Unleashing the Power of the WISC-V

Agenda

• Introduction
• Review:
  – Scoring Options
  – Revision Goals and Highlights
• Test Structure
• Interpretation Basics
• Technical Information (time permitting)
• Purchasing Information

WISC-V Revision Goals

- Update theoretical foundations
- Increase user friendliness
- Increase developmental appropriateness
- Improve psychometric properties
- Enhance clinical utility
Scoring: Paper/Pencil Format

Hand-score
With the traditional paper and pencil format, you will have the option to hand-score.

Q-global Scoring & Reporting
- Web-based Scoring
  - Score Report
  - Combination Reports
  - Narrative Reports
- New pricing
  - Subscriptions (unlimited access) OR
  - Per usage

Scoring: Digital Format

Automatic Scoring & Reporting via Q-interactive
Similar score report output as those available on Q-global, plus:
- Automatic subtest scoring
- Immediate scaled scores

Changes: New Subtests

<table>
<thead>
<tr>
<th>Visual Spatial Index</th>
<th>Fluid Reasoning Index</th>
<th>Working Memory Index</th>
<th>Complementary Subtests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Puzzles</td>
<td>Figure Weights</td>
<td>Picture Span</td>
<td>Naming Speed Literacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digit Span</td>
<td>Naming Speed Quantity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sequencing</td>
<td>Immediate Symbol Translation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>added to Digit Span Subtest</td>
<td>Deferred Symbol Translation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recognition Symbol Translation</td>
</tr>
</tbody>
</table>

Copyright 2014. Pearson Education. All rights reserved.
Test Structure – Ancillary Index Scales

Ancillary Index Scales
- Coordination
- Reasoning
- Figure-Weight
- Arithmetic
- Sub-Test
- Letter-Number
- Sequencing
- Nonverbal
- Block Design
- Visual Puzzles
- Marks Reasoning
- Figure Weights
- Picture Span
- Coding
- Spatial
- Ability
- Similarities
- Vocabulary
- Block Design
- Marks Reasoning
- Figure Weights

New Ancillary Indexes to WISC-V

Complementary Index Scores

Complementary Index Scales
- Naming Speed
- Naming Speed Literal
- Naming Speed Quantity
- Symbol Translation
- Immediate Symbol Translation
- Delayed Symbol Translation
- Recategorization Symbol Translation
- Storage and Retrieval
- Naming Speed
- Symbol Translation Index

Note: SRI = NSI + STI
SRI ≠ NSL + NSQ + IST + DST + RST

WISC-V Scoring and Interpretation: An introduction
### Descriptive Classifications

<table>
<thead>
<tr>
<th>Composite Score Range</th>
<th>WISC-V Descriptive Classification</th>
<th>Traditional Descriptive Classification (“Old”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 and above</td>
<td>Extremely High</td>
<td>Very Superior</td>
</tr>
<tr>
<td>120–129</td>
<td>Very High</td>
<td>Superior</td>
</tr>
<tr>
<td>110–119</td>
<td>High Average</td>
<td>High Average</td>
</tr>
<tr>
<td>90–109</td>
<td>Average</td>
<td>Average</td>
</tr>
<tr>
<td>80–89</td>
<td>Low Average</td>
<td>Low Average</td>
</tr>
<tr>
<td>70–79</td>
<td>Very Low</td>
<td>Borderline</td>
</tr>
<tr>
<td>69 and below</td>
<td>Extremely Low</td>
<td>Extremely Low</td>
</tr>
</tbody>
</table>

### FSIQ: Permissible Substitutions

| IN or CO | for | SI or VC |
| VP       | for | BD       |
| PC       | for | MR or FW |
| AR       | for | FW       |
| PS or LNS (LN) | for | DS       |
| SS or CA | for | CD       |

### How to Report and Describe Performance – Primary Index Scores
Interpretative Considerations

- Multiple cognitive processes
- Number of processes invoked related to task difficulty
- WISC-V primary and complementary measures are specifically designed to measure complex cognitive processes while ancillary measures are designed to measure processes related to learning difficulties.

What is represented by the VCI?

What is represented by the VSI?
What is represented by the VSI?
- Constructional ability
- Visual-spatial reasoning
- Integration / Synthesis of part-to-whole relationships
- Attention to visual details
- Visual motor integration
- Speeded performance

What is represented by the FRI?

What is represented by the WMI?
- 5-8-2-7
- 7-2-8-5
### What is represented by the WMI?

- Ability to resist proactive interference
- Attention
- Concentration
- Mental control
- Register, maintain, manipulate
  - Visual and auditory
- Speeded Performance

### What is represented by the PSI?

- Speed & accuracy of visual identification
- Decision-making & implementation
- Visual scanning & discrimination
- Attention & concentration
- Visual motor coordination
WMI and PSI

- Involves EFFICIENCY
- Working Memory
  - Identification, registration, and manipulation of information within STM store
- Processing Speed
  - Facilitates rapid identification and registration of information for decision-making

WMI < PSI indicates a difficulty with the manipulation of information within STM

ANCILLARY and COMPLEMENTARY ANALYSIS

Nonverbal Index

- Composed of BD, MR, CD, FW, VP, PS
- Useful when examinee has clear verbal difficulties
  - ELL
  - RELD, ELD
  - ASD with Language Impairment
- Does have processing speed component
  - can affect results just like FSIQ
- More emphasis on reasoning using visual-spatial processes than FSIQ
Auditory Working Memory

- Digit Span and Letter-Number Sequencing
- Very similar to WISC-IV working memory with greater focus on sequencing than previous edition
- Contrast scores:
  - DSB VS DSF impact of additional mental manipulation required by DSB
  - DSB VS DSS impact of sequencing and number knowledge required by DSS
  - DSS VS DSS impact of dual-tasking and letter knowledge
- Useful when global difficulties with visual processing affecting test performance

Quantitative Reasoning

- New complementary index composed of Figure Weights and Arithmetic
- AR requires actual math problem solving; however, AR is very complex having Fluid Reasoning, Verbal, and Working Memory components
- FW requires math skills in a more limited abstract manner. Requires the ability to reason through a problem and to select the best quantitative operation to obtain the correct response.

General Ability Index (GAI)

[Image of the General Ability Index chart]
I should consider deriving the GAI when:

- a significant and unusual discrepancy exists between the WMI and MIS or FSIQ.
- a significant and unusual discrepancy exists between the PSI and MIS or FSIQ.
- a significant and unusual discrepancy exists between the VCI and WMI.
- a significant and unusual discrepancy exists between the VCI and PSI.

I should consider deriving the GAI when:

- a significant and unusual discrepancy exists between the PSI and WMI.
- a significant and unusual discrepancy exists between the VSI and WMI.
- a significant and unusual discrepancy exists between the VSI and PSI.
- a significant and unusual discrepancy exists between the FRI and WMI.
- a significant and unusual discrepancy exists between the FRI and PSI.
- a significant and unusual discrepancy exists between a Working Memory or Processing Speed subtest and the MSS-I or MSS-F.
### GAI vs. FSIQ

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Difference</th>
<th>Critical Value</th>
<th>Significant Difference</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAI vs. FSIQ</td>
<td>127</td>
<td>128</td>
<td>1</td>
<td>4.01</td>
<td>Y = 0.05</td>
<td>m</td>
</tr>
</tbody>
</table>

### GAI vs. CPI

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Difference</th>
<th>Critical Value</th>
<th>Significant Difference</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAI vs. CPI</td>
<td>127</td>
<td>128</td>
<td>1</td>
<td>4.01</td>
<td>Y = 0.05</td>
<td>m</td>
</tr>
</tbody>
</table>

### Interpretation of -

- Naming Speed Index
- Symbol Translation Index
- Storage and Retrieval Index
NSI vs. STI

Process-Oriented Approach

Digit Span and Longest Span Process Scores
- DSF & LDSF
- DSb & LDSb
- DSs & LDSs

Block Design Process Scores
- BDn
- BDp

Picture Span
- LPSs
- LPDr

Process-Oriented Approach

Cancellation Process Score
- CAR vs CAS

Naming Speed Process Scores
- Nsco
- Nssco
- NSln

Naming Speed Error Scores
- NSLe
- NSQe
Process-Oriented Approach

**Rotation & Set Error Scores**
- Rotations on RD, SS, CD
- Set errors on SS

**Process Observations**
- Don’t know (DK)
- No Response (NR)
- Item Repetition / Requested Repetition (IR/RR)

**Process Observations**
- Subvocalization (SV)
- Self-corrections (SC)

Also review contrast scores, as appropriate.

---

Need a Focused Client Based Approach

- Signal to noise ratio
  - Adding additional tests can increase signal or can increase noise.
  - Adding targeted tests increase signal to noise.
- Consistency of deficit
  - Need more than 1 score to identify true weakness in a domain.
- Move away from "shot-gun" approaches to testing specific hypotheses.
  - Select tests related to problem.

---

Analysis of Results
Case Example: Child A

8 year old Caucasian male, 2nd grade
- has difficulty sounding out unfamiliar words.
- confuses words that appear similar.
- recognizes few words - word recognition slow.
- dislikes reading circle.
- has difficulties with spelling.

WISC–V Score Summary

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Oral Subtest</th>
<th>Conceptual Subtest</th>
<th>Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>10</td>
<td>Testing Speed</td>
<td>64</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>10</td>
<td>Naming Speed</td>
<td>105</td>
</tr>
<tr>
<td>Information</td>
<td>10</td>
<td>Immediate Symbol Translation</td>
<td>87</td>
</tr>
<tr>
<td>Comprehension</td>
<td>9</td>
<td>Delayed Symbol Translation</td>
<td>88</td>
</tr>
<tr>
<td>Work Memory</td>
<td>9</td>
<td>Recognition Symbol Translation</td>
<td>88</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Digit Spanning</td>
<td>7</td>
<td>Verbal</td>
<td></td>
</tr>
<tr>
<td>Letter-Number Sequencing</td>
<td>10</td>
<td>Fluid</td>
<td></td>
</tr>
<tr>
<td>Symbol Search</td>
<td>12</td>
<td>Working</td>
<td></td>
</tr>
<tr>
<td>Picture Concepts</td>
<td>10</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>9</td>
<td>Cognitive</td>
<td></td>
</tr>
<tr>
<td>Auditory Working Memory</td>
<td>9</td>
<td>Proficiency</td>
<td></td>
</tr>
<tr>
<td>Digit Spanning</td>
<td>7</td>
<td>Processing Speed</td>
<td></td>
</tr>
<tr>
<td>Letter-Number Sequencing</td>
<td>10</td>
<td>Quantitative Reasoning</td>
<td>85</td>
</tr>
<tr>
<td>Symbol Search</td>
<td>12</td>
<td>Auditory Working Memory</td>
<td>91</td>
</tr>
<tr>
<td>Picture Concepts</td>
<td>10</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td>9</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Auditory Working Memory</td>
<td>9</td>
<td>Cognitive</td>
<td></td>
</tr>
</tbody>
</table>

Full Scale IQ 88

Cognitive Proficiency Index 91
### Primary Analysis

**Index-Level Strengths and Weaknesses**

<table>
<thead>
<tr>
<th>Index</th>
<th>Score</th>
<th>Comparison Score</th>
<th>Difference</th>
<th>Critical Value</th>
<th>Strength or Weakness</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>92</td>
<td>93.6</td>
<td>-1.6</td>
<td>8.95</td>
<td>95%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VSI</td>
<td>100</td>
<td>93.6</td>
<td>6.4</td>
<td>10.97</td>
<td>95%</td>
<td>2.5%</td>
</tr>
<tr>
<td>FRI</td>
<td>91</td>
<td>93.6</td>
<td>-2.6</td>
<td>9.76</td>
<td>95%</td>
<td>2.5%</td>
</tr>
<tr>
<td>WMI</td>
<td>82</td>
<td>93.6</td>
<td>-11.6</td>
<td>10.58</td>
<td>95%</td>
<td>2.5%</td>
</tr>
<tr>
<td>PSI</td>
<td>103</td>
<td>93.6</td>
<td>9.4</td>
<td>12.55</td>
<td>95%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

### Choosing the Level of Significance

**Comparison Selections**

- Critical Value
- Significance Level

- More stringent
- Less stringent

### Primary Analysis

**Index-Level Pairwise Comparisons**

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Difference</th>
<th>Critical Value</th>
<th>Significance</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI–VSI</td>
<td>Y</td>
<td>N</td>
<td>18</td>
<td>17.15</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VCI–FRI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VCI–WMI</td>
<td>Y</td>
<td>N</td>
<td>22</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VCI–PSI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VSI–FRI</td>
<td>Y</td>
<td>N</td>
<td>18</td>
<td>17.15</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VSI–WMI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>VSI–PSI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>FRI–WMI</td>
<td>Y</td>
<td>N</td>
<td>22</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>FRI–PSI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>WMI–PSI</td>
<td>Y</td>
<td>N</td>
<td>21</td>
<td>18.89</td>
<td>9.7%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
### Primary Analysis
#### Subtest-Level Strengths and Weaknesses

<table>
<thead>
<tr>
<th>Subtest Level</th>
<th>Comparison Score</th>
<th>Critical Value</th>
<th>Significance Level</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Similarities</td>
<td>7 8.9 -1.9 2.81</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>10 8.9 1.1 2.23</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Block Design</td>
<td>9 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Completion</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Stems</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Picture Span</td>
<td>12 8.9 1.1 3.05</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Visual Puzzles</td>
<td>11 8.9 2.1 3.07</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Matrix Reasoning</td>
<td>10 8.9 0.1 3.09</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Figure Terms</td>
<td>7 8.9 -4.8 2.66</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
<tr>
<td>Digit Span</td>
<td>7 8.9 -0.4 2.25</td>
<td>✓ ✓ ✓ ✓</td>
<td>.01 .05 .10 .15</td>
<td>SS W W W</td>
</tr>
</tbody>
</table>
### Achievement Scores (KTEA-3)

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Scaled Score</th>
<th>Composite Score</th>
<th>Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Language</td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Reading</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentence Composition</td>
<td>73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Reading</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Fluency</td>
<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Problem Solving</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerical Operations</td>
<td>99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spelling</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Expression</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudoword Decoding</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Expression</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Fluency - Addition</td>
<td>105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Fluency - Subtraction</td>
<td>106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Fluency - Multiplication</td>
<td>117</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hypotheses

#### Cognitive Strengths

#### Cognitive Weaknesses

#### Academic Strengths

#### Academic Weaknesses
Technical Properties

Standard Errors of Measurement

<table>
<thead>
<tr>
<th>Composite</th>
<th>Overall Average SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>4.22</td>
</tr>
<tr>
<td>VSI</td>
<td>4.36</td>
</tr>
<tr>
<td>FRI</td>
<td>3.89</td>
</tr>
<tr>
<td>WMI</td>
<td>4.26</td>
</tr>
<tr>
<td>PSI</td>
<td>5.24</td>
</tr>
<tr>
<td>FSIQ</td>
<td>2.90</td>
</tr>
<tr>
<td>QRI</td>
<td>3.47</td>
</tr>
<tr>
<td>AWMI</td>
<td>3.92</td>
</tr>
<tr>
<td>NVI</td>
<td>3.23</td>
</tr>
<tr>
<td>GAI</td>
<td>3.07</td>
</tr>
<tr>
<td>CPI</td>
<td>4.12</td>
</tr>
</tbody>
</table>

Correlations With WIAT-III

<table>
<thead>
<tr>
<th>WISC-V Composite</th>
<th>Oral Lang.</th>
<th>Basic Read.</th>
<th>Read. Comp. &amp; Fluency</th>
<th>Written Exp.</th>
<th>Math</th>
<th>Math Fluency</th>
<th>Total Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>.78</td>
<td>.53</td>
<td>.65</td>
<td>.60</td>
<td>.53</td>
<td>.36</td>
<td>.74</td>
</tr>
<tr>
<td>VSI</td>
<td>.44</td>
<td>.24</td>
<td>.30</td>
<td>.39</td>
<td>.44</td>
<td>.28</td>
<td>.46</td>
</tr>
<tr>
<td>FRI</td>
<td>.33</td>
<td>.30</td>
<td>.25</td>
<td>.33</td>
<td>.45</td>
<td>.31</td>
<td>.40</td>
</tr>
<tr>
<td>WMI</td>
<td>.56</td>
<td>.54</td>
<td>.40</td>
<td>.47</td>
<td>.46</td>
<td>.39</td>
<td>.63</td>
</tr>
<tr>
<td>PSI</td>
<td>.22</td>
<td>.19</td>
<td>.36</td>
<td>.33</td>
<td>.41</td>
<td>.51</td>
<td>.34</td>
</tr>
<tr>
<td>FSIQ</td>
<td>.74</td>
<td>.61</td>
<td>.65</td>
<td>.68</td>
<td>.71</td>
<td>.58</td>
<td>.81</td>
</tr>
</tbody>
</table>

n = 211; age 6-16
Special Group Studies

Intellectually Gifted
Intellectual Disability – Mild
Intellectual Disability – Moderate
Borderline Intellectual Functioning
Specific Learning Disorders
Attention-Deficit/Hyperactivity Disorder
Disruptive Behavior
Traumatic Brain Injury
English Language Learners
Autism Spectrum Disorder

Intellectually Gifted

<table>
<thead>
<tr>
<th>Composite</th>
<th>Clinical Mean</th>
<th>Control Mean</th>
<th>Mean Diff.</th>
<th>p value</th>
<th>Std. Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>127.7</td>
<td>105.8</td>
<td>-21.97</td>
<td>&lt;.01</td>
<td>-1.74</td>
</tr>
<tr>
<td>VSI</td>
<td>121.2</td>
<td>105.2</td>
<td>-15.98</td>
<td>&lt;.01</td>
<td>-1.35</td>
</tr>
<tr>
<td>RFI</td>
<td>120.3</td>
<td>105.1</td>
<td>-15.26</td>
<td>&lt;.01</td>
<td>-1.26</td>
</tr>
<tr>
<td>WMI</td>
<td>117.9</td>
<td>104.0</td>
<td>-13.86</td>
<td>&lt;.01</td>
<td>-1.16</td>
</tr>
<tr>
<td>PSI</td>
<td>112.9</td>
<td>100.4</td>
<td>-12.44</td>
<td>&lt;.01</td>
<td>-0.92</td>
</tr>
<tr>
<td>FSIQ</td>
<td>127.5</td>
<td>105.7</td>
<td>-21.85</td>
<td>&lt;.01</td>
<td>-2.05</td>
</tr>
<tr>
<td>QRI</td>
<td>122.1</td>
<td>104.1</td>
<td>-18.04</td>
<td>&lt;.01</td>
<td>-1.55</td>
</tr>
<tr>
<td>AWMI</td>
<td>123.0</td>
<td>105.9</td>
<td>-17.13</td>
<td>&lt;.01</td>
<td>-1.32</td>
</tr>
<tr>
<td>NVI</td>
<td>122.9</td>
<td>104.6</td>
<td>-18.28</td>
<td>&lt;.01</td>
<td>-1.64</td>
</tr>
<tr>
<td>GAI</td>
<td>127.1</td>
<td>106.3</td>
<td>-20.83</td>
<td>&lt;.01</td>
<td>-1.88</td>
</tr>
<tr>
<td>CPI</td>
<td>118.8</td>
<td>102.1</td>
<td>-16.73</td>
<td>&lt;.01</td>
<td>-1.43</td>
</tr>
</tbody>
</table>

n = 95; ages 6-16

Intellectual Disability – Mild

<table>
<thead>
<tr>
<th>Composite</th>
<th>Clinical Mean</th>
<th>Control Mean</th>
<th>Mean Diff.</th>
<th>p value</th>
<th>Std. Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>66.0</td>
<td>96.1</td>
<td>30.14</td>
<td>&lt;.01</td>
<td>2.16</td>
</tr>
<tr>
<td>VSI</td>
<td>66.0</td>
<td>101.1</td>
<td>35.14</td>
<td>&lt;.01</td>
<td>2.82</td>
</tr>
<tr>
<td>FRI</td>
<td>67.0</td>
<td>99.3</td>
<td>32.34</td>
<td>&lt;.01</td>
<td>2.35</td>
</tr>
<tr>
<td>WMI</td>
<td>65.1</td>
<td>98.7</td>
<td>33.60</td>
<td>&lt;.01</td>
<td>2.64</td>
</tr>
<tr>
<td>PSI</td>
<td>71.6</td>
<td>97.3</td>
<td>25.78</td>
<td>&lt;.01</td>
<td>1.87</td>
</tr>
<tr>
<td>FSIQ</td>
<td>60.9</td>
<td>98.0</td>
<td>37.07</td>
<td>&lt;.01</td>
<td>2.92</td>
</tr>
<tr>
<td>QRI</td>
<td>64.2</td>
<td>98.1</td>
<td>33.86</td>
<td>&lt;.01</td>
<td>2.67</td>
</tr>
<tr>
<td>AWMI</td>
<td>62.2</td>
<td>99.2</td>
<td>36.96</td>
<td>&lt;.01</td>
<td>2.91</td>
</tr>
<tr>
<td>NVI</td>
<td>62.1</td>
<td>99.5</td>
<td>37.40</td>
<td>&lt;.01</td>
<td>3.02</td>
</tr>
<tr>
<td>GAI</td>
<td>63.5</td>
<td>97.9</td>
<td>34.46</td>
<td>&lt;.01</td>
<td>2.71</td>
</tr>
<tr>
<td>CPI</td>
<td>63.4</td>
<td>97.6</td>
<td>34.19</td>
<td>&lt;.01</td>
<td>2.66</td>
</tr>
</tbody>
</table>

n = 74; ages 6-16

Copyright 2014. Pearson Education. All rights reserved.
### Attention-Deficit Hyperactivity Disorder

<table>
<thead>
<tr>
<th>Composite</th>
<th>Clinical Mean</th>
<th>Control Mean</th>
<th>Mean Diff.</th>
<th>p value</th>
<th>Std. Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>97.8</td>
<td>102.7</td>
<td>-21.97</td>
<td>.05</td>
<td>.40</td>
</tr>
<tr>
<td>VSI</td>
<td>97.3</td>
<td>101.5</td>
<td>-15.98</td>
<td>.14</td>
<td>.28</td>
</tr>
<tr>
<td>FRI</td>
<td>97.6</td>
<td>102.6</td>
<td>-15.26</td>
<td>.06</td>
<td>.38</td>
</tr>
<tr>
<td>WMI</td>
<td>94.8</td>
<td>101.7</td>
<td>-13.86</td>
<td>&lt;.01</td>
<td>.54</td>
</tr>
<tr>
<td>PSI</td>
<td>94.2</td>
<td>99.9</td>
<td>-12.44</td>
<td>.03</td>
<td>.43</td>
</tr>
<tr>
<td>FSIQ</td>
<td>95.6</td>
<td>102.2</td>
<td>-21.85</td>
<td>&lt;.01</td>
<td>.61</td>
</tr>
<tr>
<td>QRI</td>
<td>94.8</td>
<td>103.1</td>
<td>-18.04</td>
<td>&lt;.01</td>
<td>.62</td>
</tr>
<tr>
<td>AWMI</td>
<td>95.2</td>
<td>101.4</td>
<td>-17.13</td>
<td>&lt;.01</td>
<td>.50</td>
</tr>
<tr>
<td>NVI</td>
<td>94.4</td>
<td>101.7</td>
<td>-18.28</td>
<td>&lt;.01</td>
<td>.57</td>
</tr>
<tr>
<td>GAI</td>
<td>97.1</td>
<td>102.3</td>
<td>-20.83</td>
<td>.03</td>
<td>.43</td>
</tr>
<tr>
<td>CPI</td>
<td>92.8</td>
<td>100.8</td>
<td>-16.73</td>
<td>&lt;.01</td>
<td>.66</td>
</tr>
</tbody>
</table>

n = 48; ages 6-16

### Autism Spectrum Disorder

<table>
<thead>
<tr>
<th>Composite</th>
<th>Clinical Mean</th>
<th>Control Mean</th>
<th>Mean Diff.</th>
<th>p value</th>
<th>Std. Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCI</td>
<td>80.4</td>
<td>104.1</td>
<td>23.68</td>
<td>&lt;.01</td>
<td>1.47</td>
</tr>
<tr>
<td>VSI</td>
<td>82.8</td>
<td>104.4</td>
<td>21.62</td>
<td>&lt;.01</td>
<td>1.18</td>
</tr>
<tr>
<td>FRI</td>
<td>84.3</td>
<td>101.6</td>
<td>17.30</td>
<td>&lt;.01</td>
<td>.98</td>
</tr>
<tr>
<td>WMI</td>
<td>77.6</td>
<td>104.1</td>
<td>26.47</td>
<td>&lt;.01</td>
<td>1.57</td>
</tr>
<tr>
<td>PSI</td>
<td>75.8</td>
<td>96.9</td>
<td>21.12</td>
<td>&lt;.01</td>
<td>1.24</td>
</tr>
<tr>
<td>FSIQ</td>
<td>76.3</td>
<td>102.1</td>
<td>25.82</td>
<td>&lt;.01</td>
<td>1.52</td>
</tr>
<tr>
<td>QRI</td>
<td>78.9</td>
<td>102.5</td>
<td>23.67</td>
<td>&lt;.01</td>
<td>1.35</td>
</tr>
<tr>
<td>AWMI</td>
<td>72.3</td>
<td>102.4</td>
<td>30.14</td>
<td>&lt;.01</td>
<td>1.70</td>
</tr>
<tr>
<td>NVI</td>
<td>79.9</td>
<td>102.8</td>
<td>22.86</td>
<td>&lt;.01</td>
<td>1.33</td>
</tr>
<tr>
<td>GAI</td>
<td>81.8</td>
<td>102.9</td>
<td>21.18</td>
<td>&lt;.01</td>
<td>1.28</td>
</tr>
<tr>
<td>CPI</td>
<td>74.4</td>
<td>100.0</td>
<td>25.62</td>
<td>&lt;.01</td>
<td>1.59</td>
</tr>
</tbody>
</table>

n = 30; ages 6-16

### Time-limited Offer!

Order your WISC-V 5 A and get your FREE Q/Interactive license today! Hurry! Offer ends 12/31/14. Reference Code: WISCVQ5

Copyright 2014. Pearson Education. All rights reserved.
Additional Questions?

Talk to a Consultant: 800-627-7271
Email: ClinicalCustomerSupport@Pearson.com

See WISCV.com and HelloQ.com for more information!

Amy.Gabel@Pearson.com