ways, it is the result of this public concern for education that applied psychology is present in schools. Psychologists' entree to schools was initiated by educators concerned about assessing the learning potential of children. By now, most everyone knows the story of Alfred Binet and Theophile Simon and their work in France during the early 1900s to develop a test that could accurately assess the cognitive functioning of children. Even earlier (in the 1800s), Galton had begun to keep systematic records of students' performances on tests of vision, hearing, reaction time, and discrimination. In fact, White and Harris (1961) cited Galton's work as the first example of school psychological services. Regardless of who was first, it seems accurate to conclude that psychological services in schools started in the form of testing with the intent to classify children as capable or not capable of benefiting from education. The testing movement, originally given impetus by educators, served to promote many changes in educational practices (Murphy, 1929).

The form in which psychology appears in schools today varies, with testing providing a baseline and other activities such as family counseling, teacher and system-level consultation, and direct intervention providing examples of more advanced forms of school psychological services. Ysseldyke, in Chapter 2 of this volume, provides a more comprehensive examination of the scope and nature of the psychological services provided in school today. To identify the major service goals of school psychology, however, we believe the American Psychological Association's (1982) *Guidelines for the Delivery of Services by School Psychologists* provides the best summary. According to the Specialty Guidelines (APA, 1982):

> *School Psychological Services* refers to one or more of the following services offered to clients involved in educational settings from pre-school through higher education for the protection and promotion of mental health and facilitation of learning: a. Psychological and psychoeducational evaluation and assessment of the school functioning of children and youth through the use of screening procedures, psychological and educational tests (particularly individual psychological tests of intellectual functioning, cognitive development, affective behavior, and neuropsychological status), interviews, observation, and behavioral evaluations with explicit regard for the context and the setting in which the professional judgments based on assessment, diagnosis and evaluation will be used.
> b. Interventions to facilitate the functioning of individual or groups with concern for how schooling influences and is influenced by their cognitive, conative, affective, and social development. Such interventions may include, but are not limited to, recommending, planning, and evaluating special education services, psychoeducational therapy, counseling, affective educational programs, and training programs to improve coping skills.
> c. Interventions to facilitate the educational services and child-care functions of school personnel, parents, and community agencies. Such interventions may include, but are not limited to, in-service school personnel education programs, parent-education programs, and parent counseling.
> d. Consultation to and collaboration with school personnel and/or parents concerning specific school-related problems of pupils and students and the professional problems of staff. Such services may include, but are not limited to, assistance with the planning of educational programs from a psychological perspective; consultation to teachers and other school personnel to enhance their understanding of the needs of particular pupils; modification of classroom instructional programs to facilitate children's learning; . . . and the creation, collection, organization and provision of information from psychological research and theory to educate staff and parents.
> e. Program development services to individual schools, to school administrative systems, and to community agencies in such areas as needs assessment and evaluation of regular and special education programs; . . . coordination, administration, and planning of specialized educational programs; the generation, collection, organization, and dissemination of information from psychological research and theory to educate staff and parents.
> f. Supervision of school psychological services.

More specific goals could be added to this list, but items *a* through *f* capture the essence of most school psychologists' service goals.

A recent proposal from the National School Psychology Inservice Network, entitled "School Psychology: A Blueprint for Training and Practice" (Yesseldyke, Reynolds, & Weinberg, 1984), identified 16 domains of school psychology leadership and function. These domains extend the list of service goals for school psychologists and emphasize educational relevance within the mission of school psychology. Briefly, it was proposed the following domains represent parts of the knowledge base in psychology that can be applied to the solution of educational problems:

1. Class Management,
2. Interpersonal Communication and Consultation,
3. Basic Academic Skills,
4. Basic Life Skills,
5. Affective/Social Skills,
6. Parental Involvement,
7. Classroom Organization and Social Structure,
8. Systems Development and Planning,
9. Personnel Development,
10. Individual Differences in Development and Learning,
11. School-Community Relations,
12. Instruction,
13. Legal/Ethical and Professional Issues,
14. Assessment,
15. Multicultural Concerns, and
16. Research

The 16 domains of knowledge identified in "School Psychology: A Blueprint for Training and Practice" represent challenging "goals" *within* the profession of school psychology. The goals of the School Psychology profession are similar to the goals of any other organization: that is, self-preservation and growth. But at some point, we must begin to ask hard questions about the ends (i.e., the goals) which this expansion in activities will allow us to accomplish. Many of the calls for role expansion are made without any reference to how, for example, children would be better served. Those who write about expansion seem to believe that because a skill (e.g., system development) is taught in a graduate school psychology program, that fact alone is reason enough to add it to the list of activities that school psychologists *should* perform. Where are the data supporting the virtually infinite list of activities school psychologists *want* to perform? Unfortunately, school psychologists should spend less time writing about what they want to do and more time conducting efficacy studies on what they can do. With very few exceptions, there are no organized bodies of knowledge in school psychology (i.e., area of systematic research) and the field is relatively devoid of any conceptual (i.e., theoretical) unification.

Who Is The Client When Psychologists Work in Schools?

Traditionally, clients for school psychologists have included children and youth, both normal and abnormal; parents and occasionally entire families; and teachers and other significant educational personnel. The current emphasis on school psychological consultation research and evaluation services has served to increase this list of clients to include organizational units such as classrooms, schools,

curriculum tracks within schools, and even entire school districts (e.g., see Snapp & Davidson, 1982). Thus, potential clients for psychologists working in educational settings range from one child and a teacher and/or parent to an entire school district composed of hundreds of children and educational personnel.

We believe one's general conceptualization of clients is influenced by several factors including (a) a psychologist's model of human behavior; (b) a psychologist's training or spectrum of competent services; (c) a psychologist's philosophy about preventive mental health; (d) legal mandates; and (e) financial remuneration. The extent to which these factors actually affect client selection and services may be influenced most by the work load or psychologist-to-student ratio within a given school district.

Our answer to the question of "Who is the client?" is "It depends!" This seemingly ambiguous response is based on the recognition that several factors can influence psychologists' conceptions of their target population. Some of the factors, such as one's model or theory of human behavior, training, and spectrum of competent services, are controlled by the individual psychologist. Other factors, such as legal mandates, workload, financial remuneration, and educational philosophy, are more externally controlled. To the extent that psychologists influence these factors, they can determine who their clients will be. Handicapped children traditionally have been and will likely continue to be a high-needs population for school psychologists. However, with the recent increased interest in education for the gifted and preschool-age children, and the consistently increasing number of requests for inservice and consultation services, school psychologists' clients are increasing in number and variety. Clearly, the question of clientage has theoretical as well as pragmatic implications for the actions of psychologists working in schools. A more comprehensive examination of this topic is presented by Stewart in Chapter 4 of this volume.

What Are the Major Theoretical Orientations of Service Delivery Systems?

Theoretical models of human behavior influence how psychologists and educators view and interact with children, especially exceptional children. Lambert (1981) has argued the necessity of theoretical models or conceptual frameworks for the healthy practice of school psychology. Quoting Lambert:

> One quality that differentiates the professional from the technician is that the professional knows the reason for a practice whereas the technician knows only how to practice. . . . School psychologists who have theoretical frames of reference, sets of theories and concepts that they employ in their practices, and reference sources of useful empirical evidence to support their frames of reference, are not easily taken in by the latest fads but test them out before moving ahead. Also,

> school psychologists whose training has provided them with a conceptual framework as the foundation for continued professional development continue to experience growth and change and thus are less likely to "burn out." (p. 204)

A brief examination of three models of human behavior will provide a foundation for understanding what and how theoretical models can influence the delivery of psychological services in schools. These models include the medical model, the behavioral-ecological model, and the reciprocal determinism model.

The medical model in psychology emerged from psychoanalytic theory (Stuart, 1970). A central postulate of this model is that psychological disturbances are best understood and modified through the intensive study of intrapsychic life. The medical model assumes (a) behavior that deviates in a negative direction from normative standards is a reflection of a personal disease and (b) behavior classified as deviant must be changed within the individual by a curative process (Reger, 1972). The first assumption implies children who cannot be maintained or accommodated in a regular education program are suffering from an *internal* psychoeducational disorder. The second assumption also has practical implications that influence educational programs. Once children are classifed as deviant or "diseased," the educational system must respond to cure them. Educational "cures" seem to come most frequently in the form of special classes which tend to isolate the "diseased" child from normal or healthy children. The medical model of psychological and educational services for children experiencing learning and behavior problems has been critically challenged on conceptual, empirical, and practical grounds (Reger, 1972; Szasz, 1960; Zubin, 1967).

Alternative models of human behavior that acknowledge the role other people and environmental factors have in shaping a child's behavior are currently prominent in the eyes of many educators and psychologists. Chief among these are the behavioral and the ecological models. The major postulate of those espousing the behavioral model is that human behavior is primarily a function of environmental events (Skinner, 1953). The ecological model is built on a similar supposition, that is, human behavior results from a complex interaction between environmental factors and the individual characteristics of people (Barker, 1965, 1968; Hunt, 1967; Levin, 1951; Reilly, 1974). Both the behavioral and ecological models provide an alternative approach to understanding human behavior that is responsive to the criticisms directed at the medical model. For example, pathology is viewed as behavior that is deemed inappropriate (generally, excessive or deficient) when compared to subjective norms and values, rather than as an "illness" in any absolute sense (Ullmann & Krasner, 1969). Advocates of the behavioral-ecological approach reject a "mental illness" or intrapsychic causal explanation of psychopathology and instead are oriented toward the belief that human problems are primarily the result of interactions between people and their environments.

An ecologically oriented model of behavior that also takes individuals' cognitions into consideration would be the most suitable model for analyzing the problems of all children, not just potentially abnormal children. Therefore, we believe the reciprocal determinism model (Bandura, 1974, 1977, 1978) of human behavior is the model of choice for school psychologists, as well as other psychologists since it provides the most comprehensive view of children and youth who experience a wide range of problems.

The reciprocal determinism model, deduced from social learning theory, conceptualizes human behavior as a continuous reciprocal interaction between an individual's thoughts and behaviors, and environmental factors. The term *determinism* is used by Bandura (1978) "to signify the production of effects by events, rather than in the doctrinal sense that actions are completely determined by a prior sequence of causes independent of the individual" (p. 345). Schematically (see Fig. 1.1), Bandura represents reciprocal determinism as a triadic or three-way interaction among behavior (B), cognitions and other internal events that affect perceptions and actions (P), and external environment (E). Thus, the reciprocal determinism model extends the basic interactionist formula of behavioral and ecological models (i.e., $B = f(P,E)$ or behavior is a function of the interaction between person and environment factors) to include internal personal factors such as beliefs, values, and perceptions. The reciprocal interaction between an individual's personal factors (P) and behavior (B), although conceptually simple, is the dimension that makes this model different and more heuristic than previous models of human behavior.

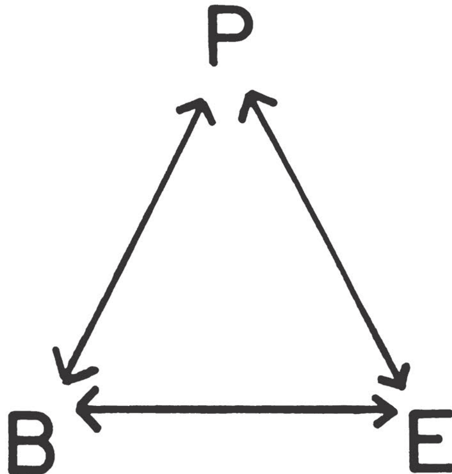

FIG. 1.1. Schematic representation of Bandura's reciprocal determinism model of human behavior.

The question of theoretical orientation and subsequent service delivery models is a complex one. The interested reader will find more comprehensive treatments of this topic in Chapter 6 by Sandoval, Chapter 13 by Christenson, Abery, and Weinberg, and in Chapter 14 by Conoley and Gutkin.

Are School Psychological Services Socially Valid and Effective?

This two-part question is the hardest to answer and thus has elicited much interest but relatively little empirical evidence. Before delving into an answer, however, some definitions and contextual information are warranted.

First, the issue of social validity. The notion here is that one's work can be evaluated by society (i.e., teachers, parents, children) on several levels (Wolf, 1978). Wolf identified three levels: (a) the social significance of *goals,* (b) the social appropriateness of *procedures,* and (c) the social importance of *effects.* Although Wolf's work with social validity focused on behavioral treatments, the definitional structure he developed easily generalizes to a broader range of psychological services. Thus, one can ask: Are the service delivery *goals* of school psychology really what society wants? Do the consumers and participants consider the service delivery *procedures* acceptable? Are the consumers satisfied with the *effects* or results of services? These questions are posed primarily for rhetorical value, but it should be noted several groups of researchers are beginning to amass data relevant to answering questions about the social validity of school psychological services. For example, Witt and his associates (Witt, Elliott, & Martens, 1984; Witt & Martens, 1984; Witt & Robbins, 1985; Witt, Moe, Gutkin, & Andrews, 1984) have investigated the social validity of different teacher-initiated interventions and influence of different philosophical orientations (e.g., behavioral vs. humanistic) as used during consultation and in psychological reports. Another line of social validity research focusing on school children has been initiated by Elliott and his associates (Elliott, 1986; Elliott, Witt, Galvin, & Moe, in press; Turco & Elliott, in press). This research with children has focused on their acceptability of various treatment procedures for classroom misbehavior. Gresham's work (1985) in social skills assessment and intervention is perhaps one of the best illustrations of how the social validity of service *goals, procedures,* and *effects* impact the conceptualization of a problem and delivery of services to remediate the problem. Other examples of social validity research that can influence the practice of school psychology include investigations by Kazdin (1980) and McMahon and Forehand (1983).

We are not of the opinion that a detailed set of socially valid services can or should ever be prescribed for everyone. The treatment situation is obviously more complex, requiring an appreciation for at least the individual differences of one's consumers (e.g., parents, teachers, children), the demands and resources

in a setting, and the skills and orientation of the service provider. The point we want to stress is that social validity *can* and *should* be assessed *prior to* and *after* the delivery of psychological services. Although we cannot say that high social validity is a necessary but not sufficient condition for effective outcomes, we do believe services that meet the tests (goals, procedures, effects) of social validity have a higher probability of changing behavior in a desired direction.

The reader should not interpret our position on socially valid services to mean school psychologists simply provide the services requested. One could argue the profession has done just that in the case of testing and placement of children. Instead, it behooves psychologists to foster a problem-solving mindset *with* their consumers so dialogue about alternative services can be established. In fact, high social validity for a particular service may only be established *after* a service has been deemed effective. Thus, when psychologists are armed with effectiveness evidence for a particular service, they may want to proceed (within the context of law and ethics) to implement the service.

This point brings us to the second part of our major question: How effective are school psychology services? To begin answering the question of service effectiveness, we suggest that one investigate the knowledge base of school psychology. As noted earlier in this chapter, Ysseldyke et al. (1984) have identified what they described as 16 domains of "a well-confirmed knowledge base for practice of psychology in the schools" (p. 10). We agree that these domains embody knowledge and techniques directly relevant to the delivery of effective services. Thus, some of the *means* to an effective *end* have been identified. The development of systems that allow for use of such means remains a major challenge.

Kratochwill, Feld, and Van Someren (in Chapter 10 of this volume) cogently discuss issues that impact upon the evaluation of the effectiveness of school psychological services. Briefly, these issues include (a) the wide scope of services available which need evaluating, (b) the manner in which psychological service efficacy questions are posed, (c) the type and scope of measurement strategies used to determine effectiveness, and (d) the wide variety of design and evaluation strategies available. These and other relevant issues are explored in detail by Kratochwill and his associates. Of particular relevance here, however, is the manner in which we have posed the question of effectiveness. Paraphrasing Paul (1967, p. 111), questions of service delivery effectiveness become, What service, by whom, is most effective with the individual experiencing a specific concern under which set of circumstances?

Our point here is not to discourage the evaluation of service effectiveness; rather, we encourage a focused approach to the evaluation of effectiveness so as to avoid many of the pitfalls and controversies experienced by researchers interested in the effectiveness of psychotherapy (Garfield, 1983). We believe the question of service effectiveness is dependent upon one's answers to our

questions concerning service goals, clients, and models of human behavior. Thus, posing questions about effectiveness can serve as a valuable heuristic for organizing one's thoughts about features and dimensions of psychological services. With this comment, we depart from posing questions to examine conceptual dimensions of psychological service delivery in schools.

ORGANIZATIONAL AND CONCEPTUAL DIMENSIONS OF SCHOOL PSYCHOLOGICAL SERVICES

Historically, administrators of progressive schools found it impractical to assign regular teachers and supervisors all the functions implied in adequate psychological services (Hildreth, 1930). In large school systems, provisions for such services were made through the organization of bureaus of research, psychological clinics, or departments of child study and guidance. Similar bureaus were maintained by the leading state universities and by a number of state departments of education. The services of these latter bureaus were especially useful to small communities that were unable to support an independent bureau.

Today, the organization and administration of psychological services within educational systems seems to assume at least four forms: a department of psychological services, a department of pupil personnel services, a department of special education, or an outside agency developed and operated by a state department of education or mental health. Detailed information has not been collected about differences in actual services provided by psychologists from each of the four types of organizational forms. In fact, relative differences in the organizational forms may be more semantic than anything else, with the possible exception of those services housed in an outside agency under the direction of a state department.

Cutts (1955), in her summarization of the Thayer Conference, described each of the four major organizational forms of school psychological services. Basically, her descriptions, although quite general, are still appropriate today. The major features she used to differentiate the four organizational forms were the personnel or staff background (training) and functions of the department.

The organizational form assumed for the provision of school psychological services would seem to be influenced by a variety of factors. Certainly, the number of psychologists on staff would be a major factor, along with the perceived importance of psychological services in the eyes of school administrators. Our experiences suggest the more staff members and the greater the perceived importance, the more likely the organizational form will be a separate department of school psychological services. The perceived recipients of psychological service may also affect the organizational placement of such services. For example, if all students are perceived as potential recipients of school psychological services, then the possibility of being organized as a separate department or being

embedded with a pupil personnel department would seem conceptually more likely than becoming part of a special education department. Interpersonal working relationships and professional turf issues may also influence the organizational form of services. The relationship between school psychologists and special educators is particularly complex and has become a focal issue for many professionals in both fields. Hence, the pairing of these two groups should be planned well to maximize cooperation and minimize friction and duplication of services.

In 1970, Herron and his associates stated, "There seems to be no universal plan for the organization of [school] psychological services. The current picture is one of disturbing diversity. There are highly organized services and there are very unorganized services" (1970, p. 211). Diversity is still an appropriate descriptor for school psychological services in the 1980s; however, we believe they are diversified less than in 1970. Major factors acting to reduce the variance among psychological service systems have been the increase in special education legislation (e.g., P.L. 94–142, The Educational Rights for all Handicapped Children Act, 1975), litigation concerning psychological testing and psychological treatment (e.g., *Larry P.*, 1979; *PASE*, 1980), and the continued development of service delivery standards by APA Division 16 and NASP. Curtis and Zins, in Chapter 5, provide a detailed examination of these and other forces impinging on the organizing of school psychological services.

Each of the aforementioned factors has been a significant force in defining the legal and ethical boundaries of psychological practice in the schools. Within such boundaries, however, there is still wide latitude for organizing and delivering psychological services. Thus, at this point, it is not possible to single out a best system of psychological service delivery; therefore, we examine four major conceptual dimensions along which services vary: direct-indirect, centralized-decentralized, proactive-reactive, and rural-urban.

Direct-Indirect Services

Traditionally, psychological services have been conceptualized as direct services. In other words, a psychologist personally worked with an individual referred for services. This approach is characteristic of the medical model of psychology. Types of services that require direct contact between a psychologist and the referred individual include testing, counseling, and some forms of cognitive or behavioral treatments.

Indirect service delivery has begun to be used more frequently by psychologists, particularly those working in schools (Gutkin & Curtis, 1982). Psychologists working in an indirect service model 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. Consultation is an exemplar of this method of service delivery. Other types of services that

illustrate an indirect service approach include inservice training for educators, parent training, curriculum advisement, and some behavioral interventions. Conoley and Gutkin, in Chapter 14, discuss the trend toward indirect services.

Monroe (1979) has used a direct-indirect service continuum concept as a means of characterizing five major roles or functions of school psychologists. The functions she identified were counseling/therapy, psychoeducational assessment, consultative child study, inservice, and research. Although admittedly oversimplified, Monroe believed that counseling/therapy was the strongest example of direct service to children, and research represented the most extreme example of indirect service. Her schema for characterizing the relative relationships along the direct-indirect service continuum of the five primary functions of school psychologists is reproduced in Fig. 1.2.

A common goal of both direct and indirect service models is to provide remedial services for problems. An additional important goal or objective of an indirect service model is to increase the consultees' knowledge and intervention skills so they can prevent or respond more effectively to similar problems in the *future*. Thus, theoretically, indirect service systems may have a greater capability for dealing with larger numbers of individuals than direct service systems because they utilize more persons in the treatment or remediation of problems.

Realistically, psychologists who wish to provide comprehensive services to children and youth will utilize both direct and indirect services. An exclusive

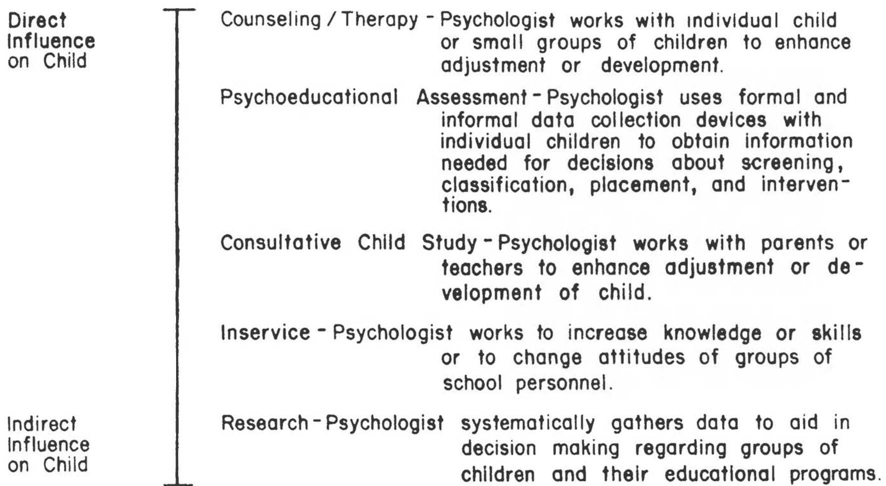

FIG. 1.2. Influences of school psychological services on children. From "Roles and Status of School Psychology" by V. Monroe. In G. D. Phye and D. J. Reschly (Eds.), *School Psychology: Perspectives and Issues* (pp. 25–47). New York: Academic Press. Copyright 1979. Reprinted by permission.

reliance on either direct or indirect service techniques is probably indicative of an incomplete service model and should be avoided; certain cases demand the direct attention and skills of a psychologist; others can be handled effectively by teachers, parents, or even peers.

Centralized-Decentralized Services

The organizational structure through which psychological services are administered and the physical location of the primary service providers are two major factors that influence the delivery of school psychological services. These two factors seem to have a strong effect on the actual, as well as perceived, coordination and proximity of services. In general, we believe centralized organization structures are characterized as more coordinated, yet more distal, to the majority of clientele. Decentralized organizations are characterized as less coordinated but more proximal to the majority of clientele. Thus, in theory, the organization and delivery of school psychological services can be meaningfully conceptualized along a centralized-decentralized continuum. This continuum is a summation of characteristics such as degree of administrative coordination and physical location of service providers.

Few writers or researchers, with the exception of Elkin (1963) and Phillips (1968), have examined the centralized-decentralized dimensions of school psychological services. Therefore, one is left to theorize about the actual functionality of such a continuum until future investigators establish an empirical base. Theorizing and hypothesizing about the centralization or decentralization of school psychological services can, nevertheless, shed valuable light on the organization and utilization of such services.

Elkin (1963) in a chapter titled, "Structuring School Psychological Services: Internal and Interdisciplinary Considerations," strongly advocated the centralization of such services. He argued that a centralized office under a Chief of Service was essential for efficient utilization of school psychologists administratively and professionally. Elkin believed the trend toward centralization of psychological services was based on practical experiences of psychologists and educators and could be attributed to five categories of factors, which he labeled (a) benefits to children, (b) needs of the educational community, (c) confidentiality of communication, (d) supervisory requirements, and (e) utilization of professional staff.

Elkin believed there were three major, direct benefits of centralized services for children. First, he argued that continuity of contact and communication between any individual child and a given psychologist who had been involved previously with the child was desirable and highly probable within a centralized service mode. In fact, a psychologist could follow a child from school entry through high school graduation if need be. Such case flexibility may allow for

quicker actions and less redundancies in services (e.g., developmental histories, parent interventions, etc.). A second benefit of centralized services results from the availability of organized and centralized record keeping systems. Such systems, according to Elkin, provide for more efficient storage and retrieval of critical information, as well as increased confidentiality of such information. A third benefit to children of centralized services may be the increased flexibility of staff utilization. Elkin elaborated upon this with an example whereby psychologists could be assigned to high need schools temporarily to alleviate problems.

The final component of Elkin's rationale for centralized services concerned issues of supervision of staff by a "qualified" chief of service and optimal staff utilization (or accountability). Many of the same examples used with the previous two features were also used as support for these final two components.

In sum, Elkin identified several major strengths of a centralized model of school psychological services. Several of these identified strengths are not, however, idiosyncratic to a centralized model of psychological services. For example, confidentiality of communications and record keeping can probably be carried out with equal effectiveness in a decentralized service system. One must be aware that other factors such as psychologist/student ratio, number of schools within a district, perceived nature of psychologists (i.e., administrator- or teacher-like), and interest in preventive mental health will also influence decisions concerning the administrative structure of school psychological services.

To date, no writer has published a parallel article to Elkin's in support of a decentralized mode of psychological services, although Phillips (1968) designed a model for psychological service which stressed a decentralized or school-based organization. Specifically, Phillips' model featured a diagnosis-intervention class and a teacher-psychological specialist. Decentralized service systems would appear to have several advantages. First, in a relatively decentralized system of psychological services, the service providers would be housed within the school or schools where they work, thus increasing the number of contacts with potential consumers. Such an arrangement would seem to be particularly helpful in establishing consultation and preventive mental health activities. Specialized service units for particular populations of students (e.g., retarded, physically handicapped, etc.) have also been an impetus for the decentralization of school psychological services. A final common reason experienced by both urban and rural school districts has been travel distance between central office and the various schools desiring service. As a result, many psychologists have elected to increase their direct service hours by relocating to field offices in the various schools they serve.

In practice, we have observed a variety of service delivery systems that have a combination of centralized and decentralized features. The majority of psychological service models probably can be characterized at different points on the centralized-decentralized continuum with respect to various service features.

Proactive-Reactive Services

School psychologists' actions should be guided by *anticipated* or perceived mental health and educational problems. Reaction to an anticipated problem is proactive, whereas reaction to an *existing* problem is characterized as reactive. In general, most school psychological activities such as assessment, consultation, and intervention are in response to identified problems (and thus reactive). These same activities can be used within a preventive framework as well. Krischenbaum's (1983) review of early behavioral intervention programs for children testifies to this point.

An analysis of psychological interventions that directly correspond with the proactive-reactive continuum of services was explicated by Cowen (1977). According to Cowen, a comprehensive system of mental health requires a three-level model of intervention. He refers to the first level as primary prevention. Basically, primary prevention refers to lowering the rate of emotional, behavioral, and learning disorders in a given population and building psychological health and resources in people. Healthy children are the main targets for primary prevention within schools, whereas secondary preventions have high-risk children or youngsters whose problems are just beginning as their targets. Early identification of and intervention with children who are just beginning to have academic and/or behavior difficulties are the major objective of secondary prevention. The final level of prevention is referred to as tertiary. Tertiary prevention services are concentrated on children and youth having "full-blown" academic or behavior problems. The fundamental goal of this third level of intervention is to remediate or repair psychologically damaged individuals so they will be able to function productively.

When moving through the levels of Cowen's prevention models, from primary prevention to secondary prevention to tertiary prevention, actions become more reactive and less proactive with regard to planning and delivering psychological services. To the chagrin of most school psychologists, a majority of services are delivered within the secondary and tertiary levels of prevention with tertiary services taking the lion's share of the psychologists' time (Benson & Hughes, 1985; Smith, 1984).

A number of school and community psychologists have championed the call for preventive mental health services within schools (Allen, Chinsky, Larcen, Lochman, & Selinger, 1976; Alpert, 1985; Clarizio, 1979a; Kirschenbaum, 1983); however, a number of factors seem to mitigate against the ready acceptance of proactive or preventive services for school children. The foremost problem is one of perception. Many educators seems to want immediate solutions to current problems and there is a perception that efforts directed toward prevention are a luxury that schools cannot afford. Also, psychologists and educators seem generally to be overwhelmed by the complexities involved in designing and establishing preventive programs. Thus, a lack of know-how coupled with a

relative paucity of prepackaged programs seems to be a significant limiting factor. Other deterrents to prevention include invasion-of-privacy and the difficulty of specifying and evaluating the goals of prevention (Clarizio, 1979b).

Rural to Urban Services

Herron and his associates (1970) emphasized the differential influence of an urban, suburban, or rural setting on the organization of school psychological services. According to these writers and to Jackson (Chapter 7 in this volume), city schools have pressing social and family difficulties, and violence in and around schools is also common. Thus, they believe family services are absolutely necessary, along with prevention programs, group therapy, and inservice training for teachers. Because of the complexity and significance of the problems encountered within urban schools, Herron et al. recommended a service structure where there was a director of pupil personnel, and all service providers (e.g., psychologists, counselors, social workers, etc.) reported to him/her.

In a suburban school, psychological services were reported to be characterized by two types of organizational structures, both of which are more decentralized than in urban schools (Herron et al., 1970). One organizational approach used psychologists on a specialized basis for such things as handling of early admissions or readiness programs. In the other type of organization, psychologists were assigned to a single school where they did everything from prevention to placement. With both of these service approaches, psychologists appeared to be housed within a separate department of psychology rather than as a section of a pupil personnel department.

Herron and his associates (1970) characterized rural school psychological services as primarily a "one-person operation" where a psychologist usually functions under the direction of a state board of education or a county agency. In actuality, a rural psychologist is not usually a part of a particular department within a school district and functions with a high degree of autonomy. Kramer and Peters in Chapter 8 of this volume provide an up-to-date examination of the major service delivery issues facing rural school psychologists.

A TAXONOMY FOR THE DELIVERY OF PSYCHOLOGICAL SERVICES

In an earlier volume (Reynolds et al., 1984), Elliott developed a taxonomy of psychological services from the work of Catterall (1970). Briefly, Catterall's taxonomy of interventions included two interactive dimensions which he referred to as *directness of approach* and *focus of approach*. Directness of approach referred to a continuum of contact, direct or indirect, between a service provider and a client. Focus of approach referred to the primary target for change, the

environment or an individual, and characterized whether the service provider was attempting change in the total environment or trying to focus on an individual in a more personal way. Schematically (see Fig. 1.3), the interaction of the directness and focus dimensions results in four types of service: indirect environmental, direction environmental, indirect personal, and direct personal. When viewed from the reciprocal determinism perspective of human behavior, direct and indirect environmental services focus on the *E* of the *PBE* triad, whereas direct and indirect personal services focus on the *P* and *B* components of the model.

Using this taxonomy of services, one can examine, from a child-as-client perspective, the directness and focus of four major psychological services generally provided by school psychologists. These four major psychological services are assessment, consultation, intervention, and research.

Assessment

Assessment is a process that is characterized by the collection of information to aid in making several possible types of decisions about an individual. School psychologists use a variety of techniques to collect information about an individual, as well as aspects of his/her environment. Typical techniques include interviewing parents, teachers, or students; reviewing student records; testing with standardized instruments and informal inventories; and observing an individual's behavior in several situations.

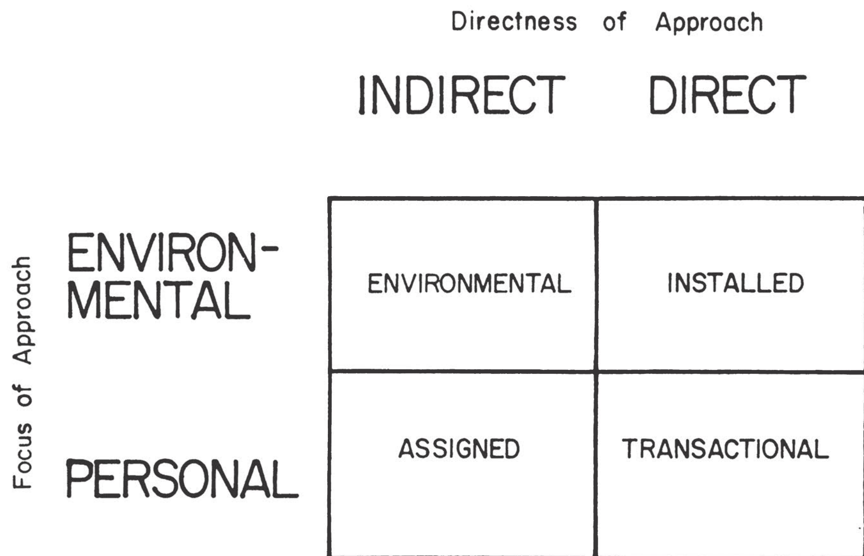

FIG. 1.3. Taxonomic dimensions of school psychological services.

Traditional assessment is considered a direct personal service because such practices are test-oriented, requiring a client to interact directly with a psychologist. Parental or teacher interviews do not directly involve the child, but rather significant others. Hence, interviewing can be considered an indirect environmental service. Similarly, the review of a child's records and classroom observations during the assessment process also would be considered indirect environmental services because such services do not directly involve the child and are focused on other persons or objects within the child's daily environment.

Assessment services characterized as direct environmental or indirect personal are used relatively infrequently. An example of a direct environmental assessment service could involve diagnostic teaching in an area proven difficult as a result of a child's test performance. An example of an indirect personal assessment service could involve a child's filling out a personality or careers inventory on his/her own and returning it to the psychologist for scoring and interpretation.

Assessment is truly a multifaceted process because it is possible to identify four categories of assessment services that differentially involve a psychologist, a child, and significant others in the child's environment. In general and in concert with current school practice, most assessment services are direct personal or indirect environmental in nature.

Some have argued convincingly (see Conoley and Gutkin, Chapter 14 in this volume) that the assessment activities of psychologists are *not* services at all. Instead, they are activities that can lead to services but they are not services per se. This point becomes more obvious if we ask simply; What benefits does a child derive from most of the assessment activities conducted by psychologists? For example, is there any inherent benefit for the child who spends over an hour responding to the WISC-R? Typically, the benefit comes to the child in the form of linking the child up with an appropriate service. Within this context, assessment serves the system and has very little direct benefit to a child.

Intervention

Interventions can be defined as strategic reactions by psychologists, educators, and/or parents to children's "inappropriate" behavior or "unsuccessful" learning. A brief review and update of Catterall's (1970) work can provide a conceptual overview of various school psychology intervention services.

Traditionally, school psychologists' interventions with children involved talk or play therapies primarily and were intended as a means by which a child could gain insights into his/her feelings and behaviors (Barbanel, 1982). Recently, most psychologists and educators have had a stronger affinity for behavioral therapies than "talk" therapies. A number of factors have contributed to such a large-scale adoption of behavioral intervention techniques. Important factors include enhanced clarity of communication and utilization of behavioral techniques in everyday classroom teaching and management.

As demonstrated by Catterall in 1970, interventions utilized by school

psychologists could be classified in all four of the basic categories of service. With the addition of a few recent interventions such as self-monitoring (an indirect personal service) and biofeedback (a direct environmental service), Catterall's taxonomy would be up-to-date. From our experience as school psychology practitioners and trainers, we believe indirect environmental and direct environmental services are used most frequently. Although with the current research interest in self-monitoring (Kazdin, 1982; Shapiro, 1984) and social skills training (Gresham, 1981), we predict increased utilization of both indirect personal and direct personal services, and when accomplished in concert with environmental intervention, such services will epitomize the reciprocal determinism model of behavior and its changes.

Consultation

Consultation is defined frequently as a process of "collaborative problem-solving between a mental health specialist (the consultant) and one or more persons (the consultees) who are responsible for providing some form of psychological assistance to another (the client)" (Medway, 1979, p. 276). To a large degree, consultative services developed in response to dissatisfaction with traditional approaches to mental health services for both children and adults (Carter, 1975; Meyers, Parsons, & Martin, 1979). Primary among the targets of dissatisfaction was the medical model approach to psychology.

To classify consultation according to our taxonomy of services, we must examine its core characteristics briefly. The major distinguishing characteristics of consultation include (a) the provision of services to children and (b) the development of a relationship between a consultant and consultee that is voluntary and collaborative in nature. Hence, from the perspective that a child is the client, consultation activities can best be classified as indirect environmental services, for they are done around the client. In comparison to assessment and intervention services, consultation is a more focused or defined service. This does not imply that it is more important, effective, or efficient. In fact, such a classification is largely the result of consultation services conceptually preceding and subsuming assessment and intervention services.

Research

Research is characterized as an empirical, fact-finding process that should inform individuals' decisions and actions. The domain of school psychology research is vast, for it can be argued that all of the behavioral sciences are an appropriate research base. Although such a view has legitimacy given the trend toward integraton of school, family, and social services, the obstacles of truly integrating such a large body of research are probably insurmountable. One way to scale down the research domain of school psychology is to allow major service functions to guide the development of research. Fry, in Chapter 11 of this volume,

discusses the connections between research and practice in educational and school psychology.

In general, research activities of school psychologists are not made explicit to children, if children are involved directly at all. Therefore, most research happens around children and to children without their prior knowledge. As a result, most school psychology research can be categorized as indirect environmental or direct environmental services.

ASSUMPTIONS AND PROCEDURES OF SCHOOL PSYCHOLOGICAL DELIVERY SYSTEMS

No single best model of school psychological services has been identified. A major reason for this is that service providers must be sensitive to the needs of consumers and aware of environmental constraints (e.g., organizational structure of services, financial ability to pay for staff and services, and legal guidelines concerning services). Because the needs of consumers and environmental constraints vary across school districts and states, school psychological service models also vary. Such variability of services does not, however, negate an analysis and discussion of the typical processes by which school psychological services are delivered. On the contrary, a common core of consultation, assessment, and intervention procedures is identifiable in most states. This is due primarily to the implementation in the mid-70s of federal legislation such as P.L. 94–142 and its corollary state mandates, which in many ways have functioned to standardize the process of providing services for handicapped children and youth.

Two delivery system models for school psychological services have been most prevalent in the literature. They are the diagnostic or assessment model (Catterall, 1972; Sabatino, 1972) and the consultation or problem-solving model (Bergan, 1977; Lambert, 1974, Meyers, Parsons, & Martin, 1979). In practice, a third, less discrete model exists that is a combination of the diagnostic and consultation models. Sandoval, in Chapter 6 of this volume, provides an integrated examination of these models, and in subsequent chapters Christenson, Abery, and Weinberg (Chapter 13) and Conoley and Gutkin (Chapter 14) effectively champion particular models for the future. Rather than advocate any one model here, we wish to focus on the development of a generic model of school psychological services that integrates components from both the assessment and the consultation models.

A Generic Model of School Psychological Service Delivery

The development of a generic model for the delivery of psychological services has much instructional value, but is certainly subject to modification upon implementation within any given school district because of numerous factors already discussed in this chapter. The generic service delivery model we espouse is

premised on six basic assumptions about work with potentially handicapped or troubled individuals. The six assumptions and brief elaborative comments about each one follow:

1. *Behavior and learning problems of children are functionally related to the setting in which they are manifest.* This assumption does not mean educational settings such as schools necessarily cause the psychoeducational problems children manifest in such settings; however, it does suggest that the relationship may be primarily causal or that behavior is triggered by a factor(s) in the school environment. Thus, it is necessary to evaluate an educational environment, as well as a particular child.

2. *A primary goal of psychoeducational assessment is to determine what a child does and does not know, and how the child learns best so successful interventions can be designed.* This assumption stems logically from the required end-product of assessment; in other words, *what* and *how* information is prerequisite to the development of a valid individual education plan. Such a supposition is consistent with a thorough consultative problem-solving and a skills-training approach to assessment.

3. *Techniques for individual diagnosis and intervention need to be supplemented with techniques for diagnosing and intervening in specific school settings and in the school as a social system.* Generally, it is not sufficient to intervene only at the level of an individual student. In order to enhance the probability of meaningful and long-term behavior change, it is necessary to intervene on a broader level.

4. *The greater the proximity in place and time of psychological services to educational settings, the greater the utilization of these services.* This assumption is based on the premise that problem-solving communications among professionals working with an individual will be enhanced if they work in the same environment. In addition, psychologists who work in and are a part of a particular ecology (e.g., a school) will be more knowledgeable of the resources and constraints of the system. In this situation, proximity does not breed contempt; rather, proximity breeds accessibility.

5. *Psychological services should be directed toward the development and utilization of resources indigenous to schools.* The essence of a consultation-oriented service system is for consultants to work indirectly with children through a consultee (i.e., teachers and parents), and thus enhance the consultee's ability to solve future problems. By focusing on indigenous resources, we increase the likelihood of designing interventions that are socially valid and that can realistically be implemented in a classroom or other settings.

6. *Psychoeducational interventions require the ongoing attention of the person(s) who implemented them because over time a child's response to a particular intervention will change.* If we had to choose one fatal flaw of education (relative to business or other fields), it is that it fails to evaluate and to periodically follow up on suggested interventions with children. Such follow-ups allow for refinement of a particular intervention and provide feedback concerning the effectiveness of previous actions.

A procedural flowchart illustrating our generic service model is displayed in Fig. 1.4. The step-by-step sequence of this service model was influenced strongly by a presentation given by Grimes and Reschly (1980). In fact, the procedural flowchart illustrating the core of our consultation-assessment-intervention service system was adapted from a similar flowchart developed by Grimes and Reschly. Persons seeking a detailed description of each procedural step in this model are referred to Reynolds et al. (1984).

This 15-step model of school psychological services for referred students should not be viewed as a rigid process. Rather, it is an attempt to organize typical services in a logical, temporal order. In addition, readers should note

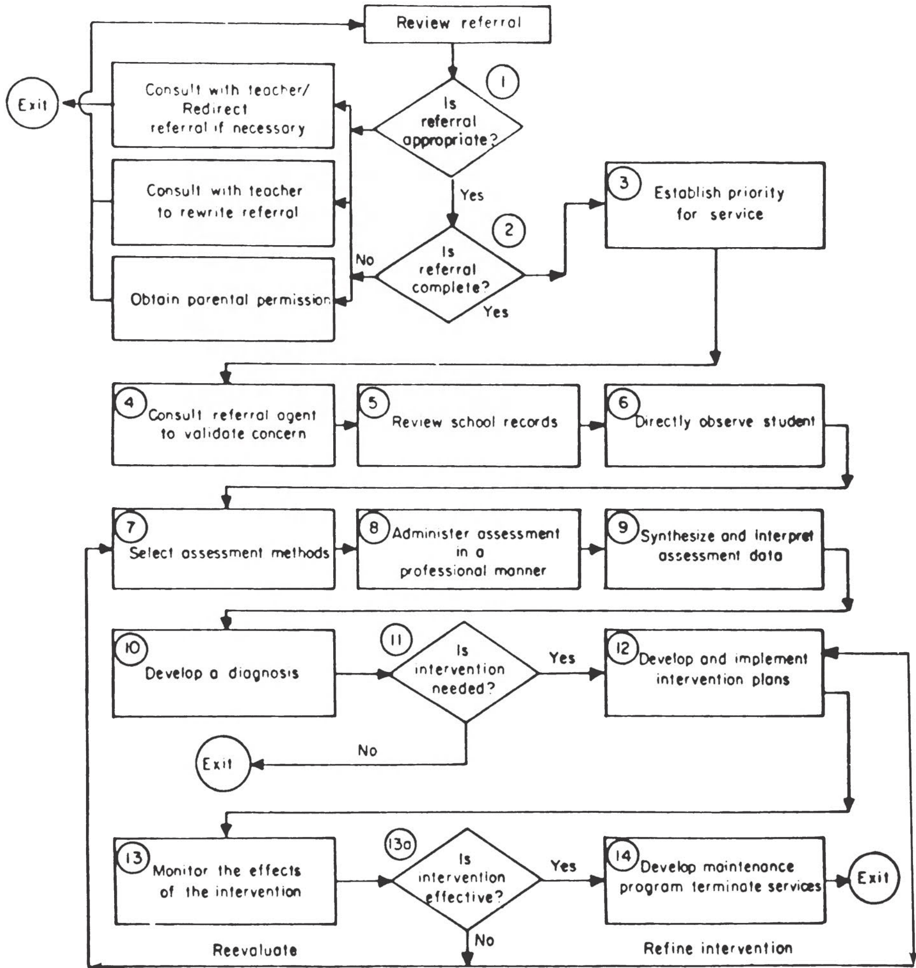

FIG. 1.4. Flowchart of consultation-assessment-intervention service system.

that feedback or refinement loops are available at each major decision point, thus allowing for redefinition of a problem, further assessment of a student, or redesigning of an intervention.

CONCLUSIONS

John Dewey (1917) has encouraged us to nourish our science in two ways and his wisdom seems as fresh and applicable today as ever. In the most typical way, knowledge advances in an additive sense whereby new information (usually data) is added to what is already known in an existing area of inquiry. A second, less common, but nonetheless important method demands qualitative rather than quantitative change in the way we think about problems and the addition of knowledge. In other words, these two alternatives can be summed up by considering the first as looking for new answers to old questions and the second as looking for ways to ask new questions. This chapter (and this book) is concerned with both of these approaches to service delivery issues within school psychology.

When a field of endeavor is really understood, it is possible for our actions to be governed by a knowledge that forces us beyond the preconception into a new or renewed awareness of the infinite possibilities. Dewey (1917) put it this way:

> A being which can use given and finished facts as signs of things to come, which can take given things as evidence of absent things, can, in that degree, forcast the future; it can form reasonable expectations. It is capable of achieving ideas; it is possessed of intelligence. For use of the given or finished to anticipate going on is precisely what is meant by 'ideas,' by 'intelligence.' (p. 21)

For school psychology, what are the possibilities? For that matter, what are the major themes which run through our profession and guide our actions? A knowledge of the latter question will help us to answer the former. A major goal of this chapter (and the book) has been to illuminate the major *process* and *conceptual* dimensions impinging on service delivery. Our intent has been to rise above the murky quagmire of day-to-day *activities* and to identify and discuss the major conceptual regularities that influence school psychology. We have done this in an attempt to see not only where we are but also where we are going. Perhaps our current efforts to "take stock" will aid future writers in the development of a plan or plans for the desired direction for the future. Without an overall plan of the desired directions for the future, development and advancement would be relegated to a haphazard status. Such a status is incompatible with the goals of science.

REFERENCES

Allen, G. J., Chinsky, J. M., Larcen, S. W., Lochman, J. E., & Selinger, H. V. (1976). *Community psychology and the schools: A behaviorally oriented multilevel preventive approach.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Alpert, J. L. (1985). Change within a profession: Change, future, prevention, and school psychology. *American Psychologist, 40,* 1125–1130.

American Psychological Association (1982). Specialty guidelines for the delivery of services by school psychologists. *American Psychologist, 36,* 670–681.

Bandura, A. (1974). Behavior theory and the models of man. *American Psychologist, 29,* 859–869.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191–215.

Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist, 33,* 344–358.

Barbanel, L. (1982). Short-term dynamic therapies with children. In C. R. Reynolds & T. B. Gutkin (Eds.), *The handbook of school psychology* (pp. 554–569). New York: Wiley.

Bardon, J. I. (Ed.). (1964–1965). Problems and issues in school psychology—1964: Proceedings of a conference on "new directions in school psychology" sponsored by the National Institute of Mental Health. *Journal of School Psychology, 3,* 1–44.

Barker, R. G. (1965). Explorations in ecological psychology. *American Psychologist, 20,* 1–14.

Barker, R. G. (1968). *Ecological psychology.* Stanford, CA: Stanford University Press.

Benson, A. J., & Hughes, J. (1985). Perceptions of role definition processes in school psychology: A national survey. *School Psychology Review, 14-1,* 64–74.

Bergan, J. R. (1977). *Behavioral consultation.* Columbus, OH: Charles E. Merrill.

Carter, B. D. (1975). School mental health consultation: A clinical social work interventive technique. *Clinical Social Work Journal, 3,* 201–210.

Catterall, C. D. (1970). Taxonomy of prescriptive interventions. *Journal of School Psychology, 8-1,* 5–12.

Catterall, C. D. (1972). Special education in transition—implications for school psychology. *Journal of School Psychology, 10,* 91–98.

Clarizio, H. F. (1979a). Primary prevention of behavioral disorders in the schools. *School Psychology Digest, 8,* 434–445.

Clarizio, H. F. (1979b). School psychologists and the mental health needs of students. In G. D. Phye & D. J. Reschly (Eds.), *School psychology: Perspectives and issues.* New York: Academic Press.

Cowen, E. L. (1977). Baby-steps toward primary prevention. *American Journal of Community Psychology, 5,* 1–22.

Cutts, N. E. (Ed.). (1955). *School psychologists at mid-century.* Washington, D.C.: American Psychological Association.

Dewey, J. (1917). *Creative intelligence: Essays in the pragmatic attitude.* New York: Henry Holt.

Elliott, S. N. (1986). Children's acceptability ratings of classroom interventions for misbehavior: Findings and methodological considerations. *Journal of School Psychology, 24,* 23–35.

Elliott, S. N., Witt, J. C., Galvin, G. A., & Moe, G. (in press). Children's suggestions and acceptability ratings of classroom interventions for misbehavior. *Professional Psychology: Research and Practice.*

Elkin, V. B. (1963). Structuring school psychological services: Internal and interdisciplinary considerations. In M. G. Gottsegen & G. B. Gottsegen (Eds.), *Professional school psychology.* New York: Grune & Stratton.

Garfield, S. L. (1983). Effectiveness of psychotherapy: The perennial controversy. *Professional Psychology, 14,* 35–43.

Gresham, F. M. (1981). Social skills training with handicapped children: A review. *Review of Educational Research, 51,* 139–176.

Gresham, F. M. (1985). The assessment of social behavior/competence in children. In P. Strain, M. Guralnick, & H. Walker (Eds.), *Children's social behavior: Development, assessment, and modification.* (pp. 143–179). New York: Academic Press.

Grimes, J., & Reschly, D. J. (1980, September). *Standards and competencies for psychological assessment, intervention, and follow-up.* Paper presented to the Nebraska School Psychologists Association, Lincoln, NE.

Gutkin, T. B., & Curtis, M. J. (1982). School-based consultation: Theory and techniques. In C. R. Reynolds and T. B. Gutkin (Eds.), *The handbook of school psychology* (pp. 796–828). New York: Wiley.

Herron, W., Green, M., Guild, M., Smith, A., & Kantor, R. (1970). *Contemporary school psychology.* Scranton, PA: International Textbook.

Hildreth, G. H. (1930). *Psychological service for school problems.* Yonkers, NY: World.

Hummel, D. L., & Humes, C. W. (1984). *Pupil services: Development, coordination, administration.* New York: Macmillan.

Hunt, J. M. (1967). Traditional personality theory in light of recent evidence. In E. P. Hollander & R. G. Hunt (Eds.), *Current perspectives in social psychology* (2nd ed., pp. 157–184). New York: Oxford University Press.

Kazdin, A. E. (1980). Acceptability of alternative treatment for deviant child behavior. *Journal of Applied Behavior Analysis, 13,* 259–273.

Kazdin, A. E. (1982). Applying behavioral principles in the schools. In C. R. Reynolds & T. B. Gutkin (Eds.), *The handbook of school psychology.* New York: Wiley.

Kirschenbaum, P. S. (1983). Toward more behavioral early intervention programs: A rationale. *Professional Psychology, 14,* 159–169.

Lambert, N. M. (1974). A school based consultation model. *Professional Psychology, 5,* 267–276.

Lambert, N. M. (1981). School psychology training for the decades ahead, on rivers, streams, and creeks—currents and tributaries to the seas. *School Psychology Review, 10,* 194–205.

Larry, P. et al. v. Wilson Riles et al. No. C 71 2270. United States District Court for the Northern District of California, San Francisco, October 1979, slip opinion.

Lewin, K. (1951). *Field theory in the social sciences.* New York: Harper & Row.

McMahon, R. J., & Forehand, R. L. (1983). Consumer satisfaction in behavioral treatment of children: Types, issues, and recommendations. *Behavior Therapy, 14,* 209–225.

Medway, F. J. (1979). How effective is school consultation: A review of recent research. *Journal of School Psychology, 17,* 275–282.

Meyers, J., Parsons, R. D., & Martin, R. (1979). *Mental health consultation in the schools.* San Francisco: Jossey-Bass.

Monroe, V. (1979). Roles and status of school psychology. In G. D. Phye & D. J. Reschly (Eds.), *School psychology: Perspectives and issues* (pp. 25–47). New York: Academic Press.

Murphy, G. (1929). *An historical introduction to modern psychology.* New York: Harcourt, Brace.

Paul, G. P. (1967). Outcome research in psychotherapy. *Journal of Consulting Psychology, 31,* 109–118.

PASE: *Parents in action on special education et al. v. Hannon et al.* No. c 74 3586. United States District Court for the Northern District of Illinois, Eastern Division, July 1980, slip opinion.

Phillips, B. N. (1968). The diagnostic-intervention class and the teacher-psychological specialist: Models for the school psychological services network? *Psychology in the Schools, 5,* 135–139.

Reger, R. (1965). *School psychology.* Springfield, IL: Charles C Thomas.

Reger, R. (1972). The medical model in special education. *Psychology in the Schools, 9,* 8–12.

Reilly, D. H. (1974). A conceptual model for school psychology. *Psychology in the Schools, 11,* 165–170.

Rettke, G. H. (1971). Psychological services: A developing model. In F. D. Holt & R. H. Kick-lighter (Eds.), *Psychological services in the schools* (pp.). Dubuque, IA: Wm. C. Brown.

Reynolds, C. R., Gutkin, T. B., Elliott, S. N., & Witt, J. C. (1984). *School psychology: Essentials of theory and practice*. New York: Wiley.

Sabatino, D. A. (1972). School psychology—special education: To acknowledge a relationship. *Journal of School Psychology, 10,* 99–105.

Shapiro, E. S. (1984). Self-monitoring. In T. H. Ollendick & M. Hersen (Eds.), *Child behavior assessment: Principles and procedures* (pp. 148–165). New York: Pergamon Press.

Skinner, B. F. (1953). *Science and human behavior.* New York: Free Press.

Smith, D. K. (1984). Practicing school psychologists: Their characteristics, activities, and populations served. *Professional Psychology: Research and Practice, 15-6,* 798–810.

Snapp, M., & Davidson, J. L. (1982). Systems intervention for school psychologists: A case study approach. In C. R. Reynolds & T. B. Gutkin (Eds.), *The handbook of school psychology* (pp. 858–870). New York: Wiley.

Stuart, R. B. (1970). *Trick or treatment: How and when psychotherapy fails.* Champaign, IL: Research Press.

Szasz, T. S. (1960). The myth of mental illness. *American Psychologist, 15,* 113–118.

Turco, T. L., & Elliott, S. N. (in press). Assessment of students' acceptability of teacher-initiated interventions for classroom behavior. *Journal of School Psychology.*

Ullman, L., & Krasner, L. (1969). *A psychological approach to abnormal behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Valett, R. E. (1965). A formula for providing psychological services. *Psychology in the Schools, 11,* 326–329.

White, M. A., & Harris, M. (1961). *The school psychologist.* New York: Harper.

Witt, J. C., Elliott, S. N., & Martens, B. K. (1984). The influence of amount of teacher time, severity of behavior problem, and type of intervention on teacher judgments of intervention acceptability. *Behavioral Disorders, 9,* 95–104.

Witt, J. C., & Martens, B. K. (1983). Assessing the acceptability of behavioral interventions. *Psychology in the Schools, 20,* 510–517.

Witt, J. C., Moe, G., Gutkin, T. B., & Andrews, L. (1984). The effect of saying the same thing in different ways: The problem of language and jargon in school-based consultation. *Journal of School Psychology, 22,* 361–367.

Witt, J. C., & Robbins, J. (1985). Acceptability of reductive interventions for the control of inappropriate child behavior. *Journal of Abnormal Child Psychology, 13,* 59–68.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11,* 203–214.

Ysseldyke, J. E., Reynolds, M. C., & Weinberg, R. A. (1984). *School psychology: A blueprint for training and practice.* Minneapolis: National School Psychology Inservice Training Network.

Ysseldyke, J. E., & Weinberg, R. (1981). Editorial comment: An introduction to the Spring Hill Symposium. *School Psychology Review, 10,* 116–120.

Zubin, J. (1967). Classification of behavior disorders. *Annual Review of Psychology, 18,* 373–406.

2 Current Practice in School Psychology

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School psychology is a relatively young profession that has expanded rapidly over the last decade. Currently, there are probably over 25,000 school psychologists. There are 211 programs at colleges and universities that offer graduate training in school psychology, that educate personnel for the practice of psychology in the schools.

My task in this chapter is to provide the reader with a description of what school psychologists actually do. When I agreed to write the chapter, I naively envisioned providing such a description as a relatively easy undertaking. Yet, I soon found that trying to describe the practice of school psychology is like trying to describe the practice of farming, law, architectual engineering, or nearly any other profession. One is faced initially with defining school psychology, and then with describing what school psychologists do. *And, there are few good accounts of what school psychologists actually do in practice.* There are formal records of the practice of law, yet few descriptions of the practice of school psychology. School psychologists simply do not do a very good job of writing about, or in other ways recording formally, what they do.

There are, of course, many (most would argue too many) *opinions about*, or accounts of *perceptions of,* the role and function of the school psychologist. In addressing issues of role and function, school psychologists have been asked for their own views of what they do (Barbanel & Hoffenberg-Rutman, 1974; Cook & Patterson, 1977; Farling & Hoedt, 1971; Giebink & Ringness, 1970; Goldwasser, Meyers, Christenson & Graden, 1983; Keogh, Kukic, Becker, McLaughlin & Kukic, 1975; Martin & Meyers, 1980; Meacham & Peckham, 1978; Ramage, 1979). Sometimes efforts have been made to understand what psychologists do by asking other professionals their perceptions of the functioning of school

psychologists. Several have reported teachers' perceptions (Ford & Migles, 1979; Gilmore & Chandy, 1973; Grubb, Petty & Flynn, 1976; Medway, 1977; Roberts, 1970). Still others have reported administrators' perceptions of the roles and functioning of school psychologists (Hughes, 1979; Kaplan, Clancy & Chrin, 1977; Lesiak & Lounsbury, 1977). Researchers who have surveyed school psychologists' perceptions of their role and function have generally concluded there is a considerable disparity between how school psychologists say they spend their time and how they say they would like to spend their time. In general, school psychologists report that they spend their time primarily in psychoeducational assessment functions, but that they would prefer to spend their time on other functions like consultation, intervention, and inservice training.

Although laws and guidelines on the practice of psychology in the schools are more specific, current practice is more diverse than ever before in the history of the profession. For that reason, it is virtually impossible to describe "typical" current practice. One must, rather, address the issue of diversity in practice and try in some way to account for it or at least describe it.

Why is there so much diversity in current practice, and what are the factors that result in such diversity? Even a cursory reading of the professional literature in school psychology will reveal a kind of overwhelming preoccupation with the extent to which, and the ways in which, external, environmental, or systems factors control the behavior of school psychologists (Bersoff, 1979; Brown, Cardon, Coulter, & Meyers, 1982; Ysseldyke, 1978; Ysseldyke & Weinberg, 1981). School psychologists have been especially quick to say that they are not in control of their own functioning and destiny. Before proceeding to an analysis of current practice, I would like to propose a model for viewing the practice of school psychology.

A MODEL FOR VIEWING THE PRACTICE OF SCHOOL PSYCHOLOGY

Efforts to understand the behavior of school psychologists are comparable to efforts to explain any human behavior. Bandura (1978) described three different models for explaining factors that influence human behavior. These are shown in Fig. 2.1. Bandura states that the most frequent model of viewing the causes of human behavior is a unidirectional model: $B = f(P,E)$. From such a view, behavior is seen as determined by one of two factors—the person or the environment. According to Bandura, such a causal model of explaining human behavior should be questioned, because "personal and environmental factors do not function as independent determinants [of behavior]; rather, they determine each other" (p. 345). Bandura proposes an alternative view, stating that "it is

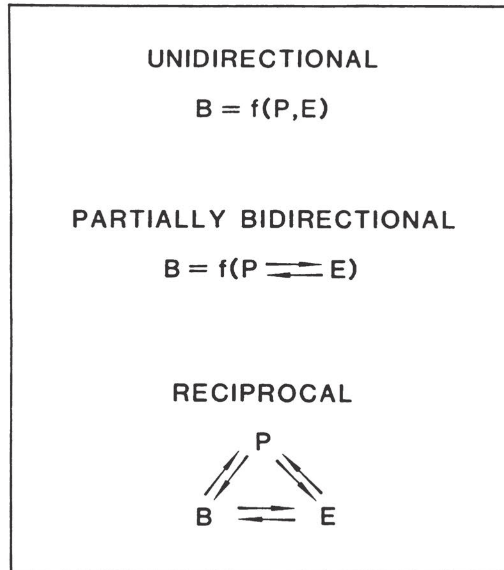

FIG. 2.1 Schematic representation of three alternative conceptions of interaction. B signifies behavior, P the cognitive and other internal events that can affect perceptions and actions, and E the external environment. From "The Self System in Reciprocal Determination" by A. Bandura, 1978, *American Psychologist, 33,* 345. Copyright 1978 by the American Psychological Association. Reprinted by permission of the author.

largely through their actions that people produce the environmental conditions that affect their behavior in a reciprocal fashion" (p. 345).

A second model of viewing the causes of human behavior is described by Bandura as a partially bi-directional model: $B = f(P,E)$. Within this model, persons, situations, and events are seen as interdependent causes of behavior. Yet, behavior itself is viewed only as a by-product of interactions between the person and the environment; it is seen as having no influence on the person, the environment, or the person's behavior.

The third model of viewing the causes of human behavior is labeled by Bandura the reciprocal determinism model: B ^{P} E. According to this model, behavior is seen as determined by a continuous reciprocal interaction between behavioral, cognitive, and environmental influences. Within this view, behavior is seen as influenced by the environment, but the environment is seen as partly a function of the person's own making.

I believe the behavior of individual school psychologists (what they do) can best be understood from the perspective of the model of reciprocal determinism. In their functioning in schools, school psychologists are not merely reactors to external stimuli or events, nor are they merely reactors to external constraints.