



LEADERSHIP

Mental Preparation For Peak Performance



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OBJECTIVES

- To identify a player's peak performance
- To identify skills and attributes
- To describe strategies for peak performance

INTRODUCTION

This chapter is designed to examine psychological strategies for mentally preparing athletes for peak performance. To accomplish this objective, a pyramid model of peak performance is presented and discussed. Components of the model include foundational or psychological make-up and performer personality factors, psychology of peak performance strategies and coping with adversity strategies. Within each component of the model a variety of mental preparation skills and strategies are examined. It is argued that for athletes to consistently achieve peak performance, psychological skills and strategies within each of the three components must be developed and continually refined.

MENTAL PREPARATION FOR PEAK PERFORMANCE

"I had a lot of rituals in terms of getting dressed. At the building I had a lot of rituals about how I got dressed or the route I would take to the arena or the ice ... I follow an order ... I think the order is what's important at a very stressful time or at a competitive time." — national champion figure skater.

"I felt ready, I felt prepared ... My approach was basically win or take me off on a shield. I was either going to win the match or they were going to carry me off. So I was very positive. I wasn't going to hold back at all." — Seoul Olympic wrestler.

"Acknowledging that you were nervous. Using your nervous energy in a positive way. That was totally effective. To acknowledge it first of all. Instead of saying, "No, I'm fine," and then going up and totally freaking out, you just say, "I think I'm o.k. I'm just really anxious to get out there and use it. Don't let it

just totally screw you up." Everybody gets nervous. It's just who handles nerves the best." — national champion figure skater.

"I was focusing on his style, what he liked to do, the pace of his wrestling, what side he leads on, what he likes to do as far as inside position ... So I was focusing on what I could do. For me, it was picking up the pace on him, staying inside, trying to push him harder than he wanted to be pushed but, at the same time, I wanted to be fairly under control and conservative — national champion figure skater.

Quotes from elite athletes like these clearly demonstrate the varied ways athletes mentally prepare for peak performance. Moreover, because the salience of mental preparation for athletes and coaches is a topic that interests sports psychologists, in the last 10 years considerable gains have been made in our knowledge on the topic.

A Unifying Model of Peak Performance

A good way to understand mental preparation for peak performance is to consider a general framework for organizing how mental skills are involved in achieving athletic excellence. One such framework appears in Figure 1-1. This framework was developed by Gould and Damarjian and considers three important sets of psychological factors that interact to produce peak performance in an athlete the psychological foundation or make-up/personality of the individual involved, the psychology of peak performance strategies and coping with adversity strategies.

At the base of the pyramid of success is the psychological foundation or make-up/personality of the individual. While our understanding of the role of personality in sports is far from complete

and the identification of the personality profile of the superior athlete has not been identified, a number of personality characteristics have been shown to influence the quest for athletic excellence. For example, an individual's goal orientations, trait self-confidence and trait anxiety are examples of important factors to consider. Other factors that might be important for future researchers to consider might be meaningfulness, hardiness and optimism.

The left side of the pyramid consists of peak performance strategies, which sport psychologists have spent considerable time identifying as necessary for peak performance. Examples include such things as concentration, a focus on performance goals, the use of specific mental preparation routines and strategies. While the use of such skills will not ensure success, their use "sets the table for success" by creating a psychological climate that increases the probability of exhibiting a good performance. Hence, when designing mental skills training programs, decisions should be made to teach and develop the specific peak performance strategies most relevant to the sport and athlete involved.

A common mistake made in mental skills training is to focus sole attention on peak performance strategies. This is problematic because athletes must also learn to deal with adversity. For example, Gould, Jackson and Finch (1993) found that national champion figure skaters experienced more stress after winning their national titles than prior to achieving it. Stress resulted from such factors as their own and others' performance expectations, time demands, the media, injuries and general life concerns. Therefore, to achieve and maintain athletic excellence, athletes not only need psychology of peak performance skills, but also psychological coping strategies that can be used to effectively help them cope with adversity. Such psychological skills might involve stress management techniques, thought stopping or social support mechanisms.

It is highly recommended that this psychological pyramid model of peak performance be considered when considering mental preparation for peak performance. Consider the personality and psychological make-up of the athletes that the program is aimed at, and if components of the program should be focused on developing or enhancing specific personal characteristics or

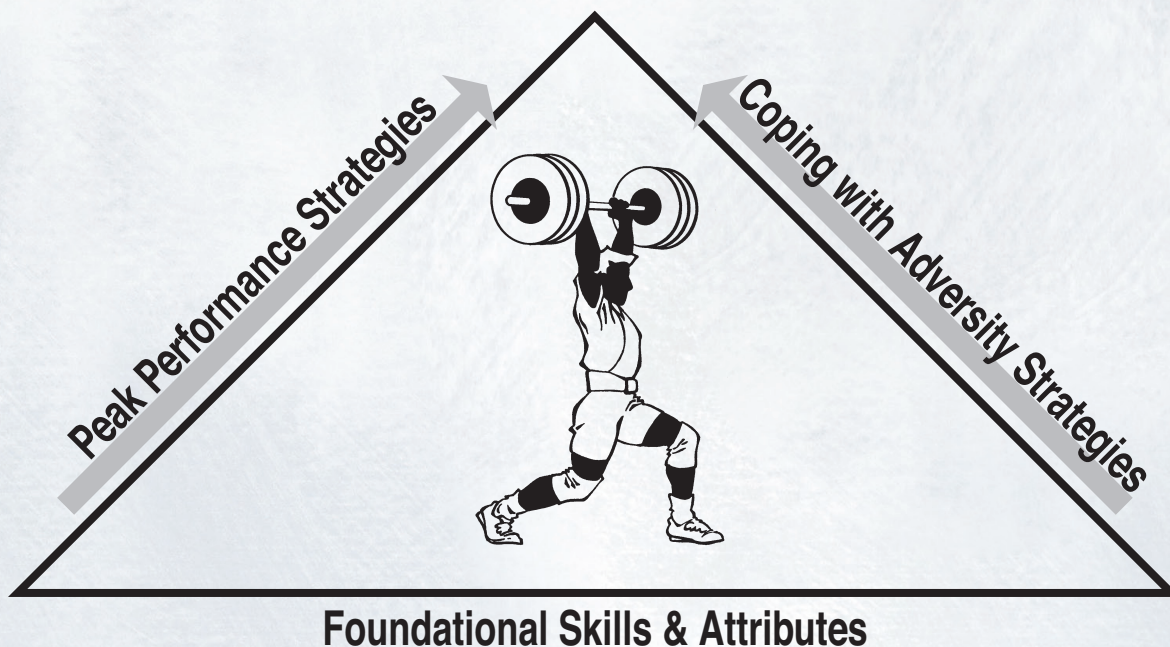


Figure 1-1. Model for peak performance.

orientations deemed important. In addition, identify the most important psychology of peak performance skills to be taught and what strategies will be most useful in coping with adversity. Mental skills training programs that address psychological factors at the base and on the two sides of this pyramid have the greatest probability of helping athletes consistently enhance performance and achieve success.

The remainder of this chapter will examine applied strategies used to mentally prepare athletes for peak performance. In so doing, these specific strategies will be discussed within the three elements of this model. This has the advantage of fitting specific strategies within a broader, more holistic perspective.

The Psychological Make-Up/ Personality of the Athlete

This element of the peak performance model is extremely important, but the most difficult to work with. This results from the fact that it is very difficult to change one's personality and motivational dispositions once they are established. However, this is one reason those interested in elite performance should be interested in and informed of the youth sport research. Children's sport research has identified the important role perceived competence plays in motivation and achievement (Weiss & Chaumeton, 1992); how positive coaching practices facilitate the development of positive self-esteem, reduce trait anxiety and lower dropout rates (Barnett et al., 1992; Smith & Smoll, 1995; Smith, Smoll & Barnett, 1995); how one's goal orientations influence achievement behavior (Duda, 1993); and what makes sports stressful for young athletes and how levels of stress can be reduced.

While it is much easier to develop positive psychological attributes through effective coaching practices when performers are young, this does not imply that nothing can be done in this area by seasoned adult competitors. When asked to consult with elite performers who are experiencing performance difficulties, highly respected North American mental training consultant Ken Ravizza, for example, spends considerable time having them discuss why they participate in their sport and what meaning it has for them. It is his opinion that athletes perform much better when they are not questioning the reasons for their involvement and

its meaningfulness. In a similar vein, Terry Orlick (1986) begins his mental training efforts by having athletes consider their long-term goals for sport participation, including a discussion of their dreams and overall aspirations. Finally, it must be recognized that meaningfulness differs greatly across athletes. Some may have their lives in total order with clear sport and non-sport goals and objectives. Others, like former diving great Greg Louganis, may have (had) a life out of sports that is totally chaotic (Louganis & Marcus, 1995). For these individuals, however, sport serves as a refuge or safe haven from their troubled outside world. And still others may be in a process of transition, during which the once clear sport and life objectives and goals are being questioned as they face retirement from sports (Danish, Petitpas & Hale, 1995; Murphy, 1995).

Lastly, seasoned athletes may change or learn to more effectively deal with their motivational orientations and personality characteristics. For instance, an elite athlete who is very outcome-oriented and focuses primary attention on winning may learn that thinking about the outcome of competition close to or during performance often interferes with achieving his or her objective. Hence, he or she learns not to focus on winning before or during the competition. It is only effective to do so at other times. Similarly, it has been recently found that perfectionism is associated with sport burnout in elite junior tennis players (Gould, Udry, Tuffey & Loehr, in press). But, many of the most effective world class athletes are perfectionistic in their orientations. However, they have learned to deal with their perfectionistic tendencies in a positive manner, allowing these tendencies to facilitate, as opposed to inhibit, their development.

Peak Performance Strategies

Both research and the experience of sport psychologists have taught a great deal about the psychological strategies needed to consistently produce outstanding performances. While it is beyond the scope of this review to discuss all of the work in this area, six strategies that are particularly important will be examined.

One reason outstanding performances occur is because top athletes set goals (Burton, 1992). We have learned, however, that not all goals are equal in terms of assisting individuals in achieving peak

performances. Goals must be specific as opposed to general, difficult but realistic, and arranged in a ladder or staircase progression of short-term goals leading to more long-range goals. They should also be frequently evaluated, and, if needed, modified. Finally, it is most important that a systematic approach to goal setting be taken and that the athlete be intimately involved in the goal setting process.

While setting and working towards goal achievement is important, goals alone are not enough. Athletes must make a commitment to achieving excellence. In their extensive study of Olympic athletes, for example, Orlick and Partington (1988) found that those who performed up to, or exceeded their personal bests in Olympic competitions were totally committed to achieving excellence. Similarly, in their study of Seoul Olympic wrestlers, Gould, Eklund and Jackson (1992) found that a commitment to excellence was a prerequisite to outstanding performance. It is very important to recognize that this commitment to excellence does not occur just on game days or in competitions, but at practices as well. In fact, many applied sports psychologists now contend that setting goals, mentally preparing and making a commitment in practices is as or more critical than at competitions for achieving consistent athletic success.

Research in the last decade has emphasized the importance of focusing on performance as opposed to outcome goals during competition (Buront, 1992; Duda, 1993; Gould, 1983; Orlick & Partington, 1988). In particular, performance goals are self-referenced performance objectives such as improving one's time in a 100-meter swim or making a certain percentage of foul shots in basketball, while outcome goals focus on other-based objectives like winning or placing higher than a particular opponent. The logic behind this recommendation is that performance goals are more flexible and in one's control, as they are not dependent on another competitor, while outcome goals are less flexible and dependent on another's performance. Because of this, outcome goals often create anxiety and interrupt psychological functioning (Burton, 1992).

An excellent example of focusing on performance goals in competition was given by Olympic gold medal skier Tommy Moe. When asked by the media

prior to this gold-medal performance whether he was thinking about winning (an outcome goal), Moe indicated that he certainly wanted to win, but had found in the past that when he thought about winning while racing, he tightened up and did not perform well. He skis at his best when he focuses on "letting his outside ski run" and keeping his "hands out in front" of himself - clear performance goals.

The above is not to imply that elite performers do not hold outcome goals. Most have these types of goals and find them very salient (Hardy, Jones, & Gould, in press). However, in the heat of competition they do not focus on these outcome goals — only on what they can control: their performance objectives.

An excellent way elite athletes prepare for peak performance is by employing imagery (Gould & Damarjian, in press; Orlick, 1986; Vealey and Walters, 1993). They see and especially feel themselves being successful. Moreover, they employ imagery in a number of ways: for error correction, to mentally prepare, to see themselves achieving goals, and facilitating recovery from injury. It is no wonder that Orlick and Partington (1988) found imagery to be a key variable separating the more and less successful performers.

One reason top performers achieve athletic excellence on a consistent basis is that they have developed mental and physical preparation routines and adhere to these in the face of adversity and failure (Boutcher, 1990; Cohn, 1990). Gould et al. (1992) found, for instance, that more successful Olympic wrestlers had better developed mental preparation routines than their less successful counterparts. Hence, they utilize systematic ways of physically and mentally readying themselves.

Finally, it has been consistently shown that more successful competitors are more confident than their less successful counterparts (McAuley, 1992; Williams & Krane, 1993). Moreover, these individuals develop confidence via all four of Bandura's (1984) sources of efficacy [performance accomplishments, vicarious experience, persuasion and physiological status interpretation and control] with performance accomplishments being the most important source of information. Elite athlete confidence comes from employing the previously mentioned psychology of peak performance strategies on a regular basis.

Coping with Adversity Strategies

An athlete can have good foundational skills (motivational orientations, perspective on the meaningfulness of involvement, etc.) and strong peak performance strategies and still fail to achieve consistent success. The reason for this is that they have not developed skills for coping with adversity. And no matter how successful athletes have been in the past, they will be faced with adversity. In the study of U.S. national champion figure skaters, for instance, it was found that the vast majority of these athletes experienced more stress after, as opposed to prior to, winning their championship. Stress resulted from such things as increased self and other performance expectations, media attention and travel demands (Gould, Jackson & Finch, 1993). Moreover, the longer an elite athlete's career lasts, the more likely he or she will sustain a major injury. For instance, most members of the U.S. ski team have sustained at least one major season-ending injury and, in so doing, had to cope with the stress of the injury and the challenge of physically recovering from it. It is imperative that the successful performer develop coping strategies for dealing with adversity.

A first step in preparing to cope with adversity is to learn to expect the unexpected. From the study of 1988 Olympic wrestlers (Gould, Eklund & Jackson, 1992), for instance, it was learned that more (versus less successful) competitors were positive in their orientation, but did not expect things to run perfectly and actually anticipated unexpected circumstances such as bad calls from officials, transportation hassles and delays in the event. By doing so, these athletes were better able to cope with such events when they actually arose. Their less successful counterparts, had experienced the same unexpected circumstances in international competition in the past, but did not expect them to occur in "their" Olympics. They became frustrated and distraught when they did so.

Given the above, it is effective to prepare elite athletes for major competitions by holding team discussions during which potential unexpected events and sources of stress are identified prior to a competition along with ways to cope with them if they arose. For example, in helping elite figure skaters mentally prepare for the U.S. senior nationals (especially for their first time), parents and loved ones can unintentionally interfere with a skater's mental preparation (e.g., the skater needs to be

alone the night before the competition but the parents insist on taking him or her out to dinner). To remedy this state of affairs, skaters are instructed to inform their parents of their mental preparation needs prior to the competition and actually plan family reunions and get-togethers. In a similar vein, discussions were held with the U.S. freestyle ski team prior to the 1994 Olympic Winter Games in Lillehammer, Norway, during which securing tickets for significant others and increased security (soldiers with machine guns) were identified as potential stress sources. To cope with the first stressor, the athletes on the team organized a ticket exchange system among themselves so that those athletes needing tickets could obtain unused ones from other team members. Nothing could be done to change the second potential stressor, but by recognizing that such feelings would occur, the athletes felt better prepared to deal with them.

Lastly, great coaches like the former University of North Carolina basketball coach Dean Smith prepared their teams for the unexpected through game simulations. For example, Coach Smith ended every practice with a referee on the court and the clock running with his team in varying circumstances (down by two and on defense, up by three with the ball). By doing so, over the course of the season his teams became accustomed to dealing with a variety of late game pressure situations and developed tactical and mental strategies for dealing with them. Hence, they practiced unexpected situations and how to effectively cope with them.

It is effective to have athletes and teams develop and practice what are labeled "psychological fire drills." For example, the importance of having and adhering to a routinized mental and physical preparation routine was previously discussed. However, during an athlete's career, things out of his or her control will sometimes prevent the initiation of optimal mental preparation. For example, a mechanical problem will cause the team bus to arrive at the venue late, a power outage will delay or interrupt an event or inclement weather will cause the event to be delayed. Just as school children practice fire drills in the event that a fire occurs at their school, athletes are taught to have emergency mental preparation plans. For instance, a short plan to use if they are rushed and do not have the ideal time available to ready themselves, or a "stretch"

plan to employ if there is a delay in the competition and they must maintain their focus for an indefinite time. Having these emergency mental preparation plans and practicing them from time to time gives the athlete the confidence to deal with unexpected circumstances.

Although no casual relationship has been identified, recent research (Gould, Eklund & Jackson, 1992; Finch, 1994) has suggested that it is extremely important that athletes have their coping strategies so well learned that they become automated. For instance, in the study of mental preparation in Olympic wrestlers, there were no differences between medal versus non-medal winning competitors in terms of the types of coping strategies they used (Gould et al., 1992). However, the medal winning wrestlers were found to have their coping strategies so well learned that they were able to employ them without hesitation. This suggests that coaches and sport psychology consultants not only teach athletes appropriate coping skills, but structure practice situations in such a way that these skills become so well learned that they can be employed without hesitation.

One of the most powerful coping skills available to individuals today is social support (Cohen & Willis, 1985; Hardy & Crace, 1991). It is not surprising that social support is an essential skill that athletes striving for peak performance develop. This may come in the form of tangible social support in which material assistance and expertise is provided; emotional social support in which individuals are available to listen and provide emotional comfort; and informational social support in which others acknowledge one's efforts as well as confirm opinions and when appropriate challenge thinking (Hardy & Crace, 1991). The old myth that mental toughness involves having an athlete do everything on his or her own needs to be replaced. Athletes must be open to, and learn to, seek social support.

Finally, when employing coping strategies, athletes must learn when to focus on the problem and when to focus on their emotional reactions to it. In the coping literature, this is called the "goodness of fit" hypothesis and is based on Lazarus and Folkman's (1984) notion that two classes of coping behaviors exist: problem-focused coping and emotion-focused

coping. Problem-focused coping strategies are those that deal directly with the source or cause of stress in an individual's experiences. For example, an athlete who is stressed because of not having enough time to train may reprioritize his or her activities and learn better time management skills and, in so doing, lower the amount of stress experienced. In contrast, emotion-focused coping does not involve changing the source of stress, rather one's emotional reaction to it. Hence, an athlete who is nervous because she is awaiting the finals in her competition may use progressive relaxation to lower the stress that she is experiencing.

The key contention of the "goodness of fit" notion is that, at times, it is realistic to change the stress source (e.g., asking parents who unknowingly place pressure on a young competitor not to talk with him or her until after a competition) while, at other times, changing the stress source is not feasible (e.g., canceling a competition because an opposing team is particularly talented). Problem-focused coping efforts are thought to be most effective when something can be done to modify the stressor. However, when the stressor cannot be modified, it is more productive to focus on dealing with the emotions resulting from the stressor.

The key practical implication arising from the "goodness of fit" notion is that when an athlete is experiencing undesirable stress levels, coaches, athletes and sport psychology consultants should analyze the situation and determine whether it would be more useful to focus on problem- or emotion-focused coping strategies. By doing so, their stress management efforts will be more efficient and productive.

USE OF PLAYER TRAINING LOG

Any elite athlete will tell you that keeping a training log is an absolute must if you want to make the most of your training. Detailed record keeping helps you remember what you did during a certain day, week or month and allows the player and coach to make judgements on what training method works best.

Nearly all of the advantages of keeping a training log stem from regular comparisons the coach and athlete are able to make.

A log enables you to chart the peaks and valleys in the player's performance. You may think that you'll never forget a particular practice or game, but can you remember the exact practice or workout the day or week before that prepared you for a particular game, tournament or series?

A training log is also a great place to record the results of competition. By jotting down this information, you can see trends in your performance.

Players' recovery from an injury can be documented in their log books and can be used as a reference for future injuries. Regular record keeping will show what type of treatment and rehabilitation was used for a particular injury.

TRAINING LOG COMPONENTS

Here are some suggestions for training log components:

- hours of sleep
- type of appetite
- daily resting pulse rate
- how you feel
- practice goals (individual)
- practice goals (team)
- skills to work on
- mental goals for practice
- mental goals for games
- goals for games (team)
- goals for games (individual)

- pre-Practice attitude
- pregame attitude
- post-practice comments
- postgame comments
- self talk
- injury record
- rehabilitation record
- life skill goals
- life skill accomplishments
- academic goals
- academic achievements
- game results

SUMMARY

If an athlete is going to consistently achieve peak performances, a variety of mental preparation skills must be developed. This presentation has tried to organize key mental preparation skills into a pyramid model of peak performance. All three components of the model must be developed and continually refined. However, it is critical to recognize that no standardized set of mental preparation skills exist, and even with the most generic skills, considerable individual differences and variation in strategy use is evident. Hence, while those choosing to use the model to guide practice will find the general strategies and guidelines useful, it is critical that an awareness and appreciation of individual differences be recognized and mental preparation programs modified accordingly. By doing so, the model will be most effective in guiding practice.