

Preface

Individuals are evaluated on many dimensions, including emotional development, social skills, educational achievements, and language skills. Within behavioral psychology, the branch of psychology that forms the foundation of this teaching manual, such dimensions are referred to as *behaviors*. Behavioral psychology thus assesses such observable aggregates as intellectual behaviors, emotional behaviors, social behaviors, educational behaviors, language behaviors, aggressive behaviors, occupational behaviors, and self-help behaviors.

Insofar as behaviors can be observed, they can also be separated and objectively measured. This factor is essential for assessing whether a client improves, stands still, or regresses. It will become apparent just how complex and rich the subject matter of behavior is when one attempts to teach or alter behaviors as described in this manual. Any one of the behaviors mentioned, such as language, may be broken down into a large number of separate behaviors, yielding more precise measurements and requiring different kinds of treatments. To the extent that we can accurately and objectively measure behaviors, we can use scientific methods to solve the problems of persons in need of help. Without scientific methodology, significant help may not be rendered.

It is generally recognized that human behavior is a product of biological makeup as well as exposure to a particular environment during development. No two persons' nervous systems are exactly alike, but each possesses enormous complexity. Likewise, no two persons' environments are exactly alike, although they are equally complex. Considering such intricate involvement, there is ample opportunity for behavioral development to go astray.

Almost all parents concern themselves with helping their children develop into happy and constructive adults. Even before a child is born, parents often wonder about genetic makeup. They may worry about whether there are familial instances of mental retardation, schizophrenia, or alcoholism that may be potentially problematic for the unborn child. During pregnancy, one may become concerned about maintaining a proper diet and avoiding stress, secondhand smoke, alcohol, vaccinations, and medications that may have deleterious effects upon the fetus. After the child is born, one may be concerned as to whether the child started to breathe

soon enough after birth and received an adequate supply of oxygen.

The first few days after birth provide abundant opportunities for continued apprehension: Is the baby receiving adequate milk? Is it held correctly? Does the baby sleep too much or too little? Are defecation and urination on schedule? There are also fevers, colds, the flu, and bladder infections to be concerned about. When the child finally goes off to preschool, parents may wonder whether the teacher cares for their child or favors other children instead. What are the other children like? Is the teacher affectionate and warm or strict and angry?

Even if all goes well during the early years, the child in all probability changes upon entering middle school. Suddenly, Mom and Dad are accused of doing everything wrong: They don't look right, Mom's hair is weird, Dad dresses strangely, Mom can no longer cook or drive a car. When driven to school, the child may demand, "Don't get out when you let me off," in fear that the parent will be seen by classmates. During these years, parents often wonder what they have done to make their child become so alienated. Years of concern about drugs, violence, and teenage pregnancies are on the horizon. If the child survives all of these issues, parents may still show concern regarding whom their child marries and how their grandchildren are raised.

Most parents accept and learn to live with some less than optimal behavioral development. For example, one may become the parent of a youngster who fails to finish high school or a child who seems emotionally aloof and does not reciprocate the amount of affection parents feel they deserve. One may also parent a child who is very angry and rejects society or who becomes addicted to drugs and goes to jail. It is possible for a person to exhibit two or three behavioral deviations and still function adequately, contributing to the variability of human behavior within society.

Once in a while a child is born who fails to develop eye contact, who behaves as if he or she cannot see or hear, who resists being held and cuddled, and who does not seem to miss family members when they leave. Such behaviors may be noticeable within the first year of life. In the second year of life, the child may fail to talk or understand what parents say. The child is unlikely to play with

toys as other children do and may seem completely oblivious to the company of others, spending his or her days in meaningless and repetitive motions such as rocking, gazing at lights, tapping objects, and pacing back and forth across the floor. The child may also develop excessive tantrums and severe self-injurious behaviors, fail to learn to sleep through the night, fail to learn to dress himself or herself, and fail to become toilet trained, remaining in diapers into adulthood. Some children develop normally up to the age of 18 to 24 months, only to suddenly lose all language and social behaviors within a period of 2 to 3 weeks for reasons no one as of yet understands.

Imagine yourself as a person whose child begins to show most or all of these difficulties. You may hope the child will “grow out of it,” but after a year or two the problems intensify, and you finally turn to a professional for help. You may be told to continue to wait, to allow the child to outgrow the behaviors. After more time passes, and after many blind leads, new opinions are offered and a diagnosis is finally provided.

Depending on the number and type of behavioral delays displayed, the child may receive one (or sometimes more) of several different diagnoses, such as pervasive developmental disorder (PDD) autistic disorder, PDD not otherwise specified (PDD-NOS), Asperger’s syndrome, mental retardation, and so on. Estimates of the frequency of autism have risen in recent years; reports place the prevalence as high as 1 in 500 births. The prevalence of PDD and Asperger’s syndrome is higher still. Then comes the prognosis: Little or nothing can be done about the problem; only 5 out of every 100 children diagnosed with autism will be able to live outside of institutions or without custodial care.

Frequently, parents are advised to go home and try to live with their child while seeking help from school districts and professionals. Although there are exceptions, most parents face major battles, starting with the Individualized Education Program (IEP). It is usually not the teachers who provide the obstacles, but rather personnel in the school administration department where funding is a central issue. Parents soon discover that seeking effective treatment is a stress that adds to the weight of living with a child with autism. The full extent of the burden on parents is difficult for an outsider to grasp; the pattern of hopes and losses that occurs time and time again seems unique to parents of children with special needs. Many parents end up facing divorce, the stress being too disruptive on the marriage.

In all this darkness, there are some signs of hope. One centers on the reduction of certain misunderstandings about the cause of autism. In the past, some professionals implied that the child’s parents caused the autism. The

number of proposed causes was limitless because professionals found it easy to be inventive, considering their ignorance of the etiology of behavioral delays. These delays already tend to be amplified by the parents’ guilt and anxiety over the possibility of having contributed to the problem (a characteristic of most parents regardless of the child’s problem). A professional may have proposed that the trip to Paris taken when the child was 2 years old caused a traumatic separation from the security of the home environment, hence the autism. Or, after the parents admitted to anxiety about not being “good enough,” the parents’ compulsive need to be perfect may have been proposed as the cause of the problem. Other possibilities include claiming that the mother’s returning to work too soon after the child’s birth prevented “bonding” from taking place, or that the birth of another child too soon after the birth of the first child caused the behavior problems. Through this misattributed blame, it was not uncommon for a professional to imply that the child wanted to have nothing to do with his or her parents and therefore withdrew into an “autistic shell.” In one such case, a parent who asked for professional advice about how to help prevent her child from poking himself around the eyes received the destructive answer, “He pokes his eyes because he does not want to see you.” The professional then considered it necessary to isolate the parent from the child’s treatment. It is difficult to understand how anyone, especially a professional, could make such heartless, unfounded remarks, adding to parents’ already high levels of anxiety and depression. However, one can take some comfort in understanding that, as knowledge of a problem increases, a concomitant decrease is shown in misunderstandings and arbitrary opinions about causes and treatments.

The second major source of relief comes from parent organizations, which have multiplied and grown in size over the last 40 years. Aided by Internet communication and increased access, parents can now keep abreast of developments in effective treatments and help advise one another on where to turn and what to do in specific situations (see Chapter 36). Parents are becoming increasingly involved in and knowledgeable about their children’s treatment and, in many cases, are the primary providers of services (see Chapters 37 and 38 for information on helping to secure funding for treatment).

There are other sources of help as well, such as religious institutions, to which parents may turn in times of stress. As a case in point, after enrolling his daughter Ellen in treatment for several years and observing very little progress (Ellen remained mute and noncommunicative), the father told me, “I know I will talk with Ellen in heaven.” This is the sort of comfort persons who develop and provide treatment need in order to continue working.

This teaching manual should assist parents acting as treatment providers. There are other resources as well, referred to throughout this manual and in the reference section at the end of the manual. Our first teaching manual (subtitled *The ME Book*; Lovaas, 1981) was based on programs developed some 30 to 40 years ago. Since that time, several new teaching programs have been developed and older ones have been discarded or revised. This manual reflects those changes and includes extensive and detailed descriptions of how to teach each program. Because of this detail, parents and teachers are in a better position to provide more effective help. The combination of increased detail and new programs requires the publication of two manuals: one for basic programs (described in the present manual) and another for advanced programs (described in an upcoming manual). The programs are cumulative in the sense that the advanced programs build on the basic programs. This necessitates that both the adult (parent, other family member, teacher, or aide) and the individual with developmental delays (who is a student once treatment begins) work through the beginning programs before starting on the more advanced programs.

The development and analysis of many new behavioral treatment programs over the last 30 years have led to three major advances. First, the outcome has been found to be particularly favorable when intensive one-on-one behavioral treatment is started early in a student's development. Second, it has been possible to identify subgroups of students in terms of who gains the most and the least from the present programs, allowing for development and testing of new programs for those who do not receive optimal benefits. Factors relating to this issue are discussed throughout this manual. Third, advances in the teaching of socially appropriate forms of communication are associated with concomitant reductions in self-injurious and other destructive behaviors in the majority of students. Because of this concomitant reduction, the use of aversive interventions to reduce destructive behaviors may no longer be necessary.

This teaching manual places a major emphasis on describing treatment programs confirmed effective based on methods of scientific inquiry. The final goal of scientific inquiry is to make the treatment procedures and data on treatment outcome believable and replicable to the scientific community and to parents, teachers, and others who want to apply them. This in turn means that one's investigative efforts are subject to review, commonly referred to as peer review, by other scientists so as to establish the validity of these efforts. The validity and efficacy of behavioral treatment is based on thousands of scientifically sound studies of learning processes investigated for over 100 years and published in journals with competent

peer review by a large number of researchers from across this country and abroad.

The knowledge of effective treatment has been built cumulatively, which is an ideal manner in which to proceed. Because such research is an ongoing process, this manual may be best viewed as preliminary; it will be improved upon when future research so dictates. Much more has to be investigated and learned for us to become truly successful teachers so as to help all individuals with developmental delays become functioning members of society.

We owe a great deal to the scientists working within the areas of Learning and Behavior and Applied Behavior Analysis who have contributed to the discovery of the learning mechanisms that form the empirical foundation for the programs presented in this manual. We are also indebted to the large number of students who have joined in the search for solutions to the many difficulties facing individuals with developmental delays. To illustrate, at any one time over the past 40 years, between 30 and 50 students from the University of California, Los Angeles (UCLA), have been enrolled in practicum courses lasting 6 to 12 months, searching for creative ways to apply learning principles to the domain of helping children with developmental delays grow emotionally, academically, and socially. Between 10 and 20 graduate students as well as full-time staff members have stayed on the project for several years and helped to generate scientific studies and supervise the treatment program. These are young people who have yet to develop strong biases against any one approach. Not only are they flexible and open-minded, they are also mature and creative. Most have worked several hours above and beyond what is required to meet course requirements or job descriptions. Through such dedication and with the support from the National Institute of Mental Health, a network of some 14 clinical sites has been established over this country and abroad, attempting to replicate, improve upon, and develop new and more effective teaching programs. How could one fail to make progress under such conditions?

We have also been fortunate to work with parents of children with developmental delays and learn of the love they have for their children, their courage, and the patience and intelligence with which they confront their problems and help search for solutions. These parents' behaviors collectively serve as a model for all persons who are parents and for those who will become parents in the future. We hope that society will reciprocate their contributions in recognition of the guidance they have offered society.

We apologize to parents for the complexity of the programs that many of them will have to learn about and supervise, as well as for the delay among professionals in

helping develop and adopt effective treatment programs (see Chapter 32). It may comfort both parents and others who work with individuals with developmental delays to see themselves from a historical perspective. Doing so may help reduce some of the stress involved in feeling as though not enough is being done.

The first detailed and documented intervention designed to aid children with developmental delays was presented 200 years ago by a young French physician, Jean M. G. Itard. Itard worked with a mentally retarded boy, Victor, who had many of the behavioral delays shown by children who would now be diagnosed with autism. Itard, who worked shortly after the French Revolution, had as his goal not only the rehabilitation of Victor, but also the presentation of educational programs designed to raise the social competence of all citizens, enabling them to participate more meaningfully in democracy. It may be interesting to review Lane's (1976) brilliant critique of Itard's work and the context in which it appeared, as many programs in Itard's work with Victor bear striking similarity to those presented in this manual.

Itard's work was carried forth in the context of special education by persons such as Fernald, Kephart, and Montessori (Ball, 1971). Sadly, the only one of Itard's many programs that survived is sensory motor training, a program that has yet to demonstrate effectiveness. A most likely reason for this is that Itard did not know how to take data and gain objective scientific knowledge about which parts of his interventions worked and should be kept, and which parts did not work and should be abandoned.

When service providers in the fields of special education, clinical psychology, and psychiatry fail to document the effectiveness of their interventions, they have, like Itard, not been able to discard some programs while keeping others. Objectivity is replaced by subjectivity, and programs that seem good and appear to be helpful are often preferred. We have also been steered into blind alleys by grand and seductive theories of human behavior; the 20th century largely belonged to theoreticians such as Kraepelin, Freud, and Piaget. As a result, there appears to be more than a 20-year delay in the application of what is known about effective treatment for individuals with developmental delays to professions such as special education, psychiatry, and psychology. We are optimistic that those who offer help to individuals with developmental delays in the future will turn to science to help relieve

parents of the uncertainties and heavy burdens they now carry from helping their children gain access to the most appropriate treatment.

In this context, we would like to express our thanks to Bernard Rimland, a father of a child with autism and a psychologist himself. Dr. Rimland was one of the first psychologists to address the importance of evaluating the treatment of autism by scientific criteria. In so doing, he helped lay to rest psychodynamic theories in the treatment of autism and became a spokesperson for behavioral and other data-based interventions. Maurice (1993) and Johnson and Crowder (1994) have presented detailed accounts of how parents can help evaluate treatments and take responsibility for their children's treatment.

We would also like to express our thanks to Lois Howard for putting up with the constant changing and rewriting of programs, creating a stack of typewritten drafts over 7 feet tall. Lois Howard faced it all with high spirits. Kristin O'Hanlon and Marie Bragais contributed to making the text better organized and more readable, working evenings and weekends to accomplish this task.

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