

VISUAL SKILLS REQUIRED FOR SPORTS OFFICIALS

Officials in team sports are responsible for interpreting and enforcing the laws of the game on the field of play, thereby protecting the players from potential injuries. Apart from the maintenance of “fair play,” the decisions of referees can affect the outcome of a game significantly. Perceptual and cognitive skills are required to make sure that the decision-making process results in accurate, consistent, and uniform decisions. Researchers have demonstrated that science-based, off-field perceptual-cognitive training protocols can increase accuracy of the decision-making process.¹

Some activities, such as basketball, soccer, football, and hockey are sports of almost constant motion, so just as it is for players, well-developed dynamic acuity (ability to maintain visual clarity when players and/or puck are in motion) is just as significant as good *static acuity* (smallest detail that can be distinguished in a stationary target/setting, like the goal in hockey/soccer or the backboard in basketball) for officials.

The same holds true for “slower moving” sports such as baseball. For example, when calling balls and strikes, an umpire must use his/her eyes to measure the location of a very fast object (a pitch) which is often moving at a trajectory that is designed to fool the hitter, often crossing a variable “strike zone.” Or, in the field, where an official needs to be aware of a runner’s foot hitting the base, while also being aware of the ball being caught by the fielder. This can be further complicated by the fact that the official is juggling two sensory perception tasks simultaneously (in this case seeing a foot touch the bag and hearing the ball strike the mitt).

To be effective, officials require intense concentration and awareness of what is happening at all times. A slight lapse in either of these areas could result in a missed call or a questionable decision that could ultimately affect the outcome of the game.

Sports Vision & Performance training can also help enhance these and other dynamic skills that specifically relate to the functions performed by officials.

Accommodation and Convergence

Accommodation is the ability to change focus instantaneously as the play moves closer to, or farther away from you. Convergence is the ability to keep both eyes working in unison so as to achieve good, clear vision, as you track players or a fast-moving puck or ball.

Anticipation Timing

The visual system provides you with the information needed in order to act, as well as the information needed to judge when to act. Timing is the key to effective performance. The ability to anticipate is a major factor in high-level performance, and even superior speed, size and reflexes cannot compensate for the insufficient processing of visual information regarding when to perform.

Concentration

Maintaining a high level of concentration and focus, no matter what sport you are officiating, is essential in order to deliver a great performance. Maintaining total awareness of what is happening all around you should not be confused with staring, which is just a form of distraction. Staring means the eyes are not focused but are, in fact, disassociated from the action and represents total loss of concentration with little or no sharp awareness of what is going on around you. To perform effectively it is necessary to maintain an unwavering focus on every relevant bit of information, i.e. your position in relation to the action, as well as the discipline not to be distracted and the energy to sustain that total concentration for the duration of the contest.

Depth Perception

In sports such as hockey, soccer, and football, the ability to accurately judge the movement of the puck or ball as it relates to a stationary line and/or moving players is critical in determining goals and off sides.

Eye-Hand Coordination

Physical fatigue can greatly affect concentration, visual reaction time and eye-hand coordination. Eye fatigue can also affect performance levels much the same. When the muscles in our eyes feel tired or strained, we feel the fatigue all over. Just like a weight lifting routine is used to increase physical endurance, visual exercises can be used to strengthen the eye muscles, and reduce fatigue.

Visual Reaction Time/Speed

How rapidly the official processes the visual information or game action and initiates a physical response; be it blowing the whistle, calling out a runner sliding into a base, or waving off a call. An immediate response can often keep a situation from getting out of hand.

Peripheral Vision/Awareness

Enhanced peripheral awareness allows the official to concentrate on a key target, and still be aware of the entire play/action as it develops around them. This in turn, could help to avoid personal injury from unexpected sources, as well as helping them to be aware of interactions that happen away from the puck or ball (i.e., in hockey, too many men on the ice; in football, holding).

Speed and Span of Recognition

Since the official must be able to read the entire play at all times, it is essential to take in and interpret many different visual activities at one time. Visual memory is also very important in order to recall action or events in their continuity when assessing penalties or awarding goals, or calling a runner safe or out.