

Psychological Considerations In Race Walking

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Race walking can be considered a hybrid event in the track and field world. The coach and athlete must learn and master both the technical subtleties of the event (similar to field events) while developing the endurance conditioning and mental discipline utilized in distance running. The event is unique in track and field because the athlete is required to adhere to stringent technical guidelines while undergoing prolonged and continuous physiological stress. This mandates not only rigorous biomechanical and physiological preparation, but also the *psychological make-up or skills* which allow an athlete to deal with this dual load during training and competition.

The purpose of this article is:

- to provide background information on the history and technicalities of the sport
- to identify special psychosocial issues and demands created by the uniqueness of the event itself, and
- hopefully motivate both coaches and athletes to become actively involved in a sport that is growing in popularity around the world.

Background of the Event

Many people think of walking as a new and trendy fitness activity, and of race walking as simply a recent competitive offshoot of this trend. However, records of competitive race walking place its development in the early 1800s with informal competitions, usually in the solution of a wager, historically contested over fairly long distances (one town to the next). Racewalking events have been part of the Olympic Games since 1904. The distances varied in the early years, but have been set at 20 kilometers (12.4 miles) and 50 kilometers (31.1 miles) for men. Beginning in 1992, women will have their first opportunity to compete for the gold in a 10 kilometer (6.2 miles) race.

Race walks are included in the schedule of all major national and international track and field competitions such as the World Championships, Pan American Games, and the race walking's own team championships: The Lugano Cup for men (where 20 and 50k scores are combined), and the Eschborn Cup for women. National championships are conducted at various distances:

- The men's championships range from 5000 meters to 100 kilometers
- The women's championships range from 3000 meters to 20 kilometers

Certain races are used to select teams to come internationally. Because the event is still rather underdeveloped in the United States, qualification for National Championships and the U.S. Olympic Festival team berths is difficult even for relative newcomers, if they are initially able athletes and they receive sound technical instruction.

There is also a wide range of Youth, Junior, Junior

Olympic and Masters events. Except for certain elite races which have qualifying standards, most competitions are open to walkers of all abilities, allowing novice and Olympic caliber walkers to toe the starting line together.

Reasons Why People Choose to Participate

There are many reasons people get involved in racewalking; it is fun, enjoyable, challenging, a wonderful fitness activity, and there is great social camaraderie within and among the racewalking community itself. Similarly, it is a sport in which people of all ages and skill levels can participate and experience a reasonable degree of success quickly. The popularity of the sport is growing, particularly among junior and masters level competitors. This is because it is relatively easy for youth to learn the basics of the event, while the subtler technicalities can provide for years of challenge. Furthermore, there are tremendous long term health benefits associated with walking and many doctors are now prescribing *fitness walking* as a preferred mode of therapeutic aerobic activity.

Initially, many of our best walkers were former runners who fell prey to injury and were looking for a sport to which they could transfer their athleticism and physiological conditioning without the constant pounding that is associated with running. As we move into the mid-90s, talented athletes from a variety of different sports are gravitating to the challenges inherent in race walking.

One of the unique motivational aspects of race walking, particularly for the beginner, is that increments for improvement can be very large and the corresponding sense of personal accomplishment can be extremely satisfying. For instance, a novice race walker with good fundamental endurance conditioning might finish their first competitive 20k race in a time of 2 hours or so. With 6 months of sound training and technique development, that time could easily drop under 1:50, an improvement of up to 10%. As a result, the *intrinsic satisfaction* and rewards can be great!

Rules of the Event

The rules of race walking place only two requirements on the athlete.

1. Unbroken contact with the ground must be maintained at all times. Thus, one foot is always on the ground, and the heel of the advancing foot must strike before the toe of the rear foot leaves the ground.
2. The supporting leg must be straight when it passes under the body.

The first rule simply captures the visually obvious difference between a walk and a run. When running, runners normally leap into the air on each step. This does not occur when walking. The second rule is less obvious, but is based on comparative energetics of walking and running. Research indicates that when running, energy is stored in the soft tissue that surrounds the knee (tendons,

(ligaments and muscles) which stretch during the bending of the knee. These tissues may act as stretched rubber bands, which spring back as the leg straightens. The knee therefore acts somewhat like a spring. This does not appear to occur in normal walking, and the *straight leg at distance* rule assures that no such energy storage in the spring of the knee can occur in race walking either. The rules are thus intended to assure that race walking is as much as possible a high speed extension of the normal walking gait. This explanation may be valuable for the coach of the young or novice athlete that is questioning the ungainly or initially awkward gait.

In competition, the event is watched by five or more judges circling the course. This is typically 1.5 to 2.5 kilometers road 100p for the 50 kilometer race, while the 10 and 20 kilometer races are held on either the track or road loop. A judge must turn a red card if they observe an athlete in violation of one or both of the rules. If an athlete is *carded* by three different judges, he or she is disqualified and removed from the race.

This aspect of the event, wherein the athlete is judged on legal technique during continuous and prolonged effort, can lead to a great amount of additional stress for the athlete. Some athletes admit to fearing that certain judges are biased against them, or that judges in one region of a country or of a particular nationality will judge their style of race more harshly than others. For instance, an athlete with especially thin legs, with protruding or knobby knees, may feel that they get unjustified calls for not tightening the leg simply because of this appearance. As a result, they may be distracted, lose their focus, be intimidated and have fear of the judges before they even begin race.

The Triad of Race Walking Preparation

Techniques

The basic biomechanics of high speed race walking require that the hips are rotated front to back (not side to side as is often caricatured) to augment leg length and accommodate the straightened support leg. The arms are driven vigorously but compactly forward (again, not laterally), to balance hip and midsection motion, and to complement drive off the supporting leg foot. Ideally, racewalkers efficiently pump their arms in coordination with each step, producing a smooth and efficient stride. These motions are powerful, yet fluid and relaxed. Perhaps more importantly, the athlete must maintain a very high step rate or turnover. Elite racewalkers can attain extremely high step rates (over 200 steps/minute for men in the 20 kilometer), and maintain this pace for the entire event. The athlete and coach must keep in mind these biomechanical concerns and constantly work to ingrain proper technique, and in particular, a high frequency during training, even when the athlete is tired and uncomfortable.

Physiology

The physiological requirements of competitive race walking are comparable to those of distance running, and similar principles are used in training for a race walk as for training for a run of the same duration. The primary concerns include the development of basic endurance, raising the $\dot{V}O_2$ max as high as possible, and elevating the anaerobic threshold. To perform well, the race walker must have the ability to train at fairly high anaerobic workloads while maintaining a high step frequency with sound legal technique. This requires great mental discipline on the part of the athlete. The work habits and mental toughness that can be developed during "quality workouts" should carry over when confronted with difficult situations during the later portions of a competitive race.

Another element of the physiology of training is work-rest ratios. If one puts in high quality workouts needed to raise the anaerobic threshold or $\dot{V}O_2$ max, it is important to include rest periods after these workouts to allow for recovery and rebuilding. Many people get into the grinding mode where "more is better." This is wrong. In actuality, the athlete and coach must be disciplined enough to keep their goals in perspective and periodize the workloads by including appropriate recovery periods within their training cycles.

It has often been said that "Confidence comes in knowing you are prepared". To this end, it is important that athletes avoid going through the motions during workouts or training simply for the sake of putting in miles and/or attaining specific pre-determined weekly mileage goals. Rather, it is more important to assure that as much mileage as possible is carried out without sacrificing race quality technique.

Psychology

No matter how sound the athlete's technique or how good the conditioning, without a certain *mental toughness*, that athlete will never attain a truly optimal performance. In race walking, mental toughness can be equated with consistency in performance, and consists of a combination-of-attributes:

1. **Discipline** is most evident in a successful athlete's willingness to train with pride, diligence, focus and a commitment to excellence. Discipline also includes being able to sustain good technique and turnover, even when feeling very fatigued.
2. **Tenacity** is of critical importance when those key decision points come up during a race to either "put the pedal to the metal" or back off. Often, it is only by conscious decision and force of will that an athlete can persevere and work through difficult spells in a race (i.e. stomach cramps, pain in the calves, overwhelming waves of fatigue, etc.).
3. **Poise and emotional self-control** are important prerequisites for success in race walking. Athletes must learn how to gain control of themselves and their emotions

before they can control their performance.

The athlete must have the *desire, determination and inner drive to want to be the best*. This involves a high degree of self-confidence, concentration, and commitment, being mentally tough and competitive enough to stay focused on their own goals and race plans, and if necessary, raise their own level of discomfort high enough to break away from the pack or competitor.

One of the primary psychological difficulties the novice race walker faces is that the sport looks funny. People are not accustomed to the appearance and feel it looks somewhat awkward. Many find the hip action hysterical, and in men, downright effeminate. Every race walker has certainly had to deal with unusual stares, verbal harassment or unpleasant cat calls from passer-byes. Women, because of the inherent movement of the lower body, seem to get verbally harassed a great deal (i.e. "*can I have some fries with that shake?*"). Interestingly, female athletes seem to be a little more thick skinned than males, perhaps because they are already accustomed to such barbs. Either way, the training is difficult, and it takes a strong willed individual to put up with these distractions. Hopefully, as more and more people get educated and involved, the unfamiliar gait pattern may become more socially accepted and the negative stigmatism will grow more distant.

Mental Training and the National Elite Race Walking Teams

In early part of 1989, the lead author was asked by the IAC National Racewalking Coaching staff to serve as sportpsych specialist for both the Men's and Women's Elite National and Junior National Race Walking teams. I was brought to a developmental camp at the Olympic Training Center in Colorado Springs and introduced as someone who would be working with the staff and athletes over the long term. This was important because it showed a commitment on the part of the National Governing Body that I was to become an *internal part of the staff and program*.

The coaches have adopted a multidisciplinary approach to performance enhancement and peak performance training, combining the scientific disciplines of biomechanics, physiology/conditioning, nutrition and sport psychology. My broadbased training and educational background in exercise and sport science made it very easy for me to "fit in".

One of their main concerns was the area of periodization of training and having the athlete develop the proper mind set for important vs unimportant races. Here is where *mental setting techniques* that incorporates physiological, biomechanical and psychological concerns come into play. The coaches were also interested in having the athletes be *more confident and mentally tough* when competing emotionally.

My approach is one of mental training specialist teaching athletes:

- How to program their minds for success.
- How to deal with performance pressures effectively.

- How to separate personal issues from performance issues.
- How to cope with personal issues that may interfere with performance effectiveness.

I adopt an *athlete-centered approach* to counseling athletes and coaches. That is, I listen to coaches and athletes intently, ask numerous questions about mental-emotional states of mind, draw from their experiences as much as possible, and try to help them *focus on things they can control*. I recognize that athletes also have a life outside of their sport; hence, I try to help them find and maintain a balance between race walking and things that are important in their own personal life.

In a typical training camp, the first evening, I might facilitate a group discussion on what sport psychology is and how it can help. The focus is on *mental training skills* (i.e. basic overview of psychological characteristics of peak performance states, what it takes to be a champion, goal setting, relaxation, visualization and coping rehearsal techniques, mental discipline and constructive self-talk, distraction control, coach-athlete communications), *identifying sources of stress* in the life of the race walker, and together, *developing strategies from which to intervene*. Perhaps most importantly, it gave us (i.e. coach, athlete, sport psychologist) an opportunity to get to know one another, *develop rapport and lay a solid foundation for future interactions*. At the end of the meeting, I pass out a short assessment device, asking the athletes to reflect back on their best and worst performances and preferences in terms of *mental focus*. In addition, I asked that they complete a short questionnaire assessing their racewalking likes/dislikes, personal and athletic strengths/weaknesses, and areas *they felt I could best serve their needs* as sport psychologist. Time is set aside throughout the camp for both formal and informal individual consultations.

The athletes generally seem to be interested in:

- learning more about the mental side of race preparation.
- developing mental plans for training and competition.
- relaxation and visualization techniques.
- learning how to talk to themselves in a more positive, constructive manner during difficult times in a race
- learning how to be more relaxed yet focused when competing.

As a sport psychology consultant, I provide avenues for the athlete to restructure the way they think and talk to themselves prior to, during and after a race.

There are a number of commonalities that come up among race walkers. Experienced walkers seem to know what it takes to excel in their sport. They seem to find the right balance between training and their own personal life. In contrast, others have a tendency to put too much pressure on themselves to do well, feeling like they "*have to*" do something extraordinary to hit a particular qualifying time.

Some get so caught up in life's daily struggles that they lose sight of the talent and ability they have at their disposal. Since there is little sponsorship in race walking and most have full time jobs or studies, many athletes have difficulty finding the right balance between work and

aining, let alone having any quality time for themselves or loved ones. As a result, many feel tired, overextended, and oftentimes overwhelmed by the multiple demands that are placed on their time and energy. *Balance* is the key and race walkers must learn how to juggle their personal, social, professional and athletic lives effectively. *Otherwise, stress builds and concentration and confidence deteriorates.*

As a result, many ask that I simply be a sounding board for them. They desire someone who can provide positive feedback, help keep them focused, is able to discuss the "big picture" (i.e. how training fits in with other things that are important in their life). I can challenge false beliefs, help them clarify decision making processes, and most importantly, help them *believe in themselves and feel good* about what they are trying to achieve both as a person and as a walker (i.e. *self-esteem development*).

Mental Skills Training

Over the years working with both the men's and women's national race walking teams, I have spent time with athletes working on goal planning, periodization of training and developing the right attitude for training and competition so that when it comes compete, the "ultimate competitor" can come out. Most walkers want to develop more confidence, better consistency, improved concentration, exposure and mental toughness throughout a race. Time spent at training camps going over things the athletes do to *set their minds up for success and feel like they are in control* over what they want to occur. Together, we develop "scripts of excellence" and mental plans of how they would like their competition to unfold. The race walker talks about the way they want to feel, focus and function prior to and during various phases of the competition. A "script of excellence" is the developed that reflects the type of *attitude and focus* they want to carry with them during various phases of the race.

Similarly, athletes engage in mental training sessions, learning how to "switch channels" when things get tough. Rather than get preoccupied with pain and/or negative defeating thoughts, athletes are taught to switch channels, affirm the hard work and preparation they put into the moment, and *focus on something positive and task oriented* (i.e. "I've trained hard, I've paid my dues, keep moving").

Along these lines, a lot of time is spent discussing the concept of "extending limits," whereupon walkers learn to mobilize all of their energy and resources, draw on affirmations and cues that help enable them to "push themselves to that point of brilliance" during the most demanding parts of their competition (i.e. "My legs are hurting and my lungs are hurting, I can beat this guy/girl if I relaxed in the upper body and think high turnover and g technique"). The duration of race walking events is unique in that there is a great deal of time for the mind to wander from the positive aspects of their effort. Consequently learning how to channel the high energy of competition into peak performance is one of the attributes that separates the elite from the average.

Audiovisualization Race Preparation Rehearsal Tapes

Many of the race walkers enjoy using *individualized Audiovisualization race preparation tapes* to help them set their minds up for success. They are very easy and fun to make. In preparation the athletes write down:

- the goals they are striving to achieve
- a list of strengths they have as a competitive athlete
- the abilities they feel confident about, and
- the type of focus they want to carry with them both prior to and during the race.

From this, we develop a list of *affirmations or self-suggestions* (i.e. earlier referred to as a script of excellence) associated with how they want to feel, focus and function during various phases of the race itself. We try to make the *visualization as vivid as possible*. They focus on *things they want to occur and can control*. Often, task specific cues are incorporated (i.e. "drop the arms, quick turnover," "keep the head up, focus on the person in front of you," "turnover, turnover, turn-over") as positive reminders to help them keep focused. With their favorite music in the background, they can *visualize* themselves executing their race plan to perfection.

For instance, I may begin by first having the athlete concentrate on *relaxation and deep breathing techniques*. This would be followed by some affirmations and self-suggestions, reaffirming the athletes preparation and goals that they are striving to accomplish (i.e. "you have every reason to believe in yourself both as a person and a competitor," "the challenge before you will require an all out effort but you are fully prepared for this challenge," "you have trained hard, you have prepared well so go out and reach for your best"). I might then comment on some things they need to be successful (i.e. "smooth and fluid," "quick turnover," "be powerful and aggressive") and have them choose a cue word to build their script around (i.e. "trust," "perfect power," "find the groove"). I would then have them try and simulate a very positive pre-event state of mind ("begin to see yourself arriving at the race site area, you know the course very well you feel good about your preparation, as you take in your environment and you see your competitors, you feel calm and confident energized yet focused"). They would then go through their warm-up routine, (i.e. "begin with your stretching, slow and easy, you feel relaxed and in control you have worked real hard for this moment and you can feel the excitement of the upcoming race building"). They then focus on 2-3 key points they need to think about to be effective today (i.e. "It's time for the ultimate competitor in me to come out, race relaxed with high turnover the whole way," "Be prepared, for so-and so's late race surge, nothing is going to stop you today").

The race would then be broken into component parts. For a:

- 20k race, begin with the start-1st mile: (get comfortable," really feel yourself pushing firmly off of the back foot and really getting up on your toes," "pace your race, don't go out too fast," "the things you need to do to be successful").
- 1k-5k ("relax, stay loose, watch breathing, pick up the

pace from the 1st mile," key words: "quick turnover," "smooth it out," "glide," "find the groove").

- 5k-10k ("relax and drive," "arms square and low," "go for it, focus on good technique, push the pace, time to hit negative spills").
- 10k-15k ("turnover, turnover, turnover," "maintain the intensity from 10k split," "stay with the group, pick off the person in front of you").
- 15k-18k ("kick it in, be mentally tough, this is my time of the race," "I'm physically stronger, mentally tougher than my opponents, you own this part of the race," "stay focused on good technique and quick turnover, drive to the finish line," "you love that burning feeling in your calves and stitch in the side near your diaphragm," "your whole body is working together like tireless machine," "no regrets, now is the time, extend yourself, go for it!")
- 50k race walker, I might remind them to "be tough in the 25k to 35k segment," and to remember that "the real race just begins at the 35k mark."

On Site Role

An important part of mental training is to teach athletes:

- how to assess what went well, what did not, and
- take the lessons of each competition and how to put it back into their training

Fortunately, I have had the opportunity to attend various national and international race walking events and observe what goes on first hand during the competitive event itself.

As an educational sportpsych specialist, I want the race walkers to *develop their own race preparation plans prior to arriving at the competition site*. Recognizing that athletes have to take responsibility for their own actions, I try to take on a non-obtrusive role at major competitions. My goal is to:

- fit into the woodwork
- find out ahead of time what each individual wants or needs from me at the race site
- provide support and reassurance, and
- serve as a positive reminder of the focus they want

to carry with them prior to and during the race itself I learn a lot at each competition. Oftentimes, an individual really looks good the first part of a race (i.e. strong, fluid, sure), then something happens causing them to lose their confidence and focus, begin to doubt their training and preparation, so that they do not really believe they can "bring it home". It is easy to dwell on things that did not occur, holding oneself back due to lack of preparation, fear of becoming injured, or fear of being disqualified. Whether it is mental, physiological, biomechanical or a combination of each, the athlete must:

- draw the appropriate lesson out of each competition
- keep things in perspective
- learn from the experience, and
- move forward in their pursuit of excellence.

Summary

Mental skills, like physical skills, take practice to be perfected. An individual has to believe in what they are trying to accomplish, stay focused on their own goals and objectives, and learn how to have the courage to "act as if" they can be successful no matter what the circumstance. The goals of mental training are simple: to produce a more confident, consistent, focused athlete who enjoys what they are doing, and one that feels in control of what they are trying to accomplish both on and off the athletic field of play.

Although the present article has focused on the triad of factors that go into making a successful elite race walker, and has highlighted how psychological interventions are directly tied to a sufficient understanding of biomechanical technique and principles of physiological conditioning, it is important to remember that people have different reasons and motives for becoming involved in walking. This is a sport people of all skill levels can be successful fairly quickly. Hopefully, this article not only provides some insight into the "mind of the elite racewalker" but can champion others to become actively involved in a sport that is growing in popularity throughout the world.

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