

CHAPTER ONE

Introduction

People who were at the '67 Drake Relays will tell you. When Ryun got the baton for the last leg of the four-mile relay, he was sixty yards behind Conrad Nightingale, one of the top milers in the nation. An impossible distance—but by the final turn, Ryun was there with him. He blew by Nightingale, hit the tape still driving, and ran 3:59 on a windy day. The next day he anchored his distance medley team to a world record.

For over three years Jim Ryun never lost a mile race. He set world records at 1500 meters, the mile, and the 880. When he ran 3:33.1 in June of 1967, he cut two and a half seconds off the metric mile record and beat the best in the world by thirty yards. Never has an American distance runner so dominated the sport.

In the spring of 1968 Ryun was shooting for a 3:50 mile when he got sick. Out six weeks with mono, he still won the Trials 1500 that summer and made the Olympic team. The Olympics that year were held in Mexico City at 7,349 feet altitude; the rarefied air would limit performances in the races over 800 meters. The experts all figured if anyone could run 3:39 in the 1500, he would win—it wasn't possible at that altitude to run any faster. Ryun ran 3:37.8 but finished second.

With that defeat, quite abruptly, he would no longer be the unbeatable and unshakable Jim Ryun. Over the next four years, a drama of frustration would play out to a bewildered cast and audience.

He began his final year of college track the next winter in an indoor meet at home in Lawrence, Kansas. Midway through a two-mile race, he dropped out. As the season went on, a pattern

developed—brilliant races followed by terrible ones. Ryun won the NCAA indoor mile, beating Marty Liquori in a sensational duel. Outdoors, at the Drake Relays, he dropped out of a much-publicized race. He followed that with a 3:55 win at Compton. He ended the season placing second to Liquori in the NCAA mile final—and a week later in the AAU Championships, he jogged off the track after two laps.

What was wrong? Ryun shook his head in frustration and told reporters of the minor injuries, the staleness from too many races, and the constant pressure. He didn't run again for a year and a half.

When he returned, he was seemingly better than ever. He ran a 3:56 mile indoors, then a 3:55 in the Kansas Relays. In May came the famous "Dream Mile," the Ryun-Liquori rematch. Ryun lost to Liquori by half a step, both of them clocking 3:54.8. A month later in Europe, Ryun ran a 4:17 mile and discontinued his season.

The Olympic year 1972 went much the same—a 4:19 last place finish in Los Angeles, then a 3:57 win at the Kansas Relays, then a 4:14. By now, everyone concerned was in a state of consternation. The media coverage of Ryun had always been intense, and now the press hounded him for answers.

"No, I don't know what is wrong," Ryun would say. "I felt heavy the first lap, and then I began to tighten up. . . . Maybe it's psychological. I don't know whether it is or not. I'm going to think about it. . . . I know I'll figure it out."¹

Others joined in, giving rise to what one writer has called a "minor industry of Ryun experts, sort of like Kennedy assassination experts, who claimed to have figured out what went wrong."²

Many runners understood the problem, if not the solution. A runner could be physically ready to race well, but he also had to be ready psychologically. If he wasn't, there would be repercussions in his racing machine—the delicate balance of relaxed concentration during maximum effort would be upset. Good racing would not only be hampered—it might be out of the question.

"The difference between what I did today and what I can do is such a little thing," Ryun said.³

This story, like many in real life, has no neat and tidy resolution. Jim Ryun ran 3:52.8 in Toronto in July of '72, the fastest mile

in the world in five years. He qualified for the Olympic team and went to Munich. There, he ran incredible workouts that had everyone talking. He seemed very ready. Of course, we won't know. In a qualifying heat he was tripped up, he fell, and did not advance to the finals.

Ryun's American mile record was broken in 1981; it had lasted fourteen years. Jim Ryun was a runner ahead of his time when he was at his best. At other times, in his problems with the inner side of the sport, he struggled like any other runner. His story makes clear—in a more obvious and dramatic way than is ordinarily seen—the importance of controlling the psychological aspects of performance.

THE PSYCHOLOGICAL CHALLENGE IN DISTANCE RACING

I am a runner and a coach of runners. My love is the distance race—the half mile on up. It is a simple sport, distance running, yet there is a lot to it.

Distance events pose similar, very challenging physical demands. Strength and endurance are required, and even in the longer races today, so is the ability to sprint. Training for milers and marathoners involves the same hard work, and race strategy requires the same methodical planning. But the side of this sport which makes it specially interesting and challenging is the psychological.

The psychological demands are formidable. The duration and the repetitiveness of distance races call for the ability to maintain concentration. Physical and mental states must be carefully heeded. Risk-taking and pain tolerance require a robust level of confidence. Breath control and muscle looseness, two more imperatives, must be maintained under duress.

Handling the distance race's inner tasks is a balancing act, a difficult one and keenly important to successful racing.

To a distance runner, the mental aspects of performance often seems elusive and inaccessible. It is far easier to control pace during a race than it is to control thoughts. It is easy to log mileage, but not so easy to chart emotions. Building sprint speed is a fairly

straightforward process—building confidence is not. The way to train for a hilly race course is obvious, but how does one train to relax through the near-panic felt during unremitting discomfort?

“The mental aspect,” one top distance runner observed, “is the only real issue in any race.”

RACES—THE BAD AND THE BEAUTIFUL

We runners sometimes wonder how it is we could run so well in our last race or feel so fine in practice all week—and then come to the next race and run poorly. There seems to be no physical cause on which we can lay the blame for the bad race; we’re not sure what went wrong. I once ran a national cross-country race in New York’s Van Cortland Park. After the first mile, instead of moving up confidently toward the front group where I belonged, I found myself letting the race go by. I can still see myself jogging dazedly into the finish chute in 211th place, one of the last runners. Before the race I had felt ready; it was the end of the season, so I was in good shape. And having run in national meets before, I felt everything was under control. Apparently not.

Every athlete has had these experiences, has had performances impaired by faltering concentration, shaken confidence, or the inability to relax. When these things happen, we can feel assured we’re in good company. Whether it is the visible, wholesale choke—the tying up and unplugging from a race—or the small, almost imperceptible mental error of reacting late to an opponent’s move, it is the same frustration—the physical capabilities we know are present have been somehow interfered with by our thoughts and emotions.

At the other end of the spectrum of performance, there is the race where everything feels right, everything comes together beautifully. Most of us have experienced these rare moments. Mind and body are in harmony. Pure speed and spontaneity are the sensations.

“It’s heightened awareness,” says Marty Liquori, “it’s a dream world, it’s like riding a wave into a beach. Everything is clear and in focus, and all around me is beautiful.”⁴

“The gun goes off,” says Frank Shorter, “and you realize, ‘Oh, man, am I ready today!’ ” He is describing his ’76 Olympic Trials marathon. “Bill [Rodgers] and I ran about 4:57 pace through twenty miles, and it was so easy. We were just cruising.”⁵

Introduction

We surprise ourselves in these races—we tap powers we didn't know we had.

These races shine in our memories. I recall one race in particular. My goal during my last track season in high school was to break nine minutes in the two mile. I had run 9:09 during the indoor season. Despite my coach's telling me I could run much faster outdoors, the 9:09 had been tough, and I had my doubts.

The district meet outdoors was to be a major test. To break nine minutes, I had to go out a lot faster, and I expected that pace to feel brutal. When I hit 4:24 at the mile, right on pace, it was a full eight seconds faster than I had ever gone through before. The surprise was that it felt effortless. There was a sensation of speed—and a feeling of inevitability, as though a machine had taken over. I kept clicking off the 220's, getting splits from helpers along the track. In the third half-mile I thought to myself, "This great feeling can't last!" I felt too good. I let off—and *still* I was hitting my splits. The last lap I felt fresh, ran it in sixty seconds, and finished in 8:56. I was hardly winded. The race still has a special clarity about it, and none that I've run has felt quite so magical as that one.

These perfect moments happen seldom for us, and usually they happen by accident. Much of the challenge and excitement we get from sports comes as we search to repeat these perfect moments.

The premise of this book is that *we have the means to make these moments happen*.

The challenge a distance race poses to a runner can be likened to the challenge an iceberg presents to a navigator. Like the iceberg's tip, the physical requirements of the race are easily seen. But the psychological requirements of the race lie below the water and they are extensive. A race forces a racer to deal with the psychological as well as the physical, just as an iceberg forces a navigator to deal with its whole. A racer and a navigator may proceed, noting only the obvious and relying on luck—in which case they experience uncertainty and court disaster. But there is another way. They may proceed with a confident knowledge of the whole, assisted by proven technique—and then they will experience beauty.

Runners and coaches can work as carefully and knowledgeably in psychological training as in physical training. We don't have to

rely on luck or fate. There are methods that help runners gain conscious control over their race-psych. Methods for improving relaxation and concentration, for example, are used by a number of coaches and athletes and have proven effective and reliable. I have seen the effectiveness of these methods confirmed in the runners I coach. This book will examine some of these methods, present practical applications to distance racing, and set forth a clear and useful program for a distance racer's mental preparation. The guidelines will help you be ready on race day—mind and body—to bring forth your best effort.

REINDEER MILK

Traditionally, the athletic community has paid lip service to the importance of preparing both mind and body for competition. Training of the mind invariably has been neglected. Training of the body, the easier and more obvious thing to do, has gotten most of the attention. Go to any pre-race clinic or coaching clinic, and you will hear all about maximum oxygen capacity, weightlifting, and proper running form. You will be treated to a smorgasborg of great workouts. In the popular running magazines you will find page after page of advice about mileage, nutrition, shoes and injuries.

"We are overeducated on the physical side of sports," says sports psychologist Dr. Tom Tutko. "We approach sports as a physical challenge, to be met with the proper application of muscle, know-how, and noble effort."⁶

The attention most coaches and runners do pay to the psychological aspects of racing is haphazard and almost superstitious. Coaches sit their runners down for the pep talk, where they exhort them to "psych-up," to "get tough," to "stay calm," and to "concentrate." The runners go off chanting these slogans, moving through their pre-race rituals, hoping, with no real assurance, that they will be able to be tough and stay calm and concentrate when the time comes. Of course, no actual mental training has been done that might enable them to do this reliably. And so, when the runner does poorly, he and his coach shake their heads and shrug their shoulders. The coach goes off muttering about what a "flake" his runner

is. The runner goes off and trains harder for the next race and repeats his incantations with more ferocity.

There are a few runners who always seem to be mentally ready for their best effort when the right time comes. It is fascinating to see the reactions they draw. Often they are seen as people of mystery. Lasse Viren is a classic example. The Finnish distance star won the Gold Medal in the 5,000 and 10,000 meter races in the '72 and '76 Olympics. The man obviously has the ability to focus all his energy at just the right time to win extremely competitive, high-pressure races. Ironically, most people can't quite accept that. Instead, they argue about whether he has been "blood-doping," and they marvel about his low resting pulse, his remote training sites, or his reindeer milk diet.

In recent years the competition in running has intensified. The margin of difference between athletes has narrowed. Consequently, runners are starting to realize the need for thorough mental preparation. Frank Shorter's comments in a *Runner's World* article illustrate this.

"From what I understand, the guys running 2:09 and 2:08 now aren't training any harder than the rest of us. It's possible that they've developed more efficient training methods, but I'm inclined to doubt it. I don't think training has changed much from what Hagg and Andersson were doing in the 1940s and what the Hungarians added in the 1950s. Basic training theory hasn't changed much. So what it comes down to is the right mental approach."⁷

EAST GERMANS, et al.

Sports psychology, the branch of psychology which deals with this mental approach to sports, has grown tremendously over the last decade. Though still in its early stages, the field has already generated a good deal of research and literature. Sports psychologists examine a variety of concerns, including motivation, aggression, personality assessment, learning, thought and attention control, stress management, and peak performance. Their work in these areas is steadily providing greater understanding of the nonphysical realm of sports, and—of vital interest to athletes and coaches—the

work is establishing effective methods of preparation for peak performance.

Much of this work has been done in controlled, psych-lab conditions, and unfortunately, much of it has stayed in the lab and hasn't reached coaches and athletes. The gap between psychologists and the sports community has been wide. Psychologists have contributed to this gap. Although their lab testing and their statistical analyses have insured their respectability as social scientists, their work often seems to be contrived and far-removed from the athletic field. Some do see the need to spend more time working with coaches and athletes, or as University of Illinois sports psychologist Dr. Rainer Martens says, to move "from smocks to jocks." Dr. Robert Nideffer, author of *The Inner Athlete*, cites another problem which contributes to this gap. This is the limitation in psychology to offer hard and fast answers to problems in human behavior, "the failure of psychological thinking itself to provide a theoretical framework . . . one that allows us consistently to understand, predict, and control the various mental factors which determine the outcome of competitive situations."⁸

Not helping the matter, coaches and athletes typically have received psychologists with great suspicion. Practical-minded and conservative, the sports people often have viewed the well-meaning psychologist as an ivory tower academic and an intruder. Some have the attitude that "shrinks" are for "crazies." Consulting a sports psychologist has seemed weird and unmanly. Psychologist Tutko relates experiences he had in the early 1960s while working with athletic teams: "One team director . . . insisted we have our meetings late at night in a remote motel so that the newspapers would not get wind of it . . . Another athletic director, fearing the title 'psychologist' would imply I was there to treat mental illness, referred to me (when he had to) as the 'team behavioral scientist.'"⁹

Despite these problems, sports psychologists and mental training techniques are being used more and more today. Several pro teams and Olympic squads have instituted full-team mental training programs. When these programs have been sustained in a thorough, systematic way, the results have been impressive. Sports psychologist Dr. Richard Suinn has worked with various U.S. Olympic teams, most notably the Nordic ski and biathlon squads. Suinn's

program has included exercises in visualization and relaxed concentration. One of his trainees, Lyle Nelson, became especially proficient in these exercises. At the '76 Winter Olympics Nelson surprised all the experts with his great improvement in the target-shooting phase of the biathlon. His performance moved his team up in the competition and helped the U.S. to their highest finish ever in that event.¹⁰

Whereas the United States has only just started to provide mental training for national teams, several other countries are much further along. In the Soviet Union there are an estimated three hundred trained sports psychologists, at least 20 percent of whom work with the various national teams. Typically, the Soviet sports psychologist is part of a support group of scientists and coaches who test and prepare the elite athletes. Psychological testing is used to establish a profile of the ideal athlete for a particular sport or position; sometimes these profiles are used in the selection of national team members. Russian psychologists have developed, "psychic self-regulation," whereby the athlete gains strict control of his optimal competitive state. Athletes are taught self-help techniques in visualization, attention-control, relaxation, and self-hypnosis.

Like his Soviet counterpart, the East German elite athlete also has the benefit of thorough preparation and the latest advancements. Sports psychology plays an important role in his training. At the Leipzig Institute, the State's main sports center, coaches study an intensive, four-year program; nearly 10 percent of the classwork focuses on sports psychology. It's difficult to gauge how much this emphasis on psychology has contributed to the country's sports success. Surely, their progress has been clearly visible and nothing short of miraculous. (In the '76 Olympics, they won almost four times more medals than they did in the '68 Olympics, and they won more gold medals than the U.S.) In a *Runner* interview with Waldemar Cierpinski, East Germany's two-time Olympic marathon champion, we get a hint of the important role psychology plays. Cierpinski explains that his mental preparation was the real heart of his training. On the starting line for the Moscow marathon, his pulse was under forty, the same as it was before his Olympic win in Montreal—testimony to how well he had learned to relax under pressure!¹¹

Coaches and athletes are finding that relaxation, psychic regulation, and visualization are *skills* just as surely as hitting a ball, skating figure-eights, or learning race pace. Like physical skills, psychological skills can be *learned* in a step-by-step way and mastered through practice.

Mental training cannot increase the amount of an athlete's physical ability. The physical speed and strength needed to run a four-minute mile must be present in the runner in order for him to achieve that time. But mental training can help the athlete make use of what he already does have. And invariably, there is a lot more there to use, sometimes more than he ever dreamed.

Take the case of Bill Buckner, the baseball player. He was entrenched in a batting slump in midsummer, and he finally turned to a hypnotist—who taught Buckner the elements of visualization. Buckner pictured himself following each pitch carefully and swinging only at the good ones. In August he batted .405 and was named the National League's "Player of the Month."¹²

Or take the case of Jacques Mayol, thirty-five-year-old French diver. A few years ago he set out to break the world record for a breath-held dive. The existing record was 240 feet by a U.S. Navy diver, Robert Croft. Mayol incorporated in his training a combination of yoga, mind-control, and deep relaxation exercises. In time, there were interesting physiological effects. His red blood count doubled. His heart rate slowed to twenty beats a minute, effecting an oxygen-conserving state, a "diving response" similar to that found in marine mammals. So far, Mayol has pushed the record to 328 feet. To other divers, the feat is remarkable. It would be akin to jumping forty feet in the long jump.¹³

The real excitement in athletics is learning what greater achievements are possible when the body's full potential is used.

The serious runner and his coach aim to maximize race performance. They seek every advantage, attend to every detail, capitalize on every sound piece of information available, hoping to gain a competitive edge. They find that the more they know about exercise physiology, the more sensible the training becomes. They find that the more they know about injury prevention, the more injury-free that training is. The more they know about the opponents and the race course, the smarter their race plan. And likewise, they

are finding that the more they learn about tapping psychological energies, the more potential is realized and the more satisfying races become.

This book then is about maximizing running potential. It will examine some of the mental and emotional interferences all distance runners encounter. It will explain some of the techniques for dealing with these interferences. It will discuss race rehearsal and the use of emotional energy. It will look at how the elite runners are preparing. It will help athletes and coaches assess running strengths and weaknesses. And it will offer guidelines to help you design your own best mental training program.