Introduction to Child Psychopathology

Maladaptive Behavior across Life

- Developmental psychopathology
  - Devoted to studying the origins and course of individual maladaptation in the context of normal growth processes
- Young children are especially vulnerable to psychological problems for a number of reasons

Maladaptive Behavior across Life

- They do not have as complex and realistic a view of themselves and their world as they will have later
- They have less self-understanding
- They have not yet developed a stable sense of identity
- They have not yet developed a clear understanding of what is expected of them and coping skills

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Maladaptive Behavior across Life

- Children used to be viewed as just miniature adults
- It was not until the second half of the 20th century that a diagnostic classification system focused clearly on the special problems of children

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Attention-Deficit / Hyperactivity Disorder

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History

- Much debate over symptoms and name for what is now called ADHD
  - William James' "explosive will"
  - George Still's "volitional inhibition"
  - Minimal brain dysfunction
  - Hyperactive child syndrome
  - DSM-II's "hyperkinetic reaction of childhood"
  - DSM-III's Attention deficit disorder

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ADHD Features

- Persistent pattern of inattention and/or hyperactivity-impulsivity more severe and more frequent than in same-age peers
- There has to be an onset of symptoms prior to seven years old, but diagnosis can occur much later

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DSM-IV-TR Criteria

- Displaying six (or more) symptoms of either inattention or hyperactivity-impulsivity for at least 6 months
- Symptoms that caused impairment were present before age 7 years

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Inattention Symptoms

- Often does not give close attention to details or makes careless mistakes in schoolwork, work, or other activities
- Often has trouble keeping attention on tasks or play activities
- Often does not seem to listen when spoken to directly
- Often does not follow instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)

Inattention Symptoms

- Often has trouble organizing activities
- Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework)
- Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools)
- Is often easily distracted
- Is often forgetful in daily activities

Inattention Symptoms

- Attention can mean a number of different things
- In ADHD, the main problem is the inability to have sustained attention or persistence on tasks, remember and follow rules, and resist distractions
  - May be more related to working memory than true "attention" problems
- People with ADHD exhibit more "off-task" time and less productivity
  - Even occurs during things like television

Hyperactivity Symptoms

- Often fidgets with hands or feet or squirms in seat
- Often gets up from seat when remaining in seat is expected
- Often runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless)
- Often has trouble playing or enjoying leisure activities quietly
- Is often "on the go" or often acts as if "driven by a motor"
- Often talks excessively

Impulsive Symptoms

- Often blurts out answers before questions have been finished
- Often has trouble waiting one's turn
- Often interrupts or intrudes on others (e.g., butts into conversations or games)

Hyperactive-Impulsive Behavior

- This group of symptoms is often called disinhibition
- In ADHD, thought to involve problems with voluntary inhibition of responses, not impulsivity due to motivators

Hyperactive-Impulsive Behavior

- Objective measures show
  - More activity than other children
  - Greater difficulties in stopping ongoing behavior
  - Excess talking
  - More frequent interruptions
  - Less able to delay gratification
  - Often respond too quickly and too often when they have to wait

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Just Being a Kid?

- Some level of **all** of the core symptoms is present in **all** children
  - Very normal thing
- ADHD is separated from ordinary exuberance and "being a kid" by the degree of the symptoms and the impairment they cause

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DSM-IV-TR Criteria

- Some impairment from the symptoms is present in two or more settings (e.g. at school/work and at home)
- There must be clear evidence of significant impairment in social, school, or work functioning
- The symptoms do not happen only during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder; the symptoms are not better accounted for by another mental disorder

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ADHD Subtypes

- ADHD, Combined Type
  - If both criteria for inattentive and hyper-impulsive symptoms are met for the past 6 months
- ADHD, Predominantly Inattentive Type
  - If criterion for inattentive is met but criterion for hyper-impulsive is not met for the past 6 months
- ADHD, Predominantly Hyperactive-Impulsive Type
  - If criterion for hyper-impulsive is met but criterion for inattentive is not met for the past 6 months

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ADHD Subtypes

- Evidence mounting that predominately inattentive type is a separate disorder
  - Sluggish cognitive style, selective attention deficits
  - Lower rates of co-morbidity with ODD and CD
  - More passive social relationships
  - Memory retrieval problems
  - Different developmental course

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DSM Criteria Criticisms

- Symptom thresholds may not apply outside of 4-16 year old range
- Research has found the following recommended levels for different age groups
  - 4/9 and 5/9 for age 17-29
  - 4/9 and 4/9 for age 30-49
  - 3/9 and 3/9 for ages 50+
  - No research on below age 4

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DSM Criteria Criticisms

- Appropriateness of item sets for different ages and genders
  - Inattention seem more geared for school-age or adolescents
  - Hyper/Impulsive seem more applicable to younger children
- Could influence rates of diagnosis across age groups, resulting in more false-negatives as one gets older

DSM Criteria Criticisms

- Onset before age 7 not research supported
  - No other mental disorder has as precise an age of onset
- No lower-age or IQ boundary in DSM-IV-TR
- No research support for symptom duration of 6 months; some support for a 12 month period

DSM Criteria Criticisms

- Requirement of impairment in 2/3 environments
  - Situational specificity
  - Lack of parent-teacher agreement
- Problems likely to be addressed in DSM-V, but can be used for more effective diagnosis now

Is ADHD Real?

- Many critics of the reality of ADHD, say that it is merely pathologizing normal behavior
  - Includes Rush Limbaugh, Phylis Schafly, George Will, Ariana Huffington, Hillary Clinton, and even some actual scientists!
- If this is true, differences would not be found between ADHD and non-ADHD children
  - Obviously not the case, 30 years of research on the differences

Is ADHD Real?

- "Valid" disorders can be said to
  - Engender substantial harm
  - Incur dysfunction of mechanisms that have been selected for survival value
- ADHD certainly fits these criteria

Prevalence

- The behavior of hyperactivity can be seen in 22-57% of children
- Only 4.2-6.3% meet criteria for the actual disorder
- Parent-reports give much lower figures than teacher-reports

Concerns Over ADHD Prevalence

- Teachers normally make the initial referral for children suspected of having ADHD
- Lack of knowledge about ADHD among teachers
- Physicians rely heavily on reports from teachers
- Increase in prescribing stimulant medication

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Percent of Youth 4-17 ever diagnosed with ADHD

State	Diagnosed	State	Diagnosed	State	Diagnosed
US	7.74	Louisiana	10.31	Oklahoma	8.11
Alabama	11.09	Maine	7.92	Oregon	7.15
Alaska	7.07	Maryland	9.11	Pennsylvania	8.17
Arkansas	9.88	Massachusetts	8.51	Rhode Island	9.81
Arizona	5.89	Michigan	9.21	South Carolina	9.98
California	5.34	Minnesota	7.53	South Dakota	6.49
Colorado	4.95	Mississippi	9.59	Tennessee	9.87
Connecticut	7.38	Missouri	7.67	Texas	7.69
Delaware	9.74	Montana	7.09	Utah	5.49
Florida	9.21	Nebraska	6.39	Vermont	6.9
Georgia	9.37	Nevada	7.22	Virginia	9.28
Hawaii	6.14	New Hampshire	9.14	Washington	7.18
Idaho	6.38	New Jersey	7.22	Washington, DC	6.74
Illinois	6.32	New Mexico	6.1	West Virginia	10.08
Indiana	7.93	New York	6.27	Wisconsin	8.06
Iowa	8.35	North Carolina	9.54	Wyoming	7.13
Kansas	8.14	North Dakota	9.39		
Kentucky	10.12	Ohio	8.88		

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Sex Differences

- Males are 2.6-5.6 times more likely to be diagnosed as females; average ratio of 3:1
- Clinic-referred samples have even higher ratio due to co-morbid ODD/CD
- Holds true even though research shows females have as great of functional impairments and deficits as males

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SES/Cultural Differences

- Little good research on relationship between SES and ADHD rates
- Using DSM criteria, higher rates are found outside the US
  - Most likely due to cultural differences in expectations or interpretations of symptoms
- Higher rates in US reported for non-whites
  - Poorly controlled studies, no correction for co-morbidity

Co-occurring Problems

- High rates of co-morbidity
  - 44% in community samples
  - 87% for clinic-referred samples
- Most common are
  - ODD (54-67%)
  - CD (26% by adulthood)
  - ASPD (12-21%)
  - Learning disorders (30-50%)
  - Anxiety disorders (25% in childhood)
  - Mood disorders (20-30%)

Situational Factors

- Children with ADHD typically show greater variability on tasks
  - Reaction times, IQ tests
- Worse performance seen in general with
  - Tasks later in the day
  - Complex tasks that require organization
  - When restraint is needed
  - Non-highly stimulating tasks
  - Lack of adult supervision

Course

- Disinhibition symptoms typically arise first (age 3-4), followed by inattention (5-7), and slow cognitive tempo (8-10)
- Those with inattention are frequently diagnosed later in life due to the less disruptive nature of these problems
- Does not "go away" with adulthood, but presentation does typically change

Developmental Impairments

- A number of concurrent developmental difficulties are seen with ADHD
  - Physical problems
    - Gross and fine motor control, motor sequencing
  - Working memory impairments
  - Poor planning and anticipation
  - Lack of verbal fluency
  - Inefficient self-monitoring
  - Poor regulation of emotion
  - Impaired academic functioning
  - Poor social skills

Developmental Impairments

- All of these impairments can fall under the domain of "executive functioning"
  - Processes that assist with "self-regulation"
    - Behaviors that modify the probability of a subsequent behavior so as to change the probablity of a later consequence
- Mediated by the prefrontal cortex

Etiology

- ADHD arises from a combination of environmental, genetic, and neurological factors
  - No one "true" developmental pathway
- Whatever pathway it takes, often ends up disrupting prefrontal cortical-striatal network
  - Smaller and less active in people with ADHD
- Social factors may play a role in expression, but would not be purely responsible for the disorder

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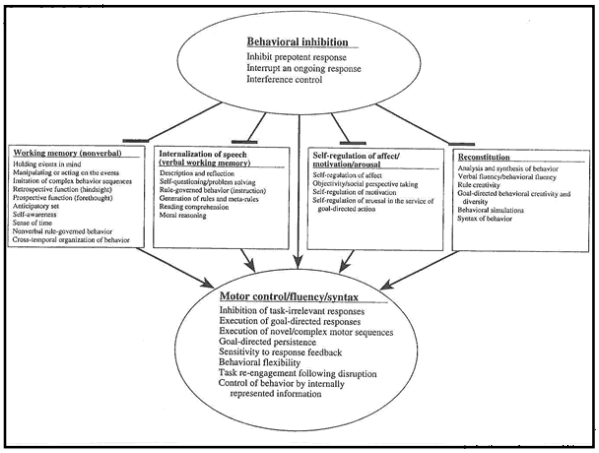
Theoretical Framework

- Barkley's model focuses on how behavioral disinhibition impacts four primary executive functions
  - Poor working memory
  - Delayed interalization of speech
  - Immature regulation of affect/motivation/arousal
  - Impaired reconstitution
- These impairments in executive function in turn impair social self-sufficiency



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Barkley's Assumptions

1) Behavioral inhibition (BI) develops ahead of these four executive functions (EF)
2) Each EF emerges at different times and has a different developmental trajectory
3) ADHD impairs the BI, which in turn impairs the EF
4) Deficit in BI due to biological factors
5) Deficits in self-regulation are caused by the primary BI, but in turn feed back to cause even poorer BI
6) Model does not apply to the inattentive type of ADHD

Diagnosis

- A typical battery for an ADHD assessment will include the following:
- Structured or semi-structured clinical interview
  - Should cover developmental and family history, DSM-IV ADHD symptoms, and symptoms of typical co-morbid problems
    - E.g. ODD, CD, LDs, anxiety/mood disorders, etc.

Diagnosis

- Intelligence and achievement testing
  - Needed to rule out LDs, can help examine executive functioning
- Parent, teacher, and self-reports of behavior
  - Good scales to use include BASC and CBCL for overall screeners; Brown ADD scales, BRIEF, Conners' scales for specific ADHD symptoms
- Can use continuous performance measures (CPT-II), but less diagnostic validity than parent- or teacher-report measures

Treatment

- Medication is highly effective at treating core symptoms
  - CNS stimulants such as amphetamine and methylphenidate help in 70-80% of children
- Behavior therapy cannot reduce core symptoms, but can help treat co-occurring problems
  - Social skills training
  - Parent training for oppositional behavior
  - Helping parents shape home environment
  - Working with teachers to shape school environment

Treatment

- A combination of medication and behavior therapy has been found to be most effective for longer term outcomes
- No other treatments found to be effective, but many are out there and taking people's money
  - Changing diets
  - Biofeedback
  - Vitamins