


The Help Group Summit 2011
**AD/HD AMONG CHILDREN WITH
AND WITHOUT INTELLECTUAL
DISABILITY**
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The Collaborative Family Study
UCLA – The Help Group Alliance



BACKGROUND

- Persons with Developmental Delays (DD) or Intellectual Disability (ID) are at heightened risk for developing a mental disorder
 - Clinically significant emotional and behavior problems and/or diagnosable mental disorder in a third to a half of cases
 - Found in surveys of adults, adolescents, and school-aged children world wide.
 - In comparison studies with children with typical cognitive development (TD) 2.5 to 4 times as many children with ID/DD have serious behavior/emotional problems as those with typical development

COLLABORATIVE FAMILY STUDY

- Overall goal: To understand how children with ID (vs. TD) affect their families, and how family factors, in turn, relate to the child's developing emotion regulation and ultimately to mental disorder.
- Three sites: UCLA, UC Riverside, Penn State
- Followed 180 families from child age 3 through 9, and now continuing into adolescence (13, 15).
- Supported by National Institute of Child Health and Human Development.

COLLABORATIVE FAMILY STUDY (CON.)

Improve on previous studies of mental disorder in ID by:

- Assessing children at specific ages (rather than in samples ranging widely in age).
- Conduct longitudinal assessments (rather than single point in time)
- Employ a better measure of mental disorder: Diagnostic Interview Schedule for Children (DISC)
- Study the role of contextual factors (i.e. child factors, family processes, and school/peer influences) on the development/maintenance of mental disorder



DISRUPTIVE BEHAVIOR DISORDERS



- Disruptive behavior disorders (AD/HD and ODD) are the most prevalent co morbid diagnoses among children with ID (and TD)



FOCUS TODAY ON: ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

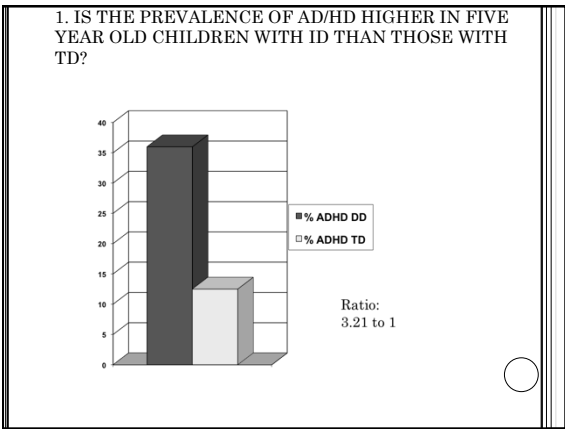
- Prevalence: 3-5% among school-aged children in the general population
- Subtypes
 - Inattentive Subtype
 - Hyperactive-Impulsive Subtype
 - Combined Subtype



RESEARCH QUESTIONS

1. Is the prevalence of ADHD higher in five year old children with ID than those with TD?
2. What is the prevalence and course of ADHD across middle childhood?
3. Is ADHD at child age 5 predicted by child and/or parent factors measured earlier (at child age 3)?

Factors of Interest:
 Child: Externalizing Behavior Problems
 Mother: Parenting Stress
 Mother: Scaffolding (Sensitive Teaching)



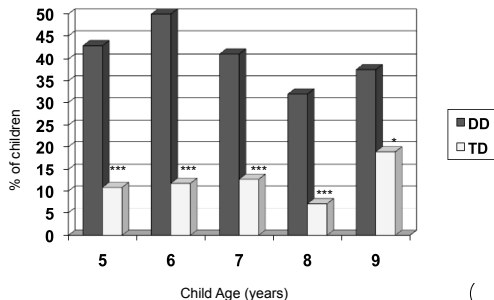
Variable	DD	TD	X ²	Relative Risk (DD: TD)
	n=95	n=141		
ADHD (Any Subtype)	38.9%	12.1%	X ² =21.76***	3.21: 1
ADHD-Inattention Subtype	28.4%	6.4%	X ² =19.65***	4.43: 1
ADHD-Hyperactivity/Impulsive Subtype	31.6%	9.9%	X ² =16.14***	3.19: 1

2. WHAT IS THE PREVALENCE AND COURSE OF AD/HD ACROSS MIDDLE CHILDHOOD?

- Does the **prevalence** of ADHD differ among children with and without ID from ages 5 to 9?
- Does **co-morbidity** differ by ID/TD?
- Are there differences in the **age of onset** of ADHD among children with ID and children with TD?
- Does the **developmental course** of ADHD (i.e. the trajectory of ADHD symptoms) differ among children with and without ID?



PREVALENCE OF AD/HD ANY SUBTYPE



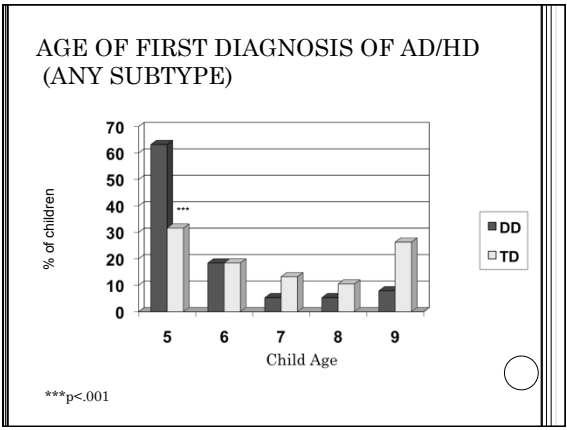
*p<.05; ***p<.001

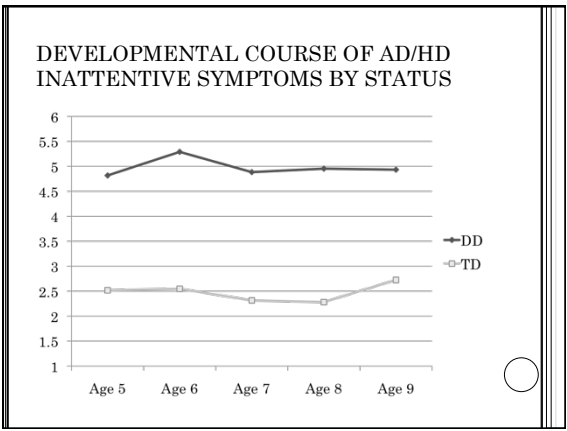


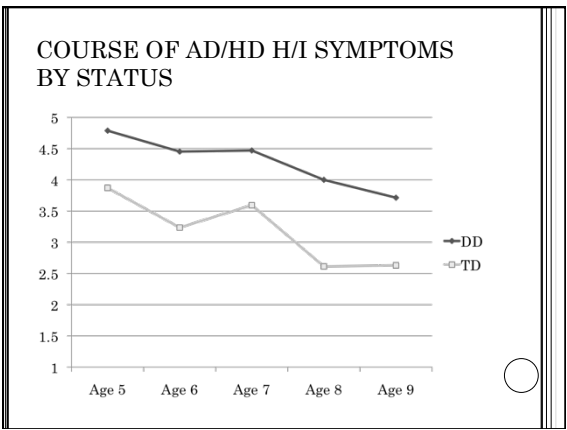
CO-MORBIDITY

- At child age 5:
 - More children with co-morbid mental disorders in the ID group (54.5% in ID group, 23.5% in TD group, $p < .01$)
 - ADHD and ODD most highly co-morbid and higher levels of ADHD/ODD co-morbidity observed in the ID group (53% in ID group, 21% in TD, $p < .01$)



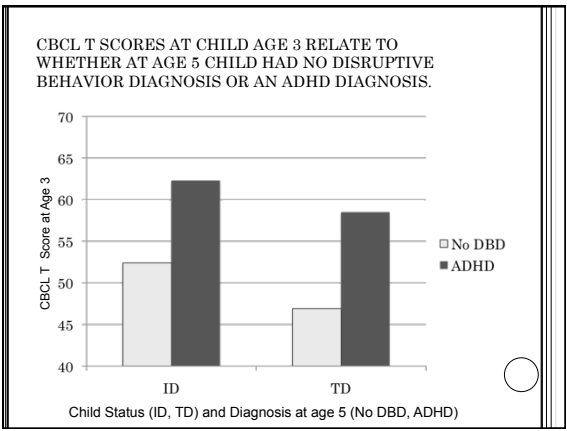






3. IS AD/HD AT CHILD AGE 5 PREDICTED BY CHILD AND/OR PARENT FACTORS MEASURED EARLIER (AT CHILD AGE 3)?

- o Child Variable
 - Externalizing Behavior (CBCL) at age 3
- o Family/Parent Variables
 - Parental Scaffolding
 - o Definition: Providing the optimal level of support and assistance necessary to allow child to succeed beyond what the child would have been able to achieve alone
 - o Observational Code of Laboratory Tasks
 - o Composite of emotional, motivational, and technical scaffolding
 - Family Impact Questionnaire (parenting stress)
 - o Assesses child's impact on the family compared to the impact other children his/her age have on their families



Logistic Regression Testing Predictors of ADHD at Age 5

Variable	DD	TD
Child Externalizing Behavior Problems age 3	ns	ns
Mother Parenting Stress at child age 3	p < .05	p < .05
Mother Scaffolding at child age 3	p < .05	ns

SUMMARY

- Children with ID are at increased risk for being diagnosed with ADHD across middle childhood – and also for being diagnosed with ODD.
- Inattentive symptoms appear to be stable from age 5 to 9 while hyperactive/impulsive symptoms seem to decrease
- Changes in ADHD symptoms over time appear to be similar in children and without ID
- Parenting interventions in preschool might focus on reducing child externalizing problems and parenting stress, and increasing parenting teaching skills (scaffolding).



FURTHER EXAMINATION OF ADHD

- Follow ADHD (and also ODD) diagnoses through early adolescence in children with ID (vs. TD).
- Study the question: Is ADHD the same disorder in youth with ID as in youth with TD?
- Examine co-morbid mental disorders (especially ADHD) in a new sample of adolescents with Autism Spectrum Disorder.
- *Appreciation to Dr. Liz Laugeson and The Help Group for their leadership in our new study phase involving ASD.*