

DOCUMENT RESUME

ED 360 763

EC 302 334

AUTHOR Soloff, Leah A.; Wright, Eleanor B.
 TITLE International Definitions of Mental Retardation.
 PUB DATE 5 Jun 93
 NOTE 31p.; Paper presented at the Annual Meeting of the American Association on Mental Retardation (117th, Washington, DC, June 5, 1993).
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Access to Education; College Students; *Coping; Foreign Countries; Goal Orientation; Higher Education; Labeling (of Persons); *Learning Disabilities; *Performance Factors; Self Esteem; Self Evaluation (Individuals); State Universities; Student Characteristics; Study Skills; *Success

ABSTRACT

This study investigates definitions and usage of the term "mental retardation" worldwide, via a review of the literature and a survey of 20 countries. Nineteen of the 20 responding countries reported using some sort of intelligence quotient (IQ) criterion to determine mental retardation, though the criterion varies. In some countries, there are differences between official classification systems and practical ones, with the official systems being used for clinical and scientific purposes while welfare agencies use practical classifications for identifying severity of disability. The paper finds that IQ may provide a statistical convenience, but it appears to be relatively insignificant in making real life decisions associated with treatment. The paper notes that analysis of different countries' terminology provides insight into cultural perspectives. The paper concludes that differences in ability are recognized in all cultures, and the impact of these differences cannot be separated from surrounding social, political, and economic conditions. Mental retardation is viewed as a social phenomenon that includes people with known organic etiology, and IQ is a neat label for a package of behaviors that generally correspond to a given level. (Contains 25 references.) (JDD)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED 360 763

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

International Definitions of Mental Retardation

Leah A. Soloff, B. A.

Eleanor B. Wright, Ph. D.

The University of North Carolina at Wilmington

601 South College Road

Wilmington, NC 28403

Paper Presented at

117th Meeting of

AMERICAN ASSOCIATION ON MENTAL RETARDATION

Washington, D. C.

June 5, 1993

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Eleanor B.
Wright

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Requests for additional information should be directed to Dr. Eleanor B. Wright.

ERIC 302 334



Abstract

With the current revision in the AAMR definition of mental retardation (Luckasson, et al, 1992) there is much interest in the essence of the concept. This study is an attempt to understand the concept of mental retardation by investigating definitions and usage of the term worldwide. A review of the literature was conducted and information obtained from replies to a questionnaire from 20 countries. In addition to the elements of the definitions used and their similarity to AAMR's definition, classifications systems, terms commonly used, and the extent to which the definitions are used within each country are discussed.

International Definitions of Mental Retardation

Defining mental retardation in the United States is currently the topic of much discussion especially since the American Association on Mental Retardation has undertaken the task of redefining mental retardation and revising the Manual on Definitions and Classification in Mental Retardation (R. L. Schalock, Personal communication, February 13, 1992; AAMR News & Notes, 1992). With this current emphasis on defining mental retardation, persons in the field struggle to understand the concept. The concept has different meanings depending on a person's perspective. Mercer (1973) views anyone labelled mentally retarded as fulfilling a social role while Gold (1980) believes that mental retardation is dictated by the depth of society's failure to provide adequate education and training. Others view a score on a standardized intelligence test as being the "most acceptable compromise" (Clausen, 1972, p. 59) in defining mental retardation. Furthermore, a variety of definitions are used in the United States by different professional groups. This is clearly demonstrated by the variety of guidelines used by states in identifying children for special education

services. Utley, Lowitzer, and Baumeister (1987) found that 56% of the states used terms promoted by AAMD (AAMR) while the remaining states used a variety of definitions from other sources.

These various concepts of the condition currently labelled mental retardation have developed through years of observation of individuals, research, and discussion among professionals. According to Gagne, Briggs, and Wager (1988) concepts develop from studying a variety of examples and determining the defining attributes of a concept. It is our contention that the concept of mental retardation could be more fully understood, especially by persons just beginning their study, if a variety of definitions were examined. While textbooks in the field of mental retardation often include a variety of perspectives on definitions of mental retardation, these generally are only those definitions used in the United States. The exception to this is in a new text by Drew, Logan, and Hardman (1992) in which they discuss definitions, classifications, and current practices in seven countries. They point out that they provide this material so that students of mental retardation may "be aware of other

approaches to this phenomenon and to have an idea of how they compare." (P. 446). Furthermore, personal communication with professionals in the field of mental retardation (R. B. Edgerton, February 20, 1992; M. S. Kivitz, May 18, 1992; O. Karan, May 18, 1992; C. Iannaccone, January 29, 1992; J. R. Mercer, February 20, 1992; T. Oakland, January 7, 1992; T. Jonsson, February 20, 1992) indicated a lack of current information on this topic and seemed to support the contentions of Drew, Logan, and Hardman. We concur that there is a need to study a wide variety of perspectives related to the concept of mental retardation in order to enhance our understanding of this phenomena.

Literature Review

A number of writers have been interested in the concept of mental retardation across cultures. Dorman in 1925 (cited in Manion & Bersani, 1987) described how persons who deviated from the norm were treated in the Kungu and the Bechuana tribes, both in the Khalahari region of Africa. Classification information was not provided but the general condition of retardation was recognized and dealt with according to traditions. Extensive international study has been done by Holowin-

sky (1982, 1983, 1986). He found that England, Poland and Japan utilize IQ criteria although it is applied in different ways. Sweden, China, and the Ukraine rely more on adjustment to societal norms of learning ability and social competence. Much of Holowinsky's work focused on what was the Soviet Union. They have a classification that compares to our mild mental retardation with undifferentiated etiology. A separate classification category is used for people with a definite neurological insult. A very different perspective on mental retardation is evidenced by the Semai of Malaysia (Dentan, 1967) and the Tamang of Nepal (Peters, 1980). The Semai use the term "Kalot" and the Tamang use "Laato." Both terms translate to "dumb" and refer to an individual's verbal ability. Intelligence is not a consideration.

From this review of the literature, specific definitions of mental retardation were found for nine countries or specific tribes within those countries. These definitions appear to be for the concept referred to as mental retardation in the United States. Terms for mental retardation and translations of these terms are indicated in Table I.

INSERT TABLE 1 ABOUT HERE

Furthermore, it is of interest to note the extent to which the intelligence quotient (IQ) and adaptive behavior criteria are used as well as whether or not there is a nationalized system for defining mental retardation.

INSERT TABLE 2 ABOUT HERE

It appears that there is limited, recent information about the concept, definitions, and use of the term "mental retardation" within various countries. This study is an effort to examine the concept of mental retardation from an international perspective to broaden our own understanding of the concept. Specifically, the purpose of this study is to address the following issue: Are there universal attributes across defining criteria for definition and classification of "mental retardation" that transcend social, economic, and political influences of culture?

Method

Questionnaires were sent to professionals in 40 countries. The subjects were found through two main sources, a list of members of the International Association for the Scientific Study of Mental Deficiency and scanning professional journals for authors on international issues. The questionnaire contained the AAMR definition (Grossman, 1983) of mental retardation as well as criteria for each classification level. Professionals were asked to respond to the following three questions:

1. What classifications, terms, and criteria exist in your country that are comparable to the above?
2. Is this a national system? If not, what agencies or organizations use it?
3. What do you perceive to be the overriding purpose in your country for classifying persons as mentally retarded?

The data from the responses were compared for general definitions and defining criteria, scope of use, and purpose of use. Additional information was provided by some respondents and is included in the analysis.

Specifically, classification trends were compared when provided.

When examining IQ as a criteria for classification, countries were rated as similar, different, or no criteria. At least three levels of retardation, with IQ criteria similar to mild, moderate, and severe or below as defined by Grossman (1983) had to be specified in order to qualify as similar. The same ratings were applied to the adaptive behavior criteria. Countries were rated as similar if they specified adaptive behavior criteria as outlined in the 1983 definition. Classification systems were described as national systems if they were indicated as such. Although some systems were specified as official or practical, it is beyond the scope of this effort.

Results

Of the questionnaires sent, 23 were returned representing 20 countries. Of these respondents, 13 (65%) countries specifically reported using IQ and adaptive behavior criteria similar to the ones used by AAMR, five countries (25%) reported using similar IQ criteria but did not specify that adaptive behavior was also considered. Therefore, it was assumed not to be a

criterion. A different system of IQ was reported by

INSERT TABLE 3 ABOUT HERE

two respondents (10%) and a respondent from one country (5%) indicated that it uses no IQ criteria. In regard to classification systems, three countries reported that there were two distinct systems, official and practical. Four countries reported having no national system.

Respondents specified a variety of reasons for classification of people with mental retardation. In Table 4 the purposes of classification were assigned

INSERT TABLE 4 ABOUT HERE

to one of the following categories: "Social Services" refers to a person's eligibility for services, "Identification of Educational/Service Needs" refers to identification of special needs, "Legal" includes issues involving rights, removal of rights, and eligibility of conviction on criminal charges. "Economic" indicates determination of eligibility to receive financial

assistance or pensions. "Medical" and "Employment" are self-explanatory labels. A number of issues were similar across multiple countries and are represented in Table 4. Several unique responses were provided. The response from Switzerland indicated that classification is done mainly for statistical reasons. The respondent from Mexico stated that the purpose is to homogenize groups for the best possible attention. Ethiopia reported no classification system and the information was not included for Saudi Arabia. Five countries provided terms in their own language which are represented in Table 5.

INSERT TABLE 5 ABOUT HERE

Trends were reported involving changing terminologies, treatment, and diagnostic approach. Changes in terminology reflect changes in perspective. The respondent from France indicated that the term "polyhandicap" is a currently used term because mental retardation "is only one diagnosis where several can be used." Several additional trends are reported in Table VI.

INSERT TABLE VI ABOUT HERE

Discussion

There were no universal attributes discovered through this study. Since of the 20 responding countries 19 reported using some sort of IQ criteria to determine mental retardation, it seems that IQ criteria is very close to a universal defining criteria. A look beneath the surface shows that this is not necessarily true. Upon closer examination we find that IQ criteria vary. A person with an IQ of 60 would be considered "Practiquement educable" or "almost teachable (I. Stites, Personal Communication, May 25, 1992) which is a category comparable to moderate retardation in the United States. In this country that same person would in all probability be classified as mildly mentally retarded. A person with an IQ of 65 might be considered mildly retarded in the United States. According to Koenig (cited in Haaseri, 1990) that same person would not be classified retarded in Germany where the cutoff is below IQ 60. In Saudi Arabia a person with an IQ of 45 would be considered essentially incurably

retarded (O. Karan, Personal Communication, May 18, 1992). In the United States that same person would be on the borderline between mildly and moderately retarded.

A second problem in considering IQ criteria a universal attribute of mental retardation is the reported difference between official classification systems and practical ones. Although the official system in Ireland utilizes the AAMR levels of severity, in practical use people are rarely assigned to the categories of severe or profound on the basis of IQ scores. Adaptive skills and dependency level are the primary determinants of classification. Similarly in Nepal the World Health Organization (1979) and American Psychiatric Association (1980) systems are used for clinical and scientific purposes while welfare agencies use the classifications of trainable and non trainable. The respondent from Nepal stated that classification by IQ "doesn't seem to be solving the issues and problems associated with the condition in this country." In these cases while IQ may provide a statistical convenience, it appears to be relatively insignificant in making real life decisions associated with treatment.

In Denmark the World Health Organization (World Health Organization, 1979) system of classification, which is similar to AAMR, is utilized in principle. In practice people are classified according to etiology or as unspecified or as having psychomotor mental retardation.

A third issue in considering IQ relatively universal is represented by the response from Taiwan. Many of the policy makers/educators there are Western educated. Their perspectives do not purely reflect their cultures but are heavily influenced by Western attitudes.

A final issue regarding IQ that must be addressed is how IQ is defined. In India IQ refers to the ratio between mental age and cognitive age (Dhaliwal, 1990), a system that the United States and others abandoned some time ago.

Terminology can give us insight into cultural perspectives. France, Norway, Denmark, and the former Soviet Union are examples of countries that use a separate category for unspecified mental retardation. This may indicate a two group approach to mental retardation similar to that discussed by Zigler and Hodapp

(1986). Norway provided a translation of "development hampering" for their term "psykisk utviklingshemming." This translation implies a condition that can be changed whereas the translation "blunted child" from China (Robinson, 1978) provides the image of a permanent state. This perspective brings to mind an early "Western" definition of mental retardation that uses the phrase "developmentally arrested...essentially incurable" (Doll, 1941) It may be that countries are on different developmental schedules with regard to their understanding of the concept of mental retardation.

France, Norway, and Denmark are examples of countries taking a holistic approach to mental retardation. In some way each of these countries considers a variety of factors when diagnosing mental retardation. Factors considered include etiology, description of symptoms, and a look at how the manifestations cause disabilities with regard to social or environmental demands.

The response from Japan involved two interesting parallels to the United States. As we have said, there are several classification systems being used in the United States. The Ministry of Education in Japan

passed a Welfare Act for the Mentally Disabled that provided a general guideline for classification. It suggested the three classification levels shown in Table V, but allowed for some autonomy by local councils. Tokyo has included a fourth level, sai judo, most heavy. The second parallel is related to the new AAMR definition that involves levels of support. In Japan a criteria for classification is the level of support needed or the "cultural adoptability."

Conclusion

The conclusion to be reached based on the information received is that there are no universal attributes to the concept of mental retardation. Although our research and existing data (Edgerton, 1981) indicate that differences in ability are recognized in all cultures, the impact of these differences can not be separated from surrounding social, political, and economic conditions. Considering this, mental retardation must be a social phenomenon that includes people with known organic etiology. If this is true then IQ may be a neat package for behaviors that generally correspond to a given level. IQ then becomes part of adaptive behavior which is defined as "...the quality

of everyday performance in coping with environmental demands." (Grossman, 1983, p. 42)

Calling mental retardation a social phenomenon is not to say that mental retardation is not real, particularly at the moderate level and below. Every person who requires special services due to intellectual differences is a testament to that reality. Perhaps the problem of generating a universal definition is due to the fact that we are taking the wrong approach. Are we looking for how a person measures up to the norm in a particular society or are we looking for the quality of some fundamental processes?

This effort was conducted as a preliminary study and the findings should be considered accordingly. There are a few limitations to this work that need to be mentioned. The responses to the questionnaire were limited and assumed to be due, at least in part, to the political, social, and economic unrest especially in Europe, Africa, and South America. The findings were given as reported by respondents without verification. The initial questions were extremely broad, they were not designed to generate definitive answers. As coun-

tries are constantly changing, so it their perspective on mental retardation.

The findings of this study may be useful in several ways. They provide an initial overview of mental retardation in a variety of cultures. They alert us to control for differences of definition when comparing prevalence rates or treatment. The contacts made and knowledge shared as a result of this effort may encourage continued contact and mutual education. Perhaps most importantly, these findings remind us that it is our responsibility as professionals to look beyond labels to practical characteristics.

International Definitions

19

Table I
Terms for Mental Retardation in Literature

Country	Term(s)	Translation(s)
China (Robinson, 1978)	[Not Found]	Blunted child
	[Not Found]	Sick
Czechoslovakie (Gargiulo, In Press)	[Not Found]	Light IQ 55-70
	[Not Found]	Middle IQ 35-50
	[Not Found]	Hard IQ 20-35
	[Not Found]	Deep IQ < 20
England/Wales (Holowinsky, 1986)	N/A	Subnormality IQ 50-70
	N/A	Severe subnormality IQ < 50
West Germany (Cited in Haasari, 1990)	<i>Geistige Behinderung</i>	Mental retardation IQ < 60-55
India (Dhallwal, 1990)	[Not Found]	Dull IQ 70-85
	[Not Found]	Feeble-minded IQ 50-70
	[Not Found]	Ineducable IQ < 50
Japan (Holowinsky, 1986)	[Not Found]	Moron IQ 50-75
	[Not Found]	Imbecile IQ 20-50
	[Not Found]	Idiot IQ < 20
Nepal/Tamang Tribe (Peters, 1980)	<i>Adha laato</i>	Half-dumb (verbally)
	<i>Laato</i>	Dumb (verbally)
Malaysia/Semai Tribe (Dentan, 1967)	<i>Kalot</i>	Dumb (verbally)
Soviet Union (Holowinsky, 1982)	<i>Umstevanno otstaly</i>	compare to Mild/undifferentiated
	<i>Oligophrenia</i>	Mod/sev/prof-neurological insult

Table II
IQ and Adaptive Behavior Criteria Reported in Literature

Country	IQ Criteria	Adaptive Behavior Criteria	Nationalized System
China (Robinson, 1978)	Unknown	No	Unknown
Czechoslovakia (Gargiuc, In Press)	Similar	No	No
England/Wales (Holowinsky, 1986)	Different	No	Yes
West Germany (cited in Haasari, 1990)	Different	No	Yes
India (Dhaliwal, 1980)	Different	No	Yes
India (Puri & Sen, 1989)	Similar	Similar	Unknown
Japan (Holowinsky, 1983)	Different	No	Unknown
Nepal/Tamang Tribe (Peters, 1980)	No	Different	N/A
Malaysia/Sema Tribe (Dentan, 1967)	No	Different	N/A
Soviet Union (Holowinsky, 1982)	No	No	Yes
Sweden (Holowinsky, 1983)	No	Different	Unknown
Ukraine (Holowinsky, 1986)	h?	Different	Unknown

International Definitions
20

Table III

IQ and Adaptive Behavior Criteria from Questionnaires

Country	IQ Criteria	Adaptive Behavior Criteria	Nationalized System
Australia	Similar	Similar	N/A
China	Similar	Similar	Yes
Denmark	Similar	Similar	Yes
El Salvador	Similar	Similar	Yes
Ethiopia	No	Different	No
Finland	Similar	No	Yes
France	Similar	Similar	Yes
India	Similar	Similar	No
Ireland	Different	Similar	Yes
Italy	Similar	Similar	Yes
Japan	Similar	Similar	Yes
Kuwait	Similar	Similar	Yes
Mexico	Similar	No	Yes
Nepal	Similar	Similar	Yes
Netherlands	Similar	Similar	Yes
Norway	Similar	Similar	Yes
Saudi Arabia	Different	No	Yes
Spain	Similar	No	No
Switzerland	Similar	No	Yes
Taiwan, ROC	Similar	Similar	No

Table IV
Purposes of Classification

Country	Social Services	Economic	Legal	Identification of Service & Educational Needs	Medical	Employment
China					X	
Denmark				X		
El Salvador				X		
Finland			X	X		
France				X		X
India						X
Ireland				X		
Italy	X	X				
Japan				X		
Kuwait	X				X	X
Nepal	X			X	X	
Norway	X	X	X		X	
Spain	X	X		X		
Taiwan ROC				X		

International

Definitions
22



International Definitions

23

Table V
Terms for Mental Retardation

Country	Term(s)	Translation(s)
France	<i>Retard Mental Leger</i>	slight
	<i>Autre retard mental de niveau precise</i>	moderate
	<i>Retard mental grave</i>	serious
	<i>Retard Mental Profond</i>	profound
	<i>Retard mental de niveau nonprecise</i>	niveau-level
Japan	<i>Keldo IQ 50-75</i>	Light
	<i>Chudo IQ 25-50</i>	Medium
	<i>Judo IQ < 25</i>	Heavy
Norway (Official)	<i>Lett psykisk utviklingshemning</i>	Light-development-hampering
	<i>Moderat psykisk utviklingshemning</i>	moderate
	<i>Alvorlig psykisk utviklingshemning</i>	severe
	<i>Dyp psykisk utviklingshemning</i>	deep
Norway (Common Usage)	<i>Lett psykisk utviklingshemning</i>	equivalent to mild
	<i>Imbesilitet</i>	equivalent to moderate
	<i>Idioti</i>	equivalent to severe
	<i>Dyp Idioti</i>	equivalent to profound
	<i>Uspesifisert oligofreni</i>	unspecified deficient neurolog.
Saudi Arabia	[Not Given]	retarded IQ <50
Switzerland	<i>Scolarisable IQ 65-75</i>	teachable
	<i>pratiquement educable IQ 45-65</i>	almost teachable
	<i>apte a prendre des habitudes IQ 30-45</i>	able to take on training
	<i>handicap mental profond IQ <30</i>	profound

International Definitions
24

Table VI
Reported Trends

Country	Reported Trends
Ireland	Moving away from the label of "Mentally handicapped" toward "General learning difficulties" for mild and "Intellectually disabled" for mod./profound
Norway	Moving toward policies avocating normalization and independence. Building down institutions.
Saudi Arabia	Developing an organized classification system.

References

- American Association on Mental Retardation. (1992, July/August). AAMR News & Notes. (Available from American Association on Mental Retardation, 1719 Kalorama Road NW, Washington, DC 20009-2683.
- American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington DC: Author.
- Dentan, R.K. (1967). The response to intellectual impairment among the Semai. American Journal of Mental Deficiency, 71, 764-766.
- Dhaliwal, A.S. (1990). The Ailing System of Examinations. New Delhi: Commonwealth Publishers.
- Clausen, J. (1972). Quo Vadis AAMD? The Journal of Special Education, 6, 51-60.
- Doll, E.A. (1941). The essentials of an inclusive concept of mental deficiency. American Journal on Mental Retardation, 46, 214-229.
- Drew, C. J., Logan, D. R., & Hardman, M. L. (1992). Mental Retardation: A Life Cycle Approach, 5th ed. New York: MacMillan Publishing Company.
- Edgerton, R. B. (1981). Another look at culture and mental retardation. In: Begab, M. J., Haywood,

- H. C., & Garber, H. L. (eds.). Psychosocial Influences in Retarded performance, Vol 1. Baltimore: University Park Press, 309-323.
- Gagne, R. M., Briggs, L. J., & Wager, W. W. (1988). Principles of Instructional Design. New York: Holt, Rhinehart, & Winston, Inc.
- Gargiulo, R. M. (In Press). Perspectives on mental in Czechoslovakia. European Journal of Special Needs Education.
- Gold, M.W. (1980). An alternative definition of mental retardation. In M. W. Gold (Ed.), "Did I say that?" Articles and Commentary on the Try Another Way System. Champaign, IL: Research Press.
- Grossman, H.J. (1983). Classification in Mental Retardation, Washington, D.C.: American Association on Mental Deficiency.
- Haaseri, K. (1990). The unification of Germany: Implications for the integration of individuals with developmental disabilities. (Paper submitted to University of Illinois, School of Public Health)
- Holowinsky, I.Z. (1982). Current mental retardation research in the Soviet Union. Journal of Special Education, 16, 369-376.

- Holowinsky, I.Z. (1983). Psychology and Education of Exceptional Children and Adolescents: United States and International Perspectives. Princeton: Princeton Book Co.
- Holowinsky, I.Z. (1986). An international perspective on terminology, prevalence, and classification of cognitive disabilities. Journal of Special Education, 20, 385-390.
- Luckasson, R. et al. (In Press). Mental Retardation: Definition, Classification, and Systems of Support. Washington, DC: American Association on Mental Retardation.
- Manion, M.L. & Bersani, H.A. (1987). Mental retardation as a Western sociological construct: A cross cultural analysis. Disability, Handicap, and Society, 2, 231-245.
- Mercer, J.R. (1973). Labeling the Mentally Retarded. Berkeley: University of California Press.
- Peters, L.G. (1980). Concepts of mental deficiency among the Tamang of Nepal. American Journal of Mental Deficiency, 84, 352-356.

- Puri, M. & Sen, A. K. (1989). Mentally Retarded Children in India. New Delhi: Mittal Publications.
- Robinson, N.M. (1978). Mild mental retardation: Does it exist in the People's Republic of China? Mental Retardation, 16, 295- 298.
- Utley, C. A., Lowitzer, A. C., & Baumeister, A. A. (1987). A comparison of the AAMD's definition, eligibility criteria, and classification schemes with state departments of education guidelines. Education and Training in Mental Retardation, 22, 35-43.
- World Health Organization. (1979). The International Classification of Diseases, 9th ed.. Ann Arbor, Michigan: Edwards.
- Zigler, E. & Hodapp, R.M. (1986). Understanding Mental Retardation. Cambridge: Cambridge University Press.