Mental Retardation

Mash & Wolfe Powerpoint

Historical Perspectives on Mental Retardation

- Historically, prevailing sentiment was ignorance and mistreatment
- Degeneracy theory (1800's) saw MR as regression to an earlier period in the development of humankind
- The eugenics movement (early 1900's) led to the view that individuals with MR were threats to society

Intelligence and Adaptiveness

- Intelligence is conceptualized in terms of an "intelligence quotient" (IQ)
- MR is not defined solely on the basis of IQ; one's level of adaptive functioning is important
- Adaptive functioning: how capably an individual
  - copes with ordinary life demands
  - can live independently
  - abides by community standards

IQ: Intelligence Quotient

- IQ is relatively stable over time (after infancy)
- Mental ability is always modifiable by environment
- Flynn Effect: IQ rise about 3 pts. per decade
- Are IQ tests biased or unfair toward African Americans?
  - African Americans score about 1 SD below whites
  - Role of economic and social inequality

Features of Mental Retardation

- DSM-IV Criteria
  - significantly subaverage IQ (<70)
  - concurrent deficits or impairments in adaptive functioning
  - characteristics evident prior to age 18

Degrees of Impairment (DSM-IV)

- Mild MR (IQ of 55 to 70)
  - About 85% of persons with MR
  - Often not identified until elementary school
  - Overrepresentation of minority group members
- Moderate MR (IQ of 40 to 54)
  - About 10% of persons with MR
  - Usually identified during preschool years
  - Many people with Down syndrome

Degrees of Impairment (cont.)

- Severe MR (IQ of 20 to 39)
  - About 3%-4% of persons with MR
  - Often associated with organic causes
  - Usually identified at a very young age
- Profound MR (IQ below 20 or 25)
  - About 1%-2% of persons with MR
  - Usually identified in infancy
  - almost always due to organic causes
  - often co-occurs with severe medical conditions

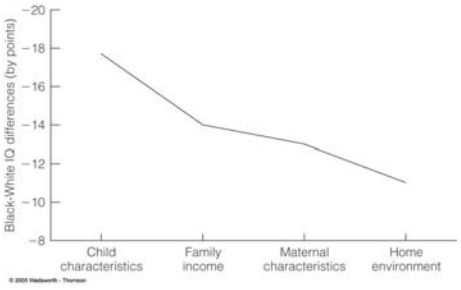
Level of Needed Supports

- AAMR bases categories on level of support or assistance needed (rather than on IQ):
  - Intermittent
  - Limited
  - Extensive
  - Pervasive
- Emphasis on interaction between person and environment in determining level of functioning

Prevalence

- 1-3% of population (depending on cutoff)
- More prevalent in
  - Males
  - Lower SES
  - Minority groups, especially for mild MR
- But no differences for more severe levels

Prevalence (cont.)



Developmental Course

- Development vs. Difference Controversy
- Often children with mental retardation experience helplessness and frustration in their learning environments, which leads to low expectations and limited success
- With appropriate training and opportunities, children who have mild mental retardation may develop good adaptive skills in other domains

Language and Social Development

- Expressive language development may be weak in children with Down syndrome
- Fewer signals of distress or desire for proximity with primary caregiver, which can influence attachment
- Self-recognition often delayed, but positive
- Problems in the development of self-other understanding
- Deficits in social skills and social-cognitive ability; can lead to rejection by peers

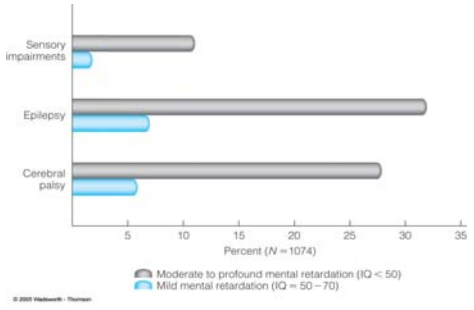
Emotional and Behavioral Problems

- Emotional-behavioral disturbances 4x > general population
  - Impulse control problems
  - Anxiety problems
  - Mood problems common
- ADHD-related symptoms
- Internalizing problems in adolescence (like peers)
- Pica and self-injurious behavior (severe and profound MR)

Other Disabilities Associated with MR

- Can be associated with other pervasive physical and developmental disabilities, including
  - sensory impairments
  - cerebral palsy
  - epilepsy
- Chance of other disability increases as degree of intellectual impairment increases

Other Disabilities Associated with MR (cont.)



Causes of Mental Retardation

- Many organic causes have been discovered but majority of cases cannot be explained, especially for mild mental retardation
- The two-group approach:
  - organic mental retardation--includes chromosome abnormalities, single gene conditions, and neurobiological influences
  - cultural-familial mental retardation--includes family history of mental retardation, economic deprivation, inadequate child care, poor nutrition, and parental psychopathology

Causes of Mental Retardation (cont.)

- Inheritance and the Role of the Environment
  - Heritability of intelligence estimated 50-70%
  - Major environmental variations can affect cognitive performance in children from disadvantaged backgrounds
  - Prenatal influences may be mistaken for genetic when they are actually environmental

Causes of Mental Retardation (cont.)

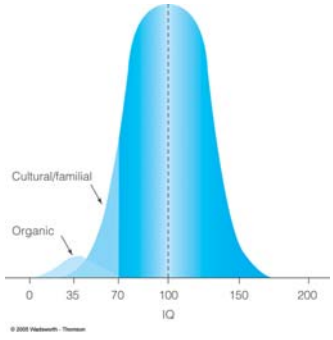


Figure 9.3 The approximate distribution of Stanford-Binet IQs. In practice, more children get low IQs than is predicted by this distribution. The excess of very low IQs has important implications for the two-group explanations of mental retardation—cultural-familial and organic. Source: Adapted from Understanding Mental Retardation, by E. Ziegler and R. J. Hodapp, p. 73. Copyright © 1986 by Cambridge University Press. Adapted by permission.

Causes of Mental Retardation

- Genetic and Constitutional Factors
  - Chromosomal abnormalities--most common severe MR
  - Down syndrome due to an additional 21st chromosome
  - Fragile-X syndrome, the most common cause of inherited MR, is associated with the FMR-1 gene
  - Prader-Willi and Angelman syndromes both associated with abnormality of chromosome 15; believed to be spontaneous genetic birth defects occurring around the time of conception
  - Inborn errors of metabolism (single-gene conditions) can result in syndromes such as PKU

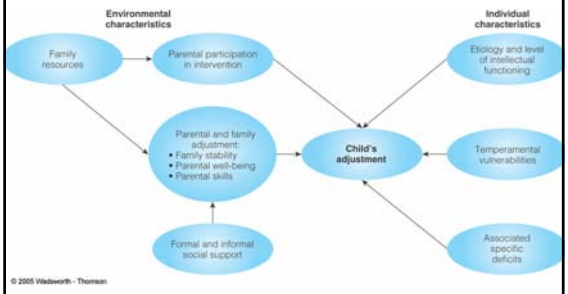
Causes of Mental Retardation (cont.)

- Neurobiological influences
  - adverse biological conditions (e.g., malnutrition, exposure to toxins, prenatal and perinatal stressors)
  - infections, traumas, and accidental poisonings during infancy and childhood
  - prenatal alcohol exposure can lead to a Fetal Alcohol Spectrum Disorder (FASD)
- Social and Psychological influences
  - deprivation of physical and emotional care and social stimulation particularly influential

Prevention, Education, Treatment

- Child's overall adjustment = function of parental participation, family resources, social supports, level of intellectual deficit, temperament, and other specific deficits
- Treatment involves a multi-component, integrated strategy that considers children's needs within the context of their individual development, family and institutional setting, and community
- Prenatal education and screening may prevent some cases of MR

Prevention, Education, Treatment (cont.)



Prevention, Education, Treatment (cont.)

- Psychosocial treatments
  - intensive, child-focused, early intervention—particularly for disadvantaged children
  - Optimal timing for intervention = preschool years
  - Behavioral techniques include shaping, modeling, graduated guidance, & social skills training
  - Cognitive-behavioral techniques, such as self-instructional training & metacognitive training
  - Family oriented interventions help families cope with the demands of raising a child with MR