1.5 Screening for Learning Disabilities

Superintendent Brown was less than pleased. "We don't need to find any more learning disabled students!" The school board had just informed her of its decision to go ahead with a screening program for learning disabilities. "Our learning disabilities programs are already full!" she continued. "We can't afford any more special programs. Why look for more problems?"

One answer to the question, "Why search for learning disabilities?" may be that the law requires it. In the United States, for instance, legislative pressure for massive screening programs built rapidly in the 1960s and 1970s. The Social Security Act was amended in 1967 to require states to provide early and periodic screening, diagnosis, and treatment to all Medicaid-eligible children. Congressional action during the decade that followed continued to push for screening of special groups of children. The Education for All Handicapped Children Act of 1975 (Public Law 94-142) called for educational and related services from preschool through age 21; and the 1983 and 1986 Education of the Handicapped Amendments Acts (P.L. 98-199 and P.L. 99-457) placed primary emphasis on expanding and improving services to infants and preschoolers.

Some states have pursued massive child-find programs, and in the coming years, most states will consider such activity. In other countries, there has been rapidly escalating interest in such screening (Frankenburg, Emde, & Sullivan, 1985).

The desire to help children with special needs, reinforced by legislative mandate, already has made screening a large-scale and controversial enterprise. In the early 1980s, a national survey by the Minnesota Department of Education found 24 states had some form of comprehensive screening aimed at finding young children with problems. Available data indicate that specific practices vary greatly in their nature and quality, both across and within states (Gracey, Azzara, & Reinherz, 1984). Although well intentioned, it appears that the rush to establish screening programs has resulted in a climate where consumers and suppliers are less critical than they should be in evaluating the validity of procedures. This is unfortunate, because large-scale screening programs are costly and there are always a significant number of errors and other negative consequences.

Underlying the legal push for screening is a desire to meet the special needs of all individuals with problems, regardless of age (Page & Barnett, 1990). Obviously, there are very good reasons for seeking out problems. Identifying problems is essential for some forms of prevention and correction, and in such instances, screening can be seen as an ethical responsibility (Adelman & Taylor, 1984).

There are, however, also good reasons to be concerned about the effects of searching and the accuracy of findings. This is especially true of large-scale screening programs. Besides errors, such programs often are not followed up with needed services after problems are identified. Moreover, searching and finding individuals with problems shapes the nature of corrective intervention. With the focus on individuals, the tendency is to ignore interventions to change factors in the learning environment that may be creating individuals' problems.

**Terminology**

Before proceeding, let's get our terms straight. Because the main emphasis has been on finding children and helping them before they have too much failure at school, screening is referred to as *early identification*, *early detection*, *early warning*, and even *prediction*. Such screening is directed at individuals with existing problems or those described as *high risk* or *at risk* for acquiring problems.

It is useful to differentiate the process of *predicting* who may eventually become a problem (high- or at-risk individuals) from the process of *identifying* existing problems. As the word *prediction* implies, the process of labeling a condition as high risk is a future judgment—an act of prophecy. Based on assessment of antecedent variables, future problems are hypothesized. In contrast, identification is the
process by which current conditions are assessed to detect existing problems. Addition of the adjective “early” to form the term early identification, although appealing and widely used, can be confusing. In effect, the term tends to be used both for identification of problems at an early age and identification of problems after their onset. And, often, it is used erroneously as a synonym for “prediction.”

It also is important to differentiate between screening and diagnosis. Screening procedures usually are intended to survey large groups as a first stage in problem detection. These procedures are expected to have lower reliability and validity than those used for diagnostic classification or for generating a specific prescription. Indeed, the validity of most first-level screens is so low that they are expected to make a relatively large number of errors. At best, such screening is meant to provide a preliminary indication that something may be wrong. When diagnostic classification and specific prescriptions are desirable, assessment procedures of greater validity are required. Despite frequent warnings about the danger of blurring the distinction between screening and diagnosis, it is common for screening instruments to be misused.

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**Child-Find Procedures**

Essentially, individuals are identified in at least one of four ways as potential learning problems or having learning disabilities. First, they may see themselves as having a problem. Second, informal observations made at home, school, or work may lead family, friends, teachers, or colleagues to suggest there is a problem. Third, formal assessment as part of regular checkups or treatment for other problems may result in a professional, for example an M.D., noting the possibility of learning disabilities. Fourth, large numbers of children may be screened as part of formal child-find programs. In all four instances, the individual may be referred to a diagnostician if a formal diagnosis is seen as necessary (see Feature 1). In the final case, sound practice calls for a follow-up individual assessment to detect errors; unfortunately, sometimes this step is ignored.

Our main focus here is on child-find programs because they are probably the most ambitious of all efforts to identify learning disabilities. We use the United States as an example because of legislation mandating development of such programs. Minimally, by law, children already in school are to be identified; when feasible, efforts are to be made to find those about to enter school.

Besides funding, one of the biggest problems in developing appropriate child-find programs for learning disabilities is deciding on the characteristics of the individuals to be found. Development of criteria for use in diagnosing learning disabilities has been discussed in Part I. As indicated, federal guidelines specify minimal criteria related to a severe discrepancy between achievement and intellectual ability in various areas of academic performance. States and local school districts may add other criteria if they wish.

Besides specifying criteria, federal guidelines spell out procedures to be followed in applying the criteria and arriving at a diagnosis. The process involves a multidisciplinary team that minimally includes the student’s regular teacher (or a qualified substitute), a qualified diagnostic examiner (such as a school psychologist), and a learning disabilities specialist. At least one member of the team, other than the student’s regular teacher, is to observe the student’s academic performance during class. After assessing the student, the team must prepare a written report clarifying

1. whether the child has a specific learning disability
2. the basis for making the determination
3. the relevant behavior noted during observation
4. the relationship of that behavior to the child’s academic functioning
5. the educationally relevant medical findings
6. whether there is a severe discrepancy between achievement and ability that is not correctable without special education and related services

(7) the determination of the team concerning the effects of environmental, cultural, or economic disadvantage (Federal Register, 1977, p. 65, 083)

Not specified by the federal guidelines is how students are to come to the attention of the multidisciplinary team. That is, the guidelines do not discuss procedures for large-scale screening, and thus there is great variability in what is done (Gracey et al.,
1984). This is not surprising, because there is no well-validated procedure available. Good procedures are extremely difficult to develop. There is still no process that can correctly detect a high percentage of learning problems without making many false identifications.

A sense of the state of the art is provided by data from two surveys of prekindergarten screening. In Illinois, a statewide survey found 77 percent of the responding agencies used standardized but not well-validated instruments; 23 percent used locally developed, largely unvalidated procedures (Van Duyne, Gargiulo, & Allen, 1980). Similar findings come from a 1984 survey in Minnesota, the first state (in 1977) to offer comprehensive, free screening to all prekindergartners (Ysseldyke, Thurlow,

**Feature 1  Referral: The Hidden Screening Procedure**

Before any formal assessment, there often is an informal screening procedure. That procedure is referral. Most children and adolescents are referred for diagnosis and treatment by school and medical personnel and sometimes by the courts.

Teachers, physicians, and judges see many individuals who have problems, but they only refer a small number for psychoeducational diagnoses and treatment.

How do they choose who to refer? Sometimes they refer those they think can best profit from treatment; sometimes they choose those they especially like (or dislike).

There has been a great deal written about the possibility that racial, sexual, and class biases play a major role in referral processes. In general, individuals from non-dominant (minority) groups in a society seem more likely than those in the dominant group to be identified and referred to programs for persons seen as "inferior" and "deviant." The fact that referral processes can be used in a way that hides prejudiced motives makes such processes controversial and of concern (Gerber & Semmel, 1984).

Another bias that affects referral processes is the tendency to see the causes of others' problems in terms of something "wrong" with the person observed. Referrers may be influenced by this tendency when they observe learning problems. They may assume the causes stem from something wrong inside the person (such as a learning disability) and therefore send the individual for diagnosis and treatment.

In contrast to observers' tendencies, the person involved may tend to see the problem as caused by some external factor, such as a poor teaching situation.

As discussed by attribution theorists, there is a pervasive tendency for actors [those observed] to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable personal dispositions (Jones & Nisbett, 1971, p. 80).

**PROFESSOR:** The reason students have trouble in my class is that they don't spend enough time studying. Some are simply lazy; others are too busy partying; some just don't care.

**STUDENT:** The reason I'm having trouble in this class are that the lectures are boring and the reading is too hard. Also, the professors in my other courses all give so many assignments that I hardly have time to do any of my work very well.

Whose explanation is right? Often, it is impossible to tell without a great deal more information. However, we aren't concerned here with who turns out to be right. What's important to understand is that referrers may often operate with a psychological bias and so, in too many instances, may be ignoring environmental causes and "blaming the victim."

Attribution theorists would criticize prevailing referral processes as favoring causal models that see the "cause" and "correction" of learning problems only in terms of individuals (review Chapter 2). As suggested, such models tend not to pay sufficient attention to the role of environments in causing such problems, or to the need for major changes in the environment as a part of efforts to correct learning problems.
O’Sullivan, & Bursaw, 1986). The survey reports the two most used instruments were the DIAL (Developmental Indicators of the Assessment of Learning) and the DDST (Denver Developmental Screening Test). The former has little empirical support for its reliability and validity (Lichtenstein & Iretton, 1984), and the latter was standardized in only one city and has overreferral rates as high as 44 percent (German, Williams, Herzfeld, & Marshall, 1982). Given this rate of overreferral, it is discomforting to note that the DDST is the screening instrument most often used by model childhood-education programs throughout the United States (Lehr, Ysseldyke, & Thurlow, 1986) and has even found its way to China (Chieh, Chu, Lu, Tang, & Wang, 1985).

Research findings and clinical observations indicate that youngsters with severe problems usually are identified readily by parents, pediatricians, and teachers without complex and costly screening devices (see Feature 2). Therefore it is not surprising that severe problems related to learning and behavior are also identified readily by screening devices.

**Feature 2  Concerns About Screening Procedures**

The desire to identify learning problems at an early age is easily understood. Prevention and intervention in the earlier stages of a problem can be more effective and economical than later remediation. Indeed, for some problems undue delay can make things considerably worse.

In contrast, arguments against screening are often misunderstood. Such arguments are raised primarily with respect to large-scale programs aimed at preschoolers and those in their first years in school. Don’t make the mistake of thinking that critics of large-scale screening programs are arguing against efforts to prevent and correct problems. They, too, want to help.

One of their main concerns, however, is about the limitations of available procedures, especially for screening mild-moderate problems—which are by far the most numerous. Studies of how screening programs currently are run tend to support this concern.

Because so much emphasis has been placed on early-screening, conclusions from research reviews in this area have special relevance for large-scale screening procedures. Reviewers report that the best available tests and rating scales generally are accurate in identifying only a moderate percentage of young (5- to 7-year-old) children who later have significant learning problems in school. In addition to missing individuals who subsequently do have problems, the procedures identify some whose current minor problems are not good predictors of later learning difficulties. The procedures are most accurate in identifying youngsters who currently have rather severe problems—that is, those who are so obviously experiencing problems that they are readily identified by parents, pediatricians, and teachers through informal observation. Only a small percentage of those who truly have learning disabilities are easily distinguished from others who have problems.

From another perspective, it has been suggested that the money spent on screening would be better used to improve preschool, kindergarten, and first-grade programs. Critics suggest that a very large proportion of those who are identified would never become persons with significant learning problems if their early schooling were redesigned. They also stress that commitment to large-scale screening programs tends to take attention away from the need to make system changes.

Hobbs’s (1975a) conclusions are as relevant today as they were in the 1970s:

> Every professionally competent report we have on early screening... strongly qualifies most assertions concerning the reliability, validity, or applicability of screening procedures... especially for use in the early years of childhood. Most serious developmental problems get picked up in routine clinical practice... or are identified by parents or other untrained observers; mild and moderate problems (by far the greatest number), however, are difficult to detect and assess even by well-trained professional people administering complete examinations with the best equipment. (pp. 92–94)
However, identifying severe problems is not the same thing as identifying learning disabilities. Some individuals with severe problems have learning disabilities, but many have other psychological problems or other biological problems. The relatively low incidence of learning disabilities (as compared to learning problems in general) means that anything less than highly accurate screening will make a large number of errors.

As indicated earlier, large-scale screening procedures for learning disabilities are meant to be only gross, first attempts at identification. They are expected to overidentify—that is, identify some individuals who do not have learning disabilities and some who don't even have significant learning problems. The errors are found later when each person is individually assessed (for example, by the multidisciplinary team as specified by federal guidelines).

In short, because large-scale screening procedures make so many errors, they are never supposed to be used to make specific diagnoses—not even tentative ones. When it comes time to make decisions about whether a person has a learning disability and about placements for remediation, the need is for assessment strategies that have greater diagnostic and prescriptive validity than is the case with available screening procedures.

Three major models defining the focal point for intervention can be used in developing screening and diagnostic procedures. One model emphasizes person assessment, in terms of pathology (disorders and "illness") or lack of developmental readiness; another focuses on the environment (also emphasizing pathology or developmental deficiencies); and the third stresses the transaction of person and environment. Of the three models, only the first has been used extensively to guide screening research (Adelman, 1989).

Assessment of individuals focuses on a limited range of pathological indicators and developmental deficits. Lack of success with this approach has stimulated interest in adding specific home and school factors. This approach has the potential, not only to improve individual screening, but also to identify factors in the environment that should be changed.

As to criteria for determining how effective a screening procedure is, one must account for the ease with which serious problems are detected without formal screening. That is, the appropriate standard for judging the value of screening instruments should be their ability to identify individuals whose difficulties are not already recognized.

**Summing Up**

Because of the trend toward large-scale screening, we stress again that the evidence does not support use of existing psychometric or rating-scale procedures in massive screening for mild to moderate learning problems among infants, preschoolers, or kindergartners. The fact is that few of the available procedures meet even the minimal standards set forth by the American Psychological Association and the American Educational Research Association (see "Standards for Educational and Psychological Tests"). Such large-scale screening provides another example where pressure and enthusiasm for screening have led to inappropriate interpretations of research findings and premature application of new procedures.