

PART I

The Concept of Mental Retardation: Critical Issues 2005

This part of the book deals with more universal, speculative, and historical issues regarding the nature of mental retardation/intellectual disabilities. Except for the first, the chapters are presented alphabetically and display a luxurious banquet of electrifying ideas for the reader to devour.

Greenspan and Switzky, in Chapter 1, present an extremely thorough analysis of the evolution of the concept of mental retardation from 1959 to 2002 in the manuals published by AAMR, giving the reader a reference point for all the discussions to follow. They describe in great detail in an unbiased way the various AAMR systems.

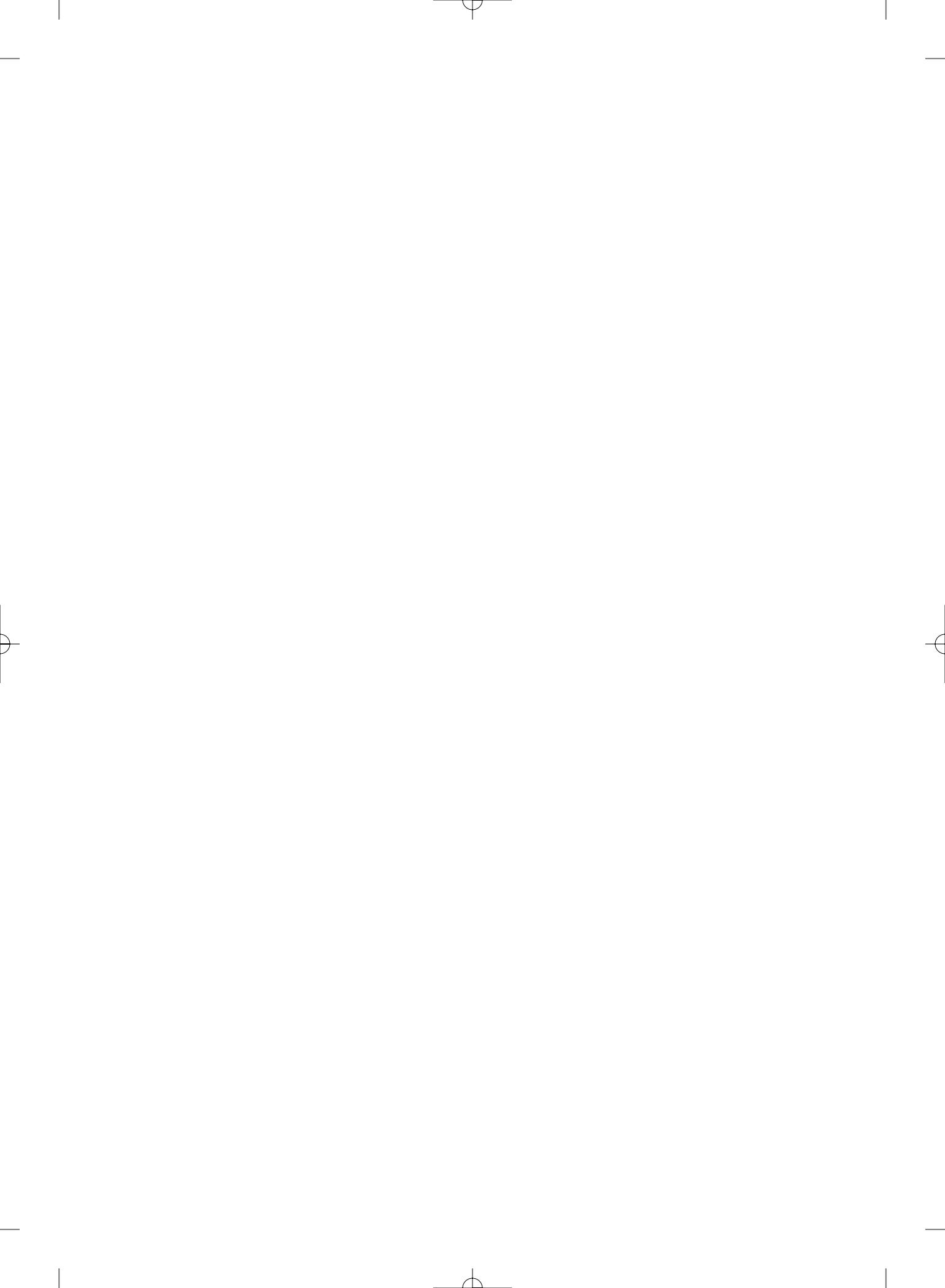
Baroff, in Chapter 2, presents his idea of mental retardation as a “disorder of chronic intellectual and emotional immaturity . . . viewed as an *intellectual disability* that adversely affects the capacity to cope successfully with the challenges of daily existence. Its most general effect is to increase the degree of *dependence* in meeting these challenges.” Baroff discusses the 2002 AAMR model in the light of his thinking.

Glidden, in Chapter 3, provides a semantic feature analysis of the 2002 AAMR definition of mental retardation compared to the 1992 AAMR model in an attempt to find “meaning” in the various labels and definitions provided by the AAMR manuals.

Smith, in Chapter 4, provides a history of MR definitions and the implications for the field of MR of the paradigm shift explicit in the 1992 and 2002 AAMR manuals.

Snell and Voorhees, in Chapter 5, focus on the effects of the label of mental retardation on the individuals so labeled, their parents and family members, and the professionals and social system agencies that use the label. An interesting part of this chapter is the ethnographic analysis and description of the effects of the mental retardation label on three adults in their 30s and 40s residing in semi-independent community settings, providing a more personal perspective into the world of persons labeled as mentally retarded.

Spitz, in Chapter 6, comments on the paradigmatic ideological position of the 1992 and 2002 AAMR systems that “exchanges an absolutist view for relativism” and abolishes familial (hereditary) forms of mental retardation. Spitz argues in his chapter that the evidence for familial (hereditary) forms of mental retardation is overwhelming and cannot be abolished by fiat by the authors of the 1992 and 2002 AAMR manuals for ideological reasons.



CHAPTER ONE

Forty-Four Years of AAMR Manuals

STEPHEN GREENSPAN AND HARVEY N. SWITZKY

INTRODUCTION

The way in which the mental retardation (MR) construct is defined has important consequences for millions of people. It affects their social and legal status and consequently the services and supports for which they may be eligible. It also affects a range of activities that shape these services and supports, including administration, communication, and statistical reporting and research.

This book explores the future of the mental retardation (MR) construct in the 21st century and comments upon the newest revision of the AAMR classification manual (Luckasson et al., 2002). In order to avoid repeating past mistakes and to understand the arguments, many of them still relevant, that underlie previous and current choices and compromises, we require some familiarity with the 2002 manual and those that preceded it. Accordingly, this chapter provides a historical frame of reference to the literature on the classification of MR. We have restricted our focus to the various manuals published by AAMR, including those issued in its previous incarnation as AAMD (American Association on Mental Deficiency). We have not considered any of the broader classification schemes, such as that of the Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association, in part because MR is only one of many disorders they address, and also because their definition of MR is typically derived from or modeled after the AAMR definition. In focusing on AAMR manuals, in a volume being published by the AAMR, one of our motives is to influence the dialogue about mental retardation in the 21st century.

Writing in the year 2005, we begin our discussion of AAMR manuals with the 1961 edition—hence the chapter title, “Forty-Four Years of AAMR Manuals.” We begin with the 1961 manual, rather than discussing earlier diagnostic manuals published by predecessor professional organizations in the 1920s and 1930s, for four reasons:

1. It is generally acknowledged to be the first one providing objective (i.e., test score) criteria.
2. It established the term that is still used (at least in the United States), mental retardation, to replace more pejorative terms such as idiocy or feeble-mindedness.
3. It was the first classificatory scheme to become almost universally adopted.

4. It provided the framework (the dual criteria of intelligence and adaptive behavior) and the competing goals (getting people needed services while avoiding the pitfalls of over identification) with which the field is still struggling.

DESCRIPTION OF THE AAMR MANUALS

Each manual will be discussed in terms of four features:

1. Background information.
2. The conceptual definition, which is a brief general description of the category of mental retardation.
3. The operational definition, which is a more concrete elaboration on the key terms contained in the conceptual definition.
4. The behavioral classification system, especially the mechanism for sub-grouping people according to the severity of their impairments and needs.

Owing to space limitations, we have not addressed other aspects of the manuals, such as the (highly valuable) material on medical etiology or service approaches.

The 1961 Manual

Background of the 1961 manual.

The 1961 manual grew out of the “Project on Technical Planning in Mental Retardation” of the American Association on Mental Deficiency (AAMD, the precursor to AAMR). Its stated purpose was to “achieve increased uniformity in terminology and in the medical and behavioral classification of persons who are mentally retarded” (Heber, 1961, p. vii), as an aid to communication, classification, treatment, administration, programming, education, habilitation, statistical reporting and research.

The AAMR viewed this as the fifth in a series of such manuals. The first had been published in 1919 by a precursor organization, the American Association for the Study of the Feeble-minded (AASF). Revisions were published in 1933 and 1941 by the AASE, in cooperation with the National Committee for Mental Hygiene. These three manuals, and related statistical reports, played an important role in establishing mental retardation as a specialty field and in encouraging the publication of nationwide statistical data on MR by the federal government.

In 1952, driven by dissatisfaction with terminology then in use (e.g., idiocy, imbecility and so on), the AAMD established a Committee on Nomenclature, chaired by Gale H. Walker. In 1957, this committee published an etiological classification scheme, which is now viewed as the fourth edition of the manual initially published in 1919. It was considered an interim product, to be replaced in a few years by a more comprehensive one (which would incorporate the etiological scheme).

That effort was initially chaired by Dr. Walker. Upon his death in 1958, the work was taken up by Rick Heber, a psychologist and research associate employed by the project. In 1959 the new manual was published in provisional form as a Monograph Supplement of the *American Journal of Mental Deficiency*. After a period of comment and review, a revised

final version was published in 1961 as a Monograph Supplement of *AJMD*, and later published in book form.

The 1959 and 1961 manuals usually are viewed as essentially identical and often are cited interchangeably. In fact, however, they differed in one very major respect. The concept of “adaptive behavior,” which has been the cause of so much controversy and confusion, did not appear as part of the conceptual definition of MR in 1959 but did appear in the revised manual two years later. This distinction is discussed in more detail in the next section.

Unlike the later process used by AAMR, where a manual was written collectively by a “Terminology and Classification” (T&C) committee, the 1961 manual appears to have been written largely by Heber and then reviewed by two committees of the Association, one (made up entirely of physicians) addressing issues of medical classification, the other (made up largely of psychologists) addressing issues of behavior classification. It has been reported, although not explicitly stated anywhere in the 1961 manual, that one of the major considerations was deep dissatisfaction with the section dealing with MR in DSM-2, the second edition of the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*. If that was, indeed, a motivator, it achieved its purpose, as the third and fourth editions of *DSM* have largely deferred to the AAMR in matters pertaining to the definition and classification of MR.

Conceptual definition of MR in the 1961 manual.

In the 1961 manual, the conceptual definition went as follows:

Mental Retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior (Heber, 1961, p. 3).

The earlier provisional (Heber, 1959) AAMD manual contained a conceptual definition which went as follows:

Mental Retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in one or more of the following: (1) maturation, (2) learning, and (3) social adjustment (p. 3).

Thus, three relatively clearly defined terms were replaced by a single, largely undefined, newly invented term, *adaptive behavior*.

Furthermore, the term *mental retardation* itself was chosen by the T&C committee as “at present . . . the most preferred term among professional personnel of all disciplines concerned” (Heber, 1961, p. 3). It was intended to replace earlier terms such as idiocy, moronity, imbecility, amentia, and mental subnormality that were now viewed as less acceptable and lacking in specificity.

Operational definition of MR in the 1961 manual.

The 1961 manual defined the term *subaverage* as:

Performance which is greater than one Standard Deviation below the population mean of the age group involved on measures of general intellectual functioning (Heber, 1961, p. 3).

It went on to define general intellectual functioning as:

Performance on one or more of the various objective tests that which have been developed for that purpose (p. 3; the circularity of this definition has been noted by various commentators).

Thus, subaverage intellectual functioning was operationally defined as a score of 84 or less on any test generally accepted as an adequate measure of intelligence. The developmental period was defined as all ages up to approximately sixteen.

Adaptive behavior was defined as:

The effectiveness of the individual in adapting to the natural and social demands of his environment (p. 3).

Impaired adaptive behavior was to be reflected in limitations in one or more of the following: (1) maturation, (2) learning, and (3) social adjustment for different age groups.

Thus, the three terms in the second part of the conceptual definition in the 1959 provisional manual (maturation, learning, and social adjustment) were folded into the final 1961 manual in the form of an elaboration on the newly invented rubric of adaptive behavior.

These terms were further operationally defined as follows:

1. Maturation was to be used to refer to “the rate of sequential development of self-help and sensori-motor skills of infancy and early childhood, the preschool years.”
2. Learning ability was to be used to refer to “the facility with which knowledge is acquired as a function of experience, particularly in school settings during the school years” (p. 3).
3. Social adjustment referred to “the degree to which the individual is able to maintain himself independently in the community and in gainful employment as well as by his ability to meet and conform to other personal and social responsibilities and standards at the adult level as set by the community. During the pre-school and school age years, social adjustment is reflected in large measure in the level and manner in which the child relates to parents, other adults, and age peers” (p. 4).

The manual indicates that the maturity criterion is most relevant to diagnosing MR in early childhood, the learning criterion is most relevant to diagnosing MR in school-age children, while social adjustment is most relevant to diagnosing MR in adults.

Behavioral classification system used in the 1961 manual.

In the AAMR manuals, beginning with the 1961 edition, severity classification is viewed as separate from diagnosis. In the 1961 manual (and in the 1959 draft version), the severity subcategory names are not prominently featured. In fact, only in a footnote to Table I, “Standard Deviation Ranges Corresponding to Measured Intelligence Levels” (Heber, 1961, p. 58), do we find the terms “borderline retardation of measured intelligence,” “mild retardation of measured intelligence,” “moderate retardation of measured intelligence,”

“severe retardation of measured intelligence,” and “profound retardation of measured intelligence.”

In the main body of that table, retardation severity levels are given numbers 1 through 5 corresponding to statistical codes (“1” corresponding to minus 1 standard deviation units on a standardized IQ measure, “2” to minus 2 standard deviation units, and so on). One has to look at the table footnotes to find the following amplification:

Where use of descriptive terminology is advisable for purposes of interpretation to legal authorities, parents, etc., the following terms are suggested: Level-1—Borderline retardation of measured intelligence; Level-2—Mild retardation of measured intelligence, and so on to Level-5—Profound retardation of measured intelligence (p. 58).

In the section on Adaptive Behavior, the same subcategory names reappear, but this time in the body of Table III, “Standard Deviation Ranges Corresponding to Level of Adaptive Behavior” (Heber, 1961, p. 62) rather than in a footnote. In this table there are four subcategories:

- “Level-I (Mild but apparent and significant negative deviation from norms and standards of Adaptive Behavior);
- Level-II (Moderate but definite negative deviation from norms and standards of Adaptive Behavior);
- Level-III (Severe negative deviation from norms and standards of Adaptive Behavior); and
- Level-IV (Profound negative deviation from norms and standards of Adaptive Behavior).”

Like Table I, described above, Table III describes retardation severity levels in terms of standard deviation units, this time (for unspecified reasons) in 1.25-unit steps (Level I = -1.01 to -2.25 standard deviation units, Level II = -2.26 to -3.50 standard deviation units, Level III = -3.51 to -4.75 standard deviation units, Level IV = less than -4.75 standard deviation units).

This seems like a rather abstract and arbitrary exercise, given that no standardized scale of adaptive behavior even existed in 1961. The manual was relatively vague about the kinds of behavioral deficits believed to correspond to these subcategories, though a table from Sloan and Birch (1955) was offered to illustrate levels of Adaptive Behavior for three broad age groups, Pre-School Age (0–5) in maturation and development, School Age (6–21) in training and education, and Adult (21) in social and vocational adequacy.

Additionally, a supplementary classification section included in both the 1959 and 1961 manuals tried to measure impairments in personal-social and sensory-motor factors that are frequently concomitants of mental retardation and influence an individual’s total behavioral adaptation to the environment. These were not diagnostic indicators for mental retardation but were viewed as important in planning for education and habilitation and in prognosis. The personal-social factors were: impairments in interpersonal relations, impairments in cultural conformity, and impairments in responsiveness. The sensory-motor factors were impairments in motor skills, impairments in auditory skills, impairments in

visual skills, and impairments in speech skills. These supplementary factors were characterized as behavior either in accord with or superior to expectations in relation to age level, or significantly deficient.

The personal-social factor of impairment in interpersonal relations was

intended to reflect deficiencies in interpersonal skills. The individual with an impairment in interpersonal relations does not relate adequately to peers and/or authority figures and may demonstrate an inability to recognize the needs of other persons in interpersonal interactions (Heber, 1961, p. 65).

The personal-social factor of impairment in cultural conformity

reflected one of the following: behavior which does not conform to social mores, behavior which does not meet standards of dependability, reliability, and trustworthiness; behavior which is persistently asocial, anti-social, and/or excessively hostile (Heber, 1961, pp. 65–66).

The personal-social factor of impairment in responsiveness

is characterized by an inability to delay gratification of needs and a lack of long-range goal-striving or persistence with response only to short-term goals. Those individuals who respond only to bio-physical stimuli of comfort or discomfort would be classified at one extreme of the dimension of behavioral responsiveness. Individuals classified at the other extreme would be characterized by responsiveness to abstract or very symbolic rewards (Heber, 1961, p. 67).

The 1973 Manual

Background to the 1973 manual.

The 1973 manual was intended to build on the 1961 manual and to remedy its perceived problems, especially its creation of a Borderline category with an IQ ceiling of 85. This problem had been exacerbated by diagnosticians' widespread ignoring of the Adaptive Behavior criterion.

The period between manuals, 1961–1973, saw a greatly increased awareness of problems of race and class discrimination in the United States. Excessively literal use of the 85 IQ cutoff, combined with a great expansion in self-contained Special Education programs for children with mild disabilities, resulted in over assignment of the MR label to minority individuals, many of whom would not have qualified for it if the Adaptive Behavior criterion had been taken seriously.

Conceptual definition in the 1973 manual.

As defined in the 1973 manual:

Mental Retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period (p.5).

This differed in two ways from the 1961 conceptual definition:

1. The 1961 definition referred to “subaverage general intellectual functioning,” which the 1973 definition changed to “significantly subaverage general intellectual functioning,” thus specifying a greater severity of intellectual impairment.
2. The 1961 definition noted that the subaverage intellectual functioning “is associated with impairment in adaptive behavior,” while the 1973 manual stated that it exists “concurrently with deficits in adaptive behavior.”

This latter change, while seemingly minor, has been interpreted by some commentators as suggesting a shift away from viewing adaptive behavior as an necessary outgrowth of low intelligence, toward seeing it as something separate and orthogonal from intelligence, akin in some ways to a personality axis in a multi-axial classification system.

Operational definition in the 1973 manual.

The biggest change in the 1973 manual was in recalibrating the upper boundary of the MR category. The manual makes clear that the first change in the conceptual definition, from “subaverage” to “significantly subaverage” intellectual functioning, was intended “to reflect the deletion of the Borderline category” (Grossman, 1973, p. 11). The upper level of MR was changed from minus one standard deviation (IQ = 85 on the Wechsler scales) to minus two standard deviations (IQ = 70 on the Wechsler scales, or IQ = 68 on the metric then in use by the Stanford-Binet).

The upper age limit of the developmental period was now set at 18 years (in 1961, it had been set at 16), which, in the words of the manual, “serves to distinguish mental retardation from other disorders of human behavior” (p. 11).

“Intellectual functioning” was described, rather than defined, as something that “may be assessed by one or more of the standardized tests developed for that purpose” (p. 11; in other words, intelligence is that which is measured by intelligence tests). The manual specified that the intelligence test had to be individually administered and pointed out that “quick” or group tests were to be avoided (p. 15).

Adaptive behavior was defined as:

The effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of his age and cultural group (p. 11).

Because of differing age-related expectations, deficits in adaptive behavior were believed to manifest themselves as follows:

1. During infancy and early childhood, in sensory-motor skills development, communication skills, self-help skills, and socialization.
2. During childhood and early adolescence, in “application of basic academic skills in daily life activities,” “application of appropriate reasoning and judgment in mastery of the environment” and “social skills.”
3. During late adolescence and adult life, in “vocational and social responsibilities and performances” (p.11).

Behavioral classification system in the 1973 manual.

As noted, the major change in the classification system from the 1961 manual was the dropping of the category of Borderline Retardation. In the 1973 manual, there are thus four levels of mental retardation: Mild, Moderate, Severe and Profound. These sub-category levels were prominently emphasized in the text. As in 1961, they progressed in steps of 1.0 IQ standard deviation units, ranging from minus two standard deviation units for mild MR to minus five standard deviation units for profound MR.

One minor change (though not minor to the individuals affected) is that while in 1961, mild MR translated as an IQ of 70 or less (on the Wechsler scale, which at that time was the individual IQ test to arbitrarily equate a standard deviation unit with an IQ score of 15), in 1973 mild MR translated to an IQ in the range of 69–52, and so on for the other categories. Thus, the IQ criteria for subcategory levels were now set at being *less than* minus one, minus two, and so on, standard deviation units, while in 1961 they had been set *at* minus one, two, and so on standard deviation units. In the section on Adaptive Behavior, the 1973 manual backed off from the idea of sub classifying people according to standard deviation units.

While the same four severity levels of adaptive behavior impairment are used as for intellectual impairment, the 1973 manual eschews a statistical basis for such sub categorization, noting that

if more precise instruments were available for the measurement of Adaptive Behavior, and general norms could be precisely stipulated, [then] the upper limit of Level-I could presumably be set at minus two standard deviations from the population mean (Grossman, 1973, p. 19).

The manual goes on to note that, while several scales of adaptive behavior had been developed,

most of the scales developed for use with the retarded have major limitations. They were developed primarily on institutional populations and do not adequately embrace the broad range of behaviors characteristic of mildly retarded children and adults living in the community (Grossman, 1973, p. 20).

And, as has been frequently noted, the biggest problem facing diagnosticians comes in differentiating between those with mild and low-normal intelligence. The proposed solution, until more adequate measures are developed, is to rely on

a combination of pertinent test data, clinical observation, and utilization of all available sources of information regarding the person's everyday behavior (Grossman, 1973, p. 20).

Therefore, the ultimate determination of the presence or absence of mental retardation rests on clinical judgment (Grossman, 1973, p. 21).

The predominant supplementary classification section included in both the 1959 and 1961 manuals in the 1973 manual was addressed as follows:

Mental retardation may co-exist with other handicaps, and frequently does in individuals with more severe degrees of retardation. Classification of such individuals is difficult and requires a multiple axial system. The system presented in

this manual attempts to make provision for as many of these problems as possible by providing supplementary categories through which other traits of the individual can be classified (e.g., hearing handicap, motor dysfunction, speech defects, psychiatric disorders (Grossman, 1973, p. 7).

Impairments in interpersonal relations and in cultural conformity disappeared into Section IX of the statistical reporting section (p. 101), and impairments in responsiveness vanished into the glossary (p. 152).

The 1983 Manual

Background to the 1983 manual.

There was a 1977 edition, but most commentators consider it to be a minor updating of the 1973 edition. The 1983 edition, while still bearing close resemblance to the 1973 manual, made some change in emphasis. The main change was an attempt to loosen the literalness with which the IQ cutoff score was being applied, by emphasizing the need to take into account an IQ test's standard error (the range, typically 5 points, within which an individual's actual score is likely to fluctuate), and by encouraging greater use of clinical judgment in the diagnostic process. These concerns were present, to some extent, in the 1973 manual, but were given greater voice in the 1983 manual. Also, previous manuals (1959, 1961, 1973) were organized into sections on medical and behavioral classification, statistical reporting, and glossary. The 1983 manual dropped its statistical reporting section and added new expanded sections on the application of the classification system to the delivery of services and research and a section on clinical applications. Also there was an emphasis throughout the manual on making explicit the implicit philosophical model undergirding the model of MR proposed. The purposes of the 1983 classification system were to contribute to an acceptable system to be used throughout the world, to facilitate communication for diagnostic, treatment, and research purposes, and to facilitate prevention of mental retardation (p. 2).

Conceptual definition in the 1983 manual.

The conceptual definition of mental retardation is somewhat confusing, since it is defined in two parts of the manual (page 1) and (page 11) which do not totally agree. The impression is that the definitions provided on page 1 are abbreviated ones, expanded in greater detail on page 11 and throughout pages 11–26 (Chapter 3) and in the rest of the manual. On page 1:

Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period,

which was the conceptual definition provided in the 1973 manual. On page 11, we read:

Mental retardation refers to significantly subaverage general intellectual functioning resulting in or associated with concurrent impairments in adaptive behavior and manifested during the developmental period.

This elaboration appears to emphasize a causal link between low intelligence (as cause) and impaired adaptive behavior (as effect), rather than viewing these as coexisting but not

necessarily causally linked. Thus, the 1983 definition seems to give somewhat more primacy to the notion that MR is at its core a condition marked by low intelligence, with various behavioral deficits flowing from such low intelligence, rather than a condition marked by low intelligence and associated behavioral deficits. However, the manual states that

the AAMD definition does not distinguish causality from association because members of the AAMD committee concluded that since one can not determine in most cases whether the lowered intellectual functioning does in fact cause the adaptive behavior deficits it was unnecessary to add a phrase implying causality (pp. 124–125).

In conclusion, the 1983 manual favored the conceptual definition provided in the 1973 manual.

Operational definition in the 1983 manual.

Significantly subaverage general intellectual functioning was “defined as IQ of 70 or below on standardized measures of intelligence” (p. 11; note that the 1961 formula of “or below” was restored, replacing the 1973 formula that established the ceiling at 69). Impairments in adaptive behavior were defined as “significant limitations in an individual’s effectiveness in meeting the standards of maturation, learning, personal independence, and/or social responsibility that are expected for his or her age level and cultural group, as determined by clinical assessment and, usually, standardized scales.” The definition of the developmental period remained as the period of time between conception and the 18th birthday” (p. 11). It was noted that

developmental deficits may be manifested by slow, arrested or incomplete development resulting from brain damage, degenerative processes in the central nervous system, or regression from previously normal states due to psychosocial factors (p. 11).

Behavioral classification system in the 1983 manual.

The 1973 behavioral classification was carried over largely intact into the 1983 manual. Mention was made, for the first time, of the need to keep the classification system congruent with other major classification systems (primarily the American Psychiatric Association’s DSM and the World Health Organization’s ICD), especially as the sections on MR in those schemes were largely derived from the 1961 and 1973 AAMD manuals. The major change in the subcategorization system, in line with the attempt to emphasize the standard error of IQ tests, was that the manual now operationally defined mild MR as falling in an IQ range of “50–55 to approximately 70” (p. 13), moderate MR as “35–40 to 50–55,” severe MR as “20–25 to 35–40,” and profound MR as “below 20 or 25.”

Levels of retardation were identified with the same terms as those used in previous AAMD manuals. The IQ ranges for levels were generally consistent with those suggested by the American Psychiatric Association in their Diagnostic and Statistical Manual III, but a narrow band at each end of each level was used to indicate that clinical judgment about all information, including the IQs, and more than one test, the information about intellectual functioning obtained from other sources, etc. is necessary in determining level” (p.13).

The procedure for determining level of retardation is as follows:

1. Recognize that a problem exists (e.g., delay in developmental milestones).
2. Determine that an adaptive behavior deficit exists.
3. Determine measured general intellectual functioning.
4. Make decision about whether or not there is retardation of intellectual functioning.
5. Make decision about level of retardation as indicated by level of measured intellectual functioning (Grossman, 1973, p. 13).

The term *mental retardation*, as used in the manual,

embraces a heterogeneous population, ranging from totally dependent to nearly independent people. Although all individuals so designated share the common attributes of low intelligence and inadequacies in adaptive behavior, there are marked variations in the degree of deficit manifested and the presence or absence of associated physical handicaps, stigmata, and psychologically disordered states. These variations greatly affect the needs of retarded individuals, the nature of the problems and services required by their families, and the burdens posed to community agencies and supportive systems. The differences are highly related to etiological factors, setting biologically damaged persons apart from psychosocially disadvantaged individuals on a number of significant dimensions: performance, problems, potentials, and prognosis (p. 12).

Two overlapping groups of mentally retarded populations were identified: the “clinical types” who demonstrated central nervous dysfunction and had low IQs in the moderate range or below composing 25 percent of the MR population, and individuals who were neurologically intact and functioned in the mild range of intelligence and were found primarily in the lowest socioeconomic segments of society, composing 75 percent of the MR population in the United States.

One innovation of the 1983 manual was its strong concern with bio-psychosocial factors and social milieus that can impede or facilitate intelligence and its extension of its multiaxial classification system by inclusion within its classification model of a multiaxial coding of social-environmental factors known to affect cognitive and developmental processes, such as:

“(a) parental absence, apathy, rejection, neglect, abuse, or lack of controls and limits; (b) lack of appropriate mental, sensory, and verbal stimulation; (c) family organization and conflict; (d) inadequate role models, socialization, and teaching approaches; (e) limited opportunities for positive interpersonal relationships with peers, teachers, and other socializing agents; (f) limited access to social and vocational opportunity structures, and (g) cultural conflicts within families (p. 51).

These factors were not diagnostic for mental retardation but helped researchers, clinicians, and service providers to understand their contributory role for the manifestation of impaired intellectual and behavioral functioning and their importance in developing a plan for intervention, habilitation, and treatment.

The 1983 manual stressed reliance for classification on cutting-edge research and not on the “vagaries of litigation, political processes and the pressure of special-interest groups” (p. 19). The 1983 classification system was concerned with both research and delivery of service programs. The manual devoted Chapter 6 to a thorough discussion of the application of its classification system to the delivery of service and research, including service-system management, planning, and evaluation of services. In terms of research, the manual wanted to provide a common terminology, because without a uniform method of classifying different subtypes of dysfunction, research would be impossible.

Planning services, specifying possible causes, and identifying opportunities for prevention require uniform specification of clinical patterns found to exist in individual’s labeled retarded. There are five factors coded for research purposes, currently being proposed in this classification that should be considered in the clinical evaluation of the clients: (a) severity of intellectual impairment, (b) assessment of adaptive behavior functioning, (c) etiology of the condition, (d) associated medical and behavioral problems, and (e) evaluation of the social environment (p. 89).

In terms of personal-social and motivational factors, the 1983 manual folded such concerns into its conceptions of adaptive behavior and its multiaxial coding of social-environmental factors. On pages 14–15, the manual characterizes mentally retarded persons as having impairments in self-direction, social responsiveness, and interactive skills, and on page 27 it includes motivation as one of the psychosocial factors that can influence intelligence.

The 1992 Manual

Background to the 1992 manual.

Although the 1973 and 1983 manuals contained some meaningful innovations (e.g., the 1973 elimination of the category of Borderline MR and the 1983 call for greater flexibility and use of clinical judgment), they both operated within the basic framework laid down in the 1961 manual—namely, a low IQ score paired with a global impairment in adaptive behavior. The T&C committee preparing the 1992 manual assumed that fundamental changes in service models and values (e.g., the use of “support” as opposed to facility-based service models, and a more optimistic and respectful way of viewing persons with disabilities perhaps due to the rise of the self-advocacy movement) made it necessary to fundamentally change the MR definition and classification system. The 1992 manual states even more explicitly than the 1983 manual the philosophical underpinnings of the model of mental retardation proposed.

Although the manual states that the changes were made with no concern for their impact on prevalence rates, there are reasons to believe that the committee was concerned that provisions in previous manuals (e.g., eliminating the Borderline category, strict enforcement of a 70 IQ ceiling, and requirement for global adaptive behavior impairment) had resulted in too many cases of deserving persons being turned down for services on the basis that they did not meet technical diagnostic criteria. Another apparent concern was the muddled state of the adaptive behavior construct, particularly the inclusion of a “maladaptive behavior” (i.e., psychopathology) component. which, while relevant for

programming purposes, was inappropriate for use in diagnosing MR. The T&C committee strongly argued for reconceptualization of the disabling process as resulting from the interaction of the person with their environment.

Mental retardation is not something you have, like blue eyes or a bad heart. Nor is it something you are, like being short or thin. It is not a medical disorder . . . Nor is it a mental disorder. Mental retardation refers to a particular state of functioning that begins in childhood and in which limitations in intelligence coexist with related limitations in adaptive skill (Luckasson et al., p. 9).

Obviously, another of the T&C committee's major concerns was the rigid reliance on IQ standard deviation units, especially in the behavioral subclassification system (i.e., mild, moderate, and so on). A related concern was the failure to exercise clinical judgment or to take into account the standard error of IQ test scores, when making the diagnosis.

The purposes of the 1992 classification system were to:

1. Attempt to express the changing understanding of what mental retardation is.
2. Formulate what ought to be classified as well as to how to describe the systems of supports people with mental retardation require.
3. Represent a paradigm shift, from a view of mental retardation as an absolute trait expressed solely by an individual to an expression of the interaction between the person with intellectual functioning and the environment. "Mental retardation describes the "fit" between the capabilities of the individual and the structure and expectations of the individual's personal and social environment" (p. 9).
4. Attempt to extend the concept of adaptive behavior from a global description to specification of particular adaptive skill area (pp. ix-x).

The major changes are as follows:

1. The global term adaptive behavior has been extended to 10 specific adaptive skill areas.
2. Four assumptions for the application of the definition are asserted at the same time as the definition.
3. Rather than requiring subclassification into four levels of a person's mental retardation (mild, moderate, severe, and profound), the system subclassifies the intensities and patterns of supports into four levels (intermittent, limited, extensive, and pervasive) (p. x).

In summary, the concept of supports and their use is integral to the definition of mental retardation that incorporates the possible nonpermanent nature of mental retardation and the demonstrated fact that with appropriate supports over a sustained period, the life functioning of individuals with mental retardation will generally improve (p. 109).

Conceptual definition in the 1992 manual.

In 1992, the following definition governed professional practice:

Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests itself before age 18 (p. 1).

This definition was based on four assumptions, which were essential to the application of the definition:

1. Valid assessment considers cultural and linguistic diversity as well as differences in communication and behavioral factors.
2. The existence of limitations in adaptive skills occurs within the context of community environments typical of the individual's age peers and is indexed to the person's individualized needs for supports.
3. Specific adaptive limitations often coexist with strengths in other adaptive skills or other personal capabilities.
4. With appropriate supports over a sustained period, the life functioning of the person with mental retardation will generally improve (p. 1).

The major innovation here is the substitution of "adaptive skills" for "adaptive behavior" and the use of a polythetic (2 out of 10) formula rather than the monothetic, and more global, requirement of "impairments in adaptive behavior." The theoretical section of the 1992 manual indicated a desire to ground the definition of MR (and of adaptive behavior) more fully in a model of multiple intelligences, specifically, a tripartite model consisting of "conceptual intelligence (IQ)" ("cognition and learning," page 11), "practical intelligence" ("the ability to maintain and sustain oneself as an independent person in managing the ordinary activities of daily life," page 15) and "social intelligence" ("the ability to understand social expectations and the behavior of other persons and to judge appropriately how to conduct oneself in social situations." page 15). However, the 1992 conceptual definition still maintained a distinction between "intellectual functioning" and adaptive behavior (now termed "adaptive skills"), and the list of 10 adaptive skills was derived, not from the tripartite model, but from a largely atheoretical community skills curriculum, the Syracuse Community Referenced Curriculum Guide (Ford, et al. 1989).

Chapter 2, the theoretical basis of the definition ends as follows:

This theoretical framework is not intended to be the "last word" on the subject. Rather, it should be considered a statement of current thinking at this point in time. As such, it is intended to guide the further development of concepts about mental retardation. Many of the ideas in this chapter warrant further elaboration, model building and empirical validation. We anticipate that further research and thinking will result in necessary changes in the framework as presented here (p. 19).

Operational definition in the 1992 manual.

As in the previous manuals, an IQ score approximately two standard deviations or more below the population mean is a necessary condition for the diagnosis of MR. In the 1992

manual, however, the criterion is established more loosely, as “a score of 70 to 75 or below” (p. 14), to take into account the standard error of any given IQ test (i.e., the likelihood that one’s true score falls within a range that is 5 points above or below the score obtained). This adding of the standard error of IQ tests into the cutting score (rather than continuing to caution diagnosticians to act flexibly in interpreting IQ scores) reflected, undoubtedly, frustration over the continuing tendency of professionals and agencies to apply the 70 IQ ceiling inflexibly, without taking into account either standard error or adaptive functioning level. One noted consequence of raising the IQ ceiling from 70 to 75, however, is that the incidence of newly diagnosed cases of MR can, theoretically, more than double, from 2 percent to about 5 percent of the population, if the new operational definition is, in fact, adopted and implemented widely (which, for the most part, has not been the case).

The 1992 definition of mental retardation is based on a multidimensional approach involving four dimensions: Dimension I—Intellectual Functioning and Adaptive Skills, Dimension II—Psychological/Emotional Considerations (assessed by measures of psychopathology, e.g., DSM III-R), Dimension III—Physical/Health/Etiological Considerations (assessed by ICD-9 and etiological factors such as biomedical, social, behavioral, and education), and Dimension IV—Environmental Considerations (as assessed by ecological analysis including educational/habilitation program, living environments, and employment environments). A three-step process of diagnosis, classification, and system of supports was followed (p. 24).

Step 1. Diagnosis of Mental Retardation,—using Dimension I—to determine eligibility for supports. Mental retardation is diagnosed if:

1. The individual’s intellectual functioning is approximately 70 to 75 or below. [“This criterion serves only to assist in the determination of whether an individual is to be classified as having mental retardation but by itself is insufficient to such diagnosis” (p. 49)].
2. There are significant disabilities in two or more adaptive skill areas. [“This part of the diagnosis is more substantive and subjective and requires clinical judgment that takes into account environmental demands and potential supports systems . . . Identified limitations in many educational, vocational, and community living skills may be irrelevant if appropriate supports or prosthetics are made available or if appropriate environmental accommodations are made. The person’s adaptive skill profile must be considered in making a diagnosis of mental retardation. The general rule is that if two or more adaptive skill limitations fall substantially below the average level of functioning (as determined either by formal comparison to a normative sample or through professional judgment), then the individual would meet this second criterion for a diagnosis of mental retardation. . . . By shifting to a greater reliance on adaptive skills in the diagnosis of mental retardation, embedded within an orientation toward observation and clinical judgment, all persons who have significant limitations associated with the defined concept of mental retardation could be assured of eligibility for services” (p.49)].
3. The age of onset is below 18.

Step 2. Classification and Description—using Dimensions I, II, III, and IV—to identify strengths and weaknesses and the needs for supports.

1. Describe the individual's strengths and weaknesses in reference to psychological/emotional considerations.
2. Describe the individual's overall physical health and indicate the condition's etiology.
3. Describe the individual's current environment placement and the optimal environment that would facilitate his/her continued growth and development.

Step 3. Profile and intensities of needed supports. Identify the kind and intensities of supports needed (intermittent, limited, extensive, or pervasive) for each of the four dimensions (p. 24).

The intent of this three-step process is to broaden the conceptualization of mental retardation, to avoid reliance on IQ scores to assign a level of disability, and to relate the person's needs to the intensities of supports necessary to enhance the person's independence/interdependence, productivity, and community integration (p. 25).

In summary, the purpose of the three-step approach to Definition, Classification, and Systems of Supports...is to provide a detailed description of the individual and his or her needed supports. This permits recognition of all separate areas of need that may require intervention while recognizing their interdependence. It also facilitates the design of treatment approaches or service delivery plans that take into account all aspects of the person's functioning. From the viewpoint of the individual, it permits a more accurate description of change over time, including individual responses to personal growth, environmental changes, educational activities, and therapeutic intervention. Finally, it focuses on the potential of one's environment to provide the services and supports that will enhance the person's opportunities for personal life satisfaction (p. 34).

Behavioral classification system in the 1992 manual.

The most controversial feature of the 1992 manual was the elimination of the behavioral classification system based on four distinct severity subcategories ("mild," "moderate," "severe," and "profound"), replacing it with a single descriptive profile approach, the Support Planning Matrix (p.106), the intensity and range of an individual's support needs across the 10 adaptive skills areas, the habilitation goals, and the environmental characteristics. The motivation was undoubtedly:

1. To reduce heavy reliance on IQ scores (since the diagnostic subcategorizing tended to be based solely on IQ standard deviation units).
2. To bring the notion of support needs, so central to the changing service paradigm in the MR field, into the definition of MR as operationalized in the Support Planning Matrix.

Opposition to this step reflects the view that subcategories have a long history in the MR field (in fact, they predate the invention of a unifying rubric of MR), that there are broad

qualitative differences between people with mild and more severe forms of MR, and that these qualitative distinctions should not be obscured.

The 1992 manual in its discussion of Dimension III, Physical/Health/Etiology considerations, modified the broad etiological model of mental retardation due to biological origins vs. mental retardation due to psychosocial disadvantage as overly simplistic. Mental retardation reflects the cumulative or interactive effects of more than one factor, and so one cannot separate the etiology of mental retardation into biological and psychological categories that may be often blurred. Instead a multifactorial model of etiology was extended to include type of factors and timing of factors. Four types of factors were proposed (p. 71):

1. Biomedical: factors that relate to biological processes, such as genetic disorders or nutrition.
2. Social: factors that relate to social and family interaction, such as stimulation and adult responsiveness.
3. Behavioral: factors that relate to potentially causal behaviors, such as dangerous (injurious) activities or maternal substance abuse.
4. Educational: factors that relate to the availability of educational supports that promote mental development and the development of adaptive skills (p. 71).

“The second direction describes the timing of the occurrence of casual factors according to whether these factors affect the parents of the person with mental retardation, the person with mental retardation, or both. This aspect of causality is termed intergenerational to describe the influence of factors present during one generation on the outcome in the next generation” (p. 71). Thus mental retardation has both multifactorial and intergenerational origins.

The 1992 manual is heavily focused on educational, adult services, social policy, and legal applications in practice. In terms of the relationship of the diagnostic and classification system to research it can be summarized as follows:

We anticipate that the 1992 Definition, Classification, and Systems of Supports will challenge the research community. For example, a major anticipated change is in the description of research subjects. The new system requires greater precision in the description of subjects beyond the mild, moderate, severe, and profound categorization. Now practice will demand complete information on the person's assessed level of intellectual functioning (IQ), a profile of adaptive skills, the condition's etiology, and the types and intensities of supports needed by—and provided to—the person.

A second anticipated change relates to focusing on the assets and liabilities of the person's environment and the types and intensities of supports being received by the person. As a result, there will be less emphasis on the person's condition and functioning level as the independent variable. Rather, more emphasis will be given to environmental conditions and support structures as independent or intervening variables and the person's functioning level, living/employment status, or level of satisfaction as the dependent variable.

In addition to the ongoing research in typical areas, and lines of research currently underway, some researchers should turn their attention to large utilization

studies and large-scale field testing of the definition so that its effects, if any, can be monitored (p. 149).

In terms of personal-social and motivational factors, the 1992 manual excludes personality, temperament, and character as not essential to the definition of mental retardation (p. 12). However, Self-Direction is included as one of the 10 adaptive skill areas. It is defined as:

skills related to making choices, learning and following a schedule; initiating activities appropriate to the setting, conditions, schedule, and personal interests; completing necessary or required tasks; seeking assistance when needed; resolving problems confronted in familiar and novel situations, and demonstrating appropriate assertiveness and self-advocacy skills (p. 40).

Self-Direction appears to be similar to modern models of self-regulation and self-determination.

Personal-social and motivational factors as outcomes (e.g., a person's sense of well being) are addressed in Dimension IV, Environmental Considerations, as the result of wholesome environments (pp. 95–96). Personal satisfaction, strengthening self-esteem, and an individual sense of worth are seen as primary outcomes of having appropriate supports (pp. 101–102). Interestingly, another result of appropriate supports, spirituality—the role of spiritual beliefs and their expression in the lives of people with mental retardation—is also mentioned in the 1992 manual (p. 108).

The 2002 Manual

Background to the 2002 manual.

After several years of deliberation by the Terminology and Classification (T&C) Committee, the 10th AAMR manual was published in 2002. Our book *What is Mental Retardation?: Ideas for an Evolving Disability* (Switzky & Greenspan, 2003) was intended to influence the debate over the development and adoption of the 10th AAMR manual. To that end, we hoped that it would come out a year or two before the 10th edition, while the T&C committee was still deliberating. However, it was delayed and came out in e-book form in 2003, almost a year later than AAMR 2002. A preliminary draft of our book was, however, circulated among the T&C members, as described by Robert Schalock in his foreword to *What is Mental Retardation?: Ideas for an Evolving Disability*, and influenced to some extent the final form of the 2002 AAMR manual. (This influence can also be seen in several references made in the AAMR 2002 manual to *What is Mental Retardation?*.)

The challenge facing the authors of the AAMR 2002 manual (10th edition) stemmed from the fairly widespread unhappiness that had been expressed over the AAMR 1992 (9th edition). This unhappiness was reflected in such things as a general ignoring of the 1992 definition by state MR/DD agencies, and by the action of the MR Division 33 of the American Psychological Association in publishing its own diagnostic manual (Jacobson & Mulick, 1996), which proposed a rival definition closer to the pre-1992 AAMR one, the 1983 version edited by Grossman, which was considered more scientific, more positivistic, and more modern. (See Jacobson and Mulick, 2003, for their critique of AAMR 1992; see also Jacobson and Mulick in this book.)

The two major stated reasons for unhappiness with the 1992 definition as discussed in the 2002 Manual, pages 27–32, were: (a) the switch from a requirement of global deficit in “adaptive behavior” to a requirement of deficits in two out of ten “adaptive skills” (with the additional problem that the listed ten skills were of questionable validity); and (b) the dropping of the diagnostic severity levels of mental retardation (based on IQ score SD units) and its replacement with a model where severity level was based on intensity of support needs across all ten adaptive skill areas.

The 2002 T&C committee also was responding to the criticism that the tripartite model of intelligence was cited in 1992 as providing justification for a new approach to adaptive behavior, but was not actually reflected in the operational definition of adaptive skills that was presented. For these reasons, it was expected that the definition of MR contained within the 2002 manual would depart in significant ways from the one proposed in 1992. Also there was major unhappiness in the psychological community with AAMR’s shift from a Functionalist-Objectivistic, Positivistic, “Scientific,” Modern paradigm of mental retardation typical of the pre-1992 AAMR manuals to an Interpretive Post-Modern paradigm of mental retardation based on a Social System perspective announced in the 1992 AAMR manual. However, no one expected that the 2002 AAMR manual would shift back to a Functionalist-Objective perspective (See Switzky and Greenspan, 2003, this book, for a discussion of the scientific paradigms underlying the various AAMR manuals).

Conceptual definition of the 2002 manual.

In the 2002 manual, “Mental retardation is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18” (Luckasson et al., 2002, p. 8). Included are five assumptions:

Assumption 1: “Limitations in present functioning must be considered within the context of community environments typical of the individual’s age peers and culture.” This means that the standards against which the individual’s functioning must be measured are typical community-based environments, not environments that are isolated or segregated by ability. Typical community environments include homes, neighborhoods, schools, businesses, and other environments in which people of similar age ordinarily live, play, work, and interact. The concept of age peers should also include people of the same cultural or linguistic background.

Assumption 2: “Valid assessment considers cultural and linguistic diversity as well as differences in communication, sensory, motor, and behavioral factors.” This means that in order for assessment to be meaningful, it must take into account the individual’s diversity and unique response factors. The individual’s culture or ethnicity, including language spoken at home, nonverbal communication, and customs that might influence assessment results, must be considered in making a valid assessment.

Assumption 3: “Within an individual, limitations often coexist with strengths.” This means that people with mental retardation are complex human beings who likely have certain gifts as well as limitations. Like all people, they often do some things better than other things. Individuals may have capabilities and strengths that are independent of their mental retardation. These may include strengths in social or physical capabilities, strengths in some adaptive skill areas, or strengths in one aspect of an adaptive skill in

which they otherwise show an overall limitation. (We find the sentence “Individuals may have capabilities and strengths that are independent of their mental retardation” a little confusing. To what domains of functioning that are independent of mental retardation is this referring, since mental retardation is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills? Beyond those, what components of functioning are left?).

Assumption 4: “An important purpose of describing limitations is to develop a profile of needed supports.” This means that merely analyzing someone’s limitations is not enough, and that specifying limitations should be a team’s first step in developing a description of supports that the individual needs in order to improve functioning. Labeling someone as mentally retarded should lead to a benefit such as a profile of needed supports.

Assumption 5: “With appropriate personalized supports over a sustained period, the life functioning of the person with mental retardation will generally improve.” This means that if appropriate personalized supports are provided to an individual with mental retardation, improved functioning should result. A lack of improvement in functioning can serve as a basis for reevaluating the profile of needed supports. In rare circumstances, however, even appropriate supports may merely maintain functioning or stop or limit regression. The important point is that the old stereotype that people with mental retardation never improve is incorrect. Improvement in functioning should be expected from appropriate supports, except in rare cases (pages 8–9).

The 2002 System’s theoretical model (page 10, Figure 1.1) maintains the ecological focus on the key elements in five dimensions derived from the *International Classification of Functioning, Disability, and Health (ICF)* (World Health Organization [WHO], 2001) model of disability: Dimension I. Intellectual Abilities, Dimension II. Adaptive Behavior (conceptual, social, and practical skills), Dimension III. Participation, Interactions, and Social Roles, Dimension IV. Health (physical health, mental health, and etiology), and Dimension V. Context (environments and culture), which influence the person’s unique functioning.

The major elements, and changes, in the 2002 definition are discussed below:

1. By including the term “disability,” the T&C committee sent the message that MR is a serious disorder, involving impairments significant enough to warrant provision of various supports in order for the person to function normally. Thus, adding the term “disability” brought the notion of “support needs” into the definition of MR more directly. Also by including the term “disability,” AAMR 2002 tries to blend its model even more into the ICF, WHO 2001, model of disability.
2. By indicating that people with MR have significant limitations in both intellectual functioning and adaptive behavior, the T&C committee put the two criteria on an equal footing. This is in contrast to 1961 and 1973 (where low intelligence is “associated with impairment in adaptive behavior”), to 1983 (where adaptive behavior “exists concurrently with deficits in adaptive behavior,” and to 1992 (where adaptive behavior is “existing concurrently with related limitations in two ... adaptive skill areas.” Thus, unlike the earlier AAMR manuals, which gave intelligence primary emphasis and adaptive behavior (or skills) secondary status

(by indicating that it is associated or exists concurrently with low intelligence), in 2002 neither criterion was given primacy, as reflected in the assertion that MR is characterized by significant limitations in both criteria.

3. In 2002, the term “adaptive behavior” was retrieved from the dust bin. In 1992 it had been replaced, by the term “adaptive skills.” This retrieval is indicated in the statement in 2002 that MR is characterized by “significant limitations both in intellectual functioning and adaptive behavior...” However, the adaptive skills term was retained by the further statement that “adaptive behavior is expressed in conceptual, social, and practical adaptive skills.” This formula allowed the T&C committee to do three things: (1) return the term adaptive behavior to a prominent place in the definition, (2) retain the adaptive skills term (as an elaboration on adaptive behavior), and (3) bring the tripartite model directly into the definition of MR, even if as a tripartite model of adaptive behavior rather a tripartite model of intelligence (which would have required dropping the construct of adaptive behavior altogether, and replacing it with a definition of MR based on deficits in multiple areas of intelligence). (See also Schalock, Chapter 17, 2003, Schalock, this book.)
4. The “developmental criterion” was retained in the 2002 manual, as reflected in the statement: “this disability originates before age 18.” As in previous manuals, there is no indication in the definition of any particular type of known or inferred etiology or cause for the disability. A development that influenced to some extent the writing of the 2002 AAMR manual was the publication, in 2001, of the World Health Organization’s (WHO) International Classification of Functioning, Disability and Health (ICF). The ICF model was intended to be more transactional and less defectology-oriented than its ICIDH predecessor, and some attention was paid in the 2002 AAMR manual to pointing out areas of convergence between the AAMR 2002 system for diagnosing MR and the 2001 ICF model of functioning, disability, and health. In the ICF model, a health disorder or disability, such as MR, is seen as the outcome of the interaction between various personal and environmental factors, as reflected in three domains: “Body Functions and Structures” (impairments, such as limited intelligence); “Activities” (the execution of various tasks, including difficulties an individual may have in playing various roles); and “Participation” (the extent to which an individual’s environment facilitates or impedes the playing of various social roles). Both the 2002 AAMR system and the ICF systems are described in the 2002 manual as “multiparadigmatic ... that is, they do not rely on a singular [sic] objective or subjective worldview and they attempt to integrate medical, psychological, and social models of disability” (p. 109). But are they both multiparadigmatic? We have argued that the ICIDH model (Switzky and Greenspan, 2003, chapter 24) and its successor, the ICF model appear to be multiparadigmatic and combine elements of the modernist and postmodernist philosophy of science, a kind of a mixed-model, but that the AAMR 2002 model retains an interpretive post-modern perspective.

In an attempt to demonstrate the equivalence of the two systems, it was argued (p. 109) that the AAMR intelligence criterion loads on ICF's body functions and structures domain, while the AAMR adaptive behavior criterion loads on the ICF activities and participation domains. Luckasson et al. (2002) go on to state that "it may be concluded that the core concepts and criteria of the AAMR 2002 System fit the frame of reference of functioning and disability of the ICF" (p. 109). Clearly, the T&C committee felt that it was important to show that 2002 diagnostic system fits nicely with the ICF's theoretical orientation. (See Buntinx, chapter 22, 2003, this book; Griffin & Parmenter, chapter 21, 2003; Jacobson, chapter 23, 2003; Simeonsson, Granlund, and Bjorck-Akesson. Chapter 20, 2003, for a more detailed analysis.)

Operational definition in the 2002 manual.

In line with the ICF (WHO, 2001), the term "disability" is "conceptualized as a significant problem in functioning and is characterized by marked and severe problems in the capacity to perform ('impairment'), the ability to perform ('activity limitations'), and the opportunity to function ('participation restrictions')" (p. 16). An individual's possible need for formal disability status, as reflected in a perceived need for special services and supports, is the starting point for assessment and diagnosis, and the outcome of that process is the confirmation or disconfirmation of that status.

An innovation in the 2002 manual is the effort to provide a conceptual definition of intelligence. This definition is "a general mental ability [that] includes reasoning, planning, solving problems, thinking abstractly, comprehending complex ideas, learning quickly, and learning from experience" (p. 51). However, in line with previous AAMR manuals, "intellectual functioning" is operationally defined as performance on a standardized measure of intelligence, and impairment in intellectual functioning is an IQ score, which is a measure of where one falls on the normal distribution of test performance across the general population. It is acknowledged in the manual that "although reliance on a general functioning IQ score has been heatedly contested by some researchers . . . it remains, nonetheless, the measure of human intelligence that continues to garner the most support within the scientific community" (p. 51).

The 2002 manual makes note of the movement among intelligence scholars away from a reliance on a single measure of "g" (general intelligence) but then goes on to state that

until more robust instruments based upon one of the many promising multifactor theories of intellectual abilities are developed and demonstrated to be psychometrically sound, we will continue to rely on a global (general factor) IQ [score] (p. 66).

In the 2002 manual, as in the 1992 manual,

the 'intellectual functioning' criterion for diagnosis of mental retardation is approximately two standard deviations below the mean, considering the SEM [standard error of measurement, usually expressed in SD units] for the specific assessment instruments used and the instruments' strengths and limitations (p. 58).

A difference between the 2002 and 1992 manuals is that in 1992, the IQ cut-off score was established as "a score of 70 to 75 or below," while in 2002 there was a return to the

1983 AAMR manual's injunction to take the SD of a scale into account, thus implying that a score of 75 makes one eligible, without specifying any particular score value. In the discussion of standardized intelligence tests, it is pointed out that a score below 70 has slightly different meanings across tests (for example, taking in a slightly larger percentage of the population with the Stanford-Binet than with the WAIS, even if both use a SD of 15 points) and that clinical judgment should be used in selecting tests and interpreting test scores.

There is much discussion in the 2002 manual of the need to reduce excessive reliance on IQ scores, and to raise the adaptive functioning criteria to an equal footing. However, in the summary for Chapter 4 (pages 51–71), which addresses intellectual assessment, it was stated that

subaverage intellectual functioning, defined as two or more standard deviations below the mean, is a necessary but insufficient criterion to establish a diagnosis of mental retardation (p. 66).

This seems to imply a continuation of the existing one-way practice, where a high adaptive behavior score will invalidate a (false positive) diagnosis of MR in someone who meets the IQ score criterion, but the same cannot be done in reverse (that is, avoiding a false negative nondiagnosis if a person with significant adaptive behavior deficits has an IQ score that falls above the cut-off ceiling). Thus, one consequence of continuing to view adaptive behavior and intellectual functioning as separate domains (rather than integrating them by adopting a tripartite model of intelligence and dropping adaptive behavior as a separate construct) is that, rhetoric to the contrary, IQ scores continues to be more important than adaptive behavior scores as the basis for defining and diagnosing MR.

In spite of continuing this view of IQ as the “necessary but insufficient criterion,” considerably more space was devoted in the 2002 manual than in predecessor manuals to a discussion of adaptive behavior and how to measure and use it. As mentioned, a major difference between the 1992 and 2002 manuals is in dropping the 10 adaptive skill areas and substituting instead a tripartite model of adaptive behavior, with the three areas being “Conceptual Skills,” “Practical Skills,” and “Social Skills.” The justification given for switching over to the tripartite model of adaptive skills is that they have been supported by “many years of empirical research on the construct of adaptive behavior” (p. 76), research that “supports the three dimensions that are in the current definition” (p. 76).

Table 5.1 (p. 77) of the 2002 manual lists several standardized measures of adaptive behavior and indicates which subscales on these various measures shed light on each of the three areas of an individual's adaptive functioning (i.e., conceptual skills, social skills, and practical skills). It is puzzling that information from intelligence or achievement tests was not recommended to shed light on deficits in conceptual skills, but this is understandable when one considers that the T&C committee wished to create the impression that adaptive skills are somehow different from what the first author (Greenspan, 1979, 1981) had previously termed “adaptive intelligence.” This results in some confusion, as “daily living skills” and “personal living skills” (from the Vineland Adaptive scales and the Scales of Independent Behavior, respectively) are placed in the “Practical Skills” column, while “Community Self-Sufficiency” and “Independent Living” (from the AAMR Adaptive

Behavior Scale and Comprehensive Test of Adaptive Behavior, respectively) are placed in the “Conceptual Skills” Column.

In previous manuals, adaptive behavior measurement was intended to be used more descriptively (the original AAMR Adaptive Behavior Scale did not even have norms), or else, as in the 1992 AAMR manual (in the selection of deficits in two out of ten adaptive skill areas), in a manner that could be considered to be criterion- rather than norm-referenced. In the 2002 manual, as part of the effort to treat adaptive behavior and intelligence as equal and parallel criteria, a requirement was established that “for the diagnosis of mental retardation, significant limitations in adaptive behavior should be established through the use of standardized measures based on the general population, including people with disabilities and people without disabilities” (p. 76).

As with IQ, the cut-off score for establishing significant limitations in adaptive behavior is “operationally defined as performance that is at least two standard deviations below the mean” (p. 76; however, there is no mention of the need to take into account the standard error of adaptive behavior instruments, as reflected in use of the language “approximately two standard deviations below the mean”). Two choices are given, however, regarding the score to which this minus 2SD criterion is to be applied. One choice involves an individual’s score on a measure of “one of the following three types of adaptive behavior: conceptual, social, or practical,” while the second choice involves “an overall score on a standardized measure of conceptual, social, and practical skills.”

If the T&C committee’s intent was to establish a parallel between adaptive behavior and intelligence, then the second choice (overall score) makes some sense, as an overall IQ score (and not solely a Verbal or Performance IQ score) is required for meeting the intelligence criterion. However, the first choice given (a low score in one of the three types of adaptive skills) makes less sense theoretically, in part because a low score on conceptual skills (in spite of the manual’s effort to establish it as different from conceptual intelligence) means that a person can be found to have MR solely on the basis of academic limitations. The first choice also is puzzling in that no empirical or theoretical basis was provided for establishing the criterion at one skill, as opposed to two or all three skills, and this makes the definition vulnerable to the same charge of arbitrariness directed against the 1992 AAMR manual’s setting the adaptive skill criterion at two-out-of-ten adaptive skills.

It was acknowledged in the 2002 manual that the option of using a significant deficit in only one of the three skill areas “may appear to be an overly inclusive criterion and one that might identify people who have deficits in a single, narrow area rather than the generalized adaptive skill deficit that is assumed to be present in a person with mental retardation” (p. 78). Three explanations were provided for giving such an easy choice. The first explanation is that since the correlations between the various aspects of adaptive behavior differ widely across various measures, requiring a finding of deficits on more than one measure would create an unfair situation in which a diagnosis of MR would depend too heavily on which adaptive behavior measure was used. The second explanation is that a finding of significant deficit in one area “will have a sufficiently broad impact on individual functioning as to constitute a general deficit in adaptive behavior” (p. 78), especially if this general deficit is confirmed through the use of clinical judgment. The third, and probably most important, explanation is that simulation studies have shown that a more

stringent standard would cause many current persons with mild MR to be found not to have MR, and the T&C committee was concerned about devising a standard that would result in too many false negatives.

Behavioral classification system in the 2002 AAMR manual.

Perhaps the most controversial provision in the 1992 AAMR manual was the dropping of the four distinct severity subtypes of MR (mild, moderate, severe and profound) and replacing this discontinuous classification scheme with a continuum based on breadth and intensity of an individual's support needs. In 2002, the T&C committee decided to side-step this source of controversy, by enumerating the various goals of subclassification and listing one or more classification mechanisms for pursuing each of the goals, but without indicating its own preferred subclassification scheme.

The statement on classification systems contained in the 2002 manual (p. 99) goes as follows:

The purposes of classification include grouping for service reimbursement or funding, research, services, and communication about selected characteristics. Multiple classification systems may be used so that the multiple needs of researchers, clinicians, and practitioners can be met. Such classification systems can be based, for example, on the intensities of needed supports, etiology, levels of measured intelligence, or levels of assessed adaptive behavior.

One obvious advantage of this wording is that one can use any classification system one likes (ranging from the pre-1992 reliance on IQ SD-based discontinuous categories to the post-1992 reliance on a continuum based on profile of support needs) without being in opposition to the AAMR manual.

CONCLUSION

In this chapter, we have provided a basic picture of the various AAMR diagnostic manuals over the past four decades, using their own words as much as possible. Our aims have been (a) to give the reader a "feel" of the style of the manuals, (b) to enable the reader to understand the historical references in the various chapters, and (c) to provide a historical perspective on current efforts to improve the 2002 AAMR manual and develop a model of mental retardation for the 21st century. Because the various contributors will be making evaluative comments (especially on the 2002 manual), we have attempted to avoid commenting on the manuals, although we have not always succeeded in keeping our biases from showing.

The basic problem with which AAMR has struggled, beginning with the 1961 manual, is how to keep the definition of MR grounded in a notion of low "intelligence" without getting locked into a rigid IQ formula or relying solely on an individual's IQ score. This has proven to be a great challenge, as reflected in the various changes that have been assayed during the past four decades in the AAMR manuals. Some familiarity with the historical record can only be helpful to the reader as this challenge is addressed.

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