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HOW CAN I USE MY S2 SCORE TO BECOME A BETTER PLAYER?

The S2 Score Eval gives you personalized insight into how you process what you see and control split-second decisions. Equipped with these new insights, you can better understand why some challenges on the field come easier to you and why you may struggle with others. Understanding what areas to improve and fine tune is what helps you improve your game. Your profile serves as a roadmap for targeting specific areas to improve on the field.

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HOW ARE PROFESSIONAL AND COLLEGE BASEBALL PROGRAMS USING S2 WITH THEIR PLAYERS?

S2 is being used by MLB teams in every division of major league baseball as well as by top collegiate baseball programs around the country. The teams not only use S2 in the selection and recruitment decisions, but perhaps more importantly, in how they develop their players. It gives teams the insight they need about why and how each player excels and struggles at the plate and in the field so that they can develop customized training and development plans for each athlete. Teams are using drills developed by S2 and top-level hitting coaches to help their players improve their hitting and fielding performance.

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IS IT COMMON TO HAVE HIGH AND LOW SCORES?

Just like every athlete brings a unique set of physical skills to the game, with some high and others low, every athlete's brain is wired with a unique set of cognitive skills, with some high and some low. It is true that athletes we've tested playing at the highest level in their sport tend to have more high scores than low scores, but even some of the best baseball players in the world have some low scores. Some elite hitters have exceptional contact rates, but show limited power. Similarly, some elite athletes can process what they see with incredible speed and accuracy, but have difficulty controlling their impulses to chase bad pitches out of the strike zone. Most athletes have patterns of peaks and valleys in their cognitive profile just like they have stronger and weaker areas in their physical skills and technique.

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HOW SHOULD I INTERPRET LOW SCORES?

At first, athletes can often feel a bit discouraged by low scores. Nobody likes low scores. It is important to keep in mind that you are being referenced to a competitive group of athletes. Even on an elite baseball team, someone is the slowest runner, someone has the weakest arm, and someone strikes out the most. Just because you have low physical or cognitive skills in some areas, doesn't mean you can't be a successful baseball player. The better way to approach low scores is to consider how they give you insight into the kind of challenges you face as an athlete. Knowing what you struggle with is the starting point for adapting your game and your training so that these struggles don't show up as much on the field. Pro ball players who have taken the evaluation and had some low scores universally acknowledge that they struggle in these areas, but immediately want to know how to work on or work around them to minimize their impact during play. Keep in mind that the best performers in any skill or profession not only want to know the things they do well, but also want to know their weaknesses so that they can refine their performance. Small improvements in weaker areas can have big impact on the baseball field.

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THE SCORES ARE PRESENTED AS PERCENTILES - WHAT IS THE CORRECT WAY TO INTERPRET PERCENTILES?

You may be familiar with percentiles used in standardized tests, but here is a brief refresher. Percentiles represent a ranking of your performance compared to a reference group of athletes. The 50th percentile can be considered the average (actually, it is the median) score. Technically, a score at the 50th percentile means that you performed better than 50% of the reference group, but that the other 50% scored higher than you. As another example, a score at the 70th percentile means that you scored better than 70% of the reference group of athletes, but that 30% scored higher than you. Higher percentiles equal better performance, with the 50th percentile representing the average score. Keep in mind that you are being compared to top athletes in your age range. There are lots of scientific studies showing that athletes perform better on these split-second decision skills compared to non-athlete peers. So lower scores are perfectly normal and may not even be low when compared to the general population of your peers.

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DO THESE SCORES HAVE ANYTHING TO DO WITH BOOK SMARTS OR INTELLIGENCE?

The S2 evaluation measures the same brain systems that athletes engage during play, which are very different than what is measured in the classroom and on standard IQ tests. Decisions in the classroom and on tests of intelligence measure abilities in everyday sorts of thinking skills and when you have minutes or hours to process information and make decisions.

In the batter's box or in the field, a baseball player makes split-second decisions in sub-second time frames. The brain systems involved in split-second play decisions are very different and unrelated to book smarts or IQ. We have tested incredible athletes who struggle in the academic classroom, but who can see, process, and react with incredible skill on the field. Similarly, just because someone excels in the classroom, those skills don't always translate to the field. Whether you score high or low on specific skills in the S2 evaluation has very little relationship to academic performance or intelligence.

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ARE THESE SKILLS GENETIC OR LEARNED, AND ARE THEY TRAINABLE?

Like most complex behavioral and cognitive processes, performance involves a complicated combination of genetics and experience. There are certainly cognitive skills that depend a lot on genetics, but the expression of most cognitive skills depends a lot on opportunities to exercise these skills in learning experiences, practice, and real-world performance. Cognitive systems in the brain develop at different speeds and peak at different ages, and some systems are more trainable than others. As a general rule of thumb, many visual processing skills, such as how fast we recognize visual information, are pretty well developed by our early teens, so training should really be focused on learning to process the visual cues in the performance context as well as possible rather than trying to do generic visual training to further develop your visual processing systems. Other cognitive skills, such as impulse control and controlling our distractibility, aren't fully developed until our late teens and sometimes into our mid-twenties, and these systems are more trainable and able to be adapted during performance. Still, the best approach is to train these systems in the performance context. The ultimate goal for training these cognitive systems is to push these systems to be the best they can be, as consistently as possible, when you perform on the field.

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WHAT'S THE BEST WAY TO TRAIN THESE SKILLS?

There are many brain training gadgets, gimmicks, and shortcuts out there that promise to make someone a better hitter in a short time with minimal effort. Unfortunately, very little work on a computer, tablet, or phone screen will "transfer" to better performance on the field. Lots of science shows that the best way to train and improve performance is to practice a particular skill more intentionally in a very similar context as you expect to perform. In other words, the best way to train these cognitive systems is by working them on the field or in the cage in ways that are similar to how they are used during a game. The training context doesn't have to be perfectly identical to an actual game, but should have a lot of similar features, and drill progressions should always be designed so that you are moving from a context with some similarities to a context that is highly similar to an actual game. At S2, we are big proponents of designing smarter drills for the cage and field that isolate and train split-second decisions. We are also proponents of designing drills that link what you see and decide to what you actually do – that is, train your brain with a bat in your hand rather than with an iPad in your hand. If you want to make faster, better decisions in the batter's box, you need to approach your hitting drills differently by challenging your decision skills. If you only take batting practice off a machine that throws a constant speed in the same location, don't expect to become a more selective, disciplined hitter at the plate. In your report and report package are drills and drill concepts to get the ball rolling.

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SHOULD I ONLY TRAIN MY WEAKER AREAS, OR SHOULD I ALSO TRAIN MY STRONGER AREAS?

Simply – train both. Train the weaker areas to minimize any negative impact on your performance, and fine tune your stronger areas so that you take maximum advantage of these skills during performance. Working on weaker areas is always more challenging, but also represents the biggest opportunity to improve performance. We caution against setting expectations too high; these cognitive skills take lots of time to move the needle. Keep reminding yourself that small, incremental changes in cognitive performance can have a big impact on the field. Also, don't neglect your strongest areas. Make sure to work on them and challenge them as much as you can to keep them sharp and tuned for optimal performance.

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HOW OFTEN SHOULD I TRAIN THESE SKILLS?

We recommend adding cognitive drills to your weekly routines and spending as much time working on your swing decisions as you do your swing mechanics. The drills and drill concepts provided by S2 represent the basic starting point, although they are sufficiently challenging to impact performance. If you opted to receive future news from S2, you will receive opportunities to learn about advanced drills.

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HOW OFTEN SHOULD I TAKE THE S2 EVALUATION?

The cognitive skills measured in the S2 evaluation are very stable over time, especially past the age of 18. At younger ages, some of the skills can change incrementally as your brain develops. We generally recommend re-testing every two years. However, some athletes choose to test once a year so that they can see how they stack up to their peers at each age level or against the top high school or collegiate players. Keep in mind that the ultimate goal is to get better on the field, not necessarily better on the S2 evaluation. The S2 evaluation provides a road map for unlocking your invisible edge and targeted training to improve on the field.