

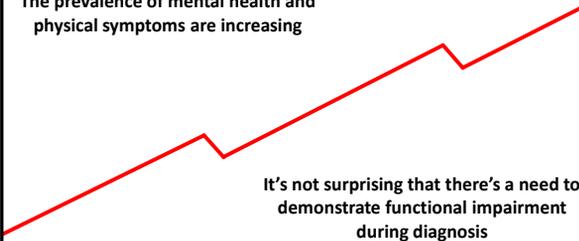




Why is the assessment of impairment critical to a comprehensive evaluation?

RSI | MHS

The prevalence of mental health and physical symptoms are increasing



It's not surprising that there's a need to demonstrate functional impairment during diagnosis

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Assessing Impairment in the Diagnostic Process



Global Assessment of Functioning (GAF) Scale

Global Assessment of Functioning (GAF) Scale

Currently only for Adults

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Best Practices and Using Rating Scales




A few things to consider...

- Psychometric Properties
- Normative Sample
- Other things to consider:
 - Usability
 - Social Validity
 - Perceived importance from stakeholders



(Campbell & Hammond, 2014)



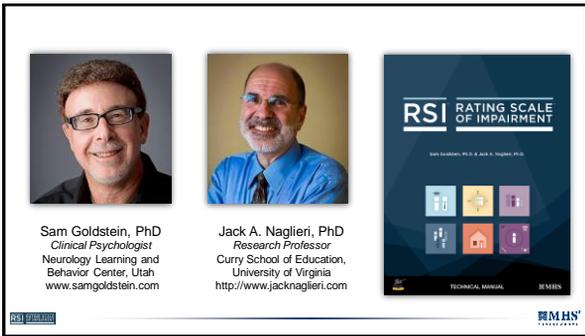

Behavior Rating Scales

<p>Advantages</p> <ul style="list-style-type: none"> • Time efficient and provide a lot of information • Respondents have observed the student in their naturalistic environment • Allow for normative comparisons between age-matched peer group 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Undesirable variability in ratings <ul style="list-style-type: none"> • Rater variance • Setting variance • Instrument variance
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(Campbell & Hammond, 2014)




RSI: Rating Scale of Impairment



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RSI RATING SCALE OF IMPAIRMENT
Sam Goldstein, Ph.D. & Jack A. Naglieri, Ph.D.
TECHNICAL MANUAL MEMBERS

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Key Features of the RSI



- Fast completion time
- Age-appropriate items
- Assess youth ages 5 to 18 years
- Large representative **normative** sample
- Assess impairment clearly **regardless of the diagnosis**

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Key Features of the RSI

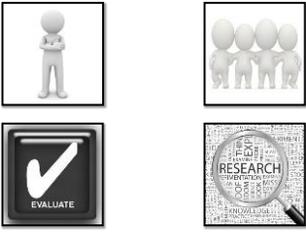


- Available in **Spanish**
- Monitor **progress** across time
- Satisfies the impairment criteria of the **DSM-5**
- Multiple raters** for a more accurate assessment
- Assist in forming intervention and **treatment planning**
- Aligned with **WHO's** domains of functioning found in ICF

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RSI: Rating Scale of Impairment

Uses for the RSI



RSI logo and MHS logo

User Qualifications

- To administer the RSI, practitioners must have B-level qualifications
- B-level qualifications require, at a minimum, that graduate-level courses in testing and measurement at a university or have received equivalent documented training
 - Familiarity with the standards for education and psychological testing
 - Members of professional associations or licensed professionals

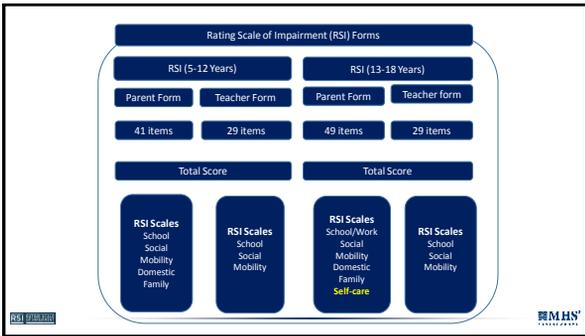


RSI logo and MHS logo

Structure of the RSI

RSI logo and MHS logo

RSI: Rating Scale of Impairment



Guidelines for T-Scores

Higher T-scores on the RSI indicating higher levels of impairment.

T-score	Percentile Ranks	Classification
<60	1-82	No Impairment
60-64	84-92	Mild Impairment
65-69	93-97	Moderate Impairment
≥ 70	98-99	Considerable Impairment

Directions on the RSI

Child's Name/ID: _____ Page 2

INSTRUCTIONS: Read each statement that follows the phrase, "During the past four weeks, how often has your child..." then circle the letter under the word that tells how often you saw the behavior. Read each question carefully, then mark how often you saw the behavior in the **past four weeks**. Answer every question without skipping any. If you want to change your answer, put an X through it and circle your new choice. Be sure to answer every question.

During the past four weeks, how often has your child...

Never Rarely Sometimes Often Very Often Always

RSI Scales & Descriptions



RSI Structure: Scales



School/Work



Mobility



Family



Social



Domestic



Self-Care



Standardization, Reliability & Validity



RSI: Rating Scale of Impairment

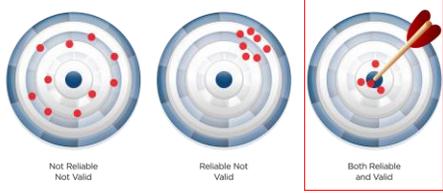
Standardization Sample

- Data collection took place from September 2012 to August 2014
- Data was collected in all 50 states
- Data collection included information about the age, gender, race/ethnicity, state of residence, and parental education level
- The sample matched 2010 U. S. Census Data
- Over 8,000 ratings were completed across the 4 RSI forms

Parent RSI 5-12 Years Form	Teacher RSI 5-12 Years Form	Parent RSI 13-18 Years Form	Teacher RSI 13-18 Years Form	Normative Sample
800	800	600	600	2,800



Excellent Psychometric Properties



Internal Consistency

RSI Scale	Number of Items	Normative Sample	Clinical Sample
School/Work	10	.90 - .94	.90 - .93
Social	10	.86 - .89	.87 - .92
Mobility	9	.79 - .91	.85 - .92
Domestic	7	.85	.85 - .88
Family	5	.76 - .82	.78 - .86
Self-Care	8	.75	.83
Total Score	29-49	.94 - .95	.94 - .96



Test-Retest Reliability

- Assessed over a 2- to 4-week interval and within a general population sample
- Total Score corrected $r = .89$ to $.96$
- RSI Scales corrected $r = .85$ to $.97$



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Stability

- 84% to 99.3% of the difference between Time 1 and Time 2 fell within ± 10 T-score points

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Inter-Rater Consistency

- Looked at agreement between 2 parents or 2 teachers rating the same child
- Parent Raters:
 - RSI Scales corrected $r = .65$ to $.87$
 - RSI Total Score corrected $r = .87$
- Teacher Raters
 - RSI Scales corrected $r = .56$ to $.59$
 - RSI Total Score corrected $r = .77$

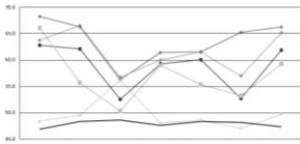
RSI MHS

Criterion-Related Validity

- Will look at differences between mean score differences by clinical groups
- This includes the following areas:
 - Primary diagnosis
 - Number of diagnoses



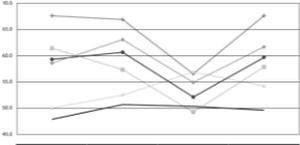

T-scores by General Population and Clinical Groups: RSI Parent Forms



Clinical Group	School	South	Midway	Total
Gen. Pop.	48.0	48.4	48.1	47.9
ADHD	66.7	55.8	50.4	59.1
ASD	68.7	66.3	54.7	59.9
Anxiety/Depression	63.8	62.8	55.1	59.2
ID	66.7	66.7	54.2	61.6
Physical Disability	48.5	49.4	54.9	49.2

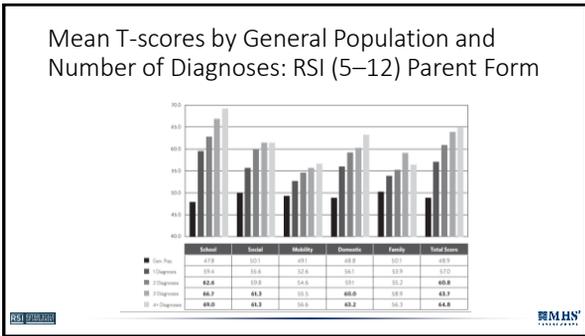


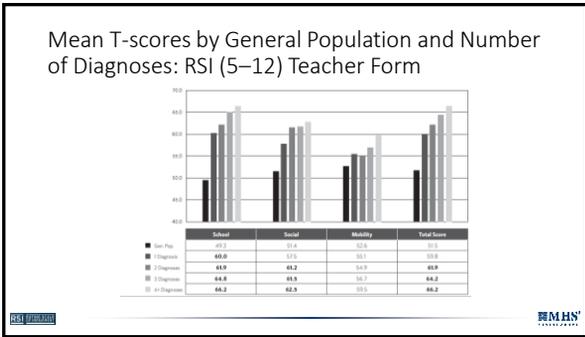

T-scores by General Population and Clinical Groups: RSI Teacher Forms

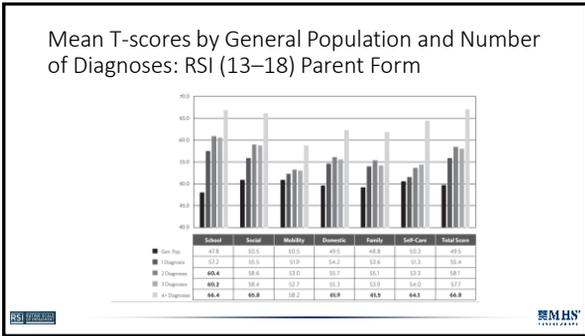


Clinical Group	School	South	Midway	Total
Gen. Pop.	48.1	51.6	50.4	49.6
ADHD	66.4	57.5	46.3	57.9
ASD	59.5	63.8	54.9	61.6
Anxiety/Depression	59.3	60.7	52.1	59.7
ID	67.9	65.8	54.8	62.9
Physical Disability	50.1	52.1	57.9	54.2

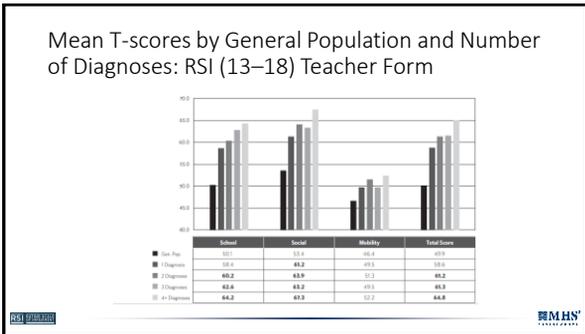


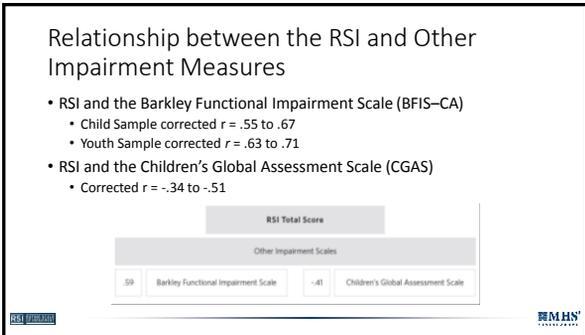



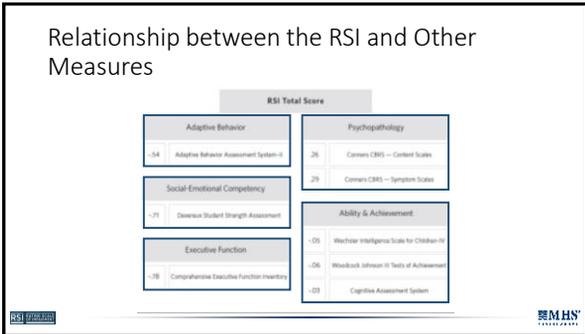




RSI: Rating Scale of Impairment

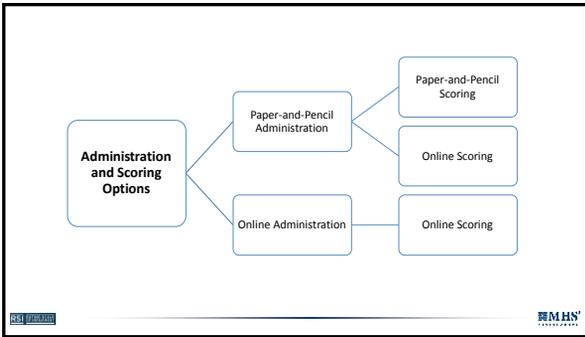






Administration, Scoring, & Interpretation





MHS Online Assessment Center



MHS Online Assessment Center 1/3

Option 1 In person while online

- 1 Administer, score and report from anywhere with an internet connection. Practitioner or individual can complete the online form during an in person session.

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MHS Online Assessment Center 2/3

Option 2 Send a link via email

- 1 Email a link to the parent, caregiver, or teacher which brings them directly to the assessment form.
- 2 The parent, caregiver, or teacher will then fill out the form and submit online.
- 3 A scored report is ready to be generated.

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MHS Online Assessment Center 3/3

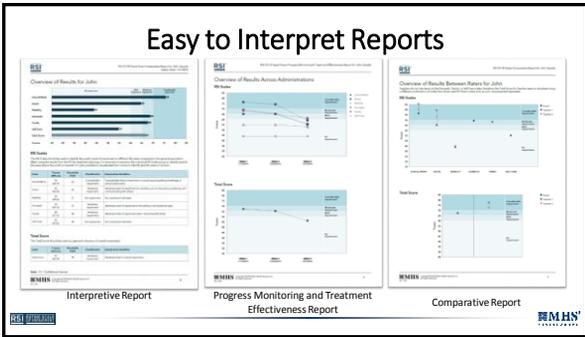
Option 3 Print the form for paper & pencil

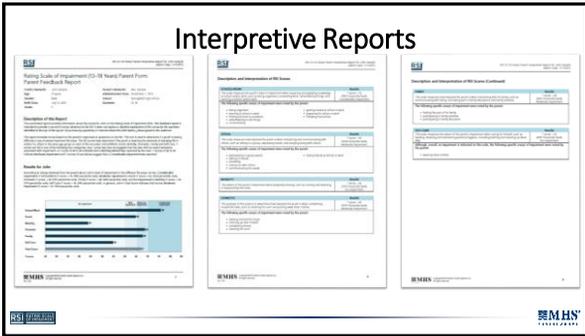
- 1 The practitioner prints the assessment form for the youth or individual to bring to home, school, or office.
- 2 The parent, caregiver, teacher, or youth will then fill out the form and return to the practitioner.
- 3 The practitioner enters the responses and generates a scored report.

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RSI: Rating Scale of Impairment







Comparative Reports

The image shows three sample pages from a 'Comparative Reports' document. The first page is a table titled 'Detailed Scores and Significant Differences Between Rates' with columns for 'Year', 'Scale Level', 'Score', and 'Significant Difference'. The second and third pages are bar charts titled 'Scale Level Scores Between Rates' and 'Scale Level Scores Between Rates (Continued)' respectively, showing data for various years and categories.

Progress Monitoring & Treatment Effectiveness Report

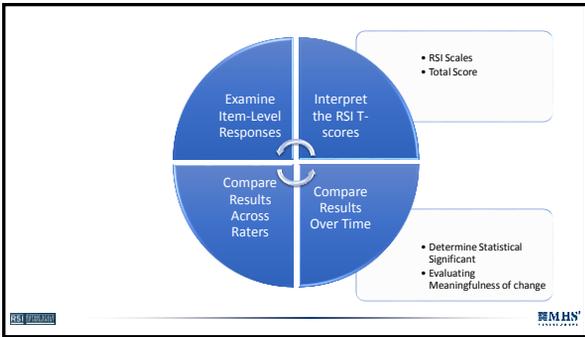
The image shows three sample pages from a 'Progress Monitoring & Treatment Effectiveness Report' document. The first page is a table titled 'Detailed Scores and Significant Change Across Administrations' with columns for 'Year', 'Scale Level', 'Score', and 'Significant Change'. The second and third pages are bar charts titled 'Scale Level Scores Across Administrations' and 'Scale Level Scores Across Administrations (Continued)' respectively, showing data for various years and categories.

RSI Interpretation

The image shows a sample page from an 'RSI Interpretation' document, featuring a large empty space for notes and the RSI logo at the bottom.

RSI: Rating Scale of Impairment

T-score	Percentile Ranks	Classification
<60	1-82	No Impairment
60-64	84-92	Mild Impairment
65-69	93-97	Moderate Impairment
≥ 70	98-99	Considerable Impairment



Case Study: Joey



RSI: Rating Scale of Impairment

Joey

- 13 years old
- History of ADHD
- Described as extremely literal
- Misses social cues
- Socially isolated
- Referred to the school psychologist



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Joey: Assessment Plan

- Interviews with Joey's mother
- Complete the RSI and behavior checklists
- Administer neurological, intellectual, and achievement tests



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Results of the Interview

- Joey's mother has not been satisfied with the effect of medical and educational intervention
- Joey appears to be advanced in some academic areas, but very behind in others
- Joey is passive and avoids social interactions
- At home, he demonstrates poor hygiene
- Refuses to complete household chores
- Joey displays disruptive behavior



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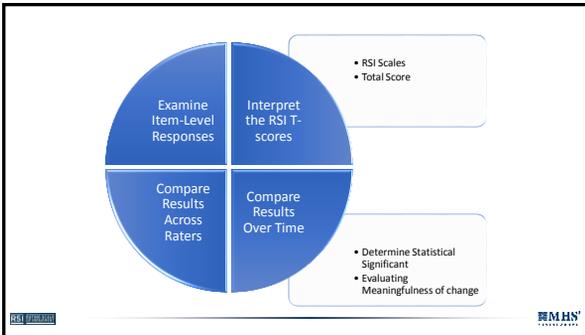
RSI: Rating Scale of Impairment

Assessment Results

- Concerns in both home and school settings for emotional distress, social impairment, academic challenges, inattention, depression, and anxiety
- Achievement scores demonstrated average intellect with problems noted in Processing Speed, Planning, and Attention
- When assessed for reading, math, and written language, Joey was placed several grades below his current placement.



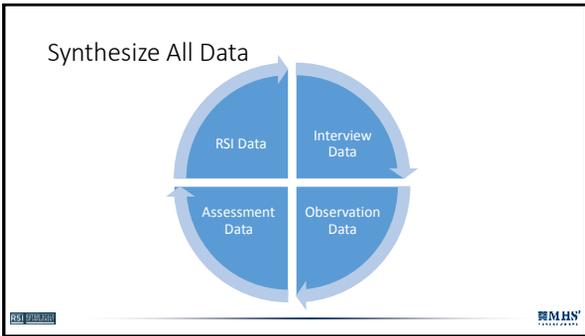


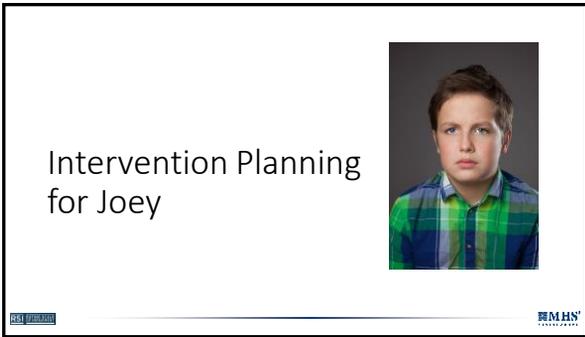


Results of the Parent RSI

Scale	Raw Score	T-score	99% Confidence Interval	Percentile Rank	Classification
School/Work	42	85	77 to 86	99	Considerable Impairment
Social	37	79	69 to 81	99	Considerable Impairment
Mobility	2	47	42 to 53	38	No Impairment
Domestic	33	79	69 to 81	99	Considerable Impairment
Family	13	63	54 to 67	90	Mild Impairment
Self-Care	24	85	68 to 85	99	Considerable Impairment
Total Score	438	81	76 to 83	99	Considerable Impairment





Treatment Plan for Joey

- Areas of impairment as noted by Joey's Parent

Behavioral Needs	<ul style="list-style-type: none"> • Not engaged • Working on school or work • Unable to complete assignments • Unable to manage time • Unable to follow directions 	<ul style="list-style-type: none"> • completing work • organization • managing school work • following instructions
Social	<ul style="list-style-type: none"> • Not engaged in group events • Working in groups • Working for help • Unable to work with others 	<ul style="list-style-type: none"> • interacting with friends • working in group or team • asking for help • working with others
Workshop		
Personal Needs		
Emotional	<ul style="list-style-type: none"> • Working on school or work • Working on after school 	<ul style="list-style-type: none"> • working on school
Family	<ul style="list-style-type: none"> • Working on school or work 	
Self Care	<ul style="list-style-type: none"> • Working on school or work 	<ul style="list-style-type: none"> • working on school • working on school • working on school • working on school

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Intervention Planning for Joey

- Adjustments to medication dosage and administration time
- Parents worked with a behavioral consultant
 - Implemented a multi-level response cost behavioral program
- Revisions to Joe's IEP
- School psychologist worked with Joey in a social skills group



RSI MHS

Joey's Treatment Progress

Scale		Administration 1	Administration 2	Significant Change Across Administrations
School/Work	Score	85	72	
	Classification	Considerable impairment	Considerable impairment	Decrease
Social	Score	79	81	
	Classification	Considerable impairment	Mild impairment	Decrease
Mobility	Score	49	49	
	Classification	No impairment	No impairment	No Change
Domestic	Score	79	62	
	Classification	Considerable impairment	Mild impairment	Decrease
Family	Score	62	59	
	Classification	Mild impairment	No impairment	Decrease
Self-Care	Score	85	75	
	Classification	Considerable impairment	Considerable impairment	No Change
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
Total Score	Score	85	66	
Total Score	Classification	Considerable impairment	Moderate impairment	Decrease

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Case Study: Megan



RSI MHS

Megan

- 11 years old
- History of ASD, OCD, ADHD, and Anxiety disorders
- Treated with multiple psychiatric medications
- Impairments in the home and school settings



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Megan: Assessment Plan

- Interviews with Megan's parents and her teacher
- Complete the RSI and behavior checklists
- Administer neurological, intellectual, and achievement tests



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Results of the Parent Interview

- Megan is the second of four children
- Megan was a difficult child.
- She receives special education service
- She has difficulty concentrating and following instructions, is often very disorganized, and loses her belongings.
- She is also very uncooperative at home
- Megan displays a range of disruptive and non-disruptive behaviors



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Results of the Teacher Interview

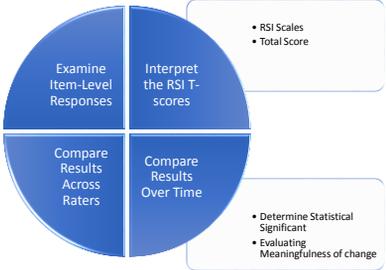
- Megan's teachers have also noted a number of areas of impairment



Assessment Results

- Megan scored lower on the working memory domain of the WISC-IV and Planning and Successive Scales of the CAS2.
- Parent and teacher reports for behavior characteristic of executive functioning assessed with the Comprehensive Executive Function Inventory (CEFI; Naglieri & Goldstein, 2013) noted symptoms as well, particularly with behaviors related to attention, organization, planning, and self-monitoring.





- RSI Scales
- Total Score
- Determine Statistical Significant
- Evaluating Meaningfulness of change



RSI: Rating Scale of Impairment

Results of the RSI

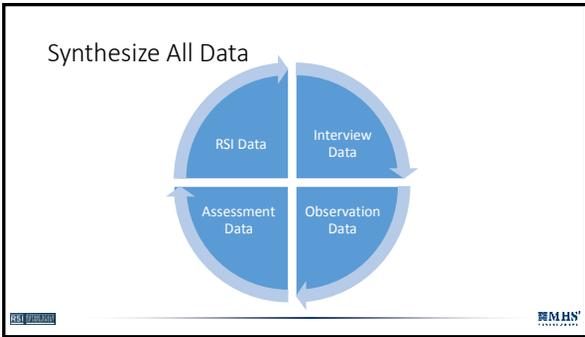
RSI Scales

Scale	Parent	Teacher	Significant Difference Between Raters
School	F-score: 85 Classification: Considerable Impairment	F-score: 71 Classification: Considerable Impairment	Parent > Teacher
Social	F-score: 68 Classification: Moderate Impairment	F-score: 62 Classification: Mild Impairment	No significant difference
Mobility	F-score: 49 Classification: No Impairment	F-score: 49 Classification: No Impairment	No significant difference
Domestic	F-score: 74 Classification: Considerable Impairment	Domestic scale does not appear on the Teacher Form	No comparison possible
Family	F-score: 66 Classification: Moderate Impairment	Family scale does not appear on the Teacher Form	No comparison possible

Total Scores

Scale	Parent	Teacher	Significant Difference Between Raters
School	F-score: 73 Classification: Considerable Impairment	F-score: 64 Classification: Mild Impairment	No comparison possible

RSI | MHS





Treatment Plan for Megan

- Areas of impairment as noted by Megan's parents and teachers



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Intervention Planning for Megan

- Megan qualified for an individual aid at school
- Megan's family referred for in-home behavioral therapy
- Megan began working with a cognitive therapist on a weekly basis
- A response cost point system was implemented at school
- No changes were made to Megan's medication regimen



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Megan's Treatment Progress: Parent Report

RSI Scales

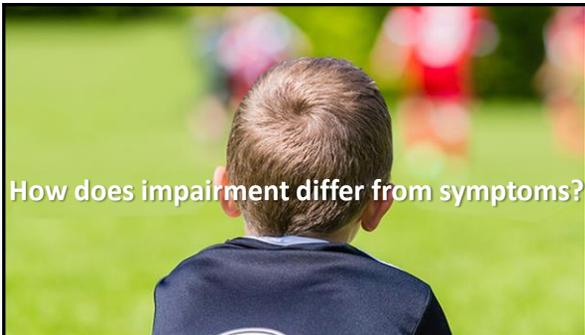
Scale		Administration 1	Administration 2	Significant Change Across Administrations
School	T-score	80	58	Decrease
	Classification	Considerable Impairment	No Impairment	
Social	T-score	68	58	Decrease
	Classification	Moderate Impairment	No Impairment	
Mobility	T-score	45	45	No Change
	Classification	No Impairment	No Impairment	
Domestic	T-score	36	32	No Change
	Classification	Considerable Impairment	Considerable Impairment	
Family	T-score	66	66	No Change
	Classification	Moderate Impairment	Moderate Impairment	
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
Total Score	T-score	73	63	Decrease
	Classification	Considerable Impairment	Moderate Impairment	

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Megan's Treatment Progress: Teacher Report

RSI Scales				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
School	T-Score	71	58	Decrease
	Classification	Considerable Impairment	No Impairment	
Social	T-Score	62	58	No Change
	Classification	Mild Impairment	No Impairment	
Mobility	T-Score	49	44	No Change
	Classification	No Impairment	No Impairment	
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
Total Score	T-Score	64	54	Decrease
	Classification	Mild Impairment	No Impairment	





How does impairment differ from symptoms?

Symptoms vs. Impairment



Inattention

VS.



Difficulty completing homework





