The Psycho-Educational Assessment of Students with Autism Spectrum Disorders

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Presentation Outline

- Introduction
- Determining the Need for a Diagnostic Evaluation
- Elements of the Diagnostic Evaluation
- Determining Educational Needs and the Appropriate Placement & Services
- Psycho-educational Report Recommendations
- Conclusions

Acknowledgement

Adapted from...

Introduction: Reasons for Increased Vigilance

- Autistic spectrum disorders are much more common than previously suggested.
  - 60 (vs. 4 to 6) per 10,000 in the general population (Chakrabarti & Fombonne, 2001).
  - In 2000 and 2002, 1 out of every 150 eight-year-olds had autism (ADDM, 2007).
  - 570% increase in the numbers served under the autism IDEA eligibility classification between 1995 and 2005 (28,725 to 192,643; U.S. Dept. of Education, 2006)

Introduction: Explanations for Changing ASD Rates in the General Population

- Changes in diagnostic criteria
- Heightened public awareness of autism
- Increased willingness and ability to diagnose autism
- Availability of resources for children with autism
- Yet to be identified environmental factors

Introduction: Explanations for Changing ASD Rates in Special Education

- Classification substitution
  - IEP teams have become better able to identify students with autism
  - Autism is more acceptable in today’s schools than is the diagnosis of mental retardation
  - The intensive early intervention services often made available to students with autism are not always offered to the child whose primary eligibility classification is mental retardation
Introduction: Increased Prevalence in Special Education (Brock, 2006)

Changes in Rates of Students Found Eligible in the Mental Retardation and Autism Categories

Introduction: Reasons for Increased Vigilance

- Autism can be identified early in development
  - 75 to 88 percent show signs first 2 years (Young & Brewer, 2002)
  - 31 to 55 percent show signs in first year (Young & Brewer, 2002)
  and it is important to identify early because...
- Early intervention is an important determinant of the course of autism
  - Substantial cortical plasticity in early development
  - Progress from intensive early intervention

(Mastergeorge, Rogers, Corbett, & Solomon, 2003; Ozonoff & Rogers, 2003; Rogers, 2001; Rogers, 1998).

Introduction: Reasons for Increased Vigilance

- Not all cases of autism will be identified before school entry.
  - Average Age of Autistic Disorder identification is 5 1/2 years of age.
  - Average Age of Asperger’s Disorder identification is 11 years of age (Howlin and Asgharian, 1999).

Introduction: Reasons for Increased Vigilance

- Most children with autism are identified by school resources.
  - Only three percent of children with ASD are identified solely by non-school resources
  - All other children are identified by a combination of school and non-school resources (57 %), or by school resources alone (40 %)

Yeargin-Allsopp et al., 2003

Introduction: Reasons for Increased Vigilance

- Full inclusion of children with ASD in general education classrooms.
  - Students with disabilities are increasingly placed in full-inclusion settings.
  - In addition, the results of recent studies suggesting a declining incidence of mental retardation among the ASD population further increases the likelihood that these children will be mainstreamed (Chakrabarti & Fombonne, 2001).
  - Consequently, today’s educators are more likely to encounter children with autism during their careers.

Presentation Outline

- Introduction
- Determining the Need for a Diagnostic Evaluation
  - Diagnostic Classifications
  - Identifying ASD risk factors and warning signs
  - Screening and Referral
  - Screening Tools
- Elements of the Diagnostic Evaluation
- Determining Educational Needs and the Appropriate Placement & Services & Services
- Psycho-educational Report Recommendations
- Conclusions
Diagnostic Classifications

Pervasive Developmental Disorders

- Autistic Disorder
- Asperger’s Disorder
- PERS-NOS
- Rett’s Disorder
- Childhood Disintegrative Disorder

In this workshop the terms “Autism,” or “Autistic Spectrum Disorders (ASD)” will be used to indicate these PDDs.

Case Finding: Looking for Risk Factors

- Known Risk Factors
  - High Risk
    - Having an older sibling with autism.
  - Moderate Risk
    - The diagnosis of tuberous sclerosis, fragile X, or epilepsy.
    - A family history of autism or autistic-like behaviors.

Case Finding: Looking for Risk Factors

- Currently there is no substantive evidence supporting any one non-genetic risk factor for ASD.
- However, given that there are likely different causes of ASD, it is possible that yet to be identified non-heritable risk factors may prove to be important in certain subgroups of individuals with this disorder.
  - There may be an interaction between the presence of specific genetic defects and specific environmental factors.
  - Individuals with a particular genetic predisposition for ASD may have a greater risk of developing this disorder subsequent to exposure to certain non-genetic risk factors.
  - In particular, it has been suggested that prenatal factors such as maternal infection and drug exposure deserve further examination.

Identifying ASD Warning Signs

- Early Developmental Red Flag Indicators
  - Failure to attend to human voice by 24 months.
  - Failure to look at face and eyes of others by 24 months.
  - Failure to orient to name by 24 months.
  - Failure to demonstrate interest in other children by 24 months.
  - Failure to imitate by 24 months.


Screening and Referral

- Screening is designed to help determine the need for additional diagnostic assessments.
- In addition to the behavioral screening (which at school should typically be provided by the school psychologist), screening should include medical testing (lead screening) and a complete audiological evaluation.

Identifying ASD Warning Signs

- Early Developmental Red Flag Indicators
  - No big smiles or other joyful expressions by 6 months.
  - No back-and-forth sharing of sounds, smiles, or facial expressions by 8 months.
  - No babbling by 12 months of age.
  - No back and forth gestures (e.g. pointing, showing, reaching or waving by 12 months).
  - No words by 16 months.
  - No two-word meaningful phrases by 24 months.
  - ANY loss of speech, babbling or social skills at ANY age.

Source: CDC, 2001; Schopler, 1995.
Behavioral Screening for ASD

- School psychologists are exceptionally well qualified to conduct the behavioral screening of students suspected to have an ASD.
- Several screening tools are available.
- Initially, most of these tools focused on the identification of ASD among infants and preschoolers.
- Recently screening tools useful for the identification of school-aged children who have high functioning autism or Asperger’s Disorder have been developed.

Behavioral Screening of Infants and Preschoolers

- Modified Checklist for Autism in Toddlers (M-CHAT)
  - Designed to screen for autism at 24 months of age.
  - More sensitive to the broader autism spectrum.
  - Uses the 9 items from the original CHAT as its basis.
  - Adds 14 additional items (23-item total).
  - Unlike the CHAT, however, the M-CHAT does not require the screener to directly observe the child.
  - Makes use of a Yes/No format questionnaire.
  - Yes/No answers are converted to pass/fail responses by the screener.
  - A child fails the checklist when 2 or more of 6 critical items are failed or when any three items are failed.

Behavioral Screening of Infants and Preschoolers: M-CHAT

- The M-CHAT was used to screen 1,293 18- to 30-month-old children. 58 were referred for a diagnostic/developmental evaluation. 39 were diagnosed with an autism spectrum disorder (Robins et al., 2001).
  - Will result in false positives.
  - Data regarding false negative is not currently available, but follow-up research to obtain such is currently underway.

Modified Checklist for Autism in Toddlers: Sample Items

1. Does your child take an interest in other children?
2. Does your child ever use his/her index finger to point, to indicate interest in something?
9. Does your child ever bring objects over to you (parent) to show you something?
13. Does your child imitate you? (e.g., you make a face-will your child imitate it?)
14. Does your child respond to his/her name when you call?
15. If you point at a toy across the room, does your child look at it?
Modified Checklist for Autism in Toddlers (M-CHAT)

M-CHAT Scoring Instructions

A child fails the checklist when 2 or more critical items are failed or when any three items are failed. Yes/no answers convert to pass/fail responses. Below are listed the failed responses for each item on the M-CHAT. Bold capitalized items are CRITICAL items.

Not all children who fail the checklist will meet criteria for a diagnosis on the autism spectrum. However, children who fail the checklist should be evaluated in more depth by the physician or referred for a developmental evaluation with a specialist.

2. NO 7. NO 12. No 17. No 22. Yes

Robins et al. (2001)

Childhood Asperger Syndrome Test: Sample Items

1. Does s/he join in playing games with other children easily?
2. Does s/he come up to you spontaneously for a chat?
5. Is it important to him/her to fit in with the peer group?
6. Does s/he appear to notice unusual details that others miss?

From Scott et al. (2002, p. 27)

Behavioral Screening of School Age Children: SCQ

Social Communication Questionnaire (SCQ)

- http://portal.wpspublish.com

Behavioral Screening of School Age Children: CAST

Childhood Asperger Syndrome Test (CAST)

  - A screening for primary grade (ages 4 through 11 years) children
  - Has 37 items, with 31 key items contributing to child’s total score
  - The 6 control items assess general development
  - With a total possible score of 31, a cut off score of 15 “NO” responses was found to correctly identify 87.5 (7 out of 8) of the cases of autistic spectrum disorders.
  - Rate of false positives is 36.4%.
  - Rate of false negatives is not available

http://www.autismresearchcentre.com/tests/cast_test.asp
Behavioral Screening of School Age Children: SCQ

- Social Communication Questionnaire (SCQ)
  - Two forms of the SCQ: a Lifetime and a Current form.
  - Current asks questions about the child’s behavior in the past 3-months, and is suggested to provide data helpful in understanding a child’s everyday living experiences and evaluating treatment and educational plans.
  - Lifetime asks questions about the child’s entire developmental history and provides data useful in determining if there is need for a diagnostic assessment.
  - Consists of 40 Yes/No questions asked of the parent.
  - The first item of this questionnaire documents the child’s ability to speak and is used to determine which items will be used in calculating the total score.

Behavioral Screening of School Age Children: SCQ

- Social Communication Questionnaire (SCQ)
  - An “AutoScore” protocol converts the parents’ Yes/No responses to scores of 1 or 0.
  - The mean SCQ score of children with autism was 24.2, whereas the general population mean was 5.2.
  - The threshold reflecting the need for diagnostic assessment is 15.
  - A slightly lower threshold might be appropriate if other risk factors (e.g., the child being screened is the sibling of a person with ASD) are present.

Behavioral Screening of School Age Children: SCQ

- While it is not particularly effective at distinguishing among the various ASDs, it has been found to have good discriminative validity between autism and other disorders including non-autistic mild or moderate mental retardation.
- The SCQ authors acknowledge that more data is needed to determine the frequency of false negatives (Rutter et al., 2003).
- This SCQ is available from Western Psychological Services
  - http://portal.wpspublish.com

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Autistic Disorder Diagnostic Criteria

A. A total of six (or more) items for (1), (2), and (3), with at least two from (1), and one each for (2) and (3):
   (1) qualitative impairment in social interaction, as manifested by at least two of the following:
      a) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
      b) failure to develop peer relationships appropriate to developmental level
      c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by lack of showing, bringing, or pointing out objects of interest)
      d) lack of social or emotional reciprocity

Autistic Disorder DSM-IV-TR Criteria

A. A total of six (or more) items for (1), (2), and (3), with at least two from (1), and one each for (2) and (3):
   (2) qualitative impairments in communication as manifested by at least one of the following:
      a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
      b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
      c) stereotyped and repetitive use of language or idiosyncratic language
      d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
A. A total of six (or more) items for (1), (2), and (3), with at least two from (1), and one each for (2) and (3):

(3) restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:

a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
b) apparently inflexible adherence to specific, nonfunctional routines or rituals
c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twirling, or complex whole-body movements)
d) persistent preoccupation with parts of objects

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.

C. The disturbance is not better accounted for by Rett’s Disorder or Childhood Disintegrative Disorder.

Other Autism Spectrum Disorders

- Asperger’s Disorder
  - The criteria for Asperger’s Disorder are essentially the same as Autistic Disorder with the exception that there are no criteria for a qualitative impairment in communication.
  - In fact Asperger’s criteria require “… no clinically significant general delay in language (e.g., single words used by 2 years, communicative phrases used by 3 years).”

- Childhood Disintegrative Disorder (CDD)
  - Criteria are essentially the same as Autistic Disorder.
  - Difference include that in CDD there has been …
    (a) “Apparently normal development for at least the first 2 years after birth as manifested by the presence of age-appropriate verbal and nonverbal communication, social relationships, play, and adaptive behavior”; and that there is
    (b) “Clinically significant loss of previously acquired skills (before age 10 years) in at least two of the following areas:
      1. expressive or receptive language;
      2. social skills or adaptive behavior;
      3. bowel or bladder control;
      4. play;
      5. motor-skill.”

- Rett’s Disorder
  - Both Autistic Disorder and Rett’s Disorder criteria include delays in language development and social engagement (although social difficulties may not be as pervasive).
  - Unlike Autistic Disorder, Rett’s also includes
    (a) head growth deceleration,
    (b) loss of fine motor skill,
    (c) poorly coordinated gross motor skill, and
    (d) severe psychomotor retardation.

Symptom Onset

- Autistic Disorder is before the age of three years.
  - Before three years, their must be “delays or abnormal functioning” in at least one of the following areas: (a) social interaction, (b) social communicative language, and/or (c) symbolic or imaginative play.
- Asperger’s Disorder may be somewhat later.
- Childhood Disintegrative Disorder is before the age of 10 years.
  - Preceded by at least two years of normal development.
- Rett’s Disorder is before the age of 4 years.
  - Although symptoms are usually seen by the second year of life.
Developmental Course

- **Autistic Disorder:**
  - Parents may report having been worried about the child's lack of interest in social interaction since or shortly after birth.
  - In a few cases the child initially developed normally before symptom onset. However, such periods of normal development must not extend past age three.
  - Duration of Autistic Disorder is typically life long, with previous studies suggesting only a small percentage being able to live and work independently and about 1/3 being able to achieve a partial degree of independence. Even among the highest functioning adults symptoms typically continue to cause challenges.

- **Asperger’s Disorder:**
  - Motor delays or clumsiness may be some of the first symptoms noted during the preschool years.
  - Difficulties in social interactions, and symptoms associated with unique and unusually circumscribed interests, become apparent at school entry.
  - Duration is typically lifelong with difficulties empathizing and modulating social interactions displayed in adulthood.

- **Rett’s and Childhood Disintegrative Disorders:**
  - Lifelong conditions.
  - Rett’s pattern of developmental regression is generally persistent and progressive. Some interest in social interaction may be noted during later childhood and adolescence.
  - The loss of skills associated with Childhood Disintegrative Disorder plateau after which some limited improvement may occur.

Associated Features

- Asperger’s Disorder is the only ASD not typically associated with some degree of mental retardation.
- Autistic Disorder is associated with moderate mental retardation. Other associated features include:
  - unusual sensory sensitivities
  - abnormal eating or sleeping habits
  - unusual fearfulness of harmless object or lack of fear for real dangers
  - self-injurious behaviors
- Childhood Disintegrative Disorder is associated with severe mental retardation.
- Rett’s Disorder is associated with severe to profound mental retardation.

Age & Gender Specific Features

- Chronological age and developmental level influence the expression of Autistic Disorder
  - Thus, assessment must be developmentally sensitive.
  - For example, infants may fail to cuddle; show indifference or aversion to affection or physical contact; demonstrate a lack of eye contact, facial responsiveness, or socially directed smiles; and a failure to respond to their parents’ voices.
  - On the other hand, among young children, adults may be treated as interchangeable or alternatively the child may cling to a specific person.
- Gender differences: with the exception of Rett’s Disorder (occurs in females only) all other ASDs appear to be more common (4-5 times higher) among males than females.

Differential Diagnosis

- **Rett’s Disorder**
  - Affects primarily girls
  - Head growth deceleration
  - Loss of fine motor skill
  - Awkward gait and trunk movement
  - Mutations in the MECP2 gene

- **Childhood Disintegrative Disorder**
  - Regression following at least two years of normal development

- **Asperger’s Disorder**
  - Expressive/Receptive language not delayed
  - Normal intelligence
  - Later symptom onset

- **Schizophrenia**
  - Years of normal/near normal development
  - Symptoms of hallucinations/delusions
  - Loss of fine motor skill

- **Selective Mutism**
  - Normal language in certain situations or settings
  - No restricted patterns of behavior

- **Language Disorder**
  - No severe impairment of social interactions
  - No restricted patterns of behavior
Differential Diagnosis

- ADHD
  - Distractible inattention related to external (not internal) stimuli
  - Deterioration in attention and vigilance over time
- Mental Retardation
  - Relative to developmental level, social interactions are not severely impaired
  - No restricted patterns of behavior
- OCD
  - Normal language/communication skills
  - Normal social skills
- Reactive Attachment Disorder
  - History of severe neglect and/or abuse
  - Social deficits dramatically remit in response to environmental change

Developmental and Health History

- Prenatal and perinatal risk factors
  - Greater maternal age
  - Maternal infections
    - Measles, Mumps, & Rubella
    - Influenza
    - Cytomegalovirus
    - Herpes, Syphilis, HIV
    - Drug exposure
    - Obstetric suboptimality

- Postnatal risk factors
  - Infection
    - Case studies have documented sudden onset of ASD symptoms in older children after herpes encephalitis.
    - Infections that can result in secondary hydrocephalus, such as meningitis, have also been implicated in the etiology of ASD.
    - Common viral illnesses in the first 18 months of life (e.g., mumps, chickenpox, fever of unknown origin, and ear infection) have been associated with ASD.
  - Chemical exposure?
  - MMR?

- Diagnostic History
  - ASD is sometimes observed in association with other neurological or general medical conditions.
    - Mental Retardation (up to 80%)
    - Epilepsy (3-30%)
      - May develop in adolescence
      - EEG abnormalities common even in the absence of seizures
    - Genetic Disorders
      - 10-20% of ASD have a neurodevelopmental genetic syndrome
      - Tuberous Sclerosis (found in 2-4% of children with ASD)
      - Fragile X Syndrome (found in 2-8% of children with ASD)

- Developmental Milestones
  - Language development
    - Concerns with communication skills and hearing loss
  - Social development
    - Atypical play
      - Lack of social interest and/or reciprocity
    - Motor mannerisms
      - Odd and/or repetitive
    - Other developmental delays
    - Regression in skills of any kind

- Medical History
  - Vision and hearing
  - Chronic ear infections (and tube placement)
  - Immune dysfunction (e.g., frequent infections)
  - Autoimmune disorders (e.g., thyroid problems, arthritis, rashes)
  - Allergy history (e.g., to foods or environmental triggers)
  - Gastrointestinal symptoms (e.g., diarrhea, constipation, bloating, abdominal pain)
Developmental and Health History

- Family History
  - Epilepsy
  - Mental Retardation
  - Genetic Conditions
    - Tuberous Sclerosis Complex
    - Fragile X Syndrome
    - Schizophrenia
    - Anxiety
    - Depression
    - Bipolar disorder
  - Other genetic condition or chromosomal abnormality

- Autism Diagnostic Evaluation:
  - Health, Family, Developmental, & Behavioral History Interview Form
  - Available: http://www.csus.edu/indiv/b/brocks

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Multi-Disciplinary ASD Assessment

- Include Qualitative & Quantitative Assessments by:
  - Psychologist: Cognitive, Adaptive (daily living) & Problem Behaviors, Social-Emotional/Play & ASD-Specific Measures
  - SLP: Speech, Oral Motor, Language, Social-Pragmatics & Play
  - Teacher(s): Academic Skills & School Functioning
  - Nurse: Vision, Hearing and H&D Screening
  - Physician: Neurologist, Lead Screening & Lab Tests
  - Others:
    - OT = Fine & Visual Motor and/or Sensory Processing?
    - APE and/or PT = Gross Motor?

Qualitative Assessment Data

- Non-Standardized Observations
  - Observations in structured & unstructured activities
- Non-Standardized Interviews
  - Interviews with parent, teacher, student, etc.
- Non-Standardized Checklists
  - Checklists for DSM-IV, Social Skills, Ed Code, etc.

* Be Sure Qualitative Assessments Consider Impairments or Symptoms Related To ASD!
Qualitative Assessment Data

- Examples of Non-Standardized Checklists:
  - Checklist of Symptoms or behaviors related to Ed Code Eligibility Category or DSM-IV Diagnosis
  - Checklists based on skill(s) (e.g., social skills, etc)

Example:
Available: www.difflearn.com

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Quantitative Assessment Data

- Indirect Assessment
  - Interviews and Questionnaires/Rating Scales
    - Easier to obtain
    - Subject to interviewee/rater bias
- Direct Assessment
  - Behavioral Observations
    - Can be more difficult and time consuming to obtain
    - Subject to interviewee/rater bias

Indirect Assessment: GARS-2

- The Gilliam Autism Rating Scale 2nd ED.
The Gilliam Autism Rating Scale, 2nd Ed. (GARS-2)
- New normative group: 1,107 individuals ages 3 to 22 reported to have autism
- 42 items, 3 Subscales and an Autism Index (AI) Score
- Subscales: Social Interaction, Communication, and Stereotyped Behaviors assess current behavior
- A structured parent interview form replaces the Early Development subscale to investigate parent perceptions and observations.
- GARS-2 items have been rewritten for clarity and operationally defined in manual.
- New guidelines for interpreting scales and index.
- Includes "Instructional Objectives for Children Who Have Autism" to use GARS-2 for developing goals.

The Asperger Syndrome Diagnostic Scale (ASDS)
- Age range 5-18.
- 50 yes/no items.
- 10 to 15 minutes.
- Normed on 227 persons with Asperger Syndrome, autism, learning disabilities, behavior disorders and ADHD.
- ASQs are classified on an ordinal scale ranging from "Very Low" to "Very High" probability of Asperger’s Disorder. A score of 90 or above specifies that the child is "Likely" to "Very Likely" to have Asperger’s Disorder.

The Autism Diagnostic Interview-Revised (ADI-R)
- Semi-structured interview
- Designed to elicit the information needed to diagnose autism.
- Primary focus is on the three core domains of autism (i.e., language/communication; reciprocal social interactions; and restricted, repetitive, and stereotyped behaviors and interests).
- Requires a trained interviewer and caregiver familiar with both the developmental history and the current behavior of the child.
- The individual being assessed must have a developmental level of at least two years.
Direct ASD Assessments: ADOS

- **The Autism Diagnostic Observation Schedule (ADOS)**

Direct ASD Assessments: ADOS

- A standardized, semi-structured, interactive play assessment of social behavior.
  - Uses "planned social occasions" to facilitate observation of the social, communication, and play or imaginative use of material behaviors related to the diagnosis of ASD.
- Consists of four modules.
  - Module 1 for individuals who are preverbal or who speak in single words.
  - Module 2 for those who speak in phrases.
  - Module 3 for children and adolescents with fluent speech.
  - Module 4 for adolescents and adults with fluent speech.

Direct ASD Assessments: ADOS

- Administration requires 30 to 45 minutes.
- Because its primary goal is accurate diagnosis, the authors suggest that it may not be a good measure of treatment effectiveness or developmental growth (especially in the later modules).
- Psychometric data indicates substantial interrater and test-retest reliability for individual items, and excellent interrater reliability within domains and internal consistency.
- Mean test scores were found to consistently differentiate ASD and non-ASD groups.

Direct ASD Assessments: CARS

- **The Childhood Autism Rating Scale (CARS)**

Direct ASD Assessments: CARS

- 15-item structured observation tool.
- Items scored on a 4-point scale ranging from 1 (normal) to 4 (severely abnormal).
- In making these ratings the evaluator is asked to compare the child being assessed to others of the same developmental level.
  - Thus, an understanding of developmental expectations for the 15 CARS items is essential.
- The sum ratings is used to determine a total score and the severity of autistic behaviors
  - Non-autistic, 15 to 29
  - Mildly-moderately autistic 30-37
  - Severely autistic, 37

Direct ASD Assessments: CARS

- Data can also be obtained from interviews, observations and student record reviews.
- When initially developed it attempted to include diagnostic criteria from a variety of classification systems and it offers no weighting of the 15 scales.
- This may have created some problems for its current use
  - Currently includes items that are no longer considered essential for the diagnosis of autism (e.g., taste, smell, and touch response) and may imply to some users of this tool that they are essential to diagnosis (when in fact they are not).
- Psychometrically, the CARS has been described as “acceptable,” “good,” and as a “well-constructed rating scale.”
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Special Education Eligibility: Proposed IDEA Regulations

- IDEIA 2004 Autism Classification
  - P.L. 108-446, Individuals with Disabilities Education Improvement Act (IDEIA), 2004
  - USDOE Regulations for IDEA 2004 [§ 300.8(c)(1)]
    - Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child’s education performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotypical movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. (i) Autism does not apply if a child’s educational performance is adversely affected primarily because the child has an emotional disturbance, as defined in paragraph (c)(4) of this section. (ii) A child who manifests the characteristics of autism after age three could be identified as having autism if the criteria in paragraph (c)(1)(i) of this section are satisfied.

Special Education Eligibility

- For special education eligibility purposes distinctions among PDDs may not be relevant.
- While the diagnosis of Autistic Disorder requires differentiating its symptoms from other PDDs, Shriver et al. (1999) suggest that for special education eligibility purposes “the federal definition of ‘autism’ was written sufficiently broad to encompass children who exhibit a range of characteristics” (p. 539) including other PDDs.

Determining Educational Needs and the Appropriate Placement & Services

- The assessment should help the IEP Team:
  - Determine eligibility categories to consider and the primary category impacting school functioning
  - Determine present levels of functioning and, if eligible, areas of unique need (goal areas)
  - Determine appropriate placement(s) in the least restrictive environment(s) to meet needs
  - Determine appropriate strategies, support and/or services (DIS) to meet needs and benefit from educational program.
The Psycho-Educational Assessment of Students with ASD

Determining Educational Needs and the Appropriate Placement & Services

- Stick to the “IEP Process”
  i. Introductions, agenda, parent’s rights, sign-in
  ii. Review assessments, present levels & eligibility
  iii. Develop measurable and reasonably calculated goals in all areas of unique need
  iv. Determine appropriate placement(s) in least restrictive environment & support/strategies
  v. Considering goals & placement, determine what specific additional designated instructional services (DIS) are required to address needs, meet goals and make meaningful progress

Determining Educational Needs and the Appropriate Placement & Services

- Addressing All Areas of Unique Need: Considerations for Goals & Objectives
  - Make sure IEP Team has considered all available assessments, information and input
  - Make sure goals are in all areas of need and relate to impact on educational progress & functioning
  - Make sure goals are measurable, with an objective and clear baseline & annual goal (benchmarks?)
  - Make sure goals are reasonably calculated
  - Make sure it is clear how progress will be monitored

Consider Continuum of Least Restrictive Environment (LRE)

Options for student:
- General Education (GE)?
- GE with DIS &/or other supplementary aids or support?
- Separate Classroom, School or Setting?

IEP Team Considerations: Placement in Least Restrictive Environment

- Mark Hartmann v. Loudon County (1997): mainstreaming or inclusion is secondary to the need to provide a free appropriate education from which the child receives educational benefit:
  ". . . the IDEA’s mainstreaming provision establishes a presumption, not an inflexible federal mandate. Under its terms, disabled children are to be educated with children who are not handicapped only "to the maximum extent appropriate." 20 U.S.C. § 1412(5)(B). Section 1412(5)(B) explicitly states that mainstreaming is not appropriate "when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily." 20 U.S.C. § 1412(5)(B); see also Rowley, 458 U.S. at 181 n.4.

IEP Team Considerations: Placement in Least Restrictive Environment (Educational Benefit vs Mainstreaming Preference)

- In N.R. v. Kingwood Township (NJ): "Specifically . . . a satisfactory IEP must provide "significant learning" and confer "meaningful benefit."
- "The least restrictive environment is the one that, to the greatest extent possible, satisfactorily educates disabled children together with children who are not disabled, in the same school the disabled child would attend if the child were not disabled."
- "We have interpreted this mandate to require that a disabled child be placed in the least restrictive environment (hereinafter "LRE") that will provide him with a meaningful educational benefit."

IEP Team Considerations: Placement in Least Restrictive Environment

- Sacramento City Unified School District v. Holland: identified several factors critical in analyzing whether a school district is complying with the least restrictive environment mandate:
  - Educational benefits available to the student in a regular classroom, supplemented with appropriate aids and services, as compared with educational benefits of a special education classroom;
  - Nonacademic (i.e., social, language, etc.) benefits of interaction with children who are not disabled;
  - Effect on the teacher and the other children in the classroom of the presence of the student with disabilities in terms of disruptive behavior and/or undue consumption of the teacher's time;
  - Cost of mainstreaming a student with disabilities in a regular education classroom as compared to the cost of placement of the student in a special education classroom.
Determining Educational Needs and the Appropriate Placement & Services

- IEP Team Considerations: Placement in Least Restrictive Environment
  - No standard criteria for inclusion, decisions are made on “case by case” basis considering the individual.
  - Some suggested inclusion pre-requisites for young children (adapted from Johnson et al. in Behavioral Intervention for Young Children with Autism; p.331-342 in Maurice, 1996).
  - Language Skills: follows 2-step group directions, communicates needs & desires, answers/asks simple questions, etc.
  - Social Skills: takes turns, waits quietly, responds to greetings, participates in group activities, imitates peers, initiates, etc.
  - Academic Skills: learns through observation and group instruction, completes seat work independently, raises hand for help, completes (near) grade level curricula, etc.
  - Behavior Skills: Responds to delayed contingencies, exhibits disruptive behaviors at near-zero level, etc.

The IEP: Strategies, Support and Designated Instructional Services (DIS)

- Consider strategies, support and DIS:
  - Do behavior, communication and/or social problems affect functioning in placement and require specific support or strategies within the placement (e.g., AT, BSP, etc.)?
  - Can placement fully address goal(s)? If not, then consider DIS support and/or services:
    - DIS services/providers (e.g., SLP, OT, SDC, Para, etc.)
    - DIS service delivery (e.g., consult, 1:1, small group, etc.)
    - DIS specific frequency and duration of services

Presentation Outline

- Introduction
- Determining the Need for a Diagnostic Evaluation
- Elements of the Diagnostic Evaluation
- Determining Educational Needs and the Appropriate Placement & Services
- Psycho-educational Report Recommendations
- Conclusions

Psycho-Educational Report Recommendations

Sample psycho-educational report recommendations for social skills, communication skills, challenging behaviors and academic skills are available at:

http://www.csus.edu/indiv/b/brocks/

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