### ASSESSMENT OF STUDENTS WITH **CO-MORBID DISORDERS** AND MULTIPLE ELIGIBILITIES UNDER IDEIA/ADA (1.0)



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### Disclosure

- My expenses for this talk are supported by Multi-Health Systems.
- I have developed tests marketed by Multi-Health Systems, Pro-Ed and Western Psychological Services.
- I have authored books marketed by Springer, Wiley, Guilford, Double Day, McGraw Hill, Brookes, Kluwer and Specialty Press.
- I am Editor in Chief of the Journal of Attention Disorders (Sage) and Co-Editor of the Encyclopedia of Child Development (Springer)

# **Learning Objectives**

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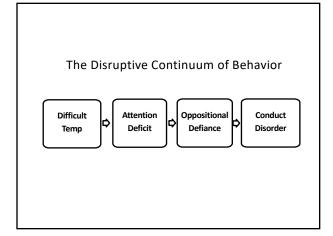
I Had a Revelation in St. Augustine

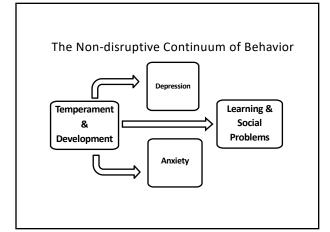
The world operates along a normal curve!



Not surprisingly all but two things we do as psychologists are dimensional!







How Shall We Understand, Define and Categorize Mental Illness and Developmental Problems?



- By etiology or cause?
- By emotions, abilities, behaviors and thoughts?
- By impaired function in activities of life?

### Diagnosis



Medicine/Medical.

The process of determining by examination the nature and circumstances of a diseased condition.

The decision reached from such an examination.

### Eligible

adjective

Having the right to do or obtain something; satisfying the appropriate conditions.

"Customers who are eligible for discounts"

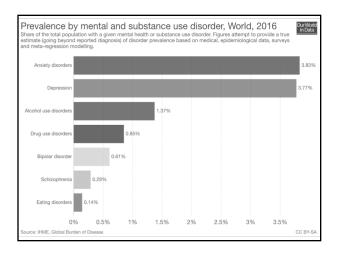
Synonyms: entitled, permitted, allowed, qualified, able

"Those people eligible to vote" (of a person) desirable or suitable as a partner in marriage.
"The world's most eligible bachelor"

Synonyms: desirable, suitable



Determining eligibility is an outcome best understood and obtained by a thorough assessment.



	How distinct are these disorders from each other?										
Much less so than makes me comfortable!											
<b>d</b>											
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	Co-Occurr	ence/	Comor	bidity							
						ı		1			
	Dx	ASD	ODD	CD	Anx	Dep	LD				
	ADHD	59%	47%	22%	35%	41%	45%			 	

How distinct are these disorders from each other?

4% to

37%

ASD

ODD

1% to

10%

42%

42%

62%

1.4% to

38%

39%

70%+

55%+

Although the National Institute of Mental Health (NIMH) has prepared well for this undertaking, much remains to be done. Rigorous diagnostic procedures are available for some mental disorders, but not all. Studies to identify the genes that influence the onset of mental disorders have been initiated, but too few are large enough to efficiently detect these genes. Dedicated investigators are working on various aspects of mental disorders, but more researchers with training in molecular and statistical genetics are required (NIH,1997)



How	distinct	are	these	disorders	from	each
othe	r?					

For over a century, psychiatric disorders have been defined by expert opinion and clinical observation. The modern DSM has relied on a consensus of experts to define categorical syndromes based on clusters of symptoms and signs, and, to some extent, external validators, such as longitudinal course and response to treatment. In the absence of an established etiology, psychiatry has struggled to validate these descriptive syndromes, and to define the boundaries between disorders and between normal and pathologic variation.

Expert Review | Published: 09 January 2018

Psychiatric genetics and the structure of psychopathology

Jordan W. Smoller , Ole A. Andreassen, Howard J. Edenberg, Stephen V. Faraone, Stephen J. Glat

Molecular Psychiatry (2018) | Download Citation ±

## How distinct are these disorders from each other?

Before the modern era of genomic research, family and twin studies demonstrated that all major psychiatric disorders aggregate in families and are heritable. Over the past decade, the success of large-scale genomic studies has confirmed several key principles: (1) psychiatric disorders are highly polygenic, reflecting the contribution of hundreds to thousands of common variants of small effect and rare (often de novo) SNVs and CNVs; (2) genetic influences on psychopathology commonly transcend the diagnostic boundaries of our clinical DSM nosology. At the level of genetic etiology, there are no sharp boundaries between diagnostic categories or between disorder and normal variation

Expert Review | Published: 09 January 2018

Psychiatric genetics and the structure of psychopathology

Jordan W. Smoller <sup>50</sup>, Ole A. Andreassen, Howard J. Edenberg, Stephen V. Faraone, Stephen J. Glat Kenneth S. Kendler

Genneth S. Kendler

Comorbidity is the

RULE

not the Exception



# What is the Goal of a Comprehensive Evaluation? Identify and define symptoms? Identify and define strengths and weaknesses? Appreciate the relationship of a set of symptoms to a unitary condition? Define limits of functional impairment to set a baseline for intervention?

### Components of a Thorough Assessment

- History
- Broad Spectrum
   Questionnaires (Parent
   and Teacher)
- Impairment. Risk.
   Executive Functioning
- Narrow Spectrum
   Questionnaires (Parent and Teacher)
- · Self report Questionnaires
- · Ability Assessment
- · Achievement Assessment
- · Interview with student



# General Guidelines for a Comprehensive Evaluation

- A distinction should be made between acute vs. chronic problems.
- Person and environment protective factors need to be understood.
- Assessment should be strength and risk focused.
- Test results should be presented in ways that are useful to consumers (e.g. family, school, etc.).
- The least amount of assessment needed to answer referral questions should be completed.



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Person Attributes Assoc Coping*	ciated With Successful
<ul> <li>Affectionate, engaging temperame</li> <li>Sociable.</li> <li>Autonomous.</li> <li>Above average IQ.</li> <li>Good reading skills.</li> <li>High achievement motivation.</li> </ul>	ent. Positive self-concept. Impulse control. Internal locus of control. Planning skills. Faith. Humorous. Helpfulness.
	*Replicated in 2 or more studies.

# Environmental Factors Associated With Successful Coping\* Smaller family size. Maternal competence and mental health. Extended family involvement. Close bond with primary caregiver. Supportive siblings. Living above the poverty level. Friendships. Supportive teachers. Successful school experiences. Involvement in pro-social organizations.

\*Replicated in 2 or more studies.



# Special Education Legislative History

- 1975 The Education for All Handicapped Children Act (EAHCA) became law. It was renamed the Individuals with Disabilities Education Act (IDEA) in 1990.
- 1990— IDEA first came into being on October 30, 1990 when the "Education of All Handicapped Children Act" (itself having been introduced in 1975) was renamed "Individuals with Disabilities Education Act." (Pub. L. No. 101-476, 104 Stat. 1142). IDEA received minor amendments in October 1991 (Pub. L. No. 102-119, 105 Stat. 587).
- 1997— IDEA received significant amendments. The definition of disabled children expanded to include developmentally delayed children between three and nine years of age. It also required parents to attempt to resolve disputes with schools and Local Educational Agencies (LEAs) through mediation, and provided a process for doing so. The amendments authorized additional grants for technology, disabled infants and toddlers, parent training, and professional development. (Pub. L. No. 105-17, 111 Stat. 37).

# Special Education Legislative History

- 2004— On December 3, 2004, IDEA was amended by the Individuals With
  Disabilities Education Improvement Act of 2004, now known as IDEIA. Several
  provisions aligned IDEA with the No Child Left Behind Act of 2001, signed by
  President George W. Bush. It authorized fifteen states to implement 3-year IEPs
  on a trial basis when parents continually agree. Drawing on the report of the
  President's Commission on Excellence in Special Education, [46] the law revised
  the requirements for evaluating children with learning disabilities. More concrete
  provisions relating to discipline of special education students was also added.
  (Pub. L. No. 108-446, 118 Stat. 2647).
- 2009— Following a campaign promise for "funding the Individuals with Disabilities Education Act", [47] President Barack Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) on February 17, 2009, including \$12.2 billion in additional funds.
- 2009— Americans with Disabilities Amendments Act was signed into law in September 2008 and became effective on January 1, 2009

### IDEA

Children are placed in special education services through an evaluation process. If the evaluation is not appropriately conducted, or does not monitor the information that is needed to determine placement it is not appropriate.

The goal of IDEA's regulations for evaluation is to help minimize the number of misidentifications, to provide a variety of assessment tools and strategies, to prohibit the use of any single evaluation as the sole criterion of which a student is placed in special education services, and to provide protections against evaluation measures that are racially or culturally discriminatory.

Overall, the goal of appropriate evaluation is to get students who need help, extra help that is appropriate for the student and helps that specific student to reach his or her goals set by the IEP team

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### California

### § 3030. Eligibility Criteria.

5 CA ADC § 3030BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS

REGULATIONS

Bardays Official California Code of Regulations Currentness
Title 5. Education
Division 1. California Department of Education
Chapter 3. Individuals with Exceptional Needs
Subchapter 1. Special Education
Article 3.1. Individuals with Exceptional Needs

(7) Multiple disabilities means concomitant impairments, such as intellectual disability blindness or intellectual disability-orthopedic impairment, the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. "Multiple disabilities" does not include deaf-blindness.

(6) 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.

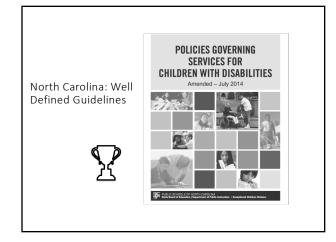
### Colorado

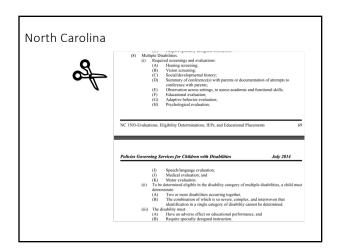
A child with Multiple Disabilities shall have two or more areas of significant impairment, one of which shall be an intellectual disability. The other areas of impairment include: Orthopedic Impairment; Visual Impairment, Including Blindness; Hearing Impairment, Including Deafness; Speech or Language Impairment; Serious Emotional Disability; Autism Spectrum Disorders; Traumatic Brain Injury; or Other Health Impaired. The combination of such impairments creates a unique condition that is evidenced through a multiplicity of severe educational needs which prevent the child from receiving reasonable educational benefit from general education

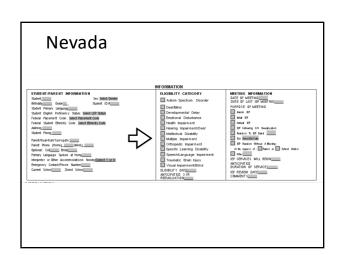
### New Jersey

Multiply disabled" corresponds to "multiply handicapped" and "multiple disabilities," and means the presence of two or more disabling conditions, the combination of which causes such severe educational needs that they cannot be accommodated in a program designed solely to address one of the impairments. Multiple disabilities includes cognitively impaired-blindness, cognitively impaired-orthopedic impairment, etc. The existence of two disabling conditions alone shall not serve as a basis for a classification of multiply disabled. Eligibility for speech-language services as defined in this section shall not be one of the disabling conditions for classification based on the definition of "multiply disabled." Multiply disabled does not include deaf-blindness.

Maryland	
TWI YIGHTA	
"Multiple disabilities" means concomitant impairments, such	
"Multiple disabilities" means concomitant impairments, such as intellectual disability-blindness or intellectual disability-orthopedic impairment, the combination of which causes such severe educational problems that the student cannot be accompanded in a compand of the student cannot be accompanded in the	
such severe educational problems that the student cannot be accommodated in special education programs solely for one of the impairments. (b) "Multiple disabilities" does not include students with deaf-blindness.	
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Oregon	
"Children with disabilities" or "students with disabilities" means children or students who require special education because of: autism; communication disorders; deafblindness; emotional disturbances; hearing impairments, including deafness;	
intellectual disability; orthopedic impairments; other health impairments; specific learning disabilities; traumatic brain injuries; or visual impairments, including blindness.	
Determining eligibility is an outcome best understood and	
obtained by a thorough assessment.	
ASSESSMENT	







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Nevada	
NEVADA Desistant Tree for Coding Educational Environments for Children Ages 3 through 5 with IEPs Report each child in only on ecopyor, Times that displaying one of the morting of the a capter Spraining majements are using this decision tee.  Does the child attend a regular early childhood program?	
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Critical Issues In Assessment	
^	
• Demographics	
• Symptoms vs. consequences	
Categories vs. dimensions     Eligibility vs. diagnosis	-
Developmental pathways: accept a moment in time	
• There are no shortcuts	
• Assess the environment	
Critical Issues in Assessment	-
A A a constant intermediate	
Assess for intervention     Understand positive and negative predictive power	

• Understand sensitivity vs. specificity

Keep low incidence problems in mindConsider resilience (protective) factors

• Measure impairment

• Begin with the disruptive/non-disruptive continuum

### How the Brain Works Ability, Knowledge and Skill



### Components of a Thorough Assessment

Step 1: History

Step 2: Assess Impairment (RSI), EF (CEFI) and Risk (RISE) Step 3: Broad Spectrum: Conners CBRS or Conners EC

**Step 4:** Decide on Narrow Spectrum Questionnaires:

- Disruptive Problems: Conners 3
- Non-Disruptive:
  - ASRS

• ASNS
• MASC 2
• CDI 2
• CAS Teacher Questionnaire



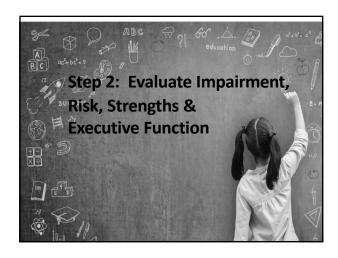
Step 5: Achievement & Ability Testing Step 6: Resilience Step 7: Personality

### Step 1: Obtain a Thorough History

- Immediate and extended family risks.
- Pregnancy and delivery
  Infancy and toddlerhood (temperament)
- Preschool and school history
- Socialization Family relations
- Sleep, appetite and hygienePast treatments or educational services
- Discipline
- Situational problems



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Why is the assessment of impairment critical to a comprehensive evaluation??





An exhaustive review of the literature demonstrates that the relationship between symptoms and functioning remains unexpectedly weak and often bidirectional (McKnight and Kashdan, 2009).

### Need

•There is a clear need to measure "impairment" when using the IDEIA, Diagnostic and Statistical Manual of the American Psychiatric Association (DSM) or the International Classification of Diseases (ICD) as a guide to eligibility determination and/or diagnosis.





### Symptoms vs. Impairment

Impairment is not the same as symptoms

- Symptoms are physical, cognitive or behavioral manifestations of a disorder.
- Impairments are the functional **consequences of these symptoms.**



vs.



Inattention

Difficulty completing homework



### IMPAIRMENT VS. ADAPTIVE BEHAVIOR

A skill deficit occurs when a person does not know how to perform an everyday task, whereas a deficit in performance occurs when an individual has acquired a skill, yet does not seem to use it when needed.

(Ditterline & Oakland, 2009)

### IMPAIRMENT VS. ADAPTIVE BEHAVIOR

Thus, while measures of adaptive behavior emphasize the presence of adaptive skills in daily functioning, measures of functional impairment tend to emphasize the outcome of a behavior or the performance of an individual rather than the presence or absence of the skill.

Ditterline & Oakland (2009); Dumas et al. 2010); Gleason & Coster (2012)

### Adaptive Behavior vs. Impairment

Skill vs Performance

### Adaptive Behavior vs. Impairment



Using

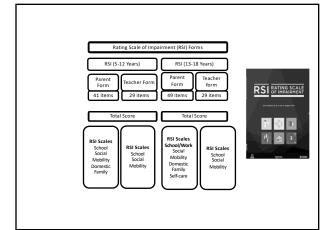


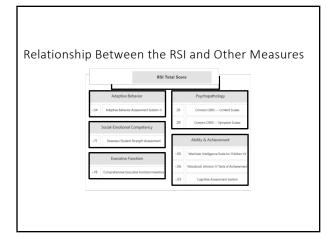
Not using utensils to eat

### Symptoms vs. Impairment

Impairment can exist absent of formal diagnosis. (Balazs et al., 2013; Wille et al., 2008)

In one study 14.2% of a sample of children were significantly impaired without a formal diagnosis. (Angold et al., 1999)







# **Executive** Function

Executive Function(s)

Given all these definitions of EF(s) we wanted to address the behavioral question...

Executive Functions ... or

**Executive Function?** 

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### Executive Function(s)

- One way to examine this issue is to research the factor structure of behaviors related to EF(s)
- To do so, we examined the factor structure of the Comprehensive Executive Function Inventory (CEFI)
- We conducted a series of research studies to answer the following question:
  - What is the underlying structure of the behaviors assessed on the CEFI?
  - Is there is just one underlying factor called executive function), or do the behaviors group together into different constructs suggesting a multidimensional structure?

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### ITEM FACTOR ANALYSES - PART 1

- For the first half of the normative sample for Parent, Teacher and Self ratings' item scores (90 items) was analyzed using exploratory factor analysis
- The *scree plots* and the *very simple solution* criterion both indicated that only **one factor**.
- The ratio of the first and second eigenvalues was greater than four for all three forms, which indicated a **one factor solution**.

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### Item Factor Analyses – Part 1

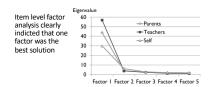


Table 8.2. Eigenvalues from the Inter-Item Correlations

		Factor							
Form									
Parent	43.7	4.1	2.3	1.5	1.3	1.3	1.0		
Teacher	56.8	3.8	2.3	1.3	1.1	1.1	0.8		
Self-Report	29.9	6.3	2.7	2.1	1.9	1.8	1.5		
Note. Extraction reipal Axis Factoring. Only the first 10 eigenvalues are presented.									

### Scale Factor Analyses - Part 2

- Using the second half of the normative sample EFA was conducted using raw scores for the Attention, Emotion Regulation, Flexibility, Inhibitory Control, Initiation, Organization, Planning, Self-Monitoring, and Working Memory scales
- Both the Kaiser rule (eigenvalues > 1) and the Eigenvalue Ratio criterion (> 4) unequivocally indicated **one factor**.

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# | Scale level factor | Parents | Par

### **EXPLORATORY FACTOR ANALYSES**

### Conclusion:

When using parent (N = 1,400), teacher (N = 1,400), or self-ratings (N = 700) based on behaviors observed and reported for a nationally representative sample (N = 3,500) aged 5 to 18 years Executive Function *not* functions is the best behavioral term to use.

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EF as a Mediator of Ability and Knowledge

- Ability: The skills we use to acquire and manipulate knowledge to solve problems. Also referred to as intelligence.
- Knowledge: Everything we learn in life. Also referred to as achievement.
- Executive Function: How efficiently or skillfully you do what you decide to do.

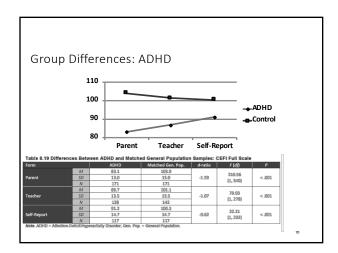
Why Does Executive Function Matter?

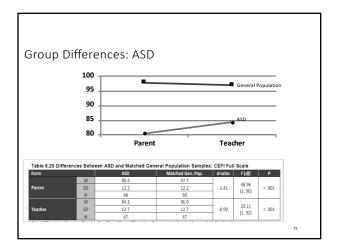


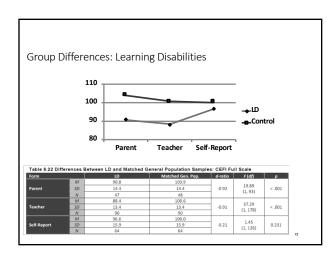
## EF is essential for success in daily living including:

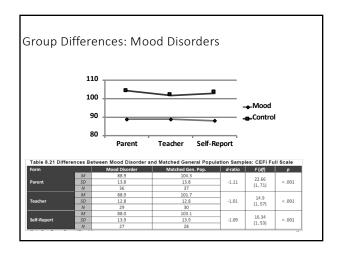
ersonal problems
• For more information see: Sprague et al., 2011; De Panfilis et al., 2013

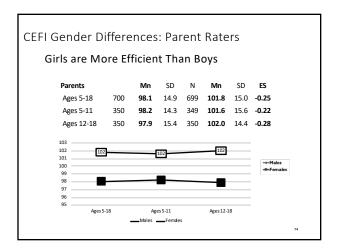
Mental health
• For more information see: Willcutt et al., 2005; Bora et al., 2009; Mesholam-Gatey et al., 2009; Snyder, 2013

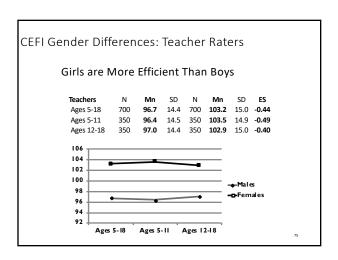


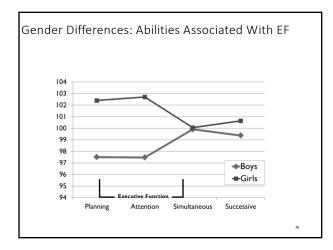












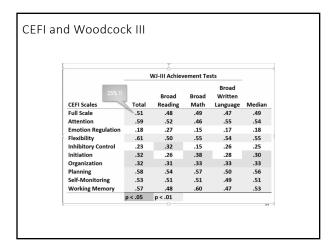
CEFI Measurses Impact WISC-IV, CAS, and WJ III

- Data from the Neurology, Learning and Behavior Center in Salt Lake City, UT
- Children given the CEFI, WISC-IV (N = 43), CAS (N = 62), and the WJIII achievement (N = 58) as part of a typical test battery.

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### 

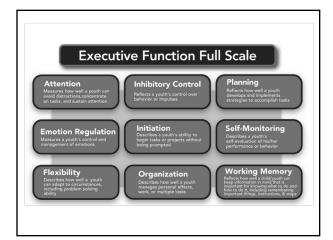
### CEFI and CAS CEFI Mn SD 91.4 13.2 CEFI Full Scale .40 .42 .39 .30 .35 .26 .22 .23 .24 .13 .52 .54 .51 .40 .42 .27 .29 .22 .18 .21 Attention 90.3 12.8 96.9 14.7 Emotion Regulation Flexibility Inhibitory Control 92.2 13.0 96.0 13.9 .27 .29 .22 .18 .21 96.0 13.9 .40 .37 .31 .30 .20 89.0 16.3 .29 .36 .21 .20 .23 90.5 14.3 .47 .54 .46 .37 .38 92.5 12.4 .48 .50 .49 .43 .35 91.2 12.4 .48 .46 .45 .38 .30 91.0 14.0 95.8 92.4 101.6 96.5 98.0 17.1 14.5 17.0 15.1 14.6 Initiation Organization Planning **Self-Monitoring** Working Memory CAS Mn Note: All correlations were corrected for range instability.



# Comprehensive Executive Function Inventory (CEFI)

- A comprehensive behavior rating scale of executive function strengths and weaknesses in children and youth aged 5 to 18 years.
- Executive function is important for problem solving and reasoning, and difficulties with executive function can often make simple tasks challenging.





Assessment of Risks and Strengths Risk Inventory and Strengths Evaluation (RISE)

- Protective Behaviors -Emotional Balance
  - -Interpersonal Skill -Self Confidence
- Risky Behaviors
   Bullying
   Delinquency
   Health
   Sexual

  - Substance Abuse
     Suicide



### **RISE Overview**

- $\bullet\,\mbox{The first tool to look at these concepts within the context of$ each other
- Ages 9 through 25 years; Parent, Teacher and Self Forms
- 15-20 minutes administration time
- Norm-referenced T-scores examine broad constructs of risk and strength
- Response validity scores also available
- For educational psychologists, counselors, clinical psychologists and other mental-health professionals working with children, adolescents and young adults (Level C)

Nationally representative (U.S.) normative sample: Matched to U.S. Census on gender, race/ethnicity, SES and U.S. geographic region Parent: J.005 forms Set 1.380 forms Peacher: J.005 forms Clinical validity sample: 188 Parent Forms Parent	Standardizati	on: RISE No	rmative	e and Cl	inical Sam	ples			
Parent: J.000 forms Self: J.300 forms Clinical validity sample: BS Parent Forms For	Nationally	representative (U	S.) normativ	ve sample: N	Natched to U.S.				
- Teacher: 1,000 forms - Clinical validity sample: - 185 Parent Forms - 270 Self Forms - 152 Teacher Forms - Includes multiple sub-samples based on risk factors, diagnosis, etc At Risk - At Risk - Gang Membership - Sucidatility/Depression - ADHD - ASD - Eating Disorders - Substance Abuse  - Su	Parent	:: 1,005 forms	icity, SES an	id U.S. geogr	aphic region				
185 Parent Forms     270 Self Forms     152 Teacher Forms     152 Teacher Forms     1 Includes multiple sub-samples based on risk factors, diagnosis, etc.     14 Risk     1 AR Risk     1 Gang Membership     5 Suicidality/Depression     1 ADHD     1 ASD     1 Eating Disorders     5 Substance Abuse  Parent or sustance Abuse									
1.152 Teacher Forms	• 185 Pa	rent Forms							
Includes multiple sub-samples based on risk factors, diagnosis, etc.  A R1 Risk Gang Membership Suicidality/Depression ADHD ASD Eating Disorders Substance Abuse  Illiability  ternal consistency coefficients 2-90 for Summary scales and Steriors of Substance Abuse  Substance Abu									
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statistics and research, internal consistency is typically a measure based on the correlations between  ferrett items on the same test. It measures whether several items that propose to measure the same general	ternal consistency coefficies SE Index; 2.70 for Subsca  #ISE Parent Form	Es	Sardization Sample Salf Form (n=183) (n=183) (0.93) (0.94) (0.83) (0.78) (0.82) (0.70)	0.90 0.95 0.95 n/s n/s n/s					
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ferent items on the same test. It measures whether several items that propose to measure the same general	cernal consistency coefficients E Index; 2, 70 for Subsca  ### Farent Form  Summary Scale index  Subscales  Su	Es	Self-Form (n=100)  Self-Form (n=100)  0.92  0.93  0.94  0.83  0.78  0.82  0.70  0.78  0.91	0.90 0.95 0.95 0.95 0.96 0.96 0.92 0.92 0.92 0.92 0.93 0.93 0.89					
nstruct produce similar scores.	ternal consistency coefficies  Elinder; 2, 70 for Subsca  #ISE Parent Form  #ISE Par	Es	Self-Form (n=100)  Self-Form (n=100)  0.92  0.93  0.94  0.83  0.78  0.82  0.70  0.78  0.91	0.90 0.95 0.95 0.95 0.96 0.96 0.92 0.92 0.92 0.92 0.93 0.93 0.89					
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### Concurrent Validity

Highlights of correlational studies with concurrent measures

2 factors (risk and strengths), so measures chosen to evaluate both

### Risk Scale

 $\textbf{BASC-3} \ \textit{Externalizing Problems} \ \text{with RISE} \ \textit{Risk Summary} : \texttt{Parent} : \textit{r} = .69; \texttt{Teacher} : \textit{r} = .63; \texttt{Self} : \textit{r} = .67 \ \text{with BASC-3} \ \textit{School Problems}$ 

Conners CBRS  $Violence\ Potential\$ with RISE  $Risk\ Summary$ : Parent: r = .66; Self: r = .66; Teacher: r = .74

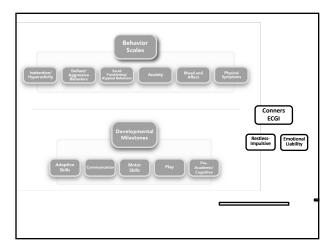
Concurrent validity refers to the extent to which the results of a particular test or measurement correspond to those of a previously established measurement for the same construct.

## Concurrent Validity Highlights of correlational studies with concurrent measures 2 factors (risk and strengths), so measures chosen to evaluate both Strength Scale $\textbf{ABAS-3} \ \textit{General Adaptive Composite} \ \textbf{with RISE} \ \textit{Strength Summary:}$ Self: *r* = .58; Teacher: *r* = .57 **Piers-Harris 3** *Total score with* RISE *Strength Summary:* Self: r = .47Analysis of subscales (comprehensive studies in Chapter 5 of RISE $\,$ Manual) demonstrates extensive evidence of concurrent validity $\ensuremath{\mathsf{AND}}$ shows that while these measures are complementary, the RISE provides data that other scales do not. Validity: Clinical Groups At-Risk Sample (n = 160): Key validation sample for RISE: qualifying for prevention and intervention services because of unfavorable socioeconomic circumstances, current gang members, ex-gang members, and youth on probation RISE scores differentiate at-risk youth from typically developing youth with *large, clinically significant* Validity studies also cover a range of additional groups (clinician-assigned diagnosis): Gang Membership • Suicidality/Depression • ADHD • ASD • Eating Disorders Substance Abuse Step 3: Broad Spectrum Measure Conners Comprehensive Behaviour Rating Scales **Conners Early Childhood** (Conners EC) (Conners CBRS) 2 to 6 years 6 to 18 years CONNERS to Children CONNERS COUNTRY

### Conners EC

- Innovative psychological instrument to assess the concerns of parents, teachers, and childcare providers about preschool-aged children.
- Aids in the early identification of behavioral, social, and emotional problems.
- Assists in measuring whether or not a child is appropriately meeting major developmental milestones (Adaptive Skills, Communication, Motor Skills, Play, and Pre-Academic/Cognitive).

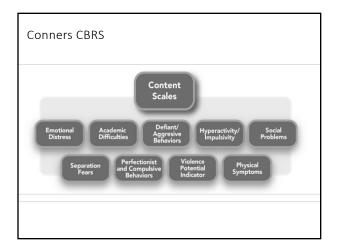


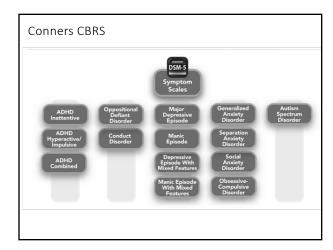


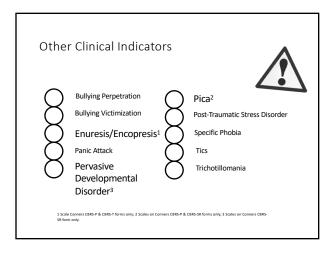
### Conners CBRS

- Comprehensive assessment tool for behavioral, emotional, social, and academic concerns and disorders.
- Common and rare but critical issues.









# Step 4: Decide on Narrow Spectrum Questionnaires

Disruptive Problems: Conners 3

Non-Disruptive: ASRS

MASC 2 CDI 2

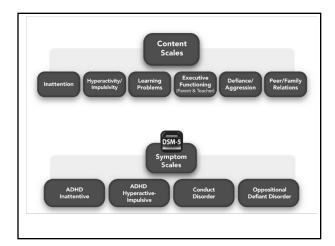
**CAS Teacher Questionnaire** 



# Conners 3rd Edition (Conners 3)

A thorough and focused assessment of ADHD and its most common co-morbid problems and disorders in children and adolescents ages 6 to 18 years.



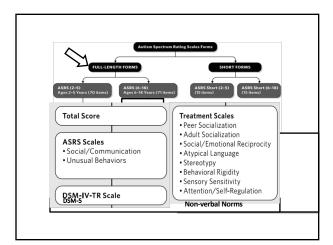


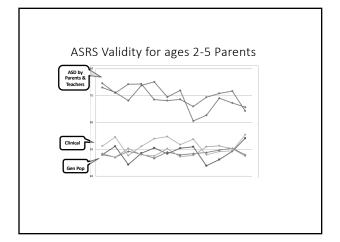


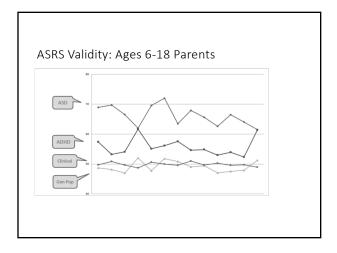
### **Autism Spectrum Rating Scales**

Multi-informant measure designed to identify symptoms, behaviors, and associated features of Autism Spectrum Disorder (ASD) in children and adolescents aged 2 to 18 years.









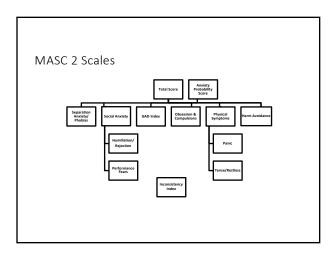


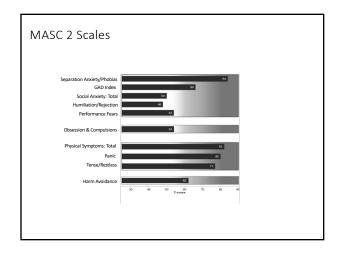
# Multidimensional Anxiety Scale for Children 2nd Edition (MASC 2)

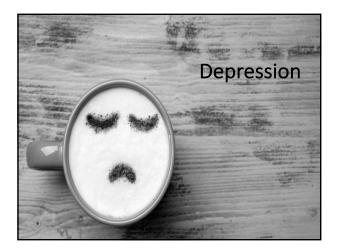
Comprehensive multi-rater assessment of anxiety dimensions in children and adolescents aged 8 to 19 years.
 Distinguishes between

 Distinguishes between important anxiety symptoms and dimensions that broadband measures do not capture.





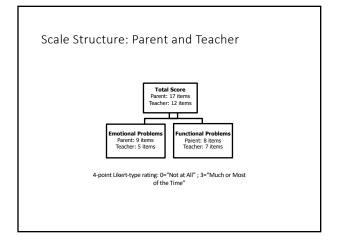


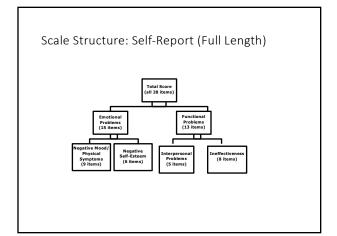


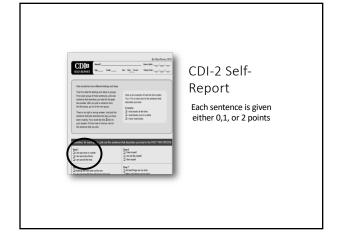
### Children's Depression Inventory 2<sup>™</sup> (CDI 2)

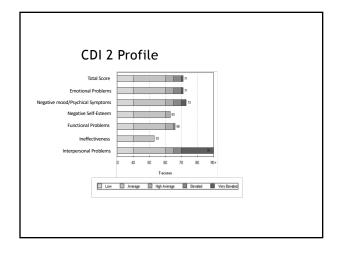
Comprehensive multi-rater assessment of depressive symptoms in children and adolescents from ages 7 to 17, which offers the flexibility of application in either clinical or educational settings.











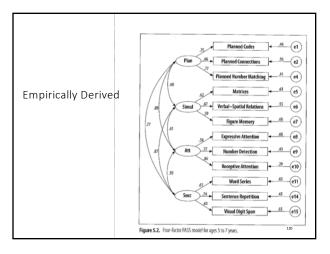


# PASS Theory PASS theory is a modern way to define 'ability' based on measuring neurocognitive abilities Planning = THINKING ABOUT THINKING Attention = BEING ALERT Simultaneous = GETTING THE BIG PICTURE Successive = FOLLOWING A SEQUENCE

#### CAS2 Development Goals

- New norms
- Strengthen reliability of the scales by modifying subtest formats
- Improve factor structure
- Add/delete items
- Add a visual Successive subtest
- Add new scales beyond PASS
- Retain Administration format of
  - Examiner demonstrates,
  - Child does a sample
  - Directions for remaining items is given
  - And opportunity to Provide Help is given

| Table 5.1 | Throughpuil Contrabution of the Bernard Family | Promotings of the Contrabution of the Security | Contrabution | Contrabu

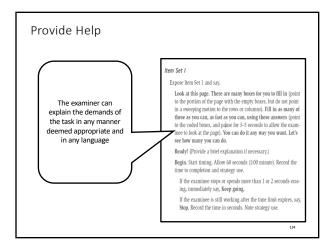


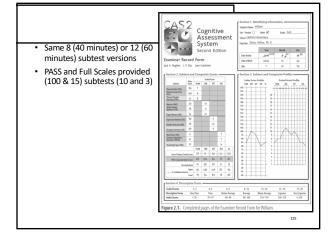
	can/non-Atrican Ame	,	were				
	Table 5.12 CAS2 Scores by Gend	er .					
		Male (n = 718)		Female (n = 668)			
	CAS2 value	М	SD	М	50	Cohen's d	Magnitude*
	Subtests						
	Planned Codes	9.7	3.1	10.6	3.0	-0.30	Small
	Planned Connections	10.0	3.1	10.0	2.9	0.00	Trivial
	Planned Number Matching	9.8	3.1	10.2	2.8	-0.12	Trivial
	Matrices	10:0	3.3	10.3	3.2	-0.08	Trivial
	Verbal—Spatial Relations	9.9	2.9	10.2	2.9	0.08	Trivial
	Figure Memory	10.1	3.2	10.1	3.0	-0.03	irivial
	Expressive Attention	9.9	3.0	10.0	3.0	-0.03	Trivial
	Number Detection	9.7	3.3	10.4	2.9	-0.22	Small
Gender and Race Fair	Receptive Attention	9.4	3.2	10.4	3.0	-0.32	Small
	Word Series	10.1	3,0	10.2	3.1	-0.02	Trival
	Sentence Repetition	10.0	3.0	10.2	2.8	-0.05	Trivial
	Sentence Questions	9.8	2.9	10.2	3.0	-0.14	Trivial
	Visual Diigit Span	10.0	3.1	10.1	3.0	-0.03	Trivial
	Core Battery						
	Manning	98.6	15.3	101.3	144	-0.78	Trivial
	Simultaneous	99.1	15.1	100.5	14.5	-0.09	Teval
	Attention	98.8	15.4	101.1	14.5	-0.56	Trivial
	Successive	99.6	15.4	100.8	15.8	-0.08	Trivial
	Full Scale	98.6	15.1	101.1	14.5	-0.17	Total
	Extended Battery						
	Planning	98.4	16.0	101.2	14.2	-0.29	Trivial
	Simultaneous	99.1	15.1	100.3	14.6	-0.08	Trivial
	Attention	98.0	15.4	101.5	14.3	-0.24	Small
	Successive	99.5	15.1	100.6	15.4	-0.07	Trivial
	Full Scale	98.4	15.4	101.2	14,6	-0.38	Trivial
	Supplemental composites						
	Executive Function w/o Working Memory	99.8	15.3	100.0	14.4	-0.02	Trivial
	Executive Function w/ Working Memory	99.1	15.3	100.3	14.7	80.0	Trivial
	Working Memory	99.1	14.7	100.9	14.8	-0.12	Trivial
	Verbal Content	98.0	15.0	101.5	14.6	-0.24	121 Small
	Nonverbal Content	98.6	15.1	104.3	14.7	-0.18	Trivial

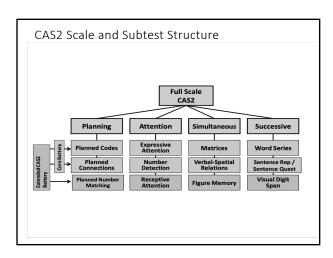
## 

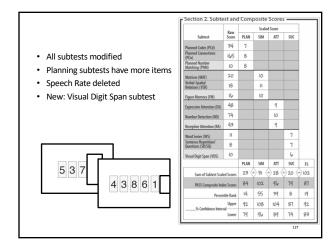
#### CAS2

- Flexibility with special populations
- Strategy assessment
- Guidelines for providing help.











Visual–Auditory Co	omparison
	Scaled Score
Word Series	
Visual Digit Span	
Difference (ignore sign)	
Circle one: .05 .10 NS	

	Scaled Score				
Subtest	EF w/o WM	EF w/ WM	WM	VC	NvC
Planned Codes					7
Planned Connections	8	8			
Matrices					10
Verbal-Spatial Relations		11	11	11	
Figure Memory					10
Expressive Attention	9	9			
Receptive Attention				9	
Sentence Repetition/Questions		7	7	7	
	EF w/o WM	EF w/ WM	WM	VC	NvC
Sum of Subtest Scaled Scores	17	35	18	27	27
Composite Index Scores	91	91	94	93	92
Percentile Rank	27	27	34	32	30
Upper % Confidence Interval	101	99	101	101	99
% Confidence Interval — Lower	84	85	88	87	86
lote: EF w/o WM = Executiv F w/WM = Executive Functi Memory; VC = Verbal Conten	on with V	Vorking I	/lemory;	N = N	

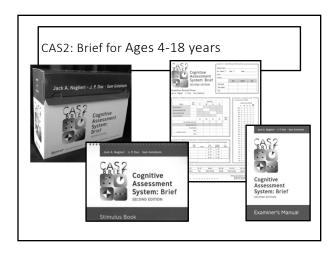
#### CAS2 Online Score & Report

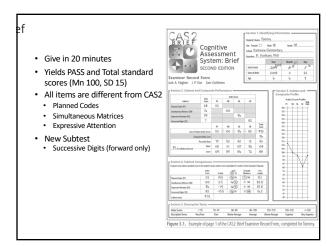
http://www.proedinc.com/customer/ProductView.aspx?ID=7277

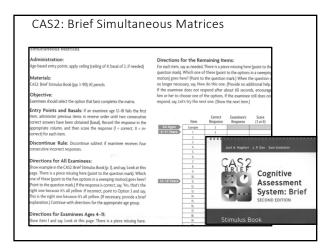
- ► Enter data at the subtest level or enter subtest raw scores
- Online program converts raw scores to standard scores, percentiles, etc. for all scales.
- ► A narrative report with graphs and scores is provided

Base Subscription) (1431)	ustomer qualifications. Click bere to
Price: \$199.00	
politica,	CASO Draine Souring and Report System
NEW	72 72
Waster Committee of the	THE R. P. LEWIS CO., LANSING, Low. Law. Low. Law. Low. Law. Law. Law. Law. Law. Law. Law. La
NOW AVAILABLE!	
Ages: 5 through 18 years	77111
Testing Time: 40 to 60 minutes Administration: Individual	
The new PC, Mac™, and iPad™	10.10 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
compatible CAS2 Online Scoring	
and Report System program is	ORDERING OPTIONS:
an efficient and easy way to obtain CAS2 scores and	CAS2: Online Scoring and Report System (Add-on 5-User License)
corresponding narrative.	\$69.00
Use CAS2 Online Scoring and	<ul> <li>CAS2: Online Scoring and Report</li> </ul>
Report System for:	System (Annual Renewal) \$69.00
converting CAS2 subtest raw	scores into standard scores, percentile
ranks, descriptive terms, and	
<ul> <li>generating PASS and Full Sca</li> </ul>	
<ul> <li>comparing CAS2 subtest and intra-individual differences:</li> </ul>	PASS scale scores to identify significant
providing a pdf report of CAS	2 performance; and
<ul> <li>Sample Interpretive Rep.</li> </ul>	ort
<ul> <li>Sample Score Summary</li> </ul>	
<ul> <li>providing intervention options</li> <li>Ordering options:</li> </ul>	i.
	ort System first-time base subscription
provides one-year unlimited of	online scoring and report access for up to

CAC2 Online Ceene 0 D	anart	-
CAS2 Online Score & R		
<ul> <li>Narrative report can be obtained in Word or PDF</li> </ul>	FULL SCALE	
	Jack earned a Cognitive Assessment System, Second Edition (CAS2) Full Scale score of 105, which is within the Average classification and is a percentile rank of 63. This means that his	
	performance is equal to or greater than that of 63% of children his age in the standardization group. There is a 90% probability that Jack's true Full Scale score falls within the range of 101 to 100. The CAS2 Full Scale score is made up of separate scales called Planning, Attention,	
CAS2 Cognitive  Assessment	Simultaneous, and Successive cognitive processing. Because there was significant variation among the PASS scales, the Full Scale will sometimes be higher and other times lower than the	
System Second Edition	four soales in this test. The Attention Scale was found to be a significant cognitive strength. This means that Jack's Attention score was a strength both in relation to his average PASS score and when compared to his peers. This cognitive strength has important implications for instructional	-
	and educational programming.	
	Placeing Placeing 122	_
Name: Jack Nag Age: 8 Gender: Male Date of Birth: 07-12-2005	Strautaneous 100	
Grade: 5 School: East Lake	Allenten 172 Successive 17	
This computerized report is intended for use by qualified individuals. Additional information can be found in the CAS2 Interpretive Manual.	Full Scale	
	48 69 99 189 129 140 168	
CAS2 Subtests		
CA32 Subtests		
Planning	Attention	
Planned Codes	Expressive Attention	
Planned Connections	Number Detection	
Planned Number Matching	Receptive Attention	
Cincultana	Commentee	
Simultaneous	Sequencing	
• Matrices	Word Series	
Visual Spatial Relations	Sentence Repetition/Questions	_
Figure Memory	Visual Digit Span	
	·	
	Jack A. NagSeri - J. P. Dos - Sam Goldstein	
	CAS2	
CACA Duit of	Cognitive	
CAS2: Brief	Assessment System: Brief	
	SECOND EDITION	
Structure and features	Examiner's Manual	
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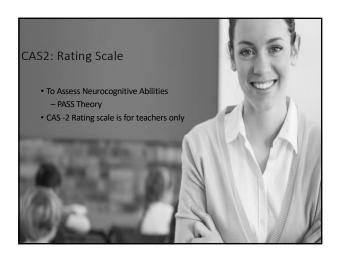
## CAS2: Brief Planned Codes & Successive Digits • Planned Codes has 8 items using numbers not letters and has different patterns • Successive Digits uses numbers (not words) Directions for Reported Strategies: After all tem sets have been completed, with item Set 6 still showing, say, Tell me how you did these. Indicate the pages in the Student Response booklet just completed by the cambre. If necessary, say, How did you complete the pages from you briefly durify the question, provided that you give no examples. Record the examines of prefer destingers in the Too Student Response booklet just completed by the cambre. If necessary, say, How did you complete the pages from your briefly durify the question, provided that you give no examples. Record the examines of prefer destinant of the Student's Description of Student Properties of the Student's Description of Student's Descriptio

#### CAS2: Brief Scale • Expressive Attention (Stroop) used CO. • Big/Little Animals (ages 4-7 years) 10 • Color Words (ages 8-Ä M 600 YELLOW RED BLUE BLUE YELLOW YELLOW

YELLOW YELLOW

BLUE

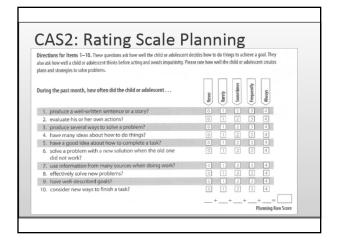
YELLOW

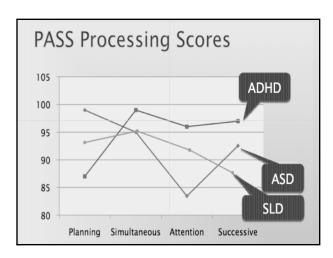


#### Cognitive Assessment System: Rating Scale (CAS2: Rating Scale)

- Norm referenced measure of behaviors related to cognitive / neuropsychological theory called PASS (Planning, Attention, Simultaneous, and Successive).
- The scores from the CAS2: Rating Scale can be used to:
  - Support a referral, supportive services, or special placements.
  - Supplement a comprehensive evaluation.
  - Compare teachers' ratings with test results.
  - Help plan and design academic interventions.
  - Monitor the effectiveness of interventions.







#### Organizing the Data

- A day in the life
- Ability/Knowledge/Skill
- Take a chronological perspective.
- Risk and Protective factors
- Determining eligibility
- Suggesting possible diagnoses
- Recommending needs
- Considering continuum of services



Multiple Handicap or Primary/Secondary?

ADOPT A LEARNING TO RIDE A BICYCLE MINDSET!





T					
Thank You!					
Sam Goldstein, Ph.D.					
	<b>TED</b> <sub>x</sub>				
	Sam Goldstein, Ph.D. sam⊚samgoldstein.com				
	The Power Of Resilience https://www.youtube.com/watch?v=isfw8JL=WM&feature=youtube_gdata				
⊕ www.s	www.samgoldstein.com				
info@samgoldstein.com					
🏏 @drsa	@drsamgoldstein				
@doct	torsamgoldstein				