Getting Into the Optimal Performance State

In recent years there has been a great deal written about optimal performance states. Optimal performance, as it is being defined here, refers to those relatively infrequent times when individuals feel totally immersed in the performance. When that happens, performers describe the experience as something outside of the ordinary. They are "in the moment" performing at an automatic level, without need for conscious thought and direction. They feel totally in control, totally focused on the task, extremely confident, with a total loss of self-consciousness, and their perception of the passage of time is altered, either losing all awareness of time, or feeling as if things are happening in slow motion (Williams & Krane, 2000).

The optimal performance state has been referred to in a couple of ways. Athletes often talk about "being in the zone," and some psychologists have talked about "the zone of optimal functioning." The reference here, is to some optimal level of arousal that leads to better integration of mental and physical processes and superior performance (Prapavesis & Grove, 1991; Hanin, 2000).

Automatic vs. Controlled or Conscious Attentional Processes

Shiffrin and Schneider (1977) and Wegner (1994) described two types of attention. The first is controlled processing, which I have referred to as conscious processing (Nideffer, 1999). This type of concentration is effortful, serial in nature, slow, and as indicated consciously controlled by the individual. It's the type of concentration an athlete uses when he or she systematically, mentally rehearses performance. Controlled processing can be contrasted with automatic processing, also called involuntary, or unconscious processing. This type of attention occurs without conscious effort in that other things can be going on and not be interfered with.

Automatic processing is parallel in nature, and is much faster than controlled processing. Most of us rely on our ability to automatically process information when we drive a car. Even the average driver's skills are so highly developed that he or she is capable of carrying on a conversation, looking at the scenery, etc., while driving. There is no need to consciously remind oneself of the need to turn, brake, shift, etc.

Involuntary, or unconscious processing of information is what occurs when athletes are in the zone (Cohen, 1991), and when individuals get into the flow state (Csikszentmihalyi, 1990). Associated with this type of processing is a feeling of being in control of things, without making any conscious effort to do so. Since involuntary processing seems to be the key to optimal performance, we need to be able to define the conditions necessary for an individual to be able to develop and maintain that type of processing.

Coaches, and teachers of the performing arts, have long recognized the need for performers to practice their performance skills long past the point of simple acquisition of the skill. It is "over learning" that helps to reduce the likelihood that performance will be interfered with by anxiety and/or emotional arousal. Huey (1968) suggested that it is hard work and practice that turns conscious attentional processing into automatic or unconscious processing. Put simply, there is no shortcut to getting into the zone or flow states. The more time you have put into the development and refinement of the skill, the more likely you are to be able to get into one of these altered states of consciousness.

Getting Into the Zone

To get into the zone, an athlete has to have practiced to the point that performance can occur at an automatic level. Given that level of development has been reached, the athlete must then reduce the amount of conscious internal processing of information as much as possible. Researchers talk about the importance of becoming immersed in the performance, caught up in the "here and now." In effect, the athlete is so busy reading and reacting (automatically or instinctively) to the events going on around him or her, that analyzing and planning cease. The athlete stops thinking about the past, or worrying about the future. Instead, attention is focused almost exclusively on the external environment. When this happens, the athletes perception of the passage of time is altered.

I've described the relationship between the passage of time and ones focus of concentration elsewhere (Nideffer, 1999; Nideffer & Sagal, 2001). Briefly, attention is constantly shifting from an external or environmental focus to an internal one (e.g., to your thoughts and feelings). As the frequency of shifting decreases, ones perception of the passage of time is altered. When attention is focused almost exclusively on the environment time appears to slow down. Athletes in the zone will tell you that things happen in slow motion and as a result feel as if they have more control and more time to react.

Staying In the Zone

To stay in the zone, the athlete must continue to be immersed in the performance itself. Anything, that forces concentration to become controlled will pull the athlete out of the zone. It pulls the athlete out of the zone, because the conscious control of concentration requires an internal shift. For purposes of our discussion here, it will be useful to classify stimuli that require conscious or controlled attention as either task relevant, or task irrelevant.

Task Relevant Stimuli

Most performance in sport is demanding, requiring athletes to string together very complex motor sequences (e.g., to run, dribble, and shoot a basketball while reacting to the movements of other players). To learn such complex sequences, athletes break them into their component parts. Those parts are practiced in isolation, and as the individual pieces are developed the athlete begins to put them together until he or she is able to execute the entire sequence.

With practice, the athlete learns to combine perceptual information (e.g., information about the location of the basket, other players, etc.) with internal information (e.g., feedback from the body about it's position in space), to create patterns that the brain can recognize at a preconscious level (Norman 1968).

One of the ways I help athletes understand this particular concept is to talk about their center of mass, that spot in their body where a vertical line that splits the body into right and left halves, would intersect with a horizontal line that splits the body into a top and bottom half. I point out that in sport, power, coordination, and timing are dependent upon the body's movement around that center of mass. A baseball hitter, to get maximum power out of his swing, has to time the transfer of his weight from his back foot to his front foot so that maximum bat speed and body weight come together as the bat makes contact with the ball. If the weight transfer is either too early, or too late, the hitter will lose power.

Each time an athlete changes the direction of movement around his bodies center of mass, the brain receives a pattern of stimulation. These patterns are task relevant, and only occur at the transition points. With practice, the athlete learns to match the pattern of kinesthetic cues he is receiving to the perceptual information that is coming in (e.g., position of the ball as it approaches the plate). As Norman points out, with a great deal of practice, these patterns can be recognized without having to consciously process the information. It's as if the picture the athlete receives from the brain says "yes" of "no". If it say's yes, the athlete stays immersed in the performance because no conscious adjustments are required. If it say's "no" the athlete will begin to consciously process the information to determine what adjustments need to be made to get back on track. If the athlete is highly practiced, and has seen this particular problem (e.g., getting out in front of a pitch) enough times, even the adjustment can be made automatically.

On an average day, athletes find themselves having to make adjustments in their performance. These adjustments require just enough conscious attention to keep them from becoming totally immersed in their performance. On a good day, however, the potential for getting into the zone is definitely there.

Self-Confidence, Immersion, Ego-Loss, and Love

Anxiety, is a major stumbling block that prevents many individuals from getting into the zone or flow states. If you try and get to the root cause of anxiety you can usually narrow it down to one of three areas. 1) A lack of confidence in your ability to perform up to your own expectations and/or desires; 2) A lack of confidence in your ability to perform up to the expectations of significant others (coach, parents, etc.), and 3) A fear of physical injury and/or death.

When a performer becomes immersed in a performance, whether the performance is physical (Zone), or mental (Flow), all three of the fears just mentioned cease to exist. The question we have to ask ourselves is which comes first. Does getting into the zone eliminate fear, or does the elimination of fear allow you to get into the zone?

Clearly, practice and training that lead to increases in skill level and confidence, can contribute to an athletes ability to get into the zone. Likewise, being involved in a performance or problem where the challenges presented are far more interesting to you than any particular outcome, and/or than the reactions that others have to the performance, can help you get into the zone. Having said those things, however, we have to realize that there are times when a lack of experience, and/or the challenges presented by the immediate situation appear to be insurmountable. Yet in the face of insurmountable odds, some individuals still manage to overcome all of the doubts and anxiety and get into the zone or flow state. That's where love comes into play.

Note that the above are only extracts from a lengthy article with the intent of identifying the optimal performance zone, its effects, et cetera.

Nideffer, R, M, 2016, Getting into the optimal performance state, viewed 20th August 2022, https://nideffer.com/wp-content/uploads/2016/06/Optimal-Performance.pdf