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ABSTRACT

School psychologists (N=119) were surveyed regarding current practices in diagnosing children with mental retardation. Results showed a wide range of responses for diagnostic criteria. Substantial discrepancies were found in relative weight given to intelligence and adaptive behavior, IQ cut-offs and ranges, importance of various areas of adaptive behavior, adaptive behavior deficits, and academic performance deficits. The need for standardization of criteria in diagnosing mental retardation is noted, and the likely results of diagnostic variation, less than equal access to special education programs, is also discussed. (Author/CL)

Current Practices in Diagnosing the Mentally Retarded

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ABSTRACT

School psychologists were surveyed regarding current practices in diagnosing children with mental retardation. Results showed a wide range of responses for diagnostic criteria. Substantial discrepancies were found in relative weight given to intelligence and adaptive behavior, IQ cut-offs and ranges, importance of various areas of adaptive behavior, adaptive behavior deficits, and academic performance deficits. Implications for the population identified as mentally retarded and educational programming are discussed.

Mental retardation is defined as significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior...which adversely affects a child's educational performance (Grossman, 1983). Though this definition is well known and well accepted, the same is not true regarding diagnostic procedures and performance criteria for making this diagnosis.

The most influential source of information on classification and terminology is the one published by the American Association on Mental Deficiency (Heber, 1959). The fifth edition of this manual established the criteria for intellectual functioning as one standard deviation below the mean for the intelligence test being used or approximately a score of 85. Use of the 85 IQ cut-off would qualify nearly 16 percent of the total United States population for programs designed for the mentally retarded (Frankenburger, 1984). Subsequent editions of the manual changed the criteria to two standard deviations below the mean or an approximate score of 70 (Grossman, 1973, 1977, 1983). In addition, clear criteria regarding range were established for each category of mental retardation.

The various editions of the AAMD manual have also reflected change in the appropriate consideration of deficits in adaptive behavior when diagnosing mental retardation. The 1973 edition indicated that deficits in adaptive behavior were "associated" with deficits in intellectual functioning. The 1977 edition indicated that deficits in adaptive behavior must exist "concurrently" with subaverage intellectual functioning for an appropriate diagnosis of mental retardation. With these revisions, adaptive behavior had been elevated to a level equal to that of measured intelligence when diagnosing mental retardation (Reschley, 1981).

Special education services are provided on the condition that the handicapping condition adversely affect educational performance. Though academic achievement can be considered under the general rubric of adaptive behavior, it is more typically a separate consideration in school settings. Though assessment of academic achievement is considered an important part of the diagnostic process, clear criteria for "adverse affect" have not been established in the professional literature.

Equal access to educational programs and appropriate educational services for mentally retarded children can only be assured if diagnosticians consistently use appropriate criteria. This study was designed to determine current practices used to diagnose mental retardation by psychologists practicing in school settings.

METHOD

Sample

Participants were 119 psychologists randomly selected from a list of all psychologists in the State of Illinois practicing in school settings.

Seventy-eight percent were trained at the master's degree level; 4 percent held specialist degrees; and 18 percent had doctoral level training. Ninety-five percent of the participants were certified as school psychologists; 14 percent held clinical licenses; 15 percent held a supervisory or administrative certificate; and 48 percent held teaching certificates; 30 percent and 18 percent in regular education and special education respectively.

All participants were experienced psychologists; 27 percent, 1-5 years; 25 percent, 6-10 years; 30 percent, 11-15 years; 18 percent, more than 15 years. Twenty-six percent reported experience as a psychologist in a setting other than a school setting; 8 percent, supervisory or administrative experience; 5 percent, special education teaching; 21 percent, regular education teaching.

Thirty-two percent were employed by local school districts and 65 percent by special education cooperative organizations. Work settings included: 21 percent, large cities; 47 percent, suburban areas; 16 percent, rural areas.

Procedure

Participants were surveyed by mail using a questionnaire specifically designed for use in this study. In addition to collecting standard demographic data, participants were asked to describe their own diagnostic practices on the following variables:

1. relative weight given to IQ and adaptive behavior
2. instruments used to assess intellectual functioning
3. IQ cut-offs and ranges used
4. instruments used to assess adaptive behavior
5. importance of various areas of adaptive behavior
6. criteria for adaptive behavior deficits
7. instruments used to assess educational performance
8. criteria for achievement deficits

RESULTS

The combined criteria for diagnosing mental retardation of significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior is prescribed in federal and state law. Responses to the question of relative weight given to intellectual functioning and adaptive behavior were: 61 percent reported giving equal weight to IQ and adaptive behavior; 32 percent, greater weight to IQ; and, 7 percent, greater weight to adaptive behavior.

Though a wide variety of instruments are available to assess intellectual functioning, participants demonstrated some clear preferences. The Wechsler tests, pre-school, children and adult versions (Wechsler, 1955, 1967, 1974) were chosen 104 times for use with children in the mild to moderate categories over a range of ages. The Stanford-Binet Intelligence Test (Terman & Merrill, 1973) was chosen 60 times for this same group. The Wechsler tests were chosen 17 times for children in the severe to profound range and the Stanford-Binet was chosen 39 times in this category. A clear pattern of choice was demonstrated for the Wechsler tests for older and higher functioning children and the Stanford-Binet test for younger and lower functioning children.

Participants were asked to indicate IQ cut-offs or ranges used as criteria for each of the categories: mild, moderate, severe and profound retardation. Table 1 summarizes these responses. Most frequent responses were: 57 percent used the 70-75 range for mild retardation; 63 percent, 51-55 range for moderate; 57 percent, 26-35 range for severe; and, 51 percent, 15-20 range for profound.

Table 1
IQ Cut-offs and Ranges Used in Diagnosing Mental Retardation

Category	Range	Percent
Mild	65-69	34
	70-75	57
	76-82	9
Moderate	49-50	33
	51-55	63
	56-60	4
Severe	20-25	6
	26-35	57
	36-50	37
Profound	15-20	51
	21-30	39
	31-40	10

Only a relatively small number of tests and checklists to assess adaptive behavior are available commercially. Most frequently reported instruments included: Adaptive Behavior Scale (Nihira, Foster, Shellhaas & Leland, 1969), Chosen 79 times; Vineland Scale of Social Maturity (Doll, 1965) or Vineland Adaptive Behavior Scale (Sparrow, Balla & Cicchetti, 1984), chosen 52 times; and the Developmental Profile (Alpern & Boll, 1972), chosen 13 times. No formal procedures or some combination of observation and clinical judgement were reported 17 times. Frequency of types of instruments reported included: 60 percent used norm-referenced tests; 3 percent, criterion-referenced; 5 percent, checklists; and, 32 percent, some combination of instruments.

Participants were asked to rate various areas of adaptive behavior relative to its importance in the diagnostic process. Table 2 summarizes those rankings. Ranking by mean and median yielded similar results for these data. Independent functioning/self-help ranked first, and economics ranked last.

Table 2

Ranking of Adaptive Behaviors

Behavior Area	Mean	Median
Independent Functioning/ Self Help	1.8	1.3
Language/Communications	3.1	2.9
Social Skills	3.2	3.0
Self Direction	3.7	3.5
Academics	5.2	5.4
Vocational/Occupational	5.8	6.3
Sensory Motor	6.2	6.2
Economics	6.8	7.5

Criteria used for determining deficits in adaptive behavior are reported in Table 3. Respondents were asked to report by percentage of deviation, adaptive behavior in the various areas that would be considered deficient. Approximately 60 percent agreement puts deficiencies in the 26-50 percent category. Nearly a quarter of the responses were in the less than 25 percent range and approximately 12 percent were in the 51-75 percent range.

Table 3

Percentages Given for Deviation in Adaptive Behavior

Behavior Area	Percentage of Deviation			
	0-25	26-50	51-75	76-100
Self Direction	24	62	12	2
Independent Functioning	23	60	15	2
Social Skills	25	59	14	2
Language/ Communication	24	60	14	2
Academics	27	59	12	2
Sensory Motor	24	59	14	3
Vocational	24	62	12	2
Economics	24	62	12	2

Instruments used to assess level of educational performance showed wide variety. Tests used to assess particular academic skills were too numerous to mention. Overall academic achievement measurement used four basic instruments: the Wide Range Achievement Test (Jastak & Jastak, 1978) was chosen 85 times; Peabody Individual Achievement Test (Dunn & Markwardt, 1970) , 60 times; Woodcock-Johnson Psychoeducational Battery (Woodcock & Johnson, 1977), 40 times; and, Brigance Inventory of Early Development (Brigance, 1978), 32 times. The Brigance was generally chosen for younger and lower functioning children. Thirty-six respondents reported using informal observation with preschool and severe and profound children, and 15 reported using no instruments with severe and profound children.

To be considered a handicapping condition, mental retardation must have an adverse effect on educational performance. Participants were asked to quantify the amount of achievement delay necessary to meet this criterion. Table 4 summarizes the amount of delay reported in years and months. Though trends for age and level of functioning are apparent, a number of categories showed considerable overlap.

Table 4

Achievement Delay in Years and Months

Category	Academic Delay	Percent	Mean	Standard Deviation
Mild				
Preschool	0.5-1.0	40		
	1.1-2.0	48		
	2.1-4.0	6	1.6	.8
Primary	0.5-1.0	16		
	1.1-2.0	54		
	2.1-4.0	30	2.0	.8
Intermediate	1.0-2.0	43		
	2.1-3.0	32		
	3.1-5.0	25	2.7	.8
Junior High	1.0-2.0	21		
	2.1-3.0	33		
	3.1-5.0	46	3.3	1.1
High School	1.0-2.0	21		
	2.1-3.0	17		
	3.1-10.5	46	4.2	2.0
Moderate				
Preschool	1.0-2.0	66		
	2.1-3.0	24		
	3.1-4.0	10	3.0	.9
Primary	1.5-2.0	26		
	2.1-3.0	40		
	3.1-5.0	34	3.1	1.0
Intermediate	2.0-3.0	27		
	3.1-5.0	49		
	5.1-7.0	24	4.2	1.4
Junior High	2.0-3.0	23		
	3.1-5.0	10		
	5.1-7.0	67	6.3	2.8
High School	2.0-3.0	23		
	3.1-5.0	20		
	5.1-10.0	57	5.1	1.9

Table 4 (cont.)

Achievement Delay in Years and Months

Category	Academic Delay	Percent	Mean	Standard Deviation
Severe/Profound				
Preschool	2.0-3.0	67		
	3.1-4.0	29		
	4.1-6.0	4	3.1	.9
Primary	2.0-3.0	35		
	3.1-4.0	27		
	4.1-6.0	38	4.0	1.4
Intermediate	2.0-3.0	18		
	3.1-4.0	11		
	4.1-7.0	71	5.3	2.1
Junior High	2.0-3.0	19		
	3.1-4.0	7		
	4.1-7.5	74	6.8	3.3
High School	2.0-3.0	21		
	3.1-4.0	4		
	4.1-10.5	75	8.0	4.0

DISCUSSION

The results of this study show considerable variation in criteria used for diagnosing mental retardation. It is clear that children diagnosed as mentally retarded by one psychologist might not be similarly diagnosed by another.

That 32 percent of the participants continue to put greater weight on IQ in diagnosing mental retardation is easy to understand but difficult to justify. Intelligence is more readily measured and quantified than adaptive behavior. However, the need to consider adaptive behavior equally with intellectual functioning is emphasized by the historical abuses related to over reliance on intelligence scores. The overidentification of children from minority groups as mentally retarded is a case in point.

Some confusion appears to exist in using retardation categories. Considerable overlap was reported for the severe and profound categories. A 5 point gap was reported between the mild and moderate categories. Intelligence tests are considered one of the most reliable groups of psychometric procedures available. The spread in scores used to define each category cannot be explained by the tests used nor does an existing research base provide explanation.

Reported percentages needed for determining a deficit in adaptive behavior raise questions both of procedures used to assess this area as well as whether there is a clear notion of how much deviation constitutes a deficit. The fact that observation and clinical judgement alone were reported as a procedure to assess adaptive behavior raises questions of reliability. The relatively low agreement regarding necessary deviation to be considered deficient suggests confusion about adaptive behavior at the conceptual level.

Less direction is available to the practitioner for determining an academic deficit consistent with a particular level of retardation than in either the intellectual functioning or adaptive behavior areas. Even when the variety of instruments used are taken into account, the range of academic achievement delay needed to demonstrate adverse effect is striking. Most instruments assessing academic achievement are standardized on normal children and include very few retarded children in the standardization population. Perhaps instruments that measure the existence of skills at various levels of retardation rather than their absence are needed. Until such instruments are developed however, criteria for expected academic performance in each category of retardation are needed.

Psychologists put great stock in their need and professional prerogative to use clinical judgement in diagnosis. The results of this study suggest the need to re-evaluate this position. It appears that no clear criteria are being used in the diagnosis of mental retardation in any of the areas of intellectual functioning, adaptive behavior or academic performance. Standardization of the critera used is needed. The variation reported in this study serves no useful purpose and likely results in less than equal access to special education programs.

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REFERENCES

Alpern, G.D., & Boll, T.J. Developmental Profile. Psychological Development Publications, 1972.

Brigance, A.H. Brigance Diagnostic Inventory of Early Development. Curriculum Associates, Inc., 1978.

Doll, E.P. Vineland Scale of Social Maturity. American Guidance Service, Inc., 1965.

Dunn, L.M., & Markwardt, F.C. Peabody Individual Achievement Test. American Guidance Service, Inc., 1970.

Frankenburger, W. A survey of state guidelines for indentification of mental retardation. Mental retardation, 1984, Vol. 22, pp. 17-20.

Grossman, H.J. (Ed.). Manual on terminology and classification in mental retardation. American Association on Mental Deficiency, 1973.

Grossman, H.J. (Ed.). Manual on terminology and classification in mental retardation. American Association on Mental Deficiency, 1977.

Grossman, H.J. (Ed.). Manual on terminology and classification in mental retardation. American Association on Mental Deficiency, 1983.

Heber, R. (Ed.). Manual on terminology and classification in mental retardation. American Association on Mental Deficiency, 1959.

Jastak, J.F., & Jastak, S. Wide Range Achievement Test. Jastak Assessment Systems, 1978.

Nihira, K., Foster, R., Shellhaas, M., & Leland, H. The AAMD Adaptive Behavior Scale. American Association on Mental Deficiency, 1969.

Reschley, D. Evaluation of the effects of SOMPA measures on classification of students as mildly mentally retarded. American journal of mental deficiency, 1981, Vol. 86(1), pp. 16-20.

Sparrow, S.S., Balla, D.A., & Cicchetti, D.V. Vineland Adaptive Behavior Scales. American Guidance Service, Inc., 1984.

Terman, L.M., & Merrill, M.A. Stanford-Binet Intelligence Scale. Houghton Mifflin Company, 1973.

Weschler, D. Weschler Adult Intelligence Scale. Psychological Corporation, 1955.

Weschler, D. Weschler Preschool and Primary Scale of Intelligence. Psychological Corporation, 1967.

Weschler, D. Weschler Intelligence Scale for Children-Revised. Psychological Corporation, 1974.

Woodcock, R.W., & Johnson, R.B. Woodcock-Johnson Psychoeducational Battery. Teaching Resources Corporations, 1977.