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# WJ IV: Variations & Comparisons

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# Agenda

**01** Overview of  
Variation &  
Comparison  
Procedures

**02** Interpretation of  
Unique Scores

**03** Conducting  
Variations &  
Comparisons using  
*Riverside Score*

**04** Q&A

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Test scores are ***best interpreted*** in the context of ***all other scores and assessment data***.

–Standards for Educational & Psychological Testing (2014)

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# Normative vs. Relative Strengths & Weaknesses

## Normative (Inter-Individual)

How does your examinee compare to same-age or same-grade peers?

## Relative (Intra-Individual)

How do your examinee's skills on one test/cluster compare to their skills on another test/cluster?



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# WJ IV Variation Procedures



**Cognitive**

Intra-Cognitive



**Achievement**

Intra-Achievement

Academic  
Skills/Fluency/Applications



**Oral Language**

Intra-Oral Language

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# WJ IV Variations Require the *Core Tests*



**Cognitive**

**Tests 1-7**



**Achievement**

**Tests 1-6**



**Oral Language**

**Tests 1-4**

# Intra-Cognitive Variation Procedures

**WJ IV COG**

**Requires At  
Minimum:  
Tests 1-7**

Analyze variability within an examinee's cognitive profile

**Can be useful for:**

- Documenting relative strengths and weaknesses
- Program planning
- Understanding tasks the examinee will find easy and/or challenging

# Intra-Achievement Variation Procedures

**WJ IV ACH**

**Requires At  
Minimum:  
Tests 1-6**

Analyze variability within an examinee's academic profile

**Can be useful for:**

- Instructional planning
- Identifying relative strengths and weaknesses
- Forming diagnostic and clinical impressions



# Academic Skills/Fluency/Applications

## WJ IV ACH

**Requires the Tests  
that comprise the  
Academic Skills,  
Academic Fluency, &  
Academic  
Applications  
Clusters**

Analyze variability within an examinee's basic academic skills, academic fluency, and applied academic skills

### **Can be useful for:**

- Instructional planning
- Identifying relative strengths and weaknesses
- Documenting the need for accommodations or modification to instruction

# Intra-Oral Language Variation Procedures

**WJ IV OL**

**Requires At  
Minimum:  
Tests 1-4**

Analyze variability within an examinee's oral language profile

**Can be useful for:**

- Instructional planning
- Identifying relative strengths and weaknesses
- Forming diagnostic and clinical impressions

# Why Do Variations Matter?



Documenting PSW



Forming clinical  
& diagnostic  
impressions



Program  
planning



Understanding of  
easy vs.  
challenging tasks

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Running Variations  
Using *Riverside*  
*Score*

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# WJ IV Intra-Achievement Variation Results

## Interpreting a Relative Weakness

VARIATIONS	STANDARD SCORES			DISCREPANCY		Interpretation at + or - 1.50 SD (SEE)
	Actual	Predicted	Difference	PR	SD	
<i><b>Intra-Achievement Variations</b></i>						
Letter-Word Identification	76	83	-7	20	-0.85	--
<b>Applied Problems</b>	<b>66</b>	<b>88</b>	<b>-22</b>	<b>2</b>	<b>-2.03</b>	<b>Weakness</b>
Spelling	82	83	-1	43	-0.17	--
Passage Comprehension	63	86	-23	1	-2.46	Weakness
Calculation	113	78	35	>99.9	+3.51	Strength
Writing Samples	94	84	10	81	+0.87	--

# WJ IV Intra-Achievement Variation Results

## Interpreting a Relative Strength

VARIATIONS	STANDARD SCORES			DISCREPANCY		Interpretation at + or - 1.50 SD (SEE)
	Actual	Predicted	Difference	PR	SD	
<b><i>Intra-Achievement Variations</i></b>						
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# WJ IV Comparison Procedures

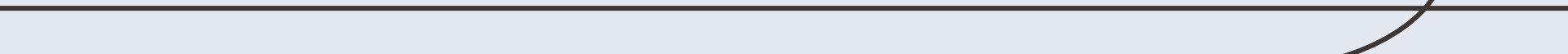
*Gf-Gc/Other*  
Ability

GIA/ACH

OL/ACH

Academic  
Knowledge/ACH

Scholastic  
Aptitude/ACH



# *Gf-Gc/Other Ability*

**Gf-Gc  
Composite**

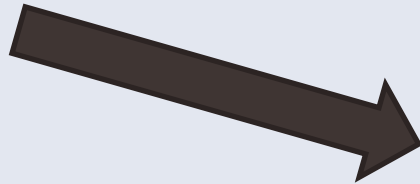
**WJ IV COG:  
Tests 1, 2, 8, & 9**



**Cognitive Abilities**



**Oral Language Abilities**



**Academic Achievement**



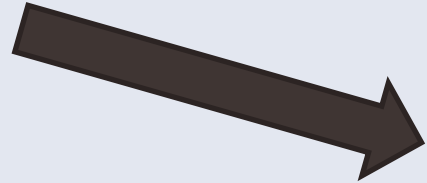
# GIA/Achievement

**GIA**

**WJ IV COG:  
Tests 1-7**



**Oral Language Abilities**



**Academic Achievement**

# OL/Achievement

Broad Oral  
Language/Amplio  
language oral

**WJ IV OL (English):  
Tests 1, 2, & 6**

**WJ IV OL (Spanish):  
Tests 10-12**



**Academic Achievement**

# Academic Knowledge/Achievement

Academic  
Knowledge Cluster

**WJ IV ACH Tests  
18-20**



**Academic Achievement  
(Reading, Writing, Math)**

# Scholastic Aptitude/Achievement

		Target Tasks for Scholastic Aptitude/ Achievement Comparisons													
		Reading				Mathematics				Writing					
		Reading	Broad Reading	Basic Reading Skills	Reading Comprehension	Reading Fluency	Reading Rate	Mathematics	Broad Mathematics	Math Calculation Skills	Math Problem Solving	Written Language	Broad Written Language	Basic Writing Skills	Written Expression
Standard Battery	COG 1	Oral Vocabulary	■	■	■	■	■	■	■	■	■	■	■	■	■
	COG 2	Number Series						■	■	■					
	COG 3	Verbal Attention			■								■		
	COG 4	Letter-Pattern Matching													
	COG 5	Phonological Processing	■	■	■	■	■				■	■	■	■	
	COG 6	Story Recall									■	■		■	
	COG 7	Visualization						■	■	■	■				
	COG 8	General Information													
	COG 9	Concept Formation	■	■		■	■	■							
	COG 10	Numbers Reversed									■				
Extended Battery	COG 11	Number-Pattern Matching	■	■	■	■	■					■	■	■	■
	COG 12	Nonword Repetition													
	COG 13	Visual-Auditory Learning													
	COG 14	Picture Recognition													
	COG 15	Analysis-Synthesis									■				
	COG 16	Object-Number Sequencing													
	COG 17	Pair Cancellation						■	■	■					
	COG 18	Memory for Words													

- Used to predict ACH across reading, writing, and math
- Each Scholastic Aptitude Cluster is based on 4 WJ IV COG Tests offering the best prediction for the ACH area of interest
- Offers clinical utility in the investigation of *unexpected* or *expected* ACH.

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**Running  
Comparisons Using  
the WJ IV ACH**

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# WJ IV Academic Knowledge/ACH Results

## Interpreting Significant Differences

<u>COMPARISONS</u>	<u>STANDARD SCORES</u>			<u>DISCREPANCY</u>		<u>Significant at + or - 1.50 SD (SEE)</u>
	<u>Actual</u>	<u>Predicted</u>	<u>Difference</u>	<u>PR</u>	<u>SD</u>	
<b><i>Academic Knowledge/Achievement Comparisons</i></b>						
<b>BRIEF ACHIEVEMENT</b>	<b>74</b>	<b>95</b>	<b>-21</b>	<b>4</b>	<b>-1.73</b>	<b>Yes (-)</b>
READING	68	95	-27	2	-2.03	Yes (-)
MATHEMATICS	90	95	-5	35	-0.38	No
WRITTEN LANGUAGE	86	95	-9	25	-0.66	No
ACADEMIC SKILLS	87	95	-8	28	-0.58	No
ACADEMIC APPLICATIONS	70	95	-25	3	-1.94	Yes (-)

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**Running  
Comparisons Using  
the WJ IV COG &  
WJ IV ACH**

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# *Gf-Gc/ACH* Results

## Interpreting Significant Differences

<u>COMPARISONS</u>	<u>STANDARD SCORES</u>			<u>DISCREPANCY</u>		<u>Interpretation at + or - 1.50 SD (SEE)</u>
	<u>Actual</u>	<u>Predicted</u>	<u>Difference</u>	<u>PR</u>	<u>SD</u>	
<b><i>Gf-Gc Composite/Other Ability Comparisons</i></b>						
<b>BRIEF ACHIEVEMENT</b>	<b>74</b>	<b>94</b>	<b>-20</b>	<b>2</b>	<b>-2.08</b>	<b>Weakness</b>
READING	68	94	-26	1	-2.46	Weakness
MATHEMATICS	90	93	-3	37	-0.34	--
WRITTEN LANGUAGE	86	95	-9	23	-0.75	--
ACADEMIC SKILLS	87	94	-7	25	-0.66	--
ACADEMIC APPLICATIONS	70	94	-24	1	-2.43	Weakness



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Questions?

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# Contact



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## Selecting Variations & Comparisons Based on Your Assessment Needs

### Learning objectives:

**Understand how to select specific variation and comparison procedures based on their assessment needs using Riverside Score**

**Identify salient pieces of the referral concern that can be used to select relevant variation and comparison procedures**

**Construct a formal testing plan based on the identified variation and comparisons**

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