Vision Tips for Athletes

Question for the group: How important is visual acuity in sports?

Listen carefully to how to hit a golf ball:

Begin your backswing by gradually shifting your weight to your back foot. Just before you start rotating your body, raise your arms back slightly in a straight line. In a single, continuous motion, rotate your arms, shoulders, and hips backward. Keep your arms fully extended as you rotate into your backswing. Once your club is around shoulder height, bend your wrists to hinge your hands and raise the club up higher. Did you follow that? And this was just the backswing!!!

Countless numbers of authors have written books about how to swing a golf club, how to hit a tennis ball, how to hit a baseball, etc. There's got to be a more efficient way to teach. That's what this presentation hopes to accomplish. I will discuss the psycho-visual portion of sports excellence and how you can advise your patients. The athlete with superior visual skills will defeat the athlete with inferior visual skills, other factors hypothetically constant.

Your VT patients want to improve their athletic performance quickly. Most are amateurs and so their time is limited due to life's responsibilities. Professionals have more time to practice. I will discuss concepts such as visualization, attending to small targets, and some sports psychology. A major goal of VT is to help people become more efficient.

Muscles don't understand English. I propose a more effective golf lesson involves the beginner observing the action, closing the eyes, and visualizing the action over and over again. Yogi Berra said, "You can observe a lot by watching." On a serious note, Einstein said, "Imagination is more important than knowledge."

If you want to become a better tennis player, watch a professional player, visualize their movements, which will help program the muscles to recreate the movements. Research has shown that if you visualize a certain activity and you measure the muscles involved in that activity, there will be an actual contraction of the muscles involved. For example, if you visualize yourself running, the muscles involved with running will contract. The brain cannot distinguish between an activity performed and an activity that is visualized.

Visualization

Visualization is real. Thoughts are real. Radio waves are real. Electricity is real. You can't see these as objects, but they're there. Einstein: "Everything is energy. Match the frequency of the reality you want and you will get that reality." One can accomplish this via visualization. For example, visualize prior to serving in tennis exactly where you want the ball to land.

A study years ago involved three groups of basketball players shooting free throws:

- A. Practiced for a month, improved by 23%
- B. Control group no practice, no improvement
- C. Visualized only, improved by 23%

Visualization Tips

- 1. Eyes closed
- 2. Upon awakening and before sleep, and during breaks of a game
- 3. Regular motion
- 4. From within
- 5. Details including colors, smells, wind, etc.
- 6. "Feelmages" by Gallwey

Small Targets

When there are too many instructions given to a student athlete, the language distracts the student away from the most important action: To keep the eyes aiming at the ball. The primary goal of the athlete is to be <u>obsessed</u> with aiming the eyes on the desired target. In many sports, the athlete must go beyond just keeping the eyes on the ball. In baseball, for example, the hitter needs to attend to the <u>center</u> of the ball. In basketball it means attending to a minuscule spot on the inner back rim of the basket. This: 1) Reduces the error, 2) Reduces nervousness, which in turn maintains the muscles acting efficiently as opposed to tightening, 3) Keeps the mind on the task at hand. Aiming the eyes towards small targets squashes inner chatter because you can't do two functions at a time. Yogi Berra was right when he said, "You can't hit and think at the same time."

Combine visualization with attending to small targets. TRUST the muscles to act well. This prevents muscle tightening and nervousness, while promoting confidence. Gallwey writes about a tennis student who complained of difficulty

hitting the ball on the sweet spot of the racket. He threw her 10 balls, of which only 2 hit the sweet spot. He instructed her to look at the seams with zero instructions about the forehand technique. She proceeded to hit 9 of 10 on the sweet spot. Vision directs the action!!!

In daily activities, people do not need to hone in on small targets. When you reach for a drinking cup, there's no need to hone in on a minuscule part of the cup. So in sports, this skill must be taught, learned, and practiced.

Combine central-peripheral vision. Advise a hitter to heighten awareness of space/air between self and pitcher. Advise the hitter to follow the pitcher's throwing hand during the windup, watching the ball all the way from pitcher to bat, honing in on the center of the ball.

It may be impossible to watch a 95mph fastball hit the sweet spot of the bat, but it behooves the hitter to make the attempt.

Visualize the action, look at a small target, feel if applicable, exert maximum effort to let it happen. Trust the body. The visualization tells the athlete what to do without words. The visualization sets the stage for the desired action.

Visual Follow-through

In basketball, keep looking at the small target after shooting ball as long as possible. Easily done for foul shooting.

In golf, keep head down when putting until you hear the ball drop into hole. In baseball, keep head down after making contact. Visualize all this!

Suppress That Annoying and Interfering Inner Chatter

Inner talk and awareness are inversely proportional. When the mind is quiet, one experiences maximum awareness. Inner talk occupies consciousness and interferes with performance. There are two actions to take to quiet the mind. During periods of inactivity in the game, be aware of your breathing. Do this now as an experiment. The other action takes place during the action. Attend to small targets. I repeat, "You can't hit and think at the same time."

Vision Training Procedures

Obviously, develop maximum binocularity for most sports. Also work on pursuits and saccades. Remember that the basketball player needs to catch passes. The saccades will help the player hone in on a tiny piece of the back rim in a hurry. Have the basketball player practice monocularly, which will

enhance player's ability to gauge how far away the hoop is as well as concentration ability. Advise the player during VT to include awareness of back space. Advise the player to practice these awareness skills informally when out of the VT room too. When looking at objects outdoors, be aware of space between self and object, aware of space beyond object, and be aware of space behind oneself. Practice peripheral awareness too, which will help a basketball player spot a teammate for a pass.

Some Psychology

I cringe when I hear players talking about their golf handicap. Sets up a rigid belief system and interferes with growth. It is self limiting.

- 1. Stop judging actions as good or bad. Stop judging the events as negative or positive. Judging an event encourages inner talk. This, in turn, may lead to the "I'ms". I'm a lousy server, I'm a slow runner, I'm a lousy shooter under pressure, I'm...You become what you think.
- 2. In other words, stop labeling; just maintain awareness. For example, if you hit the tennis ball into the net, you hit the ball into the net not good and not bad; child learning to walk will fall at times not bad.
- 3. Stop thinking about past errors; stop worrying "what if's", eg What will my teammates think if I make a mistake. Stop attaching your worth as a human to the sport.
- 4. Be grateful: Notice the beauty of the baseball field; the thrill of freedom of movement; the thrill that you have a healthy body and can play the sport in the first place.

Nobody plays well under pressure; successful players remove the pressure. The athlete has control over playing his/her best. There is less control over winning. A successful basketball player will shoot a free throw the same way whether it's the beginning of the game or whether there's one second left on the clock down by a point. The player will attend to the task at hand in the present moment.

If someone asks me if I think I will win a particular match in tennis, for example, I will follow what Jimmy Connors said in response to a question about an upcoming US Open. "Do you think you will win the tournament?" "I will exert maximum effort on every point. If I win enough points to win the tournament that will be great; if not, at least I gave it my all."

Doctrine of the Easy: Actions done easily are done well.

If a golfer can hit a solid tee shot once, what stops him/her from hitting a solid tee shot all the time? Why do many athletes perform better in practice than in games? Assuming no physical limitations, deficient vision interferes.

I went over effective ways of preparing for an upcoming game via visualization.

Other key concepts:

Visual system directs the motor system.

VA one of the least important visual skills an athlete needs! But it is important.

Vision gives us information as to where and when. A hitter with a perfect swing will fail if they have inefficient vision.

Look at small targets.

Inner chatter occupies consciousness and reduces awareness. Be aware of breathing to squash inner chatter.

Psychology: Remove the pressure; stay on task.

As Dr. Don Getz said, "If you're thinking about keeping your eye on the ball you are taking your eye off the ball."

"Ninety percent of hitting is mental, the other half is physical." - Yogi Berra