

The Assessment of Impairment with the Rating Scale of Impairment™ (RSI™): Introduction and Application

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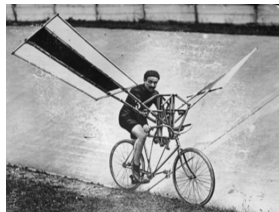
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The Mixed Blessings of Something New



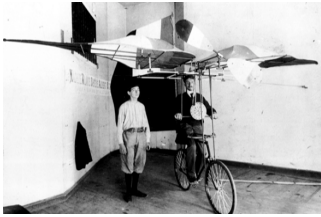
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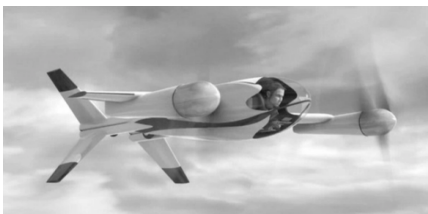
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We Are the First Congress on Defining Mental Illness (circa 1820)



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How Shall We Understand, Define and Categorize Mental Illness?

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

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The Assessment of Impairment

Goals For Today:

- Review the conceptual basis of Impairment.
- Define Impairment.
- Discuss the relationship of Impairment to symptoms and diagnoses.
- Review data from the largest epidemiologic sample assessing impairment in children.
- Review the Rating Scale of Impairment as a means of assessing impairment in a comprehensive evaluation and as a treatment monitoring tool.

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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?
- Meet eligibility criteria?
- Define limits of functional impairment to set a baseline for intervention?





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



Why is direct observation (e.g. FuBA) so critical for school based assessment?



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

- Clinicians are required to demonstrate the impact psychological and psychiatric diagnoses have on children and adults.
- 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.
- The need to measure impairment is increasing.

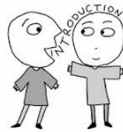


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Given trends demonstrating an increased incidence of mental health and physical symptoms across the population (Castle, Aubert, Verbrugge, Khalid, & Epstein, 2007), it is not unexpected that there is an increasing need to demonstrate functional impairment as part of a diagnostic process for medical, mental health and even educational conditions.

Understanding impairment is by far the most important and greatest challenge facing medical, educational, and mental health care providers today.





BACKGROUND & INTRODUCTION



Questions in Need of Answers to Define Impairment

- There is still no consistent agreement on even the simplest nomenclature issues about impairment (Rapee, et al., 2012).
- As researchers advocate for an expanding appreciation and understanding of impairment in the diagnostic process, progress in clinical practice is slow (Rapee, et al., 2012).
- For example, the DSM-5 Impairment and Disability Assessment Study Group recommended that impairment be viewed as a consequence of a disorder rather than a requisite feature of the disorder itself and that clinical criteria alone should not be used to determine thresholds for diagnosis (DSM-5 Impairment Disability Assessment Group, 2011).



What Does it Mean “to Be Impaired”?

- To be impaired means to be unable to perform whatever daily activities are required.
- But exactly how does impairment relate to symptom count and severity of a specific condition?
- How do symptoms and impairments contribute to disability, handicap and deficits in adaptive functioning?
- What variables within the family, community and broader culture may insulate or contribute to impairment.
- Is impairment an end point or a stop along the way to recovery?



What Does it Mean “to Be Impaired”?

- Some symptoms in an algorithm model are more potent than others in predicting impairment (Vera, et al., 2010).
- At certain ages, gender may differentially affect the expression of some symptoms and the severity of functional impairment.
- Impairment is also very clearly not appreciated on a linear continuum (Baillargeon and Bernier, 2010).



What Does it Mean “to Be Impaired”?

- The relationship of a particular condition to levels of impairment is also not evenly distributed across a bell curve.
- Youth of minority status or parents with limited socioeconomic status may experience much greater severity of impairment despite symptoms that are equal to youth in other social classes (Baillargeon and Bernier, 2010).
- Complicating matters further, is the fact that certain conditions may cause more or less impairment in certain settings. This suggests that context and rater may play a significant role in severity of impairment reported (Watabe, et al., 2014).



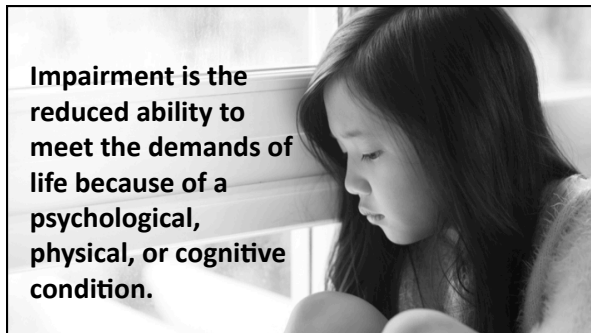
The term impairment is used differently by medical, mental health and educational professionals.

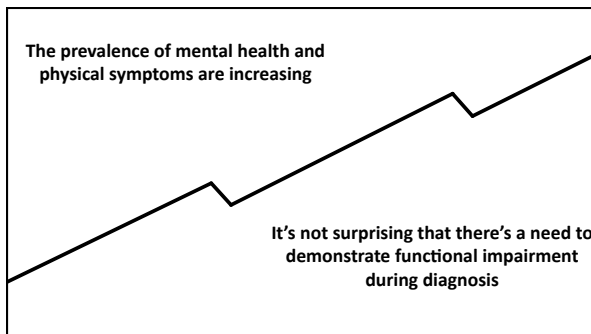
What is impairment?

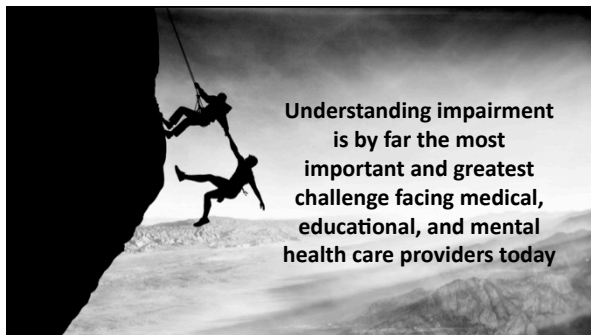


Defining Impairment









How shall we define:

- Symptoms?
- Severity?
- Situation?
- Adaptive behavior?
- Disorder?
- Disability?
- Impairment



Defining Impairment

- Webster's New College Dictionary (2008) defines the word *impair* as "the state or fact of being impaired," which means to be weakened or damaged based on the Latin word *pejor* meaning worse.
- To be impaired means to be unable to perform whatever daily activities are required.
- Impairment has been defined by the AMA as "any physical, mental or behavioral disorder that interferes with the ability to engage safely in any life activity."



Symptoms

- Manifestation of dysfunction
- Complaint
- Presence or absence of a behavior
- Difficulty
- Reflects a condition
- Observation



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**.



Inattention



Difficulty completing homework

(Barkley, 2012, 2013)

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)

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Severity

- Degree
- Intensity
- Perception
- Frequency
- Suffering
- Duration

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Situation

- Context
- Instance
- Set of demands
- Moment to moment experience
- Setting



Adaptive Behavior

- Socially acceptable
- Ability to adjust
- Function
- Functional skill
- Quality of thinking
- Goal directed behavior
- Logic
- Knowing how to





How does impairment
differ from adaptive
behavior?

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 utensils

VS.



Not using utensils to eat

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IMPAIRMENT VS. ADAPTIVE BEHAVIOR

- Adaptive behavior is a collection of social, practical and conceptual knowledge needed for daily functioning.
- Main difference is between **knowledge** and **performance**.
- Adaptive behavior is often linked with intellectual disability.
- RSI validity studies find minimal relation with intellectual ability.



Holding a fork



Not using fork to eat

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Disorder

- A political phenomenon
- A collection of symptoms
- A deviation from the norm
- A disease
- A group of symptoms that significantly impairs functioning
- A subjective condition
- A collection of objective signs

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Disability

- A perceived inability to perform daily functions
- Persistent
- Legislated
- Sociopolitical
- Mental, physical or emotional
- Cultural



wiseGEEK

clear answers for common questions

What Is a Psychological Impairment?

Ads by Google

Psychological Assessment

Mild Cognitive Impairment

Hearing Impairment

Mental Psychological

Psychological Health

A mental health professional will be required to diagnose a psychological impairment.

People suffering with a psychological impairment may benefit from medications.

A psychological impairment is a psychiatric condition that interferes with a patient's ability to engage in tasks of daily living like working and personal care. Cases of severe impairment may qualify as disabilities under the law, entitling the patient to accommodations and support services appropriate to the level of need. This also provides some legal protections against discrimination at school, or on the job. Mental health professionals can evaluate people with suspected psychological impairments to determine their nature and severity.

Some examples of conditions that can cause impairment include clinical depression, schizophrenia, bipolar disorder, and anxiety. Other mental health conditions can lead to psychological impairment as well. It may be possible to manage a disorder with medication, therapy, and other measures. This can improve the patient's ability to function and can reduce the severity of impairment. Constant management throughout a patient's life may be necessary to address changes in the person's mental health condition that may occur as a response to environmental factors, medication tolerance, and other issues.

Tasks of daily living can fall into a number of categories. Self care is one of them. Patients with a psychological impairment may have trouble with personal hygiene like dressing and bathing as well as necessities like eating, cleaning the house, and so forth. Other patients may have difficulty in work or school settings. They may not be able to hold down jobs or successfully complete school assignments.

Avoid These Foods.

New Video Explains The 3 Triggers That Create Type 2 Diabetes

Impairment

- Loss of function
- Specific
- Temporary or permanent
- Midpoint or step towards disability
- Requires accommodations

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Conceptual Basis of Impairment

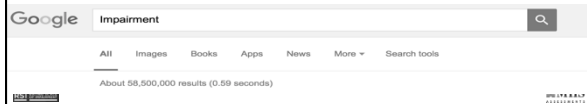
- In Western medicine, the medical model guides diagnosis and treatment in all aspects of medicine, mental health, and to some extent, education.
- The purpose of this model is to identify treatments for diagnoses based on evidence of specific symptoms assumed to suggest problems inherent within one or more organs of the body.
- The medical model has driven research and theory about physical and mental health problems on the basis of causation, symptom relief, and cure and in many cases has been quite successful (e.g., tuberculosis, measles, etc.).

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Conceptual Basis of Impairment

- As the fields of medicine, psychology and education have evolved, interest in the degree of impairment an individual may experience in a given situation, regardless of diagnosis, has increased.
- A recent Google search revealed thousands of relevant books and scientific articles addressing impairments caused secondary to physical, mental health and educational conditions.



Conceptual Basis of Impairment

- The American Psychiatric Association in the new DSM-5 (APA, 2013) very heavily emphasizes the role of impairment over and above symptom presentation.
- However, the issue of disability has been complicated and often confused with the severity of a particular condition. There is no doubt that there is a positive correlation between the severity of a condition and consequent disability or impairment but many studies have demonstrated that the relationship is not particularly robust.
- The term "functional impairment" is a concept that easily equates with disability in the World Health Organization's International Classification of Functioning, Disability and Health (WHO, 2001).

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Conceptual Basis of Impairment

- Findings suggest that the lives of individuals who do not meet specific symptom criteria may be just as impaired and disrupted as the lives of individuals who meet various criteria.
- Many who may meet symptom count for a specific diagnosis may not be significantly impaired.
- It is therefore not surprising that in a previous revision of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (APA, 2000) a requirement of significant impairment was noted in more than 70% of the disorders listed as a criterion for diagnosis (Lehman, Alexopoulos, Goldman, Jeste, & Üstün, 2002). This requirement has continued in the new DSM-5 (APA, 2013).



Impairment

Impairment can be viewed as the outcome of a risk factor such as a psychological disorder interacting with other variables manifested by a constellation of measurable behaviors.



How is impairment defined?

- The medical community?
- The educational community?
- The mental health community?
- The vocational community?
- The AAMR?
- WHO?



Impairment has been defined by the AMA as "any physical, mental or behavioral disorder" that interferes with the ability to engage safely in daily activities.

Child with a Disability
IDEIA defines this term as follows:

- (a) *General.* (1) Child with a disability means a child evaluated in accordance with §§300.304 through 300.311 as having an intellectual disability¹, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.
- (2)(i) Subject to paragraph (a)(2)(ii) of this section, if it is determined, through an appropriate evaluation under §§300.304 through 300.311, that a child has one of the disabilities identified in paragraph (a)(1) of this section, but only needs a related service and not special education, the child is not a child with a disability under this part.



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Americans With Disabilities Act

January 05, 2012 ADA Regulations: What is a Mental Impairment?

How can you be sure you're meeting ADA regulations for workers with mental conditions? Medically speaking, the term "mental illness" describes a plethora of mental and emotional disorders ranging from mild anxiety to more serious conditions that significantly interfere with major life activities such as learning, working, and simply communicating with others. Legally speaking, "mental illness" isn't quite as easy to define, yet under the ADA, employers are expected to reasonably accommodate employees who fall into this ambiguous category.

Vocational Impairment

The individual has a significant **vocational impairment**; that is, a significant **impairment** of the ability to prepare for, obtain, or keep employment in an occupation consistent with his or her abilities, aptitudes, and interests, considering the factors described in §21.50 and paragraph (b) of this section.

§21.52
www.benefits.va.gov/.../s21_5... United States Department of Veterans Affairs


The DSM-5 not only did not change this process but completely omitted any organized means of evaluating impairment!

Global Assessment Of Functioning

- Despite research suggesting that the GAF was valid and reliable (Pedersen and Karteruda, 2012), it was dropped from the DSM-5 reportedly for several reasons, including a lack of conceptual clarity and suggestions of questionable psychometrics (Canino, Fisher, Alegria and Bird, 2013).
- Instead, the authors of the DSM-5 suggest that the World Health Organization Disability Assessment Schedule (WHODAS) be included in the DSM-5 "for further study" (pg. 16).




Symptoms vs. Impairment





Inattention

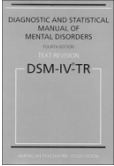
VS.



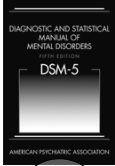
Difficulty completing homework


Assessing Impairment in the Eligibility Process




Global Assessment of Functioning (GAF) Scale





Global Assessment of Functioning (GAF) Scale



WHODAS II
Disability Assessment Schedule
(Currently only adult version)



IDEA
Individuals with Disabilities Act
Revised as IDEA in 2004



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RSI RATING SCALE OF IMPAIRMENT
TECHNICAL MANUAL




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 educational classification or diagnosis**

RSI Rating Scale of Impairment

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Key Features of the RSI





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


RSI Rating Scale of Impairment


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Uses for the RSI









RSI Rating Scale of Impairment

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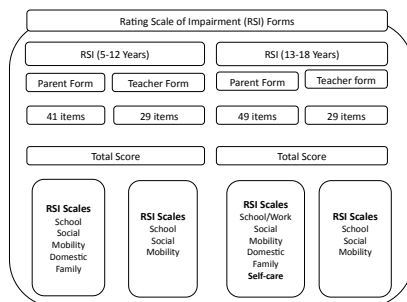
User Qualifications

- 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



Structure of the RSI





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



RSI Scales & Descriptions





Directions on the RSI

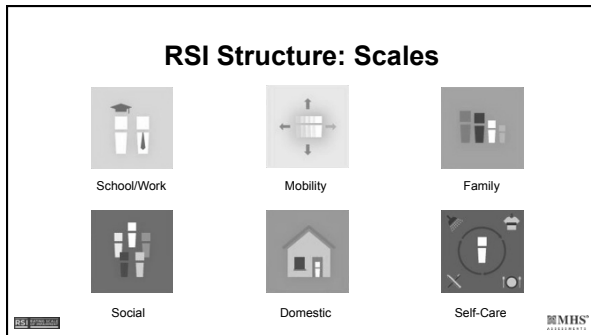
Child's Name/ID: _____ Page 2

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



Standardization, Reliability & Validity

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Standardization Sample

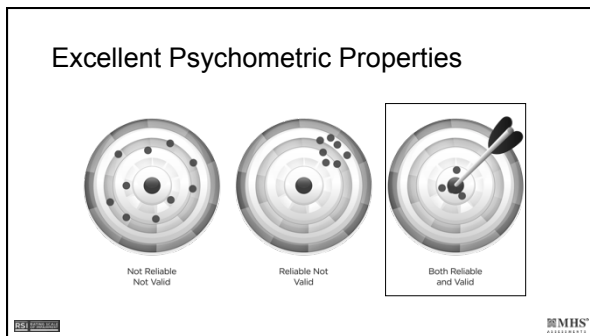
- Data collection took place from September 2012 to August 2014
- Data was collected in all 50 states
- Over 8,000 ratings were completed across the 4 RSI forms

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

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Internal Consistency

RSI Score	Number of Items	Normative				Clinical			
		RSI (5-12 Years) Forms		RSI (13-18 Years) Forms		RSI (5-12 Years) Forms		RSI (13-18 Years) Forms	
		Parent	Teacher	Parent	Teacher	Parent	Teacher	Parent	Teacher
		N = 776-794	N = 794-798	N = 584-594	N = 597-599	N = 475-494	N = 379-383	N = 357-373	N = 227-232
School/Work ^a	10	.90	.94	.90	.93	.90	.92	.93	.93
Social	10	.88	.89	.86	.89	.87	.92	.91	.92
Mobility	9	.79	.87	.85	.91	.85	.90	.88	.92
Domestic	7	.85	..	.85	..	.85	..	.88	..
Family	5	.76	..	.82	..	.78	..	.86	..
Self-Care	87683	..
Total Score	39-49^b	.94	.95	.95	.95	.94	.95	.96	.96

Note. Sample sizes vary for each form due to omitted items.

^aBased on the RSI (5-12 Years) Forms and the RSI (13-18 Years) Teacher Forms/School/Work on the RSI (13-18 Years) Parent Form.

^bThere are 29 items on the RSI Teacher Forms, 41 on the RSI (5-12 Years) Parent Form, and 49 on the RSI (13-18 Years) Parent Form.

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Standard Error of Measurement

RSI Score	RSI (5-12 Years) Forms		RSI (13-18 Years) Forms	
	Parent N = 716-794	Teacher N = 794-796	Parent N = 584-596	Teacher N = 597-599
School/Work*	3.12	2.42	3.10	2.53
Social	3.52	3.39	3.72	3.27
Mobility	4.59	3.47	3.88	2.92
Domestic	3.92	--	3.86	--
Family	4.87	--	4.26	--
Self-Care	--	--	4.95	--
Total Score	2.40	2.33	2.23	2.27

Note: Sample sizes vary for each form due to omitted items.

*School on the RSI (5-12 Years) Forms and the RSI (13-18 Years) Teacher Form; School/Work on the RSI (13-18 Years) Parent Form.



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 $.97$



Stability

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



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 $r = .77$



Content Validity

RSI Scale	RSI Definition	Example Item Content	ICF Domain
School/Work ^a	Reflects impairment in acquiring or applying knowledge at school and/or work.	had trouble completing work? had difficulty solving problems? asked for help when needed?	Education Learning and Applying Knowledge
Social	Indicates impairment when interacting and communicating with others.	enjoyed being with others? shared his/her feelings with a family member?	Communication Interpersonal Interactions and Relationships
Family ^a	Indicates impairment when interacting with family.	had fun with his/her family? had trouble lending over?	Community, Social, and Civic Life
Mobility	Describes impairment when physically moving, such as running and kneeling.	had difficulty running?	Mobility
Domestic ^a	Reflects impairment in the ability to complete chores and help around the house.	took dirty clothes on the floor? washed his/her hands after using the bathroom?	Domestic
Self-Care ^a	Describes impairment in the ability to care for oneself, such as feeding, dressing, and hygiene.	had difficulty feeding himself/herself?	Self-Care

^aSchool on the RSI (5–12 Years) Form and the RSI (13–18 Years) Teacher Form; School/Work on the RSI (13–18 Years) Parent Form.
^bFamily and Domestic are included only on the RSI Parent Form.
^cSelf-Care is included only on the RSI (13–18 Years) Parent Form.

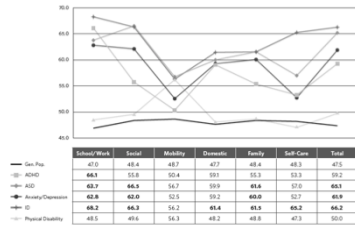


Criterion-Related Validity

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



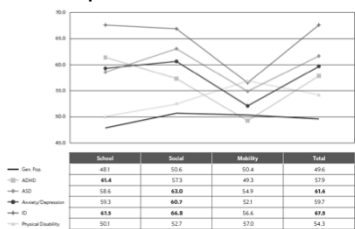
T-scores by General Population and Clinical Groups: RSI Parent Forms



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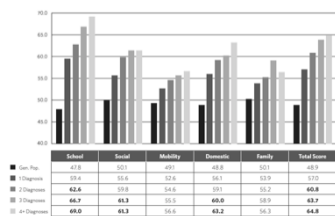
T-scores by General Population and Clinical Groups: RSI Teacher Forms



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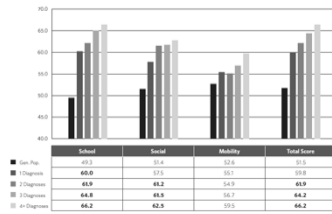
Mean T-scores by General Population and Number of Diagnoses: RSI (5-12) Parent Form



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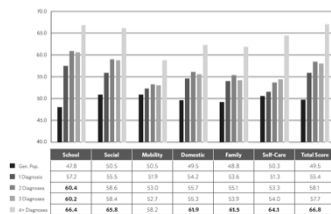
Mean T-scores by General Population and Number of Diagnoses: RSI (5–12) Teacher Form



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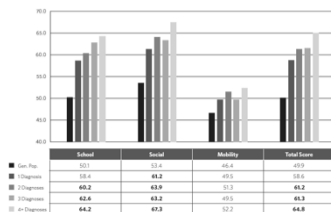
Mean T-scores by General Population and Number of Diagnoses: RSI (13–18) Parent Form



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Mean T-scores by General Population and Number of Diagnoses: RSI (13–18) Teacher Form



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Is the RSI measuring unique variance?

WISC IV FS	.07
CAS FS	.04
WJ III Achievement	.03
Clinician Rating	.34

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Is the RSI measuring unique variance?

CGAS	.41
Conners	.23
Conners	.29
ABAS	.52
DESSA	.71
CEFI	.78
WISC IV	.07
CAS	.04
WJ III	.03
Clinician Scale	.34

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Is the RSI measuring unique variance?

Conners

5-12	Parent	.24
5-12	Teacher	.19
13-16	Parent	.22
13-16	Teacher	.26
5-12	Parent	.33
5-12	Teacher	.27
13-16	Parent	.32
13-16	Teacher	.27

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Is the RSI measuring unique variance?

ABAS

5 - 12	Parent	-.45
5 - 12	Teacher	-.54
13 - 16	Parent	-.50
13 - 16	Teacher	-.57



Is the RSI measuring unique variance?

DESSA

5 - 12	Parent	.65
5 - 12	Teacher	.77



Is the RSI measuring unique variance?

CEFI

5 - 12	Parent	.80
5 - 12	Teacher	.76
13 - 16	Parent	.84
13 - 16	Teacher	.70

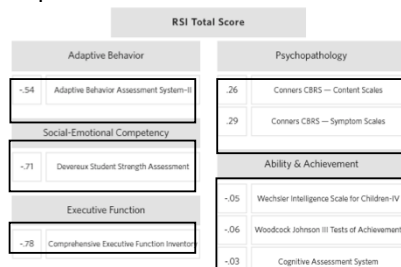


Relationship between the RSI and Other Impairment Measures

- RSI and the Barkley Functional Impairment Scale (BFIS-CA)
 - Child Sample corrected $r = .55$ to $.67$
 - Youth Sample corrected $r = .63$ to $.71$
- RSI and the Children's Global Assessment Scale (CGAS)
 - Corrected $r = -.34$ to $-.51$

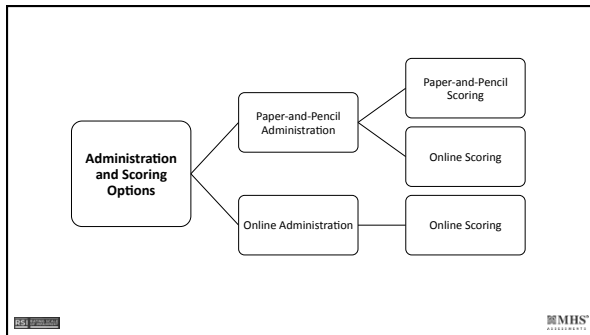


Relationship Between the RSI and Other Measures

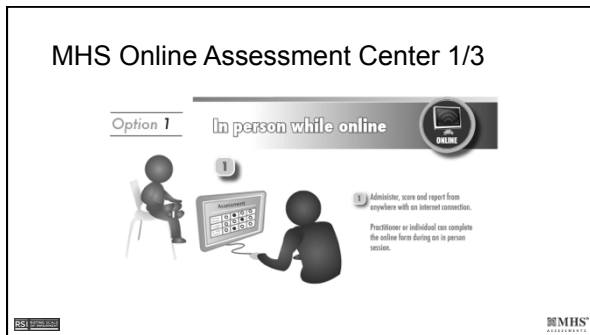


Administration, Scoring, & Interpretation









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 second report is ready to be generated.

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MHS Online Assessment Center 3/3

Option 3

Print the form for paper & pencil



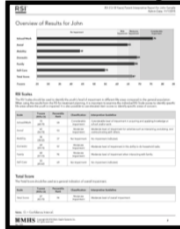
1. The practitioner prints the assessment form for the youth or individual to bring to home, school, or office.
2. The parent, caregiver, teacher, or youth will then fill out this form and return to the practitioner.
3. The practitioner enters the responses and generates a second report.

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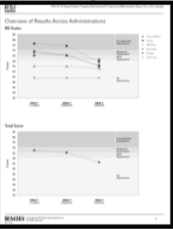


Features of the RSI Reports

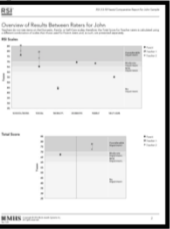
Easy to Interpret Reports



Interpretive Report




Progress Monitoring and Treatment Effectiveness Report





Comparative Report

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COMMUNITY

Interpretive Reports




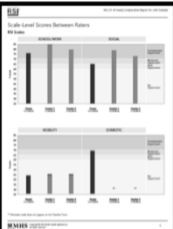


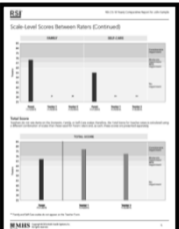


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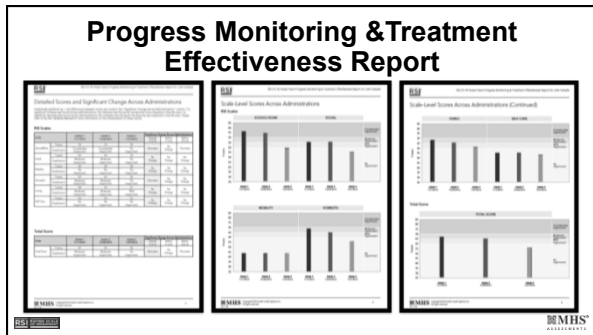
Comparative Reports

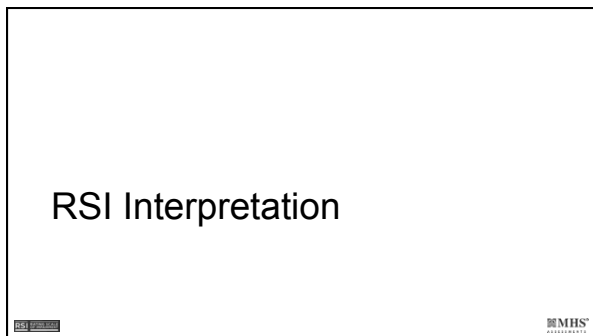




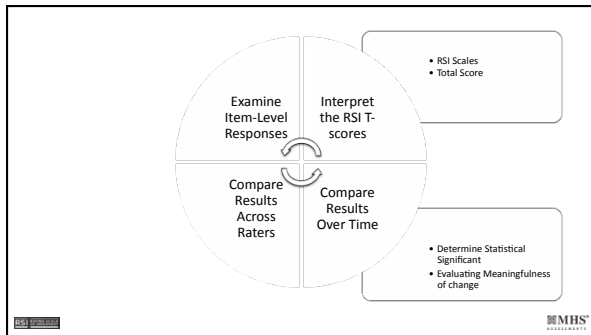


MHS
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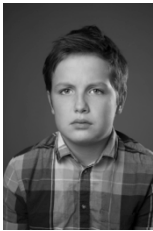




T-score	Percentile Ranks	Classification
<60	1-82	No Impairment
60-64	84-92	Mild Impairment
65-69	93-97	Moderate Impairment
≥ 70	98-99	Considerable Impairment



Case Study: Joey

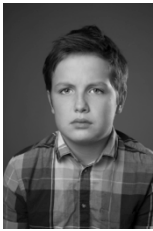


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Joey

- 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



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



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	90% 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

BSI PROFILE

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Treatment Plan for Joey

Areas of impairment as noted by Joey's Parent

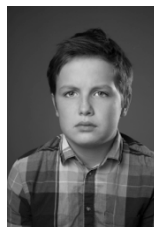
Work	<ul style="list-style-type: none"> • missing important work • missing school or work • missing school or work • missing school or work • missing school or work 	<ul style="list-style-type: none"> • completing work • completing work • completing work • completing work • completing work
Social	<ul style="list-style-type: none"> • not participating in group events • not participating in group events • not participating in group events • not participating in group events • not participating in group events 	<ul style="list-style-type: none"> • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace
Family	<ul style="list-style-type: none"> • not participating in group events • not participating in group events • not participating in group events • not participating in group events • not participating in group events 	<ul style="list-style-type: none"> • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace
Domestic	<ul style="list-style-type: none"> • not participating in group events • not participating in group events • not participating in group events • not participating in group events • not participating in group events 	<ul style="list-style-type: none"> • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace
Self-Care	<ul style="list-style-type: none"> • not participating in group events • not participating in group events • not participating in group events • not participating in group events • not participating in group events 	<ul style="list-style-type: none"> • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace • communicating in the workplace

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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



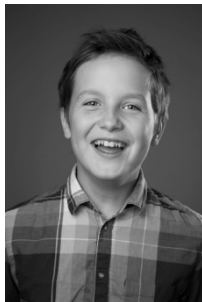
BSI PROFILE

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Joey's Treatment Progress

Scale		Administration 1	Administration 2	Significant Change Across Administrations
School/Work	Focus	88	72	Decrease
	Classification	Considerable Impairment	Considerable Impairment	
Social	Focus	79	71	Decrease
	Classification	Considerable Impairment	Mild Impairment	
Mobility	Focus	47	47	No Change
	Classification	No Impairment	No Impairment	
Domestic	Focus	79	62	Decrease
	Classification	Considerable Impairment	Mild Impairment	
Family	Focus	64	50	Decrease
	Classification	Mild Impairment	No Impairment	
Self-Care	Focus	80	79	No Change
	Classification	Considerable Impairment	Considerable Impairment	
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
	Focus	81	66	Decrease
Total Score	Classification	Considerable Impairment	Moderate Impairment	





Case Study: Megan



Megan

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



Megan: Assessment Plan

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



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



Results of the Teacher Interview

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



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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.



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Results of the RSI

RSI Scales				
Scale		Parent	Teacher	Significant Difference Between Raters
School	T-scores	85	71	Parent > Teacher
	Classification	Considerable Impairment	Considerable Impairment	
Social	T-scores	68	62	No significant difference
	Classification	Moderate Impairment	Mild Impairment	
Mobility	T-scores	45	49	No significant difference
	Classification	No Impairment	No Impairment	
Domestic	T-scores	78	Domestic scale does not appear on the Teacher Form	No comparison possible
	Classification	Considerable Impairment		
Family	T-scores	66	Family scale does not appear on the Teacher Form	No comparison possible
	Classification	Moderate Impairment		
Total Score				
Scale		Parent	Teacher	Significant Difference Between Raters
School	T-scores	79	68	No comparison possible
	Classification	Considerable Impairment	Mild Impairment	

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- 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



Scale		Administration 1	Administration 2	Significant Change Across Administrations
School	Facore	85	88	Decrease
	Classification	Considerable impairment	No impairment	
Social	Facore	68	58	Decrease
	Classification	Moderate impairment	No impairment	
Mobility	Facore	45	55	No Change
	Classification	No impairment	No impairment	
Osmore	Facore	74	72	No Change
	Classification	Considerable impairment	Considerable impairment	
Family	Facore	66	66	No Change
	Classification	Moderate impairment	Moderate impairment	
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
Total Score	Facore	72	63	Decrease
	Classification	Considerable impairment	Mild impairment	

Megan's Treatment Progress: Teacher Report

RSI Scales				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
School	Score	71	68	Decrease
	Classification	Considerable Impairment	No Impairment	
Social	Score	42	48	No Change
	Classification	Mild Impairment	No Impairment	
Mobility	Score	49	44	No Change
	Classification	No Impairment	No Impairment	
Total Score				
Scale		Administration 1	Administration 2	Significant Change Across Administrations
Total Score	Score	64	64	Decrease
	Classification	Mild Impairment	No Impairment	





Conclusions

- Impairment can be defined and measured in children.
- Functional impairment can be accurately measured with the Rating Scale of Impairment.
- The RSI offers the first valid, reliable comprehensive measure of daily functional challenges within a factor analyzed framework built on the WHODAS categories.
- Assessment of and treatment monitoring of impairment offers an important advance in assessment.



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The image shows the front cover of the book 'RSI: RATING SCALE OF IMPAIRMENT'. The cover is dark with white text. At the top, 'RSI' is in large letters, followed by 'RATING SCALE OF IMPAIRMENT'. Below that, it says 'Second Edition, RSI 4.0 and 4.1 August 1992'. The central part of the cover features a grid of icons representing different types of impairments: a person, a car, a house, a person with a cane, a person with a wheelchair, and a person with a prosthetic arm. At the bottom, it says 'MHS' and 'Mental Health Services'.

A 3D rendering of a white, stylized human figure standing next to a large, dark, three-dimensional question mark. The figure has its arms crossed and is looking at the question mark.

<http://www.mhs.com/product.aspx?gr=cli&prod=rsi&id=overview>

The logo for Mental Health Services (MHS), featuring the letters 'MHS' in a stylized font.

The logo for Mental Health Services (MHS), featuring the letters 'MHS' in a stylized font.
