BEHAVIOR DISORDERS OF CHILDREN AND ADOLESCENTS

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PREFACE

The purpose of this book is to introduce undergraduate and beginning graduate students to the developmental and behavioral problems of children and adolescents and to the clinical methods for assessing and treating these problems. A primary goal has been to present an overview of the field that relates past and present trends to future directions; thus, the book contains a variety of theoretical and clinical approaches to children's psychological problems. A second goal has been to develop an understanding of the methods for obtaining information about children's developmental and behavioral problems and the problems associated with the evaluation and interpretation of this information. The final goal has been to familiarize the student with the major types of children's psychological problems and our knowledge about their assessment, etiology, and treatment.

This book is an extension of two editions of my text *Child Psychopathology* (1978, 1982); it covers a wider span of children's problems than is usually subsumed under the label "psychopathology" and therefore has been titled more accurately.

The first half of the book contains general information about assessment methods, theories and research on etiology, and approaches to treatment or intervention. The second half contains comparable specific information that has

been obtained about children with certain types of behavior problems. The student should be aware that the population of children with behavior disorders may be subdivided in a variety of ways; the diagnostic and labeling system used in this book is based primarily on the *Diagnostic and Statistical Manual of Mental Disorders,* 3rd edition (DSM-III).

Most books require an extended period of devotion by the author, and this one is no exception, having been written in parallel with the many other activities of academic life. In a larger perspective, however, an author's product is the result of a much longer history of contact with the research literature and interactions with specific individuals. I am particularly indebted to Lewis Lipsitt, Judy Rosenblith, Donald Baer, Lucie Jessner, and Harrie Chamberlin for their lasting influences as teachers and colleagues, and to my students and clients, who have continued to challenge and teach me.

I am appreciative of the typing assistance provided by the Dean's Office, College of Humanities and Sciences, and offer special thanks to Diana Rawls in the Psychology department who persuaded a word processor to help us with this manuscript. I also acknowledge with gratitude the loving support and proofreading of Robert P. Erickson and PC work on the indices by David Erickson.

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1 INTRODUCTION

The study of children's behavior disorders is largely a twentieth-century phenomenon. Before modern times children's status in society precluded the possibility of substantial concern about behavior disorders; first, because the odds against physical survival were very high and, second, because children were perceived as sources of amusement for adults and as property of relatively little value. Descriptions of children's abnormal behavior did appear sporadically in the writings of the eighteenth and nineteenth centuries, but disordered behavior was viewed as primarily reflecting some inherent evil in the afflicted person (Kanner, 1962). The role of early childhood experience in the etiology of behavior problems was not formally recognized until the advent of psychoanalytic theory. With the exception of mentally retarded children, concentrated study of children with behavior disorders did not occur until the 1930s. Many changes in society very likely contributed to the new focus on children's problems: greatly decreased mortality rates, the development of educational opportunities for all children, the introduction of psychological treatment for adult problems, the development of methods for measuring human behaviors, and the accumulation of data describing children's growth and behavior.

Knowledge of the behavioral repertoires of children at different ages

was a crucial prerequisite to the study of child psychopathology. The child development researchers of the 1920s and 1930s initiated the first large-scale studies of behavior using both longitudinal and cross-sectional approaches. The longitudinal approach involved the observation of the same children periodically throughout their development period beginning in infancy. The cross-sectional approach utilized different groups of children at each age level. Both approaches have presented a variety of advantages and disadvantages to researchers (Nunnally, 1973) but nevertheless have provided a critical foundation for judging the normality or abnormality of behavior.

Reliance on the norms of behavior has not been universally accepted by professionals who deal with children's problems. Some clinicians prefer to use personal standards for judging whether or not a behavior is abnormal, and some rely almost exclusively on the judgments of the adults complaining about the child's behavior. Lack of reference to norms, however, can result in a child's behavior being diagnosed as abnormal when it, in fact, is not significantly different from that of same-aged children.

THE CLINICAL PROFESSIONS

In modern times a number of professional disciplines have been involved in the assessment and treatment of children's behavior problems. In the early child guidance clinics three professionals, the child psychiatrist, the clinical child psychologist, and the social worker, provided the services for the child and the parents. Initially, their activities were complementary: the psychologist administered and interpreted tests, the psychiatrist interviewed the family members and later treated the child, and the social worker counseled the parents. Through the years, changes in the training programs have created an overlap in the clinical skills of these professions. Clinical psychologists, for example, are now trained to conduct the diagnostic interview as well as to administer and interpret a broad spectrum of tests; much of the psychologists' training also focuses on treatment techniques. Thus, to a large extent, the skills of clinical psychologists and psychiatrists in assessment and treatment are comparable. The principal differences between psychiatrists and clinical psychologists lie in the medical training of the former, which prepares the psychiatrist to diagnose physical problems and to use medication in treatment.

Training Programs

In this section we describe the characteristics of training programs and educational requirements for psychiatrists, clinical psychologists, and other professionals involved in the assessment and treatment of children's behavior problems.

Psychiatry. Psychiatry is one of the medical specialties; intensive training in psychiatry begins only after the student completes undergraduate and medical school programs, each of which takes about four years. In medical school the student is given a curriculum in the basic sciences and small amounts of supervised clinical experience in many of the medical specialties, including psychiatry. Intensive training in a medical specialty is called a *residency* and is usually based in the appropriate clinical department of a medical school. Many residency training programs affiliate with community facilities, such as clinics, hospitals, and institutions, and these settings are thereby also available for the training of residents.

Residency training programs in psychiatry require two years of supervised experience working with adults. Those trainees who are interested in focusing on the problems of children spend from one to three additional years gaining supervised experience with children and their parents. Departments of psychiatry typically employ clinical psychologists and social workers who also contribute to the training of residents.

The goal of the residency in psychiatry is to train the student to provide diagnostic and treatment services for a broad spectrum of behavioral problems. The goal is achieved through seminars and direct experience with a variety of patients. Supervision of the resident's activities with patients usually involves the trainee's describing the interactions during a session or playing a tape recording of portions of the session and the experienced clinician (supervisor) commenting and making suggestions about the resident-patient interactions. Occasionally, the resident may have the opportunity to observe experienced clinicians conducting interviews or providing treatment or doing both. Supervision may be conducted on a one-to-one basis, or several residents may meet weekly with a supervisor to share their training and experiences.

After a year of diagnostic and treatment experience following the residency training program, the psychiatrist becomes eligible for the written examination for certification in adult psychiatry by the American Board of Psychiatry and Neurology. This is followed by an oral examination. After successful completion of these examinations, the psychiatrist may take the examination for certification in child psychiatry. This procedure is in addition to the examination required by state medical licensing boards, which permit physicians to practice medicine.

A small number of psychiatrists supplement their therapeutic skills by enrolling in a psychoanalytic institute. Completion of the course of study, which is usually pursued part time over a number of years, allows the therapist to be called a *psychoanalyst.* The training includes seminars, the psychoanalysis of several patients under the supervision of an experienced psychoanalyst, and a personal psychoanalysis. A few psychoanalytic institutes accept candidates who do not have medical training. A person without an M.D. degree who has completed training in psychoanalysis is called a *lay analyst;* a prominent lay analyst working with children was the late Anna Freud, the daughter of Sigmund

Freud, who directed the Hampstead Clinic in London, a major training center for lay analysis.

Clinical Psychology Clinical psychologists are trained in university departments of psychology and receive the Ph.D. degree upon completion of the program, which usually takes about five years. During this time the graduate student takes courses in the theoretical and applied aspects of psychological principles and receives supervised experience in assessment and treatment. Most of the clinical psychology training programs prepare students both to do research and to provide clinical services.[1] Research training is considered to be necessary for several reasons: (1) to provide the clinician with the skills to evaluate the research literature, (2) to emphasize the importance of research in the advancement of the field, and (3) to encourage and provide the background for conducting research on clinical problems. A large number of Ph.D. clinical psychologists are employed in settings (community clinics, institutions, private practice) involving the delivery of assessment and treatment services to clients. Other clinical psychologists join the faculties of university psychology departments, where they teach courses, supervise students' clinical work, and conduct research.

As in psychiatry, the training programs in clinical psychology emphasize clinical work with adults and vary greatly in their training resources for students who plan to work with children and their parents. Only a few programs specialize in the training of clinical child psychologists or have close relationships with child development programs whereby the student can acquire a comprehensive understanding of children. Efforts are currently in progress to establish guidelines for the training of professional psychologists who deliver services to children (Roberts, Erickson, & Tuma, 1985). Such guidelines are very important to ensure the public that professional child psychologists are at least minimally qualified to provide clinical services to children.

Doctoral training programs in clinical psychology may be accredited by the American Psychological Association (APA). APA accreditation indicates that the training programs meet certain requirements. In 1985, 142 doctoral training programs held APA accreditation. During the period of graduate study, one year is devoted to a clinical internship; APA accreditation is also available to facilities (that is, psychiatry departments, clinics, and institutions) offering internship training.

Doctoral level clinical psychologists are not the only professional psychologists offering clinical services. Counseling and school psychologists, whose training programs (also eligible for APA accreditation) may be in either departments of psychology or schools of education, also provide assessment and therapeutic services. In addition, a large number of master's degree level profession-

[1] Several training programs offer a Doctor of Psychology degree instead of the traditional Ph.D.; these programs emphasize the practitioner role and deemphasize training in research.

als in clinical, school, and counseling psychology are employed by agencies, clinics, and schools. The APA does not grant full membership to master's level psychologists or accredit master's degree programs.

Other Professions. In addition to psychology and psychiatry, members of other professional disciplines provide services for children with behavior problems. Social workers, for example, have a long history of helping parents to cope with children's problems. The master's degree in social work is the principal academic degree and is awarded after two years of course work and supervised clinical experience. A few universities offer the Ph.D. in social work, but the recipients of the doctoral degree usually go into teaching, research, and administrative positions.

Other specialists in medicine (pediatricians, neurologists, and general practitioners, for example) are often called upon to evaluate and recommend treatment for children with behavior disorders. Physicians are trained primarily in the physical aspects of children's problems but are also expected by parents to provide advice on a wide variety of behavior problems. Medical school and residency training programs vary greatly in the emphasis placed on normal and abnormal child behaviors, and many physicians must rely heavily on their own clinical experience with children to provide advice to parents on behavioral problems.

Most of the remaining professions providing services for children with developmental and learning problems require at least master's degree level training. Other professionals currently involved in some aspect of assessment or treatment, or both, of children's behavior disorders include special educators, physical therapists, occupational therapists, nursing specialists, nutritionists, speech pathologists, and rehabilitation counselors.

RESEARCH APPROACHES TO UNDERSTANDING CHILDREN'S BEHAVIOR PROBLEMS

It is generally agreed that the goal of behavioral science is to acquire knowledge that would enable us to predict and control behavior. In the specific case of children's behavior disorders the ultimate goals are to develop effective treatment procedures and to prevent problems through a complete understanding of the factors that cause these problems. As you will learn in the remaining chapters of this book, our knowledge falls far short of these goals, although significant progress in some areas has been made.

The quality of scientific knowledge depends on both the creativity of the investigator and the research strategy employed in the collection of data. The creative component of this equation is not well understood but basically consists of ideas or hypotheses about relationships among variables. The sources of these hypotheses may be determined by previously acquired knowledge in one area or

in more than one related area of study and direct observation of phenomena. The highest level of scientific creativity is reflected by theory that states general principles about relationships among variables and provides testable hypotheses. While relatively few scientific investigators have created theories, most of them work within a theoretical system and design their research to test specific hypotheses. Creativity often is also a significant component in research methodology (for example, in choosing measuring instruments, apparatus, and specific procedures). It is through the continuous interweaving of creativity and research strategy that new knowledge is acquired.

Our understanding of children's behavior disorders has come from a variety of sources ranging from descriptive studies to experimental research. Each of the research strategies has made unique contributions to our knowledge, but each also has certain disadvantages or problems associated with it. The history of psychology suggests, in addition, that the various research strategies are mutually dependent and that no single one could provide all of the necessary information.

Descriptive Studies

Fundamental to the acquisition of scientific knowledge is description of the phenomenon of interest. Descriptions of behavior, normal and abnormal, may take many forms. For example, the earliest sources of information about the developmental progression of young children may be found in the "baby biographies," which are narrative descriptions of individual children's behaviors, in most instances recorded by their psychologist-parents (Kessen, Haith, & Salapatek, 1970, pp. 299ff). Biographical accounts of behavior offer a richness of description not attained by other methods of study and have provided a fund of information for investigators who have subsequently applied more systematic research methods in the collection of data. For instance, the early baby biographies depicted the regularity and timing of developmental changes and most probably contributed to later studies on the development of large groups of children. The biographical approach, however, does present serious problems for the researcher seeking general principles of behavior. The reliability of the biography is questionable in that the parent-biographers might have biases that distort the data. Moreover, the biographers vary their organization of the data and attention given to specific behaviors and, in that way, preclude any direct comparisons among the biographies. These particular problems have been solved to a large extent by the development of standardized procedures in the collection of behavioral data.

The studies that have provided us with normative data on the developing child (behavioral abilities of children of different ages) have used several variations of the descriptive approach, including narrative accounts by parents during interviews, description based on observed behavior, ratings of behavior by parents, teachers, and researchers, and scores on specific tasks or tests. Statis-

tical analysis of narrative descriptions requires the intervening step of someone rating the written description on a psychological dimension, such as aggression.

In order for investigators to make statements with reference to groups of children and to compare individual children to other children of the same age, all data have to be classified or quantified (reduced to numbers), or both. A variety of methods, therefore, have been developed for translating narrative description into numerical description. At the simplest level, a child might be scored on whether a particular behavior is present or absent. Since observers do not necessarily agree on the definitions of specific behaviors or concepts encompassing multiple behaviors, investigators began to use *operational definitions,* which are exact descriptions of the behavior or characteristic being assessed. Operational definitions of behavior are exemplified in tests in which each item or task is administered in a predetermined manner and the criteria for passing or failing are clearly designated in the test manual. Operational definitions ensure that each child is being rated or scored on the basis of the same criteria, thus making it possible to discuss average or typical levels of response.

Describing the performance of groups of children usually involves two statistical measures, a measure of central tendency, which represents all of the scores in the group, and a measure of variability within a set of scores. The most frequently used measure of central tendency is the mean, the arithmetic average of the scores. Among the available measures of variability, the standard deviation is most often reported in psychological research studies. The standard deviation is particularly useful because it provides an objective method for determining whether an individual score is unusually high or low by showing how far it is from the mean.

In general, descriptive studies have focused on the assessment and comparison of behaviors as a function of the child's age, sex, or socioeconomic level. These demographic variables, of course, cannot be designated as having caused differences in behavior and are better conceptualized as correlates of behavior differences. Behavioral differences between males and females, for example, are as likely to be a product of differences in child-rearing patterns as the direct result of genetic and biological differences.

While descriptive studies of behavior rarely provide direct evidence of cause-effect relationships, they have been invaluable for providing hypotheses and theories regarding factors that cause differences in behavior. In many ways, the clinical assessment of a child with behavior problems parallels descriptive research. The clinician accumulates a large amount of information about the child and subsequently forms hypotheses about the factors that may be responsible for the problems. The clinician has no way of knowing with certainty what the critical factors have been and, therefore, relies on a combination of previous clinical experience, knowledge of the research literature, and descriptive information about the child to derive hypotheses about the nature of the problem and the treatment methods that might be effective.

Correlational Studies

Correlational studies represent a second approach to the understanding of behavior. In comparison with descriptive studies, in which behavior is simply described or presented as a function of demographic variables, correlational studies measure the extent to which two or more variables may predict one another. In the typical correlational study, data on at least two characteristics or variables are collected from or about each individual within a group. Examples might be test scores on two types of tests, parents' attitudes on child rearing and on children's social behavior, or ratings of problems during pregnancy and child behavior ratings at three years of age. The sets of scores are subjected to statistical analysis, which summarizes the relationship of these scores in a correlation coefficient that may range from +1.0 through 0 to −1.0. A +1.0 correlation indicates a perfect positive relationship between the two sets of scores—a high score on one variable is invariably related to a high score on the other variable. A −1.0 correlation indicates a perfect negative relationship between the two sets of scores—a high score on one variable is invariably related to a low score on the other variable. In both of these instances knowledge of a person's score on one variable permits optimal prediction of that person's score on the second variable. A correlation coefficient of zero indicates that there is no relationship between the variables. In practice, it is rare to find either perfect positive or negative correlations between psychological variables. Rather, the majority of correlational studies reports values that are less than perfect but different from zero. The size of the correlation is evaluated in terms of the probability that it could have been obtained by chance. The statistical significance of a correlation is substantially influenced by the number of subjects from whom the data were obtained; that is, relatively low correlations (closer to zero) may reach statistical significance when large groups (several hundred or more) are involved in the study.

Unfortunately, correlational studies frequently lend themselves to misinterpretation. The greatest misinterpretation is that a high correlational relationship necessarily implies a cause-effect relationship between the variables. It is important to remember that correlational studies only reflect the extent to which two variables are related; they *may* indeed be causally related, but there is always the possibility that a third (unmeasured) variable is causing the changes in the two measured variables. In many psychological studies, no decision with respect to these alternatives can be made without further investigation.

Correlational studies have provided us with a substantial amount of our knowledge about children's behavior disorders. They have been particularly valuable in providing hypotheses regarding the variables that may be implicated in the etiology of behavior problems. In addition, correlational research provides the foundation for many of our assessment methods. For example, the reliability of psychological tests may be measured by correlating the scores obtained on the first administration of a test with scores obtained on a second administration (test-retest reliability) or correlating scores on one half of a test

with scores on the second half of the test (split-half reliability). Since tests must be reliable to be useful, high correlations (0.8 to 0.9) are required for a test to be considered reliable. Another example of the use of correlation in evaluating assessment methods is the determination of the amount of agreement between ratings of behavior by two observers. Just as in the case of psychological tests, behavioral ratings must be demonstrated to be reliable by high correlations, that is, the independent ratings of two or more observers must be in agreement before that method of assessing the behavior is considered to be reliable.

Experimental Studies

Experimental studies also examine the relationships among variables, but they possess the asset of giving us better information about cause-effect relationships. In the simplest case, an experimental study evaluates the relationship between an independent variable and a dependent variable. The *independent* variable is usually some aspect of the stimulus environment (for example, type of treatment) which the researcher varies or manipulates and includes two or more levels of the experimental conditions. Subjects are randomly assigned to the different levels of the independent variable. The random assignment of subjects to the levels of the experimental condition essentially counterbalances the individual differences among the subjects due to biological factors and prior history. That is, random assignment tends to make the groups more similar or comparable to one another at the beginning of the study. After the subjects have experienced their respective levels of the experimental condition, the researcher obtains data on the *dependent* variable, a measure of the subjects' response or behavior.

Let us consider an example in which a researcher wishes to evaluate the effect of two forms of treatment on children with a specific type of behavior disorder. In this example, the researcher would probably include what is called a *control group,* that is, a group that did not receive either of the two forms of treatment. The independent variable, then, would be type of treatment and would be applied to three groups of children: two groups receiving different forms of treatment and one control group. Individual children with the behavior disorder would be randomly assigned to one of the three groups. After the treatment phase had been completed, the same behavioral measure of the independent variable would be obtained for each child in each group. The dependent variable in this case could be a direct evaluation of behavior through observation or ratings of the child's behavior by parents or teachers. The scores or ratings for the children within each group would be combined and described in terms of means and standard deviations. Statistical analysis of these data would determine the extent to which any differences among the groups were due to chance or random variability. In psychological research, differences among groups that might occur by chance five or fewer times out of one hundred are considered to be statistically significant. That is, when the probability is very low