

# WISC-IV Interpretation for Out-of-the-Box Gifted Children

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## Visual-Spatial Strengths and Weaknesses Pertinent to WISC-IV Test Result Interpretation

### Strengths

Holistic: get the Big Picture  
Able to follow and find patterns  
Original, active learners  
Think in pictures, images, ideas  
Visualize and process ideas visually  
Creative, artistic, inventive  
Aware of environment, scan  
Emotional intensity  
Total immersion, can hyperfocus  
Detect significance  
Sensitive  
May be artistic and love to draw  
Love of games, humor

### Weaknesses

Don't notice details (unless exotic)  
Don't memorize isolated details  
Don't follow others' steps well  
Translate verbal to visual and back  
Poor word retrieval, simplistic language  
Enjoy mind games, esp. BD and MR  
Distractible, lose train of thought  
Variability, mood dependence  
Poor time sense, hate being timed  
Bored by routine, repetition  
Overwhelm easily  
Hate handwriting, writing in general  
Can sidetrack process

### WISC-IV Patterns That May Reveal Visual-Spatial Learners

1. **PRI > VCI** or may be roughly equal. If VCI is much lower, there is probably a deficit area in language or auditory processing.
2. **Similarities** - may go for relationships: "Red and blue make purple." Concepts may exceed expressive language capability.
3. **Vocabulary** - scenarios or personal experience rather than linear definitions.
4. **Comprehension** - may be high along with high SS if highly observant, aware of environment.
5. **Information** - can be high if a voracious reader. Weak in info usually memorized, like months of the year, leap year. Good with concepts.
6. **Block Design** - likely to enjoy, be fast. Will rotate rather than flip blocks. Can move two or more blocks as a unit. May ask for more to do.
7. **Picture Concepts** - may be a low outlier. May consistently see relationships rather than categories (The chain and the basket both "go with" the bike.).
8. **Matrix Reasoning** - possible directionality issues. Most VSLs are not impulsive, take needed time. Pattern finding a strength. Good with rotation Patterns. Enjoy this subtest.
9. **Digit Span** - reversed digits may exceed forward, especially if quick response. Often serialize incorrectly. Numbers may be remembered but in wrong order.
10. **Arithmetic** - Strong ability to perform mental math reasoning and calculation unless math-phobic.
11. **Coding** - almost always a low score, awkward pencil work, little completed. May memorize code quickly.
12. **Symbol Search** - If vision is intact, score may be high. May be impatient scanner of environment—and impatient with verbal instructions.

## Sensory Processing Disorder (SPD) and other Impaired Processing Problems in WISC-IV Behavior, Responses, and Score Rankings

### Some Categories of Behaviors Associated with SPD:

Impaired Sensorimotor Integration – incomplete coordination of systems, such as the visual-motor system or the balance system.

Impaired Sensory Regulation - difficulty modulating the amount of information or stimulation being inputted. Appear over-responsive. Easily overwhelmed.

Sensory-Seeking Behaviors – too little sensory stimulation. Children need and seek unusual amounts of stimulation (chew on collars, touch everything, rock...)

“Sensory integration is the organization of sensations for use. Our senses give us information about the physical conditions of our body and the environment around us... Countless bits of sensory information enter our brain at every moment, not only from our eyes and ears but from every place in our body... The brain must organize all of these sensations if a person is to move and learn and behave in a productive manner... When the flow of sensations is disorganized, life can be like a rush-hour traffic jam.”

---Jean Ayres in *Sensory Integration and the Child*.

### WISC-IV Patterns and Test Behaviors That Indicate SPD Problems

1. Child slouches, reclines, or props self on arms on table. Never sits upright.
2. **Block Design** – Fingers are awkward. Knock blocks away from design after placement. Generally flip, not rotate. If poor visual processing involved, there may be reversals of pattern components, of directionality, rotations. Child may not see when block is correctly placed. Blocks may be correct on the periphery but cannot be pulled together to complete the design. Design #13 (more difficult) may be better than #11 (easier but has less contrasting white space to work with).
2. **Matrix Reasoning** – Possible directionality issues. Strong reaction to visually “busy” items.
3. **Arithmetic** – Many requests for repetition of items may signal auditory processing disorder. (May also repeat question aloud or under breath.)
4. **Digit Span** – Low digits forward and even lower digits backward; also a signal of possible auditory processing or attentional weaknesses.
5. **Coding** – poor pencil control. Very light or very heavy pressure. Messy designs. Slow work. Skipped spaces or lost place.

## 2e (Twice-Exceptional) WISC-IV Patterns and Behaviors

Twice-Exceptional refers to a situation where a child is both gifted and disabled in some area(s). Both Exceptionalities require accommodation beyond usual classroom instruction.

Several patterns are possible:

1. Verbally gifted: (high VCI) with lower scores in one or more other composites:
  - a) Lower PRI if visual processing deficits. PSI also lower. WMI may be high to compensate, or not. Not NLD.
  - b) VCI and PRI unitary but either WMI or PSI (or both) highly discrepant. GAI can be used.
2. Spatially gifted: (high PRI) with lower VCI and still lower PSI. WMI may be low or high. Less a processing speed deficit than a common pattern with a visual-spatial learner. Will need accommodations around writing.
  - a) If VCI very low, language may be impaired. Possible articulation and other language production problems. Better understanding of directions when accompanied by pictures. May look away to listen better.
  - b) Possible attentional deficits. Misses beginning of instructions and needs repetition. Loses thought in mid-sentence. May drift off into own thought-space. Hard to tell if processing or lost in thought.
3. Flat-Liners: Dual LD situation where both auditory and visual systems are impaired. Results appear to be in average range but there is evidence (anecdotal or interactional) of giftedness. More investigation required. Following any needed interventions, a different pattern of test results may appear when retested.
4. Scattered scores in all areas common. Few unitary units.