Psy 664a - Fall 2001
Class Note Outlines

V. Psychopathology and Special Populations


B. Overview of childhood psychopathology: Maxmen Ch 20 (skim); previous Sattler: pp 552-559
   1. DSM-IV: Disorders usually first evident in infancy, childhood or adolescence -- can diagnose at any age
      Handout: overview

2. Statistical classification of childhood psychopathology
   a. Problem with current classifications: too specific

   b. Alternative groups - broader categories
      1) Kohn - 2 clusters:
         1) Apathy-withdrawal
         2) Anger-defiance

      2) Quay - 4 clusters:
         1) Conduct disorder
         2) Anxiety-withdrawal
         3) Immaturity
         4) Socialized-aggressive

C. Learning Disabilities: previous Sattler: pp 597-623; Watkins et al. (1997); MacMillan et al (1997); (also see Dumont & Willis, 1995)

   1. General definitions:
      a. in general: academic (or achievement test) performance is significantly below expected for intelligence (IQs), background; not due to disability or MR, IQ is "normal"

      b. specific criteria school systems: e.g., 15 pt difference between IQ and performance on achievement test

   2. DSM-IV categories:
      a. Learning Disorders
         1) Reading Disorder (dyslexia)
         2) Mathematics Disorder
         3) Disorder of Written Expression
         4) Learning Disorder NOS

      b. Motor Skills Disorders
         1) Developmental Coordination Disorder
c. Communication Disorders

1) Expressive Language Disorder
2) Mixed Receptive-Expressive Language Disorder
3) Phonological Disorder
4) Stuttering
5) Communication Disorder NOS

3. Etiology: heterogeneous, biological, cognitive

4. Alternative classification of subgroups

a) Kinsbourne & Warrington
   1) language retardation group: VIQ<PIQ
   2) Gerstmann syndrome: VIQ>PIQ

b) Mattis, French & Rapin
   1) language disorder group
   2) articulatory and graphomotor dyscoordination group
   3) visuospatial perception disorder group

5. Assessment

a) Test battery:
   1) Developmental, learning history
   2) Individually administered intelligence test: (WISC-III)
   3) Individual achievement test
      a> general:
         1> Woodcock-Johnson
         2> Peabody Individual Ach. Test (PIAT-R)
         3> Wechsler Individual Ach. Test (WIAT)
         4> Wide Range Ach. Test (WRAT-R and WRAT-3)
      b> specific: Key Math, Grey Oral Reading

4) Visuomotor test: Bender, Beery (will return to)

b) Definition: LD = FSIQ 18 points higher than scores on achievement test(s) and FSIQ within "normal" range

1) Difference from FSIQ - Indiana definition 18 points
2) Reading Disorder=dyslexia: reading age/CA or MA < .8
c) WISC-R/III results: FSIQ "normal"

1) VIQ/PIQ patterns of differences
   a> VIQ < PIQ
   b> VIQ > PIQ
   c> VIQ = PIQ

2) ACID test
   a> low Arith, Coding, Info, Digit Sp
   b> hardest: I, A, D Sp, Cod, Voc; easiest: PC, PA, BD, OA
   c> Watson et al. (1997): Q usefulness of ACID test?

3) Bannatyne (1974) factors - WISC-R
   a> Spatial: PC, BD, OA (visuospatial)
   b> Conceptual: Comp, Sim, Voc (language develop)
   c> Sequential: Arith, D Sp, Cod (freedom fr distract)
   d> Acquired Knowledge: Info, Arith, Voc (learned info)
   e> LD: Spatial>Conceptual>Sequential; & low Acq Kn
   f> critique: developed theoretically, not through factor analysis

4) class example: VIQ/PIQ, ACID, Bannatyne

5) critique: heterogeneous
   a> Slate (1995) VIQ/PIQ
   b> Katz et al. (1993): Bannatyne pattern 20% adult LD

6) Wechsler Deterioration Index (WDI)
   a> hold - don't hold
   WDI=  -------------------
       hold=V, I, OA, PC
don't hold=DSp, S, Cod, BD
   hold
   b> Bowers et al ('92)- renamed it the Wechsler "Developmental" Index (WDI) and found: ADD>normal on WDI, LD kids were not
   c> Watkins (1996): LD and ED>normal and MR on WDI – however, high false negative rate
   d> cautions: Meehl & Rosen (1955): role of BR
   e> Elwood (1993): significance not reflect SIZE of diff
7) Intrasubtest scatter: **Dumont & Willis (1995)**: overinterpretation; clinical lore

8) How does lower IQs of WISC-III affect identification of LD?

9) **MacMillan et al. (1997)**: Hispanic students – how does use of FSIQ vs PIQ affect classification of LD (vs MR)?

### D. Attention-Deficit and Disruptive Behavior Disorders

1. **Reading:** old Sattler book: 20 (617-636); also see: Ch 5 (91-3), 18 (552-9); Anastopoulos et al. (1994); also see Riccio et al. (1997)

2. **Attention deficit hyperactivity disorder (ADHD)**
   a) **description**
      1) predominantly inattention type
      2) predominantly hyperactive-impulsive type
      3) combined type (both behavior problems)
   b) **assessment**
      1) IQ and achievement tests:
         a) pattern: variability in perf, careless errors, low frustration tolerance, impulsive, omissions, attentional problems - low D Sp, Cod, Arith + behavior observations
         b) form hypothesis but need further assessment to diagnose
         c) **Anastopoulos et al. (1994):** Q find out about use of Freedom fr Distact factor in dx ADHD?
         d) **Riccio et al. (1997):** Q find out about correlation of Fr f Dist factor and other measures of attention? Use in dx AFHD?
   2) Behavior rating scales and observations: parent and teacher form - look at behavior different settings: (Achenbach; Connors)
   3) Continuous performance tests often on computer (e.g., IVA – Independent Variables of Attention or TOVA - Test of Variables of Attention)
   4) example

3. **Conduct Disorder: Old Sattler book: finish Ch 20**
   a) **description:** pattern of violation of rights of others, societal norms, rules: aggression to people, animals, destruction of property, lying, theft, serious violations of rules (e.g., truancy)
   b) relationship to LD and ADHD: often have LD and/or ADHD
   c) pattern on tests: IQ > achievement tests, VIQ<PIQ
4. **Oppositional Defiant Disorder**: similar but milder, negativistic, hostile, defiant behavior (outside norms for that age)

E. **Severe psychopathology**:
   1. **Pervasive Developmental Disorders**: autism, Rett's, Asperger's
      a. severe impairment in the development of language
      b. severe deficits in social skills, language; we don't usually see
   2. **Mental retardation** (skip - come back to – first, gifted)

G. **Gifted**: Reading: old Sattler book: Ch 21
   1. definition
      a) intelligence or special abilities
      b) IQ top 2-3% (5%), IQ ≥ 130, VIQ and PIQ
   2. identification of gifted
   3. educational programs
   4. class examples

H. **Mental retardation**
   1. Reading: old Sattler book: Ch 21; also see: Ch 5 (95-6), Ch 15 (375-85)
   2. **AAMD definition**
      a) IQ < 70 and impaired adaptive functioning
      b) levels of retardation
         1) mild (educable) IQ 50-70 (75-85%)
         2) moderate (trainable) IQ 35-55; (10-20%)
         3) severe IQ < 40 (3-4%)
         4) profound IQ < 25 (1-2%)
   3. **DSM-IV (1994) definition**
      a) IQ ≤ 70 - individually administered intelligence test
      b) concurrent deficits in adaptive functioning
      c) onset before age 18 (to differentiate from organic)
      d) levels of retardation
         1. borderline: 71-84 (V code, not a diagnosis of MR)
         2. mild: 50/55 to 70, up to 6th grade skills
         3. moderate: 35/40 to 50/55, 2nd grade
         4. severe: 20/25 to 35/40, simple tasks
         5. profound: below 20/25
   4. **Causes**: genetic (Down), familial, toxic/metabolic,
5. Assessment
   a. heterogeneous performance on IQ tests - no MR pattern
   
b. tests: full battery
   1) individually-administered intelligence test
   
2) adaptive behavior scale:
   a> Vineland Adaptive Behavior Scales (Sparrow et al, 1984):
      1> from Vineland Social Maturity Scale (Doll, 1953)

      2> 3 forms: Survey, Expanded, Classroom

      3> 4-5 scores: Communication, Daily Living Skills, Socialization, Motor Skills, Maladaptive Behavior

      4> Mean of 100, SD 15 for areas, total

      5> Adaptive Behavior Composite (total)

   b> Adaptive Behavior Inventory for Children

c) SES, environment, cultural factors, personality, psychopathology, physical and sensory handicaps

d) Culture-fair or nonverbal tests (come back to):
   1) for ethnic, racial and linguistic minorities: probs with traditional tests (e.g., MacMillan et al. 1997 - use of WISC PIQ and FSIQ with Hispanic children)

   2) Specific Tests:
      a> Leiter International Performance Scale: 2-18

      b> Raven's Progressive Matrices: 6-adult

      c> Black Intelligence Test of Cultural Homogeneity

      d> System of Multicultural Pluralistic Assessment

      1> ages 5-11, norms based on SES and race

      2> uses: WISC-R/WPPSI, Bender, parent interview, Adaptive Beh Scale for Children

      3> score = estimated learning potential (ELP)

e) WISC-III results with MR
   1) Same factors in protocols of individuals with MR as non-MR

   2) stability of IQs, factors; more of a drop from WISC-R to WISC-III

   3) organic vs nonorganic MR

   4) Performance tests easiest-- order (from easy-difficult):

      OA, PC, BD, Cod, Sim, Comp, PA, I, A, Voc

   5) low ceiling (especially young) -> Standford-Binet

6. Case examples
I. Brain damage
   1. Reading: old Sattler book: Ch 22; also see: Ch 5 (94-5), Ch 18 (545-9),
   2. description of symptoms (handout of neurological terms)
   3. etiology (cause)
   4. assessment
      a. IQ tests
      b. Other neuropsychological tests
      c. Bender and visuomotor tests

J. Visuomotor and Visuographic Tests
   1. Reading: old Sattler book: Ch 14 (359-69)
   2. Introduction: writing sample
   3. Beery ('67,'82) Developmental Test of Visual Motor Integration
      a. Ages 2-15; 2 versions: 2-8, 2-15; norms: males, females
      b. Scoring: P/F, raw score, developmental age equivalent
   4. Bender Visual Motor Gestalt Test (Bender)
      1. Introduction: Wertheimer (1923), Bender (1938), 9 figures, several ways administer, several scoring systems, purposes
      2. Administration
         a. Basic administration:
            1) Blank 9x11 sheet (vertical), pencil w/eraser
            2) "I have 9 cards w/ designs I want you to copy" or
               "Here are 9 figures for you to copy - just copy them the way you see them"
            3) Neutral encouragement, no instructions on organization
               "how ever you like" "its up to you"
            4) Extra paper available in sight (should be able to see)
            5) Always time them; average: 5 min, < 3.5 = "impulsive", > 5.5 = "compulsive"
            6) Take notes on behaviors: erasures, turn paper (don't let them turn the cards), counting, etc.
            7) Don't let them write on the back of the paper
            8) Be sure to record their name, date, copy time at top (and if an alternative administration was used)
         b. Alternative administration procedures
            1) Tachistoscopic administration:
               a) present each card for 5 sec, remove, then let them draw from memory;
               b) examines nonverbal immediate visual memory
            2) Memory administration:
               a) after copy the designs using standard admin., take away, give blank paper, ask to reproduce from memory
               b) Examines incidental learning, for nonverbal visual memory
            3) Stress Bender:
               a) ask copy designs as quickly as possible
               b) better to detect organicity, construction probs.
c. Uses of the Bender
   1) Ice-breaker

   2) Visuomotor development - visuographic and construction

   3) Estimation of intelligence (Pascall & Suttell): \( r = 0.5 \) w/ WAIS-R, \( r \) w/ reading, \( r \) w/ GPA and education

   4) Screening test for low IQ (w/out calc IQ)

   5) Screening test for organicity
      a) parietal lobe lesions, especially R parietal
      b) generalized deficits either hemisphere can affect
      c) L hem: serial, sequential, lesion: loss of details, simplification of designs
      d) R hem: global, gestalt, lesion: loss of gestalt, have details but fragmented (or rotated)
      e) Rotation: strongest indicator of brain damage -usually from R lesions (2:1) but can be L lesion
      f) Hand tremor - sign of organicity
      g) Other signs: loss of angles, perseveration (excess dots, difficulty w/ intersections of parts
      h) Memory admin: expect recall 5 figures, 3 or less suggests organicity, visual memory problem
      i) Brilliant & Ginter - 82% correct identification

   6) Screening test for severe emotional problems

   7) Projective Personality Test - overinterpreted, caution

d) Scoring systems

   1) Koppitz Developmental Bender Scoring System (1964) -for determining visuomotor development
      a> book is in clinic - ( can use to score Bender w/ WPPSI-R)
      b> Developmental visuomotor abilities: 30 errors
         1> score is sum of the errors, norms 5-8, standard scores w/ mean=100,sd=15;
         2> 4 error types: distortion of shape, rotation (>45), integration diff, perseveration
         3> high intrarrater reliability (\( r = 0.91 \))
         4> validity: not good predict acad perf (\( r = -0.29 \)), or reading (\( r = -0.29 \)) -- better for arith (\( r = -0.43 \))
      c> Emotional indicators: 12 types of errors
         1> less evidence for, use for hypotheses only
         2> See handout for 12 errors
         3> Cautions: # factors affect Bender: illness, handicap, motivation, cultural, ADD, LD

   2) Hutt scoring system: 11 organic indicators (handout): adults

   3) Hain: scoring system for brain damage: adults
      a> weighted system w/ specific errors worth 1-4 pts
      b> score = sum (count each type of error only once)
      c> 0-5 = normal; 6-12 = borderline; 13-up = organic

   4) Projective personality test
      a> see handout for specific errors and interpretation
      b> little evidence for validity
**K. Other Psychopathology** (come back to later with adults)

1. Use adult criteria in DSM-IV: depression and mood dis, anxiety dis, schizophrenia, etc

2. **Childhood depression** - adult diagnostic criteria
   1. Controversies
      a. Psychoanalytic - not exist
      b. Cytryn & McKnew (1972) - "masked depression"
      c. Current view - similar to adult depression

   2. Categories
      a. Major depression
      b. Dysthymia

   3. Assessment and diagnosis
      a. Personality Inventory for Children (PIC)
      b. Children's Depression Inventory (CDI) - like adult BDI, Kovacs & Beck (1977), 7-17 (early-mid teens)
      c. Children's Depression Rating Scale (CDRS) - like Hamilton Rating Scale for adults Poznanski et al. (1979), 6-12
      d. Adolescents: MMPI-A or MAPI (Millon Adolescent Personality Inventory)
      e. Intelligence test results:
         1) Low concentration/attention: scatter, A, Cod, Dsp, SyS
         2) Psychomotor slowing: beh obs, PIQ, timed
         3) Low motivation: gives up, decrease all areas, Cod
         4) Fatigue, low energy
         5) Low self-esteem: negative cognitive set, self-full-filling prophecy
         6) Qualitative analysis

3. **Anxiety disorders**
   a. Disorders
      1) Generalized anxiety disorder
      2) Social phobia
      3) Panic Disorder and Agoraphobia
      4) Specific phobias
      5) Obsessive-Compulsive Disorder
      6) PTSD and Acute Stress
   b. Assessment
      1) some of same tests as above + specific scales for anxiety
      2) Intelligence test: some of same as for dep (uneven perf, poor concentration, low A, Cod, D Span) but without psychomotor slowing

4. **Schizophrenia**: delusions, hallucinations, thought disorder; poor perf across most test including nearly all subtests