

Reading

Peripheral Vision in Sports

Focus in on something as small as a pin. Notice that everything else that fills your whole area of possible sight is **indistinct**, lacking in detail. We **tolerate** this large outlying field of **blur**, this **peripheral** view, without taking note. We **unconsciously** accept it. Sometimes we take charge of how we process all that **blur** surrounding the tiny center¹ that our **vision** is focused on. Athletes best **demonstrate** just how much we can use the entire range of our vision, fanning out to the periphery.

An **athlete's performance**, necessitating high levels of coordination and reaction time, depends on training visual abilities, not just tuning muscles. **Detecting** and keeping track of as much motion as possible while performing physical **maneuvers** is quite a feat. **Peripheral** visual information is processed quickly. The office worker might notice the tiny **distracting** insect moving beside the computer, but the fast-moving athlete must **detect** all kinds of motion from every angle and never lose concentration. Each peripherally viewed movement must be immediately processed as more and varied movements from different sources and directions keep coming rapidly. Good footwork and body positioning will help the athlete gain viewing time in this intense environment, improving the opportunity to **anticipate** what will happen next.

The athlete's view, full of movement, requires rapid **scanning** with visual focus changing rapidly among various distances. Tracking fast objects is often **complicated** by the need for the athlete's body to move in response to other aspects of the activity, and head motion must **coordinate** with eye movement to assist in balance. A volleyball player, for example, must pay attention to body positioning in relation to the speed and angle of the moving ball as well as to the court **boundaries**, all the while scanning the movement of the other players. Athletes need as much peripheral **range** as possible.

The environment contributes to athletes' visual sharpness. Contrasting court backgrounds, adequate **lighting**, nonconfusing uniform color combinations, and less off-court motion all help the athlete's peripheral concentration. It seems odd that visiting baseball teams are allowed to dress in gray uniforms when bright colors would help the home team keep a better eye on them.

Everything that catches the athlete's attention causes the eyes to pause almost **indiscernibly** as they gather a quick view of focused detail. As the eyes move in and out of focus, there is a momentary blur between each pause. This is when visual tracking errors can occur. Even the act of blinking, usually at a rate of twenty-five blinks per minute, or one-tenth

¹BrE: centre

of a second per blink, interferes with the athlete's **vision**. Normal, natural blinking means the eyes are closed for two and half seconds out of every minute, and more than that if the athlete is anxious. This is added to the rapid **blurs** that occur as the athlete's eyes move in and out of focus on specific objects. These nonvisual moments can be somewhat compensated for if the athlete thoroughly tunes in to the game. Anticipation, a learned and practiced² art, can serve the athlete well in many ways.

Answer the questions about **Peripheral Vision in Sports**.

Questions 1–7

Do the following statements agree with the information in the reading passage?

Write

- TRUE** if the statement agrees with the information.
FALSE if the statement contradicts the information.
NOT GIVEN if there is no information on this in the passage.

- _____ 1. Peripheral vision refers to what we see near the boundaries of our visual range.
- _____ 2. Focusing our eyes on one object only will cause that object to look indistinct.
- _____ 3. In addition to physical abilities, athletes need to be skilled at detecting movements all around them.
- _____ 4. Office workers tend to find that certain kinds of movements are more distracting than others.
- _____ 5. A volleyball player does not need to focus on the movements of the other players on the court.
- _____ 6. Poor lighting and confusing color combinations on uniforms can have a negative effect on an athlete's performance.
- _____ 7. Athletes blink more often when they are feeling anxious.

²BrE: practised

My Words

Write the words that are new to you. Look them up in the dictionary and write their definitions.

Words

Definitions

Word Families

noun	complication	Playing a ball game is not as simple as it may look; there are many complications.
verb	complicate	The need to pay attention to many things at once complicates the game for an athlete.
adjective	complicated	A game can become very complicated when there are many players on the field.

noun	coordination	It is important for an athlete to have good physical coordination.
verb	coordinate	An athlete must coordinate physical skill with sharp vision to play a game well.
adjective	coordinated	The coordinated movements of all the team members will help them win the game.

noun	demonstration	The athlete gave a demonstration of the correct way to throw the ball.
verb	demonstrate	Professional athletes demonstrate a high level of skills.
adjective	demonstrative	The way that goal was scored was demonstrative of good teamwork in action.

noun	performance	The team gave an excellent performance at last night's game.
noun	performer	All the performers did a good job.
verb	perform	The entire team performed well during the game.

noun	tolerance	An athlete should have tolerance for hard physical activity.
verb	tolerate	Athletes need to be able to tolerate a high level of action around them.
adjective	tolerant	Good athletes always try to do their best but must still be tolerant of occasional failure.

noun	vision	Good vision is important for playing sports well.
adjective	visual	In sports, visual abilities can be as important as physical abilities.
adverb	visually	The coach used drawings to explain the game visually.

Word Family Practice

Choose the correct word family member from the list below to complete each blank.

In order to **1**..... well, an athlete must have a number of different abilities. Naturally, she should **2**..... excellent physical skills. In addition to strength, **3**..... of all parts of the body while moving around the court or field is very important. The athlete also needs to have good **4**..... abilities. She needs to be able to see what is happening around her so that she can respond to the other players' maneuvers. She has to be **5**..... of activity around her without losing her ability to focus on her own part in the game. Finally, she needs to be a fast thinker. **6**..... can occur in any game, and the athlete needs to be able to respond to them quickly.

1. performance	performer	perform
2. demonstrations	demonstrate	demonstrative
3. coordination	coordinate	coordinated
4. vision	visual	visually
5. tolerance	tolerate	tolerant
6. Complications	Complicate	Complicated

Dictionary Skill

Parts of Speech

Focus can be either a noun or a verb. *Blur* can also be either a noun or a verb.

Read the dictionary definitions below. Then read the sentences and write the letter of the correct definition for each sentence.

QUESTIONS 1–2

fo-cus [FO-kus]

A *noun*. the center of attention

B *verb*. to center attention on one object; concentrate

_____ 1. When playing a game, always *focus* on the ball.

_____ 2. Keep your *focus* on the goal.

QUESTIONS 3–4

blur [BLUR]

A *noun*. something not seen clearly

B *verb*. make unclear

_____ 3. I couldn't follow the game; it was all a big *blur* to me.

_____ 4. Poor lighting can *blur* the players' vision.

Listening

CD 1
Track
5

Listen to the discussion. Complete the notes below.
Write **NO MORE THAN ONE WORD** for each answer.

Vision and Basketball

Basketball players have to **1**..... on the ball. They have to **2**..... the other players' maneuvers. They **3**..... the whole court to see the actions of the rest of the players. They don't think about this; they do it **4**..... .