


Intellectual Disability

Stephen E. Brock, PhD, NCSP, LEP
California State University, Sacramento



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Seminar Objectives

From this seminar it is hoped that students will increase their ...

1. understanding of the clinical, Federal (IDEA), and Stated definitions of /criteria for ID.
2. ability to conduct ID eligibility evaluations.
3. understanding of special issues associated with ID eligibility evaluations.

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Preface

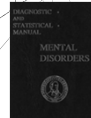
We as a Nation have long neglected the mentally ill and the mentally retarded. This neglect must end, if our Nation is to live up to its own standards of compassion and dignity and achieve the maximum use of its manpower.

John F. Kennedy, address to Congress on February 5, 1963

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Preface: Historical Definitions

- ▶ *DSM I* (p. 18):Chronic Brain Syndrome
 - ▶ These categories are provided for the group of mental disturbance formerly diagnosed as secondary mental deficiency. Clinically, a general developmental defect of mentation is superimposed on the chronic brain syndrome, and when prominent may require the addition of the qualifying phrase .x4 Mental deficiency. The degree of defective intelligence will be specified as *mild, moderate, or severe*, and the current IQ rating will be added to the diagnosis (see Mental deficiency).

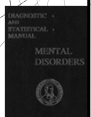


Sources: American Psychiatric Association (1952)

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Preface: Historical Definitions

- ▶ *DSM I* (pp. 23-24): Mental Deficiency
 - ▶ Here will be classified those cases presenting primarily a *defect of intelligence* existing since birth, without demonstrated organic brain disease or known prenatal cause. This group will include only those cases formerly known as familial or "idiopathic" mental deficiencies. The degree of intelligence defect will be specified as *mild, moderate, or severe*, and the current I.Q. rating, with the name of the test used, will be added to the diagnosis.

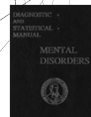


Sources: American Psychiatric Association (1952)

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Preface: Historical Definitions

- ▶ *DSM I* (pp. 23-24): Mental Deficiency (continued)
 - ▶ In general, *mild* refers to functional (vocational) impairment, as would be expected with I.Q.'s of *about 70-85*; *moderate*, is used for functional impairment requiring special training and guidance, such as would be expected with I.Q.'s of *about 50-70*; *severe* refers to the functional impairment requiring custodial or complete protective care, as would be expected with I.Q.'s *below 50*. The degree of defect estimated from other factors than merely psychological test scores, namely, consideration of cultural, physical and emotional determinants, as well as school, vocational and social effectiveness. The diagnosis may be modified by the appropriate qualifying phrase, when, in addition to the intellectual defects, there are significant psychotic, neurotic, or behavioral reactions.




Sources: American Psychiatric Association (1952)

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Preface: Historical Definitions

- ▶ **DSM II (p. 14): Mental Retardation**
 - ▶ ... refers to *subnormal* general intellectual functioning that originates during the developmental period and is associated with impairment of either learning and social adjustment or maturation, or both.
 - ▶ SB IQ 68-85 = Borderline; 52-67 = Mild
- ▶ **DSM III (p. 36): Mental Retardation**
 - ▶ The essential features are: (1) *significantly subaverage* general intellectual functioning, (2) resulting in, or associated with, deficits or impairments in *adaptive behavior*, (3) with age of onset before the age of 18.




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Sources: American Psychiatric Association (1968, 1980)

Preface: Historical Definitions

- ▶ **DSM III-R (p. 28): Mental Retardation**
 - ▶ The essential features are: (1) *significantly subaverage* general intellectual functioning, accompanied by (2) significant deficits or impairments in adaptive behavior, with (3) onset before age of 18
- ▶ **DSM IV (p. 39): Mental Retardation**
 - ▶ The essential feature ... is *significantly subaverage* general intellectual functioning (Criterion A) that is accompanied by significant limitations in adaptive functioning in at least two of the following skill areas: communication, self-care, home living, social/interpersonal skills, work, leisure, health and safety (Criterion B). The onset must occur before age 18 years (Criterion C).




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Sources: American Psychiatric Association (1987, 1994)

Preface: Historical Definitions

- ▶ **DSM IV-R (p. 42): Mental Retardation**
 - A. *Significantly subaverage general intellectual functioning*: an IQ of *approximately 70* or below on an individually administered IQ test (for infants, a clinical judgment of significantly subaverage intellectual functioning).
 - B. *Concurrent deficits or impairments in present adaptive functioning* (i.e., the person's effectiveness in meeting the standards expected for his or her age by this or her cultural group) in at least two of the following areas: communication, self care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety
 - C. The onset is before age 18 years.





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Source: American Psychiatric Association (2000)

Preface: Current Terminology

- ▶ On Tuesday, October 5, 2010, President Obama signed into law S. 2781 ("Rosa's Law")
- ▶ Changed references in Federal statutes (including IDEA) that referred to "mental retardation" to refer, instead, to "intellectual disability."
- ▶ The story behind Rosa's Law ([video](#))

Preface: Historical Age of Onset Criteria

- ▶ 1908
 - ▶ A state of mental defect from birth, or from an early age, due to incomplete cerebral development (Tredgold, p. 2).
- ▶ 1941
 - ▶ A state of social incompetence, obtained at maturity, or likely to obtain at maturity, resulting from developmental arrest of constitutional origin (Doll, p. 215).
- ▶ 1959
 - ▶ ... which originated during the developmental period (i.e., birth through approximately 16 years; Heber, p. 3).

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Source: Schalock et al. (2010, p. 9)

Preface: Historical Age of Onset Criteria

- ▶ 1973
 - ▶ ... manifested during the developmental period (upper age limit at 18 years; Grossman, p. 11).
- ▶ 1983
 - ▶ ... manifested during the developmental period (period of time between conception and the 18th birthday; Grossman, p. 1).
- ▶ 1991
 - ▶ Mental retardation manifests before age 18 (Luckasson et al., p. 1).
- ▶ 2002
 - ▶ This disability originates before age 18 (Luckasson et al., p. 1).

Source: Schalock et al. (2010, p. 9)

Preface: Historical IQ Cutoff Criteria

- ▶ 1959
 - ▶ Less than one standard deviation below the population mean of the age group involved on measures of general intellectual functioning (Heber, p. 3).
- ▶ 1961
 - ▶ Greater than one standard deviation below the population mean (Heber, p. 3).
- ▶ 1973
 - ▶ Two or more standard deviations below the population mean (Grossman, p. 11).

Source: Schalock et al. (2010, p. 10)

Preface: Historical IQ Cutoff Criteria

- ▶ 1983
 - ▶ IQ of 70 or below on standardized measures of intelligence; *upper limit is intended as a guideline* and could be extended to 75 or more (Grossman, p. 11)
- ▶ 1992
 - ▶ IQ standard or of *approximately* 70 to 75 or below, based on assessment that includes one or more individually administered general intelligence tests (Luckasson et al., p. 5).

Source: Schalock et al. (2010, p. 10)

Preface: Historical IQ Cutoff Criteria

- ▶ 2002
 - ▶ *Approximately* two standard deviations below the mean, considering the standard error of measurement for the specific assessment instruments used and the instruments' strengths and limitations (Luckasson et al., 58).

Source: Schalock et al. (2010, p. 10)

Preface: Historical Adaptive Behavior Cutoff Criteria

- ▶ 2002
 - ▶ Performance that is at least two standard deviations below the mean of either (a) one of the following three types of adaptive behavior: conceptual, social, or practical or (b) and overall score on a standardized measure of conceptual, social, and practical skills (Luckasson et al., p 76).

Source: Schalock et al. (2010, p. 10)

Preface: AAIDD Assessment Framework

- ▶ Functions (and questions) of the assessment
 1. Diagnosis
 - ▶ Is the student a person with ID?
 2. Classification
 - ▶ Does the student require special education
 3. Planning/development of support system
 - ▶ What are the IEP goals and objectives?

Source: Schalock et al. (2010, pp. 21-25)

Preface: AAIDD Assessment Framework

- ▶ Function (and methods) of the Assessment
 1. Diagnosis
 - ▶ IQ tests
 - ▶ Adaptive behavior scales
 - ▶ Age of onset documentation
 - ▶ History
 - ▶ Social & educational record review

Source: Schalock et al. (2010, pp. 21-25)

Preface: AAIDD Assessment Framework

- ▶ Function (and methods) of the Assessment
 - 2. Classification
 - ▶ Levels of adaptive behavior
 - ▶ IQ range or levels
 - ▶ Environmental measures
 - ▶ Etiology-risk factors
 - ▶ Mental health measures

Source: Schalock et al. (2010, pp. 21-25)

Preface: AAIDD Assessment Framework

- ▶ Function (and methods) of the Assessment
 - 3. Planning/development of support system
 - ▶ Speech/language, motor, sensory assessment
 - ▶ Achievement tests
 - ▶ Functional behavioral assessment
 - ▶ Functional analysis assessment

Source: Schalock et al. (2010, pp. 21-25)

Preface: Important Resources

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Seminar Outline

1. Intellectual Disability (ID) Defined
2. Identifying ID for Special Education Eligibility Purposes
3. Special Issues
4. The ID Psycho-educational Report Template

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APA Definition

- ▶ DSM-5 Definition: Intellectual Disability (Intellectual Developmental Disorder)
 - ▶ "... a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains."

Source: APA (2013, p. 33)

APA Definition


- ▶ Changes from *DSM-IV-TR*
 - ▶ Name change
 - ▶ No longer referred to as Mental Retardation
 - ▶ Intellectual Disability (Intellectual Developmental Disorder)
 - ▶ "Intellectual Development Disorder" in ICD-11
 - ▶ Severity determined by adaptive functioning
 - ▶ No longer determined by IQ scores
 - ▶ Severity level specifiers "mild," "moderate," "severe," "profound" (see pp. 34-36)

Source: APA (2013, pp. 33-36)

APA Definition

- ▶ Rationale for *DSM-5* Changes
 - ▶ Intellectual Disabilities is now the more common (preferred) term
 - ▶ PL 111-256, Rosa's Law
 - ▶ ID is quite literally PC
 - ▶ Need for comprehensive assessment
 - ▶ Emphasizes clinical assessment AND standardized cognitive testing

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Source: APA (2013)

APA Definition

- ▶ Consequences of *DSM-5* Changes
 - ▶ Less reliance on the IQ score
 - ▶ Ensures IQ tests are not over emphasized
 - ▶ Greater emphasis on adaptive functioning
 - ▶ Severity levels (mild, moderate, severe, profound) based on conceptual, social, and practical behaviors

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Source: APA (2013)

APA Definition

- ▶ Implications for School Psychologists
 - ▶ Same terminology as IDEA
 - ▶ Can be more certain that clinical assessments have given adequate consideration to adaptive behavior

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Source: Brock & Reeves (2013)

WHO Definition

- ▶ *ICD 10* (pp. 369-370): Mental Retardation
 - ▶ A condition of *arrested or incomplete development of the mind*, which is especially characterized by *impairment of skills that contribute to the overall level of intelligence*, i.e., cognitive, language, motor, and social abilities. Retardation can occur with or without any mental or physical condition. Degrees of mental retardation are conventionally estimated by standardized intelligence tests. These *can be supplemented* by scales assessing social adaptation in a given environment. These measures provide an approximate indication of the degree of mental retardation. The diagnosis will also depend on the overall assessment of intellectual functioning by a skilled diagnostician. Intellectual abilities and social adaptation may change over time, and, however poor, may improve as a result of training and rehabilitation. Diagnosis should be based on the current levels of functioning. ²⁸

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Source: World Health Organization (1993)

AAIDD Definition: Intellectual Disability

- ▶ *Intellectual Disability* (p. 1)
 - ▶ Intellectual disability is 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.


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Source: Schalock et al. (2010)

IDEA Definition: Intellectual Disability

- ▶ According to the Code of Federal Regulations "intellectual disability" (formerly referred to as mental retardation) is a term, used to describe a student with a disability who needs special education and related services.
- ▶ More specifically . . .




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Source: CFR, Title 34, Chapter III, Part 300, §300.8 (Child with a disability), (a) (1)

IDEA Definition: Intellectual Disability

- ▶ Intellectual disability means *significantly subaverage general intellectual functioning*, existing concurrently with *deficits in adaptive behavior* and *manifested during the developmental period*, that *adversely affects a child's educational performance*.


[Emphasis added]



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Source: CFR, Title 34, Chapter III, Part 300, §300.8 (Child with a disability), (c)(6)

Discussion



- ▶ Looking back at the historical definitions and criteria (associated with what we now refer to as intellectual disability)...
 - ▶ What are the significant changes that have occurred?
 - ▶ Do these changes create any opportunities?
 - ▶ Do they create any challenges?
- ▶ The power of words
<http://downsdad.wordpress.com/2011/09/28/a-girl-speaks-out-for-her-brother-about-retarded/>

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Seminar Outline

1. Intellectual Disability (ID) Defined
2. Identifying ID for Special Education Eligibility Purposes
3. Special Issues
4. The ID Psycho-educational Report Template

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Identifying ID: Three Clinical Criteria


1. Age of onset
 - ▶ "...manifested during the developmental period..."
2. Intellectual functioning
 - ▶ "...significantly below average general intellectual functioning..."
3. Adaptive behavior
 - ▶ "...deficits in adaptive behavior..."

Sources: Schalock et al. (2010, pp. 27-28); CCR, Title 5, §3030[h]

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Identifying ID: Clinical Criterion 1. Age of Onset

- ▶ Manifest during the developmental period.
 - ▶ Age at which the disability began.
- ▶ Purpose is to distinguish ID from other forms of disability that may occur later in life.
 - ▶ ID typically originates close to birth.
 - ▶ Sometimes, ID may originate later.
 - ▶ Thus, ID does not necessarily have to have been diagnosed, but must have begun, during the developmental period.




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Source: Schalock et al. (2010, pp. 27-28)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

- ▶ "Although far from perfect, intellectual functioning is currently best represented by IQ scores when they are obtained from appropriate, standardized and individually administered assessment instruments."
 - ▶ "A single dimension of intelligence continues to garner the most support within the scientific community."



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Source: Schalock et al. (2010, pp. 31, 34)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

▶ "... an IQ score that is *approximately* two standard deviations below the mean, considering the standard error of measurement for the specific assessment instruments used and the instruments' strengths and limitations."

[Emphasis added]

▶ Discussion:

- ▶ What is the IQ score that indicates the presence of ID?
- ▶ Why is the word "approximately" used in the AAIDD definition?

Source: Schalock et al. (2010, p. 27)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

- ▶ There is no "hard and fast cutoff point/score" for ID.
- ▶ "A fixed point cutoff score for ID is not psychometrically justifiable."
 - ▶ Due to the fact that an individual's true score is a hypothetical construct.
- ▶ Question???

 - ▶ What is the "true score" on a measure of intelligence?

Source: Schalock et al. (2010, pp. 36-41)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

▶ Issues to consider when evaluating an obtained score include:

- ▶ "Although the statistical reliability of most scales, especially intellectual, is well established before the test is published, it is still important ... that professionals carefully consider the possible statistical error in any score, the variability of scores across different tests, and the importance of the testee's physical limitations, motivation, and cultural background."

Source: Schalock et al. (2010, p. 82)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

▶ Issues to consider when evaluating an obtained score include:

1. Measurement Error
2. Test Fairness/Differences
3. The Flynn Effect
4. Practice Effect

Source: Schalock et al. (2010, pp. 36-41, p. 82)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

1. Measurement Error

- ▶ No IQ test is 100% reliable.
 - ▶ All psychological tests are associated with some degree of measurement error
 - ▶ Standard error of measurement (SE_m) is an estimate of this error.
 - ▶ SE_m is directly related to a test's reliability

$$SE_m = SD\sqrt{1-r}$$

Source: Schalock et al. (2010, p. 36)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

1. Measurement Error

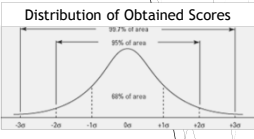
- ▶ No IQ test is 100% reliable.
 - ▶ SE_m is obtained by multiplying the standard deviation (SD) of the test by the square root of 1 minus the reliability coefficient of the test.
 - ▶ For example, the WISC-IV (2003) has a SD of 15 and an internal consistency reliability coefficient of .97, then...
 - ▶ $SE_m = 15/\sqrt{.97} = 15/\sqrt{.03} = 15(0.17) = 2.6$ (round up to 3)
 - ▶ SE_m is used to develop confidence intervals (CI).

Source: Williams et al. (2003)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

1. Measurement Error


- ▶ No IQ test is 100% reliable.
- ▶ The formula for a CI is
 - ▶ Obtained IQ score \pm Z(SE_M)
 - ▶ The "Z" in this formula refers to the z score obtained from a normal curve table. Confidence Intervals (SE_M=3)
 - ▶ 68% of error scores = $z \pm 1$ 1(3) = 3
 - ▶ 90% of error scores = $z \pm 1.65$ 1.65(3) = 4.95 (or 5)
 - ▶ 95% of error scores = $z \pm 1.96$ 1.96(3) = 5.88 (or 6)
 - ▶ For example, for an obtained IQ score of 70 on an IQ test with an SE_M of 3, we are 68% confident that the true score is 70 \pm 3 (or 67-73).



Identifying ID: Clinical Criterion 2. Intellectual Functioning

▶ Discussion

- ▶ How do we go about minimizing the error represented in obtained IQ test scores?
- ▶ Under what circumstances would you use a 68% CI vs. a 90% CI?
- ▶ Are there situations wherein you would use a 95% CI?



Identifying ID: Clinical Criterion 2. Intellectual Functioning

2. Test Fairness

- Requirements for a verbal response from individuals who have severely limited verbal abilities.
- Testing individuals of diverse ethnicity or culture.

2. Test Differences

- Significantly different results can be obtained from different tests.
 - ▶ SBIV yielded significantly higher scores than did the WISC-III for students with mild mental retardation

Sources: Lukens & Hurrell (1996); Schalock et al. (2010, pp. 36, 38)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

3. The Flynn Effect


- ▶ IQ scores have been increasing from one generation to the next by about 0.33 point per year.
- ▶ Consequently, Flynn has suggested that obtained IQ scores be adjusted 0.33 points for each year the test was administered after standardization
 - ▶ WISC IV (2003), 12 years = 3.99 (or 4).
 - ▶ Hence 2SD below the current population's mean could be 70+4
 - ▶ Factoring in the SEM and using CIs we might argue an "obtained" score as high as 77 may be 2SD below the current population's mean.
 - ▶ 74 \pm 3 (71 to 77 = 68% CI)

Sources: Schalock et al. (2010, p. 37); Flynn (1984; 1987; 2006)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

3. The Flynn Effect

- ▶ Initial student IQ 55-85
 - ▶ Retested on same WISC version = \uparrow 1 IQ pt.
 - ▶ Retested on a newer WISC version = \downarrow 5.6 IQ pts.
- ▶ Initial student IQ borderline
 - ▶ More than 1/3 of reclassified at ID upon retesting with a newer version of the WISC



Source: Kanayaet al. (2003, p. 787)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

3. The Flynn Effect

- ▶ "... there is reason to believe that many students are diagnosed as MR based upon the year in which they are tested and test norms used rather than on their cognitive ability."
 - ▶ "More specifically, as norms age, fewer children are diagnosed MR as more children's IQ scores rise above the 70-point cutoff."
 - ▶ "With the introduction of newer norms, suddenly more children score below the 70-point cutoff."

Source: Kanayaet al. (2003, pp. 786-787)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

4. Practice Effect

- ▶ If a given test is re-administered within a short time interval there is an artificial increase in IQ scores.
 - ▶ Thus, established clinical practice is to avoid giving the same IQ test within the same year.

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Source: Schalock et al. (2010, p. 38)

Identifying ID: Clinical Criterion 2. Intellectual Functioning

▶ Test Selection

- ▶ Should employ an IQ test that yields a measure of *g*
- ▶ Should consider sensory/motor limitations; and cultural, social, ethnic, and language differences.
 - ▶ For example, the TONI or UNIT may appropriate when there are language differences.
 - ▶ The Baily Scales of Infant Development may be appropriate for profoundly impaired students.

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Source: Schalock et al. (2010, p. 41)


Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Adaptive behavior is the collection of conceptual, social and practical skills that have been learned and are performed by people in their every day lives.
 - ▶ Conceptual
 - ▶ language; reading and writing; money, number, and time concepts
 - ▶ Social
 - ▶ interpersonal, social responsibility, problem solving, rule following, naiveté.
 - ▶ Practical
 - ▶ personal care, occupational skill, travel/transportation, health care safety

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Source: Schalock et al. (2010, pp. 43-44)

Identifying ID: Clinical Criterion 3. Adaptive Behavior



- ▶ For the diagnosis of intellectual disability, significant limitations in adaptive behavior should be established...operationally defined as performance that is *approximately* two standard deviations below the mean.

[emphasis added]

 - ▶ Either one of the three types of adaptive behavior
 - ▶ Or an overall score
- ▶ Question??
 - ▶ Why is the word “approximately” used in the AAIDD definition?

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Source: Schalock et al. (2010, p. 43)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- Deficits in adaptive functioning ... refer to the extent to which an individual fails to meet community standards of personal independence and social responsibility, *in comparison to others for similar age and sociocultural background*.
 - Conceptual (academic) domain
 - Memory, language, reading, writing, math reasoning, acquisition of practical knowledge, problem solving, and judgment in novel situations
 - Social domain
 - Awareness of others' thoughts, feelings, and experience; empathy; interpersonal communication skills; friendship abilities; and social judgment
 - Practical domain
 - Learning and self-management across life settings, including personal care, job responsibilities, money management, recreation, self-management of behavior, and school and work task organization

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Source: APA (2013, pp. 37-38)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Conceptual, Mild
 - For preschool children, there may be no obvious differences. For school-age children and adults, there are difficulties in learning academic skills involving reading, writing arithmetic, time or money, with support needed in one or more areas to meet age-related expectations. In adults, abstract thinking, executive function (i.e., planning, strategizing, priority setting, and cognitive flexibility), and short-term memory, as well as functional use of academic skills (e.g., reading, money management), are impaired. There is a somewhat concrete approach to problems and solutions compared with age-mates.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity "Specifier:" Conceptual, Moderate
 - All through development, the individual's conceptual skills lag markedly behind those of peers. For preschoolers, language and pre-academic skills develop slowly. For school-age children, progress in reading, writing, mathematics, and understanding of time and money occurs slowly across the school years and is markedly limited compared with that of peers. For adults, academic skill development is typically at an elementary level, and support is required for all use of academic skills in work and personal life. Ongoing assistance on a daily basis is needed to complete conceptual tasks of day-to-day life, and others may take over these responsibilities fully for the individual.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ DSM-5 Severity "Specifier:" Conceptual, Severe
 - ▶ Attainment of conceptual skills is limited. The individual generally has little understanding of written language or of concepts involving numbers, quantity, time, and money. Caretakers provide extensive supports for problem solving throughout life.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity "Specifier:" Conceptual, Profound
 - Conceptual skills generally involve the physical world rather than symbolic processes. The individual may use objects in goal-directed fashion for self-care, work, and recreation. Certain visuospatial skills, such as matching and sorting based on physical characteristics, may be acquired. However, co-occurring motor and sensory impairments may prevent functional use of objects.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity "Specifier:" Social, Mild
 - Compared with typically developing age-mates, the individual is immature in social interactions. For example, there may be difficulty in accurately perceiving peers' social cues. Communication, conversation, and language are more concrete or immature than expected for age. There may be difficulties regulating emotion and behavior in age-appropriate fashion; these difficulties are noticed by peers in social situations. There is limited understanding of risk in social situations; social judgment is immature for age, and the person is at risk of being manipulated by others (gullibility).

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity "Specifier:" Social, Moderate
 - The individual shows marked differences from peers in social and communicative behavior across development. Spoken language is typically a primary tool for social communication but is much less complex than that of peers. Capacity for relationships is evident in ties to family and friends, and the individual may have successful friendships across life and sometimes romantic relations in adulthood. However, individuals may not perceive or interpret social cues accurately. Social judgment and decision-making abilities are limited, and caretakers must assist the person with life decisions. Friendships with typically developing peers are often affected by communication or social limitations. Significant social and communicative support is needed in work settings for success.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity "Specifier:" Social, Severe
 - Social language is quite limited in terms of vocabulary and grammar. Speech may be single words or phrases and may be supplemented through augmentative means. Speech and communication are focused on the here and now within everyday events. Language is used for social communication more than for explication. Individuals understand simple speech and gestural communication. Relationships with family members and familiar others are a source of pleasure and help.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Social, Profound
- The individual has very limited understanding of symbolic communication in speech or gesture. He or she may understand some simple instructions or gestures. The individual expresses his or her own desires and emotions largely through nonverbal, nonsymbolic communication. The individual enjoys relationships with well-known family members, caretakers, and familiar others, and initiates and responds to social interactions through gestural and emotional cues. Co-occurring sensory and physical impairments may prevent many social activities.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Practical, Mild
- The individual may function age-appropriately in personal care. Individuals need some support with complex daily living tasks in comparison to peers. In adulthood, supports typically involve grocery shopping, transportation, home and child-care organization, nutritious food preparation, and banking and money management. Recreational skills resemble those of age-mates, although judgment related to well-being and organization around recreation required support. In adulthood, competitive employment is often seen in jobs that do not emphasize conceptual skills. Individuals generally need support to make health care decisions and legal decisions, and to learn to perform a skilled vocation competently. Support is typically needed to raise a family.

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Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Practical, Moderate
- The individual can care for personal needs involving eating, dressing, elimination, and hygiene as an adult, although an extended period of teaching and time is needed for the individual to become independent in these areas, and reminders may be needed. Similarly, participation in all household tasks can be achieved by adulthood, although an extended period of teaching is needed, and ongoing supports will typically occur for adult-level performance. Independent employment in jobs that require limited conceptual and communication skills can be achieved, but considerable support from co-workers, supervisors, and others is needed to manage social expectations, job complexities, and ancillary responsibilities such as scheduling, transportation, health benefits, and money management. A variety of recreational skills can be developed. These typically require additional supports and learning opportunities over an extended period of time. Maladaptive behavior is present in a significant minority and causes social problems.

63

Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Practical, Severe
- The individual requires support for all activities of daily living, including meals, dressing, bathing, and elimination. The individual requires supervision at all times. The individual cannot make responsible decisions regarding well-being of self or others. In adulthood, participation in tasks at home, recreation, and work requires ongoing support and assistance. Skill acquisition in all domains involves long-term teaching and ongoing support. Maladaptive behavior, including self-injury is present in a significant minority.

64

Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- DSM-5 Severity “Specifier:” Practical, Profound
- The individual is dependent on others for all aspects of daily physical care, health, and safety, although he or she may be able to participate in some of these activities as well. Individuals without severe physical impairments may assist with some daily work tasks at home, like carrying dishes to the table. Simple actions with objects may be the basis of participation in some vocational activities with high levels of ongoing support. Recreational activities may involve, for example, enjoyment in listening to music, watching movies, going out for walks, or participating in water activities, all with the support of others. Co-occurring physical and sensory impairments are frequent barriers to participation (beyond watching) in home, recreational, and vocational activities. Maladaptive behavior is present in a significant minority.

65

Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How is Adaptive Behavior Assessed?
- Requires both
 - Clinical assessment
 - Adaptive behavior scales
 - Must use “Individualized, culturally appropriate psychometrically sound measures”
- When identifying ID, deficits must be noted in
 - One of the three types of adaptive behavior
 - Or an overall score
 - Must be directly related to ID

66

Source: APA (2013, pp. 34-36)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How is Adaptive Behavior Assessed?
- Clinical assessment
 - Information sources
 - Parent/Caregiver or other family member
 - Teachers
 - Prior evaluations (educational, developmental, medical, and mental health)
 - Direct naturalistic observations

Sources: APA (2013, pp. 34-36); Sattler & Hoge (2006)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How is Adaptive Behavior Assessed?
- Adaptive behavior scales
 - Multiple (home & school) and knowledgeable informants
 - Scores interpreted using clinical judgment
 - "... the individuals ethnic, cultural, and linguistic background, available experiences, and adaptive functioning within his or her community and cultural setting must be taken into account."

Sources: APA (2013, pp. 34-39); Sattler & Hoge (2006)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How are Adaptive Behavior Scales Developed?
- Hypothetically, any psychological test variable measured enough times (given a large enough sample of individuals) will be normally distributed.
- In other words, the obtained scores will be normally distributed.
 - What does it mean to say that adaptive behavior measure scores are "normally distributed?"
 - Answer is on the next slide

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How are Adaptive Behavior Scales Developed?
- Mean, Median, and Mode are the same.
 - 50% of scores are above the mean
 - 50% of scores are below the mean
- ± 1 SD = 68% (most) of the obtained scores
- ± 2 SD = 95% (almost all) of the obtained scores
- ± 3 SD = 99.7% (virtually all) of the obtained scores

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- How are adaptive behavior scales developed?
- With a large enough sample size the scores of a psychological test should be normally distributed.
 - We can use the test to tell us how far above or below the mean and individual student is (in terms of standard deviations) on the variable (e.g., adaptive behavior) measured by the assessment tool.

We want to know about these

We have these to work with

Population

Sample

Parameter μ (Population mean)

Statistic \bar{X} (Sample mean)

Inference

Random selection

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- To whom does the Vineland II compare evaluation subjects?
 - A nationally representative sample of individuals from birth to 90 years.
 - From a pool of over 25,000
 - Survey Interview Form & Parent/Caregiver Rating Form: n = 3,695 (20 age groups, birth - 90 years)
 - Expanded Interview Form: n = 2,151 (20 age groups)
 - From a pool of over 19,000
 - Teacher Rating Form: n = 2,570 (15 age groups, 3-18 years)
 - Evenly split between males and female
 - Designed to match 2001 U.S. Census regarding race/ethnicity, SES, Geographic region, community size, special education placement
 - Clinical samples: ADHD, ASD, ED/BD, Hearing impaired, LD, ID (mild, moderate, or severe/profound) and visual impaired

Source: Sparrow et al. (2008)

How are Adaptive Behavior Scales Developed?

Source: Sparrow (2008, p. 89)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- Technical Notes: Vineland II
- Reliability (dependability)
 - Internal Consistency
 - mid- to high .90s
 - Test-Retest
 - Low .80s to mid .90s
 - Inter-rater/Inter-interviewer
 - .70s to .80s for parents/caregivers
 - .40s to .60s for Teacher Rating Form
- DON'T RELY ON A SINGLE TRF TO MAKE A DETERMINATION REGARDING LEVEL OF ADAPTIVE FUNCTIONING.

74
Source: Sparrow et al. (2008)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Use standardized measures
 - ▶ Common rating scales for use with parents and teachers
 - ▶ Adaptive Behavior Scale-School (2nd ed.)
 - ▶ Adaptive Behavior Evaluations Scale-Rev. 2nd ed.
 - ▶ Scales of Independent Behavior-Rev.
 - ▶ Adaptive Behavior Assessment System (2nd ed.)
 - ▶ Vineland Adaptive Behavior Scales (2nd ed.)
- ▶ Focus on typical performance
- ▶ Use knowledgeable respondents

75
Sources: Harrison & Raineri (2008); Schalock et al. (2010, p. 47)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Strengths of Rating Scales
 - ▶ Focus on behaviors in natural settings
 - ▶ Obtain information from multiple respondents
 - ▶ Provide a developmental reference for adaptive skills
 - ▶ Can be used to develop goals and objectives

76
Source: Harrison & Raineri (2008)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Limitations of Rating Scales
 - ▶ Dependent on the rater's perceptions
 - ▶ May reflect rater's expectations/standards
 - ▶ May be influenced by student's characteristics
 - ▶ Reflect a sample of behaviors

77
Source: Harrison & Raineri (2008)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Best Practices
 - ▶ Select rating scales carefully
 - ▶ Use measures that are valid for the particular student.
 - ▶ Make use of multiple measures
 - ▶ Obtain data from multiple raters across setting.
 - ▶ Use multiple assessment methods
 - ▶ Include naturalistic observations across settings.
 - ▶ Conduct semi-structured interview of informants.
 - ▶ Review student records (including prior evaluations)

78
Source: Harrison & Raineri (2008)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Best Practices
 - ▶ Select rating scales carefully
 - ▶ Should have current norms and be developed on a representative sample of the general population.
 - ▶ Make sure scales used are technically adequate
 - ▶ Reliable, valid, generalizable, developed with the identification of ID in mind
 - ▶ Appropriate for the specific student
 - ▶ Represented in the normative sample
 - ▶ Account for physical conditions
 - ▶ The evaluation of individuals with vision, hearing, and motor impairments is complex

79

Source: Schalock et al. (2010, p. 49-53)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

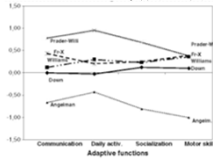
- ▶ Best Practices (continued)
 - ▶ Consider other factors that influence scores
 - ▶ Opportunities
 - ▶ Relevant context/environments
 - ▶ Sociocultural considerations
- ▶ Handout 1: AAIDD guidelines for selecting adaptive behavior scales

80

Source: Schalock et al. (2010, p. 49-53)

Identifying ID: Clinical Criterion 3. Adaptive Behavior

- ▶ Adaptive Behavior Profile & Genetic Syndromes
 - ▶ Prader-Willi was found to have the highest adaptive profile, with marked decreases in motor abilities.
 - ▶ The adaptive profiles of Fragile-X and Williams had very similar levels and trends, except for lower communication skills in Williams.
 - ▶ Down syndrome showed a flat profile, with limited differences between the areas.
 - ▶ Angelman syndrome showed the lowest profile, with strong deficits in socialization and motor skills.



81

Source: Nuovo & Buono (2011)

Identifying ID: Educational Criterion

- ▶ *“...adversely affects a child’s educational performance.”*

82

Sources: CFR, Title 34, Chapter III, Part 300, §300.8 (Child with a disability), (c)(6); Indiana State Board of Education, Special Education Rules, Title 511, Article 7-41-3

Identifying ID: Concluding Comments

- ▶ “A ... common misuse of classification concerns misleading assumptions regarding precision of scores. Examples include an IQ of 75 versus a score of 69 leading to qualitatively different eligibility decisions or determining eligibility or diagnosis on the basis of a single score or assessment.”

83

Source: Schalock et al. (2010, pp. 81-82)

Identifying ID: Concluding Comments

- ▶ Clinical Judgment Strategies
 1. Clarify/state the 3 reasons (diagnosis, classification, program planning) for the school psychologist’s evaluation.
 2. Conduct a thorough review of the student’s history.
 - ▶ Social, medical, & educational
 3. Make use of broad-based assessments.
 4. Synthesize the obtained data
 - ▶ Keep in mind “Rules” #3 & #4

84

Source: Schalock et al. (2010, p. 90)

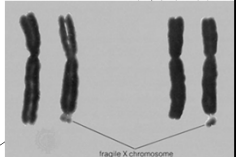
Seminar Outline

1. Intellectual Disability (ID) Defined
2. Identifying ID for Special Education Eligibility Purposes
3. Special Issues
4. The ID Psycho-educational Report Template

85

Special Issues: Etiology

- ▶ “Etiology represents a multifactorial construct composed of four categories of risk factors (biomedical, social, behavioral, and educational) that interact across time and affect the individual’s functioning.”



Source: Schalock et al. (2010, pp. 57-72)

Special Issues: Etiology

- ▶ Reasons for identifying include:
 - ▶ May be associated with other health-related problems.
 - ▶ May be treatable.
 - ▶ Associated with specific behavioral phenotypes.
 - ▶ Families can be referred to others with the same etiology for information and support.
 - ▶ Facilitates long term planning.

87

Source: Schalock et al. (2010, pp. 57-72)

Special Issues: Etiology

- ▶ Risk factors for ID:
 - ▶ Biomedical
 - ▶ Social
 - ▶ Behavioral
 - ▶ Educational
- ▶ See [Handout 2](#).
- ▶ See also [Handout 3](#) for behaviors associated with selected genetic disorders.

88

Source: Schalock et al. (2010, pp. 57-72)

Special Issues: Mental Health

Biological	Psychological	Social
Brain damage	Self-worth	Living in inappropriate environments
Sensory impairments	Self-image	Exposure to adverse life events
Genetic conditions	Poor coping mechanisms	Expectations of others
Medication	Bereavement and loss	Family
Epilepsy	Difficulty expressing emotions	Reduced social networks
	History and expectation of failing	Economic disadvantage
	Dependence on others	Transitions
		Discrimination
		Legal disadvantage

Source: Kitchener et al. (2010, pp. 12-13)

Special Issues: Mental Health

- ▶ Prevalence
 - ▶ Among children/adolescents comorbidity of ID with a mental disorder is between 30 to 50%.
 - ▶ While children ages 6/7 yrs. with ID and borderline IQ “account for 15% of the total child population, they account for up to 40% of the total child psychiatric morbidity within their age group.”
 - ▶ Controlling for socio-economic disadvantage significantly reduced, but did not eliminate this increased prevalence.

90

Sources: Einfeld et al. (2011); Emerson et al. (2010, p. 584); Fletcher et al. (2007)

Special Issues: Mental Health

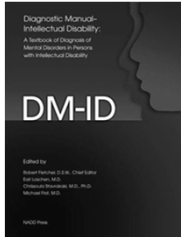
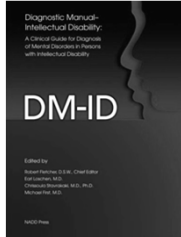
- ▶ Prevalence
 - ▶ Psychiatric disorders among persons with ID while common, are often not appropriately identified.
 - ▶ Mental health treatment for students with ID is lacking
 - ▶ May be one of the most underserved populations in the U.S.

91

Source: Fletcher et al. (2007)

Special Issues: Mental Health

- ▶ Assessment
 - ▶ *Diagnostic Manual - Intellectual Disability (DM-ID)*


92

Source: Fletcher et al. (2007)

Special Issues: ADHD

A. (1) Inattentive Type

- ▶ When assessing developmentally inappropriate inattention, compare the student to age and intellectual peers.
- (b) Student may gaze into space, need 1:1 aide, or require constant verbal prompts to stay on task.




93

Source: Fletcher et al. (2007, pp. 127-131)

Special Issues: ADHD

A. (2) Hyperactive/Impulsive Type

- ▶ When assessing developmentally inappropriate hyperactivity, compare the student to age and developmental peers (rather than with younger typical children of comparable developmental level).



94

Source: Fletcher et al. (2007, pp. 127-131)

Special Issues: ADHD

- B. If an early developmental Hx is not available, the age requirement may be dropped.
- D. There must be clear evidence of clinically significant impairment in social or academic functioning that is related to inattention, hyperactivity, or impulsivity and not just the ID.

95

Source: Fletcher et al. (2007, pp. 127-131)

Special Issues: ADHD

- ▶ **Conners Parent Rating Scales-R Cut-off Scores**
 - ▶ CPRS-R may distinguish between student with ID who are ADHD from those who are not.
 - ▶ CTRS does not do so
 - ▶ Not applicable to students with severe and profound ID.

Age	Cut-off	Sensitivity	Specificity
3-9 yrs.	50	.95	.84
10-17 yrs.	43	.88	.67

96

Source: Deb, Dhaliwal, & Roy (2008)

Special Issues: PTSD

A.(1): Stressor

- ▶ Within the special needs population, by age 18, 42.5% of girls & 28% of boys have been sexually assaulted.
- ▶ The range of potential “extreme traumatic stressors” is greater for students with ID.
 - ▶ For example may include residential placement, or developmental crises.


97

Source: Fletcher et al. (2007, pp. 365-378); Surfas (2012)

Special Issues: PTSD

A.(2): Response

- ▶ Response to stressor more likely to be expressed as disorganized or agitated behavior (as *DSM-IV-TR* suggests is common among children).



Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: PTSD

B. Re-experiencing Symptoms

- (1) Among students with severe to profound ID symptoms may include behavioral acting out.
 - ▶ Self-injury may be a symptom
- (2) Distressing dreams may not have recognizable content.
- (3) Trauma specific enactments.
 - ▶ Caution: Can be symptoms of psychosis in adults

99

Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: PTSD

C. Avoidance/Numbing Symptoms

- (1) Assessment difficult given difficulty communicating about internal states.
- (2) Avoidance may be reported by caregivers as “noncompliance.”
 - ▶ These students may have difficulty verbalizing their desire to avoid.
- (3) Need to ensure failure to recall important aspects of the traumatic event are not due to ID.

100

Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: PTSD

C. Avoidance/Numbing Symptoms

- (4) Diminished interest/participation may be reported by caregivers as “noncompliance.”
 - ▶ These students may have difficulty verbalizing their feelings.
- (5) Feelings of “detachment or estrangement” may be viewed by caregivers as self-isolation.

101

Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: PTSD

C. Avoidance/Numbing Symptoms

- (7) Need to account for the fact that many students with ID do not have normative expectations for their future.
 - ▶ They may not have the ability to project themselves into their future.
 - ▶ They may not have the expectations of age peers due to their ID (and not to trauma exposure).
 - ▶ Limited utility with severe/profound ID.

102

Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: PTSD

- D. Increased Arousal Symptoms
 - ▶ No adaptation.
- E. Documenting symptom duration can be challenging as functional impairments can also be associated with the ID (and not just trauma)
- F. Documenting “significant distress” and or “impairment” can be challenging as these may appear solely related to the ID.

103

Source: Fletcher et al. (2007, pp. 365-378)

Special Issues: Mental Health

- ▶ Treatment Options
 - ▶ Psychological Interventions
 - ▶ The opportunity to explore problems and find practical solutions.
 - ▶ May involve the use of charts, pictures, photos, drawings and diaries to help describe feelings and worries
 - ▶ Behavioral Interventions
 - ▶ To improve the skills and environment of the person
 - ▶ Skills Training
 - ▶ Social skills, anger management, relaxation and/or assertiveness training
 - ▶ Medication
 - ▶ With close medical supervision to monitor possible side-effects.

104

Special Issues: Mental Health

- ▶ Treatment Options
 - ▶ Cognitive-Behavioral Therapy
 - ▶ Exclusion of people in the mild-borderline ranges of intellectual functioning from CBT is probably not warranted.
 - ▶ Emerging evidence suggests the majority of people with mild ID have the ability to engage in/benefit from CBT.
 - ▶ Clients with mild ID have the skills necessary for CBT's cognitive component.
 - ▶ e.g., emotional labeling/recognition and, to a lesser extent, understanding of the mediating role of cognitions.
 - ▶ These skills appear to decline as verbal ability (receptive vocabulary) decreases.

105

Source: Taylor et al. (2008)

Special Issues: Mental Health


- ▶ Treatment Options
 - ▶ Cognitive-Behavioral Therapy
 - ▶ CBT can be modified in practice for a client with a range of significant cognitive skills deficits so that it is still effective in targeting the cognitive distortions central to presenting problems.
 - ▶ More clinical research is needed before we can justify denying potentially helpful treatments to people with ID.
 - ▶ This is particularly important in relation to the treatment of internalizing disorders (e.g. anxiety, depression, anger) in which perceptual schemas, attentional biases and entrenched beliefs are central.

106

Source: Taylor et al. (2008)

Special Issues: Mental Health

- ▶ Recommendations
 - ▶ Intellectual Disability and Mental Health First Aid Manual (2nd ed.), by B. Kitchener, A. Jorm, & C. Kelly (2010)




MENTAL
HEALTH
FIRST AID

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Available:
http://www.mhfa.com.au/cms/wp-content/uploads/2011/02/2nd_edition_id_manual_dec10.pdf

Special Issues: Pain

- ▶ Student's with severe to profound cognitive impairment experience many episodes of pain.
 - ▶ e.g., gastro-esophageal reflux, contractures, epilepsy
- ▶ These events can effect test taking.
 - ▶ Can be motivating operations for challenging behaviors
- ▶ Recognition/assessment of pain in these children is hindered by their limited communication abilities.



Source: McGuire et al. (2010)Terstegen et al. (2003)

Special Issues: Pain


- ▶ Assessment strategies
 - ▶ Checklist Pain Behavior (23 item)
 - ▶ <http://www.anestesiarianimazione.com/DWLDocuments/Checklist%20Pain%20Behaviour.pdf>
 - ▶ Pain Behaviour Checklist (10 item)
 - ▶ Non-communicating Children's Pain Checklist
 - ▶ http://pediatric-pain.ca/files/02/79/NCCPCPV_200901.pdf
 - ▶ Paediatric Pain Profile

Sources: Breau et al. (2000); Duivenvoorden et al. (2006); Hunt et al. (2004); McGrath et al. (1998); Terstegen et al. (2003); van der Putten & Vlaskamp (2011)

Seminar Outline

1. Intellectual Disability (ID) Defined
2. Identifying ID for Special Education Eligibility Purposes
3. Special Issues
4. The ID Psycho-educational Report Template

Report Template



- ▶ See EDS 243 webpage
- ▶ Review and discuss the template.
- ▶ Make specific edits.
 - ▶ Do you have better/alternative parent/user friendly language?
- ▶ Offer general suggestions.
 - ▶ Are there areas of the report you would exclude?
 - ▶ Are there any missing elements?
- ▶ Offer any general observations about the process/product of the psychoeducational evaluation of the student with an intellectual disability.

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Coming up next ...

November 15 ^o	<ul style="list-style-type: none"> → Autism Spectrum Disorders[¶] → Student presentation 11: CAST^o 	<ul style="list-style-type: none"> Required reading[¶] → Harrison & Thomas (2014a), Chapter 26[¶] Recommended reading[¶] → Brock et al. (2006)^o
November 22 ^o	→ Case Conferences ^o	□
November 29 ^o	<ul style="list-style-type: none"> → Quiz 3: ED, ID, & autism[¶] → Autism Spectrum Disorders[¶] → Student presentation 12: GARS^o 	<ul style="list-style-type: none"> Required reading[¶] → Harrison & Thomas (2014a), Chapter 27^o
December 6 ^o	→ Student presentations: Open Topics ^o	□
December 13 ^o	→ Finals Week ^o	→ □

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Intellectual Disability

Stephen E. Brock, PhD, NCSP, LEP
California State University, Sacramento



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Leadership begins here.

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