

Full Scale Score (FS-AIQ) **108** Based on all ten subtest scores, the FS-AIQ is considered the best overall estimate of athletic intelligence.

Visual Spatial Processing (Gv) **111** This factor measures visual perception and organization, simultaneous processing, visual memory, and spatial scanning. Ultimately, these tasks require athletes to mentally organize visual information efficiently and effectively.

Manipulation Rotation (Shape Rotations) **96** Assesses the ability to visualize the field well, especially under altered conditions. A strength in manipulation/rotation might come into play when an athlete must adapt to his visual field changing as a play unfolds.

Navigation (Route Finding) **109** Assesses the ability to scan a visual field quickly and effectively, and determine the shortest route to the destination. A strength in navigation may enable an athlete to quickly recognize obstacles and identify the best path.

Visual Retention (Memory for Shapes) **129** Assesses the ability to form and store mental images and then recognize or recall them later. A strength in visual retention may enable an athlete to learn different offensive and defensive formations more efficiently. In addition, the athlete is likely to remember where other players are supposed to be on the field as plays are carried out.

Spatial Awareness (Design Matching) **108** Assesses the ability to maintain orientation with respect to objects in space. A strength in spatial awareness may enable an athlete to keep a specific play in mind and maintain his positioning in relation to other players or landmarks.

Reaction Time (Gt) **102** This factor measures an athlete's speed in response to stimuli. It also assesses the ability to make snap judgments, detect differences, or compare information. These tasks require sustained attention, concentration, and mental control.

Reaction Time - Simple (Simple Reaction Time) **103** Assesses the ability to respond quickly and accurately to immediate stimuli. A strength in reaction time - simple may enable an athlete to get a jump on an opposing player.

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Reaction Time - Distract (Choice Reaction Time) **100** Assesses the ability to respond quickly and accurately to important stimuli while ignoring distractions. A strength in reaction time - distract may enable an athlete to remain focused on key information while ignoring extraneous factors.

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Decision Making (Gs) **110** This factor measures the speed and accuracy of decision making over time.

Multiple Target Search (Object Scanning) **99** Assesses the ability to search for information rapidly in a visual field. A strength in this area would likely enable an athlete to quickly locate players or markers of interest.

Target Comparison (Number Matching) **122** Assesses the ability to quickly compare information in a visual field. A strength in this area may allow a player to quickly decide what to do next, based on the actions of opposing players.

Learning Efficiency (Glr) **105** This factor measures the ability to store information into long-term memory and then retrieve that information later.

Acquisition (Paired-Associative Learning) **106** Assesses the ability to store and recall information through association. A strength in this ability may enable an athlete to learn and recall plays efficiently and effectively, thus requiring less study time.

Recall (Paired-Associative Learning - Delayed) **105** Assesses the ability to recall previously learned information quickly and accurately. A strength in this area may allow an athlete to retain previously learned plays well over time.



Note: the AIQ is not intended for diagnostic purposes. It is a descriptive tool that provides information about how athletes acquire, process, and apply sport-specific information.

Analysis

- Overall, he displayed a strong cognitive profile, with no significant weaknesses and two notable strengths.

This player displayed strong visual spatial processing abilities. Athletes who earn a high score on this factor are likely to do well with general field presence and awareness.

In particular, he did very well on measures of visual retention and spatial awareness. Visual retention is the ability to take a mental picture of what an athlete sees and then remember details about it later. Spatial awareness involves maintaining spacing and orientation with respect to objects in space. For a hitter, the combination of these strengths may allow him to visualize where the previous pitch or pitches crossed the plate and assist in reading the movement and trajectory of the next pitch in relation to the strike zone. His strength in spatial awareness may also help him maintain appropriate mechanics at the plate, because he can picture his body in space. He also did well on a measure of navigation. As a centerfielder, this strength may enable him to take efficient routes to the ball.

Additionally, given his exceptional strength in target comparison, he is likely to do well with quickly deciding whether to tag up or go half-way on a ball hit to the outfield.

Strengths were also noted in the area of learning efficiency. As such, he may have a competitive advantage compared to other elite athletes when learning new strategies and techniques, as he will require less time and effort to digest this information. Additionally, he may do well with remembering scouting information (e.g., pitcher's repertoire and tendencies) when needed.

Recommendations

- Based on his significant strength in visual retention, he may be able to see in his mind where previous pitches crossed the plate and whether they were called strikes.

His strength in spatial awareness should help him perceive how both his body and the ball move in space. As a result, he should be able to make adjustments when the hitting coach or others note issues with mechanics.

Based on his strength in navigation, if he gets a good jump on the ball, he is likely to do well with getting to spot to make the catch.

Considering his significant strength in target comparison, coaches may want to encourage him to focus on either-or decisions. This would apply on the basepaths or in the outfield.

Given his strength in learning efficiency, he should be able to learn important information in practice and recall it when needed during games. He is also likely to grasp information faster than other elite athletes.